

MEASURING PORNOGRAPHY USE IDENTITY: VALIDATION STUDY OF THE
MODIFIED CENTRALITY OF EVENT SCALE

by

Michael Steven Takacs

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University

March, 2018

MEASURING PORNOGRAPHY USE IDENTITY: VALIDATION STUDY OF THE
MODIFIED CENTRALITY OF EVENT SCALE

By Michael Takacs

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University, Lynchburg, VA

2018

APPROVED BY:

Frederick Volk, PhD, Committee Chair

David Jenkins, Psy.D, Committee Member

Nicole DiLella, PhD, Committee Member

ABSTRACT

There has been an increase in research focused on the influence that pornography use has on an individual. Observations of dysfunction with pornography users, in both clinical and religious settings, have driven a large part of this increase in research. Current research findings on religiosity and incongruent sexual behaviors further support the need to examine the correlation between the individual and their pornography use, especially with religious users. To date, there has been no research in the literature addressing the connection between the individual's beliefs towards their pornography use and the effect of these beliefs on their identity or other externalized interactions and experiences. Also, there has been no research in the literature that proposes a way to measure this interaction. To bridge this gap, this study modified the Centrality of Event Scale to focus specifically on the perception of how pornography use impacts their identity and externalized interactions and experiences. The findings from this study demonstrated, for religious pornography users, a relationship between their pornography use and both their internalization (i.e., identity) and externalization (the way they view their world).. These findings have begun to fill the gap in the literature and substantiate the need for additional research in this area. Also, the findings from this study have implications for counselors who work with individuals who experience dysfunction with their pornography use, supervisors who consult with clinical staff, and counselor educators who prepare future counselors to enter the field.

Keywords: pornography, pornography use, pornography abuse, pornography addiction, centrality of events scale, central component of identity, turning point in life stories, reference point for meaning, kairos moment, identity formulation.

Acknowledgments

I give glory to our Father who brought me to and through this journey to a Ph.D. I know that you have so much more planned and this is only the start of this journey. I want to thank my wife, Crystal, who has stood by me, has loved me, and supported me through my personal, professional, academic, and spiritual growth. I love you and couldn't have done it without you. For my daughters, Emily and Isabella who have been my biggest fans. For my parents who have taught me to be the man, I have grown to be. I want to thank my committee, Dr. Jenkins, and Dr. DiLella, who invested so much time in me and this project. To my brother and sisters in my cohort, John, Brittany, Alyssa, Krista, Trish, and especially Lucy. Your friendship and support through this process were essential to my success. I want to thank my professors who have all had a hand in my growth. And to Dr. Volk, my chair, my professor, and my mentor. Thank you for being there all the times that I stumbled, not giving up on me even when I would give up on myself, and lifting me up to continue the fight. I am forever grateful to you all.

TABLE OF CONTENTS

ABSTRACT	iii
Acknowledgments.....	iv
List of Tables	ix
List of Abbreviations	x
CHAPTER ONE: INTRODUCTION.....	1
Background of the Problem	2
Purpose of the Study	5
Research Questions.....	5
Assumptions and Limitations	6
Definition of the Terms.....	7
Significance of the Study	9
Theoretical and Conceptual Framework.....	9
Organization of Remaining Chapters.....	15
Summary of the Chapter	16
CHAPTER TWO: REVIEW OF THE LITERATURE	18
Pornography Use.....	18
Trends in Pornography Use	20
Problematic Pornography Use	23
Religiosity and Problematic Pornography Use.....	26
Beliefs and Problematic Pornography Use	29
Kairos Moments and Impact on Identity	30

Identity and Problematic Pornography Use	32
Instrument Considerations	33
Problematic Pornography Use Scale (PPUS)	34
Compulsive Pornography Consumption (CPC).....	34
Cyber Pornography Use Inventory (CPUI).....	35
Cognitive and Behavioral Outcomes Scale (CBOSB).....	36
Sexual Compulsivity Scale (SCS)	36
Hypersexual Behavior Inventory (HBI).....	37
Pornography Cravings Questionnaire (PCQ).....	38
Hypersexual Behavior Consequences Scale (HBCS).....	39
Centrality Event Scale.....	39
Summary.....	42
 CHAPTER THREE: METHOD	 44
Research Design.....	44
Selection of Participants	45
Instrumentation	45
Demographic Information.....	45
Validity and reliability testing	48
Catch trial.....	49
Research Procedures	49
Data Collection	49
Research Questions.....	50
Research Question 1	50

Research Question 2	50
Research Question 3	51
Data Processing and Analysis.....	51
Ethical Considerations	52
Summary.....	53
CHAPTER FOUR: RESULTS	54
Data Screening.....	54
Participant Demographics.....	55
Data Analysis	60
Principal Axis Factoring of the Initial Item Battery	61
Research Question 1	65
Research Question 2	65
Research Question 3	66
Summary.....	67
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	68
Summary of Findings and Implications.....	68
Research Question 1	69
Research Question 2	69
Research Question 3	70
Limitations of the Study.....	71
Suggestions for Future Research	73
Clinical Implications.....	74
For Counselors	74

For Counselor Educators and Supervisors	75
Summary of Chapter	76
Summary of Study	77
References:.....	78
Appendix A.....	107
Appendix B.....	108
Appendix C.....	109
Appendix D.....	110
Appendix E.....	111

List of Tables

Table 4.1 Participant Demographics

Table 4.2 Religious Demographics

Table 4.3 Pornography Use Statistics

Table 4.4 Final Factor Structure (Pattern Matrix) of Principal Axis Factor Analysis (PAF) with Oblique Rotation

Table 4.5 Pearson rs, Means, and SD's (CES-P, HBI, CPUI)

Table 4.6 Pearson rs, Means, and SD's (RCI, Masturbation)

List of Abbreviations

Cognitive and Behavioral Outcomes Scale (CBOS)

Centrality of Events Scale (CES)

Centrality Events Scale – Pornography (CES-P)

Compulsive Pornography Consumption (CPC)

Cyber Pornography Use Inventory (CPUI)

Hypersexual Behavior Consequences Scale (HBCS)

Hypersexual Behavior Inventory (HBI)

Pornography Cravings Questionnaire (PCQ)

Problematic Pornography Use Scale (PPUS)

Religious Commitment Inventory (RCI)

Sexual Compulsivity Scale (SCS)

CHAPTER ONE: INTRODUCTION

Individuals' identities are formed through their experiences, influences, and beliefs, which create their self-perception and internalization of who they are. These beliefs impact not only the way individuals see themselves but also the way they see and experience the world. This research is focused on how individuals' pornography use can influence their identity and beliefs about themselves. The way in which individuals see the world, relationships and experiences are also influenced by their behavior. There is strong evidence that what pornography users believe about their use is an important factor in how they interpret its impact on their lives (Nelson, Padilla-Walker, & Carroll, 2010; Stewart & Szymanski, 2012). To date, no research has explored the degree to which pornography use may influence the users' perception of self or self-concept.

The Centrality of Event Scale (CES, Berntsen & Rubin, 2006) was developed to assess the degree to which a traumatic event, or sequence of traumatic events, inculcated itself in people's psyches, influencing the way they view themselves and interpret their experiences. Given religious pornography users' tendency to view pornography as addictive (Grubbs, Exline, Pargament, Hook, & Carlisle, 2015) and interpret their use as shame-inducing (Volk, Thomas, Sosin, Jacob, & Moen, 2016), it is not unreasonable to assume that pornography use may become a dimension of some users' identities, at least in part. However, the CES in its current form is not designed to assess pornography use as a catalyst that impacts the individual's beliefs and identity. Therefore the scale was modified to address the problem and include pornography using behaviors for this study. The modified Centrality of Event Scale is expected to measure how the individuals' pornography using behaviors acts as the events, modifies their beliefs about themselves and impacts their identity. Testing the validity and reliability of the CES-P scale is

necessary to determine if it is a reliable instrument for future use. Since the CES measures the beliefs of the individual, further investigation into beliefs is also essential for the CES-P. It is hypothesized that the beliefs an individual has about their behaviors are directly impactful on identity formulation than other beliefs. This may be more specifically true with religiosity because shame and guilt are often seen with pornography use in religious populations (Chisholm & Gall, 2015; Gilliland, South, Carpenter & Hardy, 2011), and should be considered in investigations of that relationship. It is expected that individuals who self-identify as religious will see their behaviors as having a higher impact on their identity than non-religious individuals due to the shame and guilt relationship.

Background of the Problem

The relationship between the impact of life events and identity formation has been independently studied consistently in the last few decades (Short, Black, Smith, Wetterneck, & Wells, 2012). Pornography use has shared the same increase in research (Kuss et al., 2014). The problem is that the combination of the three has not been studied. The relationship among individuals' pornography use and its impact their beliefs and identity needs to be further conceptualized. The lack of empirical support justifies further investigation. A significant amount of investigative research supports the relationship among various events within a person's life and their impact on beliefs (Catlin & Epstein, 1992; Janoff-Bulman, 1990; Kaufman, Allbaugh, & Wright, 2018). A study conducted by Specht and colleagues (2011) found the impact that events and beliefs have on an individual varies depending on the person's resiliency, the type of event, possible trauma, the person's age, and other factors (Specht, Egloff, & Schmukle, 2011). These life events can also cause deviations in a person's mental health, self-

perception of identity, and personality traits (Kaufman et al., 2018; Kendler, Hettema, Butera, Gardner, & Prescott, 2003). Further, the frequency of a recurring event can increase the event's influence on a person's self-perception relative to his or her identity (Specht et al., 2011).

Despite the research in these areas, there has been no focus on the relationships among pornography use, users' beliefs about themselves, and identity formulation. It is these relationships that present the problem that this study is focused.

There have been studies focused on how different events in peoples' lives can influence their personality and identity after those events (Thoits, 2013). Most of the research focuses more on these events as some form of trauma (Kauffman et al., 2018). These traumas are associated with more violent acts such as tragic death, sexual assault, and motor vehicle accidents (Norris, 1992; Pfefferbaum et al., 2003). The area where there is a gap in the literature is from the perspective of the pornography user. There has been some research regarding the beliefs of users toward their pornography use (Exline, Wilt, Stauner, Harriott, & Saritoprak, 2017; Kvaalem, Træen, Lewin, & Štulhofer, 2014); however, the research does not address the impact of those beliefs about pornography on their identity. To formulate a better understanding of the impact of beliefs about their pornography use, it is necessary to examine the relationship between pornography, the perspective of the users regarding use and beliefs toward their use, and the impact of their perspective on their identity.

The concept that viewing pornographic images can impact the beliefs, identity, and meaning-making of an individual is not well understood. Recognition of the triadic relationship yields the possibility that not only has the use of pornography been considered less of an influence on individuals, but the problem is larger than previously considered in the field and by researchers. Furthermore, the triadic conceptualization stands on the back of substantiated

research and is the next step up toward a more holistic understanding of the problem. The impact of people's pornography use on their perception of self may be just as necessary to understand as what their use clinically looks like. Also, the clinical understanding would allow mental health professionals to identify that pornography using behaviors may be more symptomatic to the primary problem of self-identity. However, due to the lack of research in the area of self-identity and its influence from the individuals' pornography use, the profoundness and history of the problem may have gone overlooked.

Pornography use is a growing phenomenon that requires additional understanding. Despite the increase in the research focused on pornography use and its related issues, scholars have failed to conceptualize those negative outcomes as function of the that use's impact on the core identity of the user. Pornography use appears to cause maladjustment in marriages (Manning, 2006), depression (Perry, 2017), sexual dysfunction (Park et al., 2016), and other mental health problems (Odlaug et al., 2013). While these examples have been observed as causing cognitive dissonance in peer-reviewed literature, previous research has focused on the symptomology and superficial problems within the individual and ignored other aspects of pornography use. There is no research on how the engagement in pornography use impacts the core of the person, specifically in his or her identity and how they make meaning of their world. In summary, the study will explore whether pornography use can influence individuals' beliefs about themselves, which influences their identity and meaning-making. The study will also test the validity of the CES-P and its use to understand better how pornography use impacts the individual on a foundational level.

Purpose of the Study

Studies that investigate pornography use have not included the perspectives of users regarding their beliefs about their use and the impact on their identity. The purpose of the study is threefold and is to investigate the relationship between beliefs, pornography use, and identity, and bridge the gap in the research. If pornography use becomes a central component of their identity, that may act as a reference point for meaning making with other events in their life. Testing the validity and reliability of the CES-P will provide data on the psychometric properties of the scale, which will then be used to further explore the relationship between identity and pornography use. It is important for mental health professionals to recognize these self-defining perceptions because they can impact case conceptualization, goal setting, and treatment outcomes. Understanding how these central events in an individual's life have impacted the meaning of other events and self-identity requires the use of instruments that can assist with identification of how these events affect the individual. The CES has demonstrated the ability to assess these aspects, but it does not examine pornography use as the central life event specifically. Thus, the CES-P was developed. Further testing of its validity is required, which is another part of the study. Permission was obtained for the use of these scales, and they were modified, so the language in the scale reflects pornography use as the central life event. A final purpose of this study is to develop a measure that will accurately assess the degree to which pornography users' thinking about their use impacts the way they interpret their past and future experiences.

Research Questions

The following research questions are explored in this study:

RQ1: Does the CES-P maintain the factor structure of the original CES?

RQ2: Is there a correlation between higher pornography use frequencies and scores on the CES-P?

RQ3: Do individuals who self-identify as religious score higher on the CES-P than nonreligious individuals?

Assumptions and Limitations

There are multiple assumptions in this study. The first assumption is that the original CES measures the three domains that it seeks to measure. Although the subscales have demonstrated that they measure these domains in the CES through the literature, it remains an assumption. The second assumption is that the CES-P subscales will measure what they propose they measure. The third assumption is that the participants who will complete the CES-P have the ability to self-reflect on their experiences. It is assumed that these participants have the cognitive ability to comprehend that habitual pornography use can cause a person to find meaning in future life events and influence the person's self-identity. The fourth assumption is that the use of Mechanical Turk (MTurk) will provide a high-diversity sample of participants and will include individuals who are representative of pornography users. MTurk is an online labor market that was created by Amazon that pays workers for completing computerized tasks such as completing surveys (Paolacci & Chandler, 2014; Peer, Vosgerau & Acquisti, 2014). Although there is the support that MTurk can provide a diverse pool of individuals and data that can be easily disseminated at low cost (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010), it is unclear how diverse or representative of pornography users the collected

sample will be. The final assumption is that the CES-P will treat pornography use similar to how the CES addresses the centrality of a life event or events.

There are several identified limitations in this study. The first is that through the use of MTurk the severity of the pornography users' perception of use cannot be specifically identified because the data is self-reported by the participants and could be reported inaccurately. The data collected may not adequately identify individuals who would be more pathological in their use because the sample may not be truly representative of pathological pornography users. MTurk may not provide a sample of people who are distressed or have impairment in functioning due to their pornography use. The second limitation is that the definition of pornography varies considerably among users (e.g., from still pictures that are provocative to video footage of people engaging in intercourse) and should be derived from the perspective of the user. Due to pornography being a more subjective term, self-reports may not be accurate. Providing a uniform definition of pornography would move the individual's beliefs about what pornography is to terms that are controlled by the researcher. Since pornography can be anything that the participant believes it to be, the definition is left to the individual. The final limitation is in testing the validity of the CES-P because the scale has not been used before. Having no history in the literature, the use of the CES-P should be considered as one of the limits to its own supporting study. The CES-P has not been tested before this study, so it requires further validity testing to determine its construct validity.

Definition of the Terms

Pornography: Pornography is challenging to define, as explained by Tarver (2010), who suggests that the idea of pornography is fluid and depends on the individual and culture. She

states that where one person may view something as pornographic, another may consider it erotica. She continues to say that the idea of what is unacceptable and what is acceptable changes and causes a cloudy perspective of current research. In addition, the perception of usage by the individual maintains the same cloudiness with defining pornography addiction. Hald and Malamuth (2008) explain that using pornography is different among users, which also changes what is viewed as an addiction and what is just use. Defining pornography should rely heavily on participants' perspectives because pornography can be defined differently based on the user's perspective.

Pornography Use is defined in this study as the engagement of sexually stimulating materials (i.e.: pornographic video, photographs, movies). This study does not require that sexual satisfaction through masturbation is achieved. This study further considers that pornography use is defined as consistent interaction through the viewing of pornography and not just being in close proximity of pornography (i.e., television stays on with pornography playing in the background).

Kairos was originally coined by Aristotle and attempts to describe the combination of a chronological event that the individual experiences and an internal change for the individual that happens simultaneously.

Identity in this study is defined as the perception of oneself through inner reflection. This is the combination of their beliefs about themselves, their opinions of themselves, and their self-conceptualization.

Religiosity is defined in this study as the individual's position on their belief in a higher power. The term includes a way to qualitatively self-measure their opinions of how religious they are.

Significance of the Study

This study focuses on the triadic relationship between pornography use, beliefs, and identity. Support for how individuals' pornography use can impact their beliefs about themselves, and how those beliefs impact their identity, has been proposed for this study through bridging the concepts. There is hope that the CES-P can become the new method of measuring the impact that pornography use has on the user's identity. The CES-P could also provide support in clinical settings in the treatment of pornography use by understanding the extent to which individuals identify themselves and their perceived level of addiction. It is further hoped that the data retrieved through the study could provide additional insight into the impact that individuals' religiosity has on the relationship between their use, their beliefs, and their identity.

Theoretical and Conceptual Framework

The relationship between life experiences, beliefs, and identity has been previously investigated in research (Berntsen & Rubin, 2006; Park, 2010) and has been found to be the result of cognitive restructuring within the individual (Yanos, Roe, & Lysaker, 2011). It has been further identified that the results of cognitive restructuring may have lifelong effects on the individual (Resick, Williams, Suvak, Monson, & Gradus, 2012). The majority of the research of how life events cause this restructuring has been focused on events such as trauma (Hovens et al., 2012), substance abuse (Fetzner, McMillan, Sareen, & Asmundson, 2011), divorce (Kendler et al., 2010), and sexual assaults (Ullman, Relyea, Peter-Hagene, & Vasquez, 2013). There have been research considerations toward how the repetitive behaviors of the individual can cause the same impact (Black, Kehrburg, Flumerfelt, & Schlosser (1997). The impact of repetitive

behaviors, the individuals' beliefs about those behaviors, and the individuals' cognitive restructuring process presents a gap in the literature that requires further understanding and investigation since there has been no attempt to bridge this gap.

Understanding how pornography use affects the psychological health and functioning of individuals has also increased in the literature over the last two decades and includes effects like cognitive dissonance, depression, and anxiety (Kruisselbrink, 2013; Szymanski, Feltman, & Dunn, 2015; Xiuqin et al., 2010). This study focuses on the connection between how pornography use acts as a catalyst impacting individuals' perspectives regarding how they view other events in their lives and beliefs about themselves. The relationship between pornography use and its impact on identity requires support to build the bridge between the two. Assessing the relationship further requires an instrument that can include both concepts through combining the theories and analyzing the outcome. To meet this need, the CES was modified to include pornography use as the reference point in the individuals' life story and a central component of their identity. This study investigates the validity of the CES-P scale as a tenable assessment and its ability to measure the effect that pornography use has on the experiential meaning of life events and identity in individuals. In addition, the study investigates considerations to better conceptualize the relationship between pornography use and its impact on individuals' psychopathology.

The concept of pornography use and its relationship with addiction can be seen from a physiological perspective and addiction literature. The strongest support is driven by neurological research (Love et al., 2015). An article by Hilton and Watts (2011) explains that addiction and its effect on the brain were understood as early as the 1660s. They found that while drug addiction is most commonly understood, natural addiction is most prevalent. They explain

that natural addiction involves behaviors like overeating, gambling, and sex. The authors continue to explain that biological research on natural and chemical addiction is the same when observed through the neurological understanding of addiction. Leeman and Potenza (2013) explain the same observations associated with substance use are also observed during pornography use. The relationship between substance use and pornography use supports that pornography addiction can provide similar neurological responses seen with chemical addiction and other natural addictions. Hilton (2013) suggests that pornography addiction should be viewed under the same criteria as other impulsive, obsessive, or compulsive diagnoses. These compulsive behaviors can be encouraged by the increase in accessibility through the Internet (Mendez & Shapira, 2011). In addition, these neurological influences can contribute to other mental health disorders such as depression, low self-esteem, and sexual dissatisfaction (Stewart & Szymanski, 2012). Pornography addiction behaves the same way other addictions behave, suggesting that consideration of its acceptance as an addiction should be further investigated.

Mental health clinicians and researchers have increased their attention to the dysfunction that pornography use has caused over the last decade in users (Briken, Habermann, Berner, & Hill, 2007; Kuss, Griffiths, Karila, & Billieux, 2014) seen throughout clinical settings. These professionals are reporting an association between pornography use and cognitive dissonance with clients (Nelson et al., 2010; Poulsen, Busby, & Galovan, 2013), as well as dysfunction in other areas of their lives. These reports suggest that additional investigation into the relationship between dysfunction and pornography use should be engaged (Philaretou, Mahfouz, & Allen, 2005). Increasing the conceptualization and understanding of the influence pornography use has on an individual's life and daily functioning is essential to understanding how to treat it.

Despite the increase in research in the area of pornography use, the collection of research is in sporadic directions (Attwood, 2011). It is necessary to continually investigate how to comprehend and apply possible ways of addressing the pathological problems associated with pornography use. There is also a need to address the various theories found in the literature and include multiple concepts and directions that contribute to the field of study and primarily focus on substantiating pornography use under three areas: use, abuse, and addiction (Griffiths, 2000; Young, 2007). While these considerations are vast, it is necessary for researchers to both acknowledge and further investigate the growing impact that pornography use has on society, on individuals, and in clinical practice. Areas that have not been studied include how pornography use manipulates individuals' perspectives from which they see the world and how it changes pornography users' identities. The purpose of this study is to explore these areas further.

We considered that individuals who use pornography would be prone to experience dissonance in several areas of their lives because pornography use serves as a significant life event that impacts the way individuals view the world and their experiences in it. As a significant life event, pornography use is also theorized to become a turning point in their life stories, as well as a central part of their identity. This study holds that individuals derive their identity from their beliefs and experiences. The following section will further explore the justification for these theories, as well as support for these assumptions. The overarching theory for the study is that individuals who identify that their use is observably influential on their beliefs about themselves will have higher scores on the CES-P subscale that has their pornography use as perceived as a reference point for skewness in their meaning-making, thus, influencing their identity.

Pornography use, for some people, can be representative of the same problems that are found in other substance and process addictions. These addictions, both substance and process,

have similar proposed patterns of psychological influence on users' identities (Koski-Jannes, 2002). In the area of mental health, clinicians should help pornography users explore how their pornography viewing has impacted their lives and how that impact has become both an internal cognitive representation of self and an outward projection of identification (Myers et al., 1991). Understanding the strength of the connection between use and identity will enable clinicians to assess, to some degree, how intractable the use is. That is, those users who more closely associate their use with their identity are more likely to have adopted a belief system that is more resistant to change (O'Rourke, Haimovitz, Ballweber, Dweck, & Popović, 2014; Ryan & Mercer, 2012).

For example, individuals who frequently engage in theft may identify themselves as thieves. Clinically, they may be diagnosable as kleptomaniacs based on the criteria found in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5). The first time they remember stealing may not cause them to view themselves as thieves. The repetitive behavior of stealing would encourage internalization and cause them to believe that their continuation of behaviors now defines them as thieves. During the transformation, the individual would have internalized their perspective and beliefs of themselves and would create a series of events known as the kairos moment. Gaining insight into how their beliefs and perceptions of themselves can influence their identity, as well as their future experiences, suggest that people's behaviors with pornography use should also be considered a significant impact on the individual. Through individuals' beliefs about their behaviors with their pornography use, their self-reflection manipulates their identity.

Conceptualizing the perceptions each individual has toward the practice and use of pornography warrants further study. Understanding the self-perceived level of the severity of

individuals' pornography use makes it plausible to place their use in domains based on severity (Hilton et al., 2011). The three domains that define severity are use, abuse, and addiction (Griffiths, 2001; Ley, Prause, & Finn, 2014). Recognizing the categorization is important because it shows that use is not a black-and-white issue. The problem with classifying individuals' severity of use through measuring use is that the classification does not provide a measure from the perspective of the user; instead, it provides a generalizable measure. Recognizing that individuals' self-perception of their use, abuse, and addiction is measured through their perspective is necessary because each individual's severity of use should be determined by his or her perceived addiction (Grubbs et al., 2010; McIntosh & McKeganey, 2000). A scale that can assist in measuring the perceived addiction that is related to pornography is the Cyber Pornography Use Inventory (CPUI). The CPUI demonstrates promise in measuring the Internet pornography addiction (Grubbs, Wilt, Exline, Pargament, & Kraus, 2017; Grubbs et al. 2010) despite there being no diagnosis for pornography addiction in DSM-5. While there is not any diagnostic procedure for pornography addiction, the manual includes other diagnosable behaviors with other addictions that are representative of each other. Measuring perceived addiction through the CPUI will provide insight into individuals' perceived use, but further assessment is needed to gain insight into the impact of use on identity.

In order to measure the relationship between pornography use and identity, it is necessary to use an instrument that can measure how these repetitive use behaviors can impact individuals' way in which they view the world, their beliefs, and their perceptions of self. The CES provides the necessary elements to measure these three domains: impact of events on identity, the impact of the events becoming a reference point for meaning in their lives, and the event becoming a turning point in their life stories. While the scale includes these domains, it does not consider

pornography as the specific event. The Centrality of Event Scale for Pornography (CES-P) was developed by modifying the CES to assess an individual with pornography use; it may further allow mental health professionals to assess how pornography users' viewing of explicit material has impacted their functioning in these domains, including their beliefs about themselves. The CES has been used and validated multiple times in various studies and settings (Berntsen & Rubin, 2007; Berntsen & Rubin, 2006; Boals, 2010; Robinaugh & McNally, 2011). The CES-P requires testing for its validity. This study will examine the validity of the CES-P and considerations for continued use in clinical settings as well as identifying if there is a relation between pornography use and its significance to the individual.

Organization of Remaining Chapters

The second chapter of the study includes a review of the literature surrounding the various aspects of this study. It begins with empirical support for understanding the history of pornography, its societal impact, and its influence on the individual. The chapter reviews the change from pornography use to problematic pornography use, as well as the trends seen in the literature with use. Past research in pornography is discussed, followed by a comprehensive understanding of the concept of kairos moments and how these moments impact identities. The association of kairos moments and pornography is then discussed, followed by a discussion of how spiritual and religious beliefs can impact the previously reviewed aspects of the individual. The chapter then includes a review of several scales that were considered for this study. The chapter concludes with a discussion of the past use of the CES and the testing of its validity. It then supports the rationale for the modification of the CES to the CES-P. Next is a review of the literature regarding the three subscales of the CES-P and why each aspect is important not only

for validating the scale but in the rationalization of their use in further understanding participants' use. The literature review further explores the connections between pornography use, its impact on functioning, and how the varying definitions and views affect identity formulation and manipulation.

Chapter 3 describes the methods used in the study. It provides support for the proposed method for data collection, how the measures will be used, and how data will be collected and disseminated. Chapter 4 will describe the statistical analysis. Chapter 5 will include an exploration of the study's findings. Further discussion of the results will be compared and contrasted with previous research, the validity of the CES-P in comparison to the CES will be additionally discussed, and an interpretation of the results of the study will be reviewed. Implications of the study's findings will be elaborated with a discussion of direction in which future studies should be conducted.

Summary of the Chapter

Chapter one provided a brief overview of the theoretical and conceptual constructs that form the framework of the study. The triadic relationship between pornography use, identity, and beliefs requires further exploration. To measure the aspects of the relationship between use, identity, and beliefs, the CES was modified for pornography use. Investigating the validity and reliability of the CES-P is essential to the future of research on the influences of pornography on identity. Having the data to support the research questions in the study may also provide support for assisting individuals who struggle with pornography. The data will, in turn, help mental health providers further assist those who have excessive pornography use while opening the door to understanding other behaviors and identity formulation based on beliefs and behaviors.

Additionally, clinicians may better understand how problematic pornography use impacts individuals, their families, their loved ones, and society and, therefore, encourage further research.

CHAPTER TWO: REVIEW OF THE LITERATURE

This study will explore the impact of pornography use on user's understanding of themselves. To understand this relationship, assessing the validity and reliability of the CES-P measure is necessary. The first question is whether individuals recognize their problematic behaviors with pornography use as a turning point in their life stories. The second question is if their problematic behaviors with pornography use became a reference point for meaning-making of other events in their life. The third question is if their pornography use acts as a central component in their identity.

This chapter provides an investigation into the literature regarding pornography, its history, and its impact. This chapter provides empirical support for the impact pornography has on individuals concerning identity delineation and the clinical distress that is often associated with those seeking assistance for their use. The chapter also includes a discussion of reasons individuals use pornography, the current research about pornography use, and considerations of how its use can become problematic. The chapter includes how individuals' use of pornography can impact their identity and how religious users have additional distress with their use. Finally, instruments and assessments that were considered for testing the hypotheses are discussed and rationalized.

Pornography Use

Pornography use is not a new phenomenon in society. Its roots can be traced as far back as 79 A.D. with frescos found in Pompeii during the excavation of the site in the 18th century (Robinson, 2010). The term pornography is rooted in Greek from two words: *porni*, meaning prostitute, and *graphien*, which means to write (Sunstein, 1986). Throughout history, the method in which pornography is delivered has changed, but the purpose has remained the same: images

that induce sexual arousal (Wilson, 2016). Irrespective of the production intent, it is the viewers' attitudes and beliefs that define what the images mean. Consumption is the foundation for defining pornography: individualistic rather than collective interpretation and use. An individual who views *The Nude Maja* by Francisco Goya, which depicts a young woman, completely nude and lounging on furniture, could perceive this as simply art. It may not elicit any form of sexual arousal or interest. Another individual may perceive the art as provocative and consider it pornography. A third individual could view it as sexually arousing and initiate sexual stimulation both mentally and physically.

In the early 1980s, the Canadian government began attempting to define pornography through creating Bill C-54 and identifying the way pornography should be perceived (Mahoney, 1987). In 1985 the United States created the Meese Commission on Pornography to define what is and is not pornography (Nobile & Nadler, 1986). These efforts from the 1980s have not had a discernible impact on current distribution and use of pornography. In academic literature on psychology and sexuality, the adopted definition is images that create or elicit sexual thoughts, feelings, or behaviors; and explicit images or descriptions of sexual acts involving the genitals (Hald & Malamuth, 2008; Kor et al., 2014; Reid, Li, Gilliland, Stein, & Fong, 2011). While focusing on specific sexual acts and genitalia as foundational to the operational definition of pornography is good for researchers, it is the users' use and interpretation of that use that have become much more important in understanding the potential impact of use. Observing the trends of pornography use through society creates a picture of how it has had a progressive impact on the individual.

Trends in Pornography Use

Pornography use has existed for centuries and continues to evolve. Reviewing the timeline of pornography requires an analysis multiple artifacts throughout the literature and has been sporadic. Hajar (2011) has provided a substantial portion of this literature, through the collection of pornography's history, and provides an in-depth description of its history. Early pornography consisted of drawings, sculptures, and paintings, which were the only media available during that period. Later, printed materials could be copied, and in 1880, Halftone Printing began producing pornographic pictures (Chambers & Leslie, 2005). In the early 1900s, publishers in France began producing magazines in the name of art with nudity. Between the 1920s and 1950s, mass-produced magazines began including images with more emphasis on various women's body parts and moved from provocatively dressed women to completely nude and seducing poses. Films depicting risqué content also began about the same time as magazines in the 1880s. Starting out as underground films, pornography popularity grew with the movement of published materials in print. During the 1970s, the development of consumer video technologies (i.e., VHS and Beta) enabled the easy distribution of videos across the movie-making industry, of which producers of pornographic material were a part. By the 1980s, the onset of cable enabled the delivery of movies with some sexual content (i.e., rated R) direct to the consumer without the editing required for general broadcast. The emergence of the DVD in the 1990s made it even more affordable and accessible for individuals to gain access to materials with strong sexual content. Finally, the onset of the broad-based adoption of the Internet made pornographic movies and pictures accessible without constraint. Pornography that is viewed through web pages and the internet is commonly referred to as Internet pornography (Cooper, McLoughlin, & Campbell, 2000; Short et al., 2012; Wetterneck et al, 2012).

The shift of pornography from accessibility for a few to availability for nearly everyone has spurred an interest in understanding the impact that exposure to pornography has on those using it (Cooper & McLoughlin, 2001; Buzzell, 2005; Daneback, Træen, & Månsson, 2009). Early research on pornography was concentrated on the impact the pornography had on men's perception of women and the theory that men who viewed pornography were more likely to commit sexual assault and rape than men who did not (Allen, Emmers, Gebhardt, & Giery, 1995; Boeringer, 1994; Mikorski & Szymanski, 2017). Early research was skewed more toward demonstrating that pornography was detrimental to the view of women, nurturing men to be sexually aggressive, objectifying women, and damaging sexual and nonsexual relationships at a societal level (Gebhardt et al., 1995). Later researchers examined the impact that pornography has on individuals, relationships, and families (Campbell & Kohut, 2017; Manning, 2006; Paul, 2005). The research over the last ten years has focused on the relationship between pornography use and outcomes, and under what conditions those outcomes are either attenuated or exacerbated (Poulsen, Busby, & Galovan, 2013). These conditions include differences in gender (Baltieri, de Souza Gatti, de Oliveira, & Aguiar, 2016; Laier, Pekal, & Brand, 2014), religiosity (Baltazar, Helm, McBride, Hopkins, & Stevens, 2010; Perry, 2017), pathology (Hilton & Watts, 2011; Voros, 2009), and forms of hypersexual behavior (Reid, Garos, & Carpenter, 2011; Stein, Black, Shapira, & Spitzer, 2001).

The increase of pornography use is no longer limited to male users, as it was in its earlier development. Female use has seen a steady rise in the last decade (Baltieri et al., 2016; Laier et al., 2014). Reasons for the steady rise in use among women could be a combination of factors, including broader acceptance of use among both young people and adults more generally (Buzzell, 2005; Owens, Behun, Manning, & Reid, 2012; Price, Patterson, Regnerus, & Walley,

2016); the aforementioned ease of access through technology that enables individual privacy (Kingston, Malamuth, Fedoroff, & Marshall, 2009), which reduces externally driven shame because access is hidden from external view; and the possibility that women are simply increasing use because the disparity of use between men and women was so pronounced historically. While it is not believed that the recent increase in use with women is deliberate, there is an observable trend of use.

The research on women who use pornography remains limited despite the increase in research on pornography in general in recent years (Brosi, Foubert, Bannon, & Yandell, 2011; Rogala & Tydén, 2003). It has been focused primarily on the effects of men's use on women (Shaw, 1999), the perception of women by men through pornography use (Hald, Malamuth, & Yuen, 2010), and correlations between pornography use and violence toward women by men (Foubert & Bridges, 2017; Kingston et al., 2009). In their study focused on women who were seeking treatment for self-perceived problematic pornography use, Lewczuk, Szmyd, Skorko, and Gola (2017) found that women's motivations for seeking treatment differed from men's. While both men and women were suffering from similar rates of depression and issues with self-esteem (Stewart & Szymanski, 2012), women who were seeking treatment were using pornography at much higher rates than women who were non-treatment seekers (Lewczuk et al., 2017). Differences in rates of use between male pornography users who are seeking treatment for pornography use compared to men who are not seeking treatment for use are much less stark than those found for women (Lewczuk et al., 2017; Gola et al., 2016; Kraus et al., 2016).

An estimated 18 million individuals' use pornography (Baltazar, Helm Jr., McBride, Hopkins, & Stevens Jr, 2010). It is also estimated that over 2 million of those users believe they are addicted and have some form of dissonance (Baltazar et al., 2010; Cooper, 2002). The

increase in its influence, on both society and the individual, is supported through this section's review of the literature. The increase in availability and accessibility of pornography has experienced a similar increase as the dysfunction seen in clinical settings, with both males and females, and includes mental health issues, sexual dysfunction, and marital discord (Canfield, O'Donnell & Roid, 2008; Landripet & Štulhofer, 2015; Hosley, Xiuqin et al, 2010). When the dysfunction in life domains has reached a level that individuals perceive as problematic, their use becomes known in the research as problematic pornography use. Through problematic pornography use, individuals experience increased shame, guilt, and challenging of beliefs about themselves, and their identities can be altered.

Problematic Pornography Use

Pornography use can have different implications for different individuals; their perspective can determine whether they view their use as problematic. Increasing the potential for problematic pornography use is the affordability and accessibility of Internet pornography, which allows for excessive and unrestricted use (Cooper, 1998; D'Orlando, 2011; Ross, Mansson, & Daneback, 2012; Wood, 2011). This allows for both casual and pathological use to occur. Research on pornography use often focuses on negative impacts, but casual use can be positive, with users having more openness to experience and less sexual guilt (Hald & Malamuth, 2008; Paul & Jae, 2008; Weinberg, Williams, Kleiner, & Irizarry, 2010; Young, 2008). However, pornography use can become problematic in different areas of functioning, causing problems for the individual and long-term effects (Linz, Donnerstein, & Penrod, 1988; Seto, Maric, & Barbaree, 2001). Attempts to provide a clear measure of problematic pornography use have been conceptualized by researchers through several different means.

Cooper and colleagues (1999) believed use that exceeds 11 hours a week should be considered problematic; other researchers have attempted to use similar quantitative measures (Ley, Prause, & Finn, 2014; Short et al., 2012). Using this type of measure creates an issue because this method does not allow for the perspective of users and their perception of whether their use is problematic or not.

There have also been several definitions of what problematic pornography use is based on the discretion of researchers (Allen, Kannis-Dymand, & Katsikitis, 2017; Short et al., 2012). Researchers have attempted to define problematic pornography using two predominant methods outside of quantitative measures. The first is by following addiction models found in the current version of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) (APA, 2013). Several scales have been developed that combine both addiction and behavioral diagnostic criteria related to pornography use (Garcia & Thibaut, 2010). It was observed that the behaviors found in other addictions, such as gambling and substance abuse, mirrored the behaviors found with pornography use (Brand et al., 2011; Carnes & Wilson, 2002; Goodman, 1993; McBride, Reece, & Sanders, 2007; Schneider, 2000). Researchers have also attempted to define problematic pornography through the clinical behaviors presented by the user. Researchers recognized that individuals seeking treatment in clinical settings sought assistance with compulsive and impulsive type behaviors in relation to their pornography use (Kor et al., 2013). While these presented a clinical component, there still remains no diagnostic criteria associated with pornography in the current version of the DSM-5

The second method was observing not just the act of using, but the reasons for use. There are several reasons researchers have found for individuals' use, which include escaping or avoiding negative emotions, having distress, or having impairments in functioning (Kor et al.,

2013; Shreiber, Odlaug, & Grant, 2012; Winters, Chirstoff, & Gorzalka, 2010). Additional considerations for use have been found to include early exposure to pornography at a young age (Owens et al., 2012). Research has also found that early exposure during childhood to pornography has been linked to rape fantasies (Corne, Briere, & Esses, 1992) and fantasies of being dominated, spanked, and tied up (Joyal, Cossette & Lapierre, 2015) in girls, while boys were more likely to engage in juvenile delinquent behaviors and sexual abuse toward others (Burton, Leibowitz & Howard, 2010; Ford & Linney, 1995). Poor coping skills, a lack of emotional regulation skills, and stress reduction have also been considered reasons for use (Wetterneck et al., 2012) and pornography users should rely on these characteristics to assist with identifying if they believe that their use is problematic.

Further studies have demonstrated that problematic pornography use can foreshadow perceived pornography addiction and perceived addiction correlates with various levels of distress (Grubbs, Stauner, Exline, Pargament, & Lindberg, 2015; Grubbs, Volk, Exline, & Pargament, 2015). Furthermore, the decline in functioning that appears with problematic pornography use is similarly representative of other disorders such as substance addiction, impulse control disorders, and compulsive disorders (Twohig, Crosby, & Cox, 2009).

In clinical settings, the pathology associated with pornography use is on the rise (Kwee, Dominguez, & Ferrell, 2007) with a particular increase in women reporting issues with pornography and problematic use (Laier et al., 2014). Problematic pornography use and pornography addiction are also considered triggered responses to negative emotions, in much the same way that substance use is perceived in the field of mental health (Twohig et al., 2009). There has been considerable research on the clinical impact of pornography on the individual. Correlational studies have linked problematic pornography use with anxiety, depression (Raviv,

1993; Raymond, Coleman, & Miner, 2003), social phobias, and substance use (Kafka & Hennen, 2002; Reid, Carpenter, & Lloyd, 2009). The correlation between problematic pornography use, hypersexual behaviors, and diagnostic disorders suggests that individuals could perceive a differentiation in their identity and how they view relationships (Reid, 2010). The pathology of pornography use and addiction is still being explored and researched, building a larger conceptualization and understanding of the extent of the problem from a clinical perspective.

This study considers a different approach to defining problematic pornography use. The definition remains with the users and whether they view their use as problematic or not. This is important to consider because there are multiple factors that can influence the perspective of the user. In a review of the research around perceived addiction and problematic pornography use, the perspective of the user has provided several different rationales for why users view their use as problematic. Some have reported they believe their use has reached an addictive level of severity (Philaretou, Mahfouz, & Allen, 2005), and that their use has caused difficulties in their jobs and careers (Levin, Lillis, & Hayes, 2012; Stewart & Szymanski, 2012; Twohig et al., 2009). Others users have disclosed that they perceive their use as problematic due to religious or moral reasons (Grubbs, Volk et al., 2015; Grubbs et al., 2010), while other users find that their problems have been in relationships (Stewart, 2012). Despite the individuals' rationales for their use, their perception should define whether it is problematic or not.

Religiosity and Problematic Pornography Use

The influence of spirituality and religiosity plays an interesting role in pornography use. Typically, evangelical Christians condemn the use of pornography and view its use as sinful despite research that supports no impact on the individual's commitment to religiosity (Short,

Kasper, & Wetterneck, 2015). Multiple studies have investigated the relationships between belief systems and pornography use due to the internal conflict that precedes it. Conservative Evangelicals, specifically, have demonstrated opposition to pornography use. However, during this same time, Evangelicals' anti-pornography narratives have become increasingly secular (Thomas, 2013). An investigation into this shift is warranted due to the appearance that beliefs toward pornography use among Evangelicals are changing. The correlation between individuals' religious beliefs and their pornography use also requires additional investigation and attention.

Lewczuk et al. (2017) found a direct and significant correlation between religiosity and seeking treatment for problematic pornography use in women, which suggests that the problem is not specifically in males. Research indicates that people with high levels of religiosity, or with conservative religious values, are more likely than others to perceive themselves as being addicted to pornography than nonreligious individuals (Abell et al., 2006; Grubbs et al., 2010; Kwee et al., 2007; Thomas, 2016). Research has also found that individuals who identify themselves as religious have a lower rate of pornography use than those who don't (Short et al., 2015). The religiosity/pornography use incongruence supports the hypothesis that religious individuals are more likely to perceive a change in their beliefs about themselves based on their pornography use than less religious people.

The present study hypothesizes that religious individuals will score higher on the impact of pornography on their identities, the impact of pornography on their relationships, and the sense that pornography served as a *kairos* moment in their lives than individuals who do not consider themselves religious. The rationale for these hypotheses is that the impact of shame and spiritual influence can cause additional dysregulation (Reid, Bramen, Anderson, & Cohen, 2014) and sexual shame for the religious individual (Volk, Thomas, Sosin, Jacob, & Moen, 2016). For

example, the influence that shame has on religious individuals who use pornography has been shown to be the defining factor in the way those individuals navigate life and how they engage in social relationships (Arel, 2015; Kaufman, 1989). This influence suggests that pornography use can be a kairos moment. Volk et al. (2016) found that there is a cyclical relationship between religious individuals and shame because of two reasons. First, individuals perceive pornography use as sin and therefore feel shame; second, this feeling of shame leads to a feeling of powerlessness over their use and ultimately leads to their riskier sexual behaviors and deeper negative emotions (Volk et al., 2016).

The role that religiosity plays in this study is important to consider for several reasons. Those who perceive themselves as religious, specifically individuals who have more conservative religious affiliations (e.g., Evangelical Christians), can most often distinguish a difference in their lives before and after their spiritual commitment (Gordon, 1974; McGrath, 2016). Evangelicals often can share a description of their time before their commitment to Jesus Christ and their individual salvation experience. They can explain how their life was before and after their commitment to following Christ. Their salvation experience serves as their kairos event that influenced their life from then on. In religious populations, this same effect has been described as giving their life meaning and changing their fundamental belief systems (Park, 2005). Also, the religious views of a person can provide a new identity. This same change impacts the way they see relationships and their meaning-making because their religious beliefs become a lens through which they view their world (Entwistle, 2016; Mealy, 2016; Park, 2005). This comparison aligns with hypotheses outlined in this study and the concept that individuals' pornography use can cause the same effect on their beliefs and therefore their identity.

Beliefs and Problematic Pornography Use

Individuals using pornography at a level they perceive as problematic, often struggle with the internalization of their behaviors, especially religious users (Stack, Wasserman, & Kern, 2004). This internalization impacts their beliefs about themselves, as well as their self-perceptions (Poulsen et al. 2013). The relationship between pornography use and beliefs is necessary to discuss because of the inner conflict that can occur within the individual who is using. Studies investigating the relationship between individual beliefs and pornography remain sparse, causing a gap in the literature (Nelson, Padilla-Walker, & Carroll, 2010). Despite this gap, these studies need to be continually considered due to the relationship between addictive and compulsive type behaviors and beliefs about those behaviors. Self-reflection and users' beliefs about their behaviors have been found to cause cognitive dissonance when there is a discrepancy between the two (Stone, 2008). This is especially true with individuals who identify as religious and use pornography, serving as an example of the cognitive dissonance that can occur when challenged between beliefs and behaviors (Olmstead, Negash, Pasley, & Fincham, 2013; Regnerus, 2007).

Beliefs that individuals hold about themselves and their behaviors have a substantial impact on their identity. If individuals believe themselves to have sinful behaviors, they may perceive themselves as sinners. If they believe that they are addicted to pornography, then they may identify themselves as pornography addicts. If individuals perceive themselves as kind and giving, then they maintain that they are good people. The beliefs individuals hold about themselves strongly influence their self-perception of their identity and impact functioning, health, and relationships (Jensen et al, 1999; Schwarzer, 1994; Yeh et al, 2005). This relationship

cannot be ignored. These same beliefs can cause comorbid dysfunction such as depression, low self-esteem, poor self-image, and low body satisfaction (Stewart & Szymanski, 2012). The relationship between what people feel about their pornography use, how they perceive their behaviors regarding their use, and their self-reflective identities is a substantial part of this study, because of people's beliefs about themselves nurtures, manages, and shapes their identity.

Kairos Moments and Impact on Identity

Defining the word *kairos* is necessary to conceptualize further how pornography use can impact an individual's identity. The term *kairos* comes from Greek and has several translations. It relates to a moment, or event, and not a physical thing (Miller, 1992). It can be best described as a point in time that marks a significant change, a point of transformation on a chronological lifeline (Aristotle, trans. Solmsen, 1954). Its roots come from the time of Aristotle, during the birth of philosophy, who perceived *kairos* as a time where one time was different than another (Kinneavy & Eskin, 2000). While the concept of *kairos* requires deeper reflection than just have a simple meaning, it is something that happens daily to individuals. Kairos moments include salvation experiences, marriage, the birth of a child, and many other events that individualize the experience as a time before and a time after. It is not simply the event, but the change that takes place within the individual through the sequence of events. While the concept is easily defined by positive events, a Kairos moment can also be caused by negative ones. Death, rape, and trauma can all provide the same impact and include the same conceptualization. Internal and external experiences become one to form a time before and a time after. An individual's repetitive behaviors can initiate self-reflection at a deeper level, and this reflection can become the Kairos event(s).

To build a bridge between a philosophical sense of identity transformation and pornography use requires conceptualization through current associations found in previous research. The most prevalent empirical support for this concept is found in substance addiction research. Individuals who engage in substance addiction have been observed having their identity self-defined as being an addict or recovering addict (De Leon, 1996; Kearney & O'Sullivan, 2003). The concept of having an identity change based on behaviors was observed in a qualitative study that reviewed how long it took participants to change behaviors, which in turn changed their self-perception of identity (Kearney et al., 2003). This study found that an "identity shift" takes place at a certain point when the individual has changed his or her problematic behavior for a particular time (Kearney et al., 2003). A similar study, conducted on recovering substance abusers, found that individuals refer to their previous selves during their substance addiction as a different identity (Hughes, 2007). This same scenario was observed in two other studies that included recovering drug addicts and alcoholics (Anderson & Mott, 1998; Granfield & Cloud, 1996). Shinebourne and Smith (2009) observed this same identity pattern in a qualitative study, which found that past reflection on the individual's identity is seen as a before-and-after scenario. Through the literature, it becomes evident that individuals can recognize a differentiation between their current and past identities, and those identities can be based on problematic behaviors and addictions (DiClemente, 2017; Frings & Albery, 2015). Through the addiction literature, there is also support in both the identification of being and not being, self-defined as an addict. Since research has demonstrated the behaviors associated with pornography use can be self-described as addiction, it should also be considered that this same self-reflection can influence users' perceived identities. Simply stated, if drug addicts self-define as drug addicts due to their drug-using behaviors, then pornography users can self-define as

addicted to pornography based on their behaviors. Thus, the users' beliefs toward themselves and their behaviors equate to beliefs about their identity through the Kairos event(s).

Identity and Problematic Pornography Use

Understanding how pornography use can affect both individuals' lives and their identities requires deeper reflection on a combination of previous research findings, clinical observations, and comprehension of life influences. Portions of each study provide additional insight into how identity and life functioning can be influenced by an individual's pornography use. However, there are no studies that specifically observe the relationship between pornography use and the impact on the users' identities.

The foundational understanding would be that at a point in the individual's life, he or she moves from being a non-pornography user to being a pornography user. This change in behavior can similarly be seen as being a smoker or not, believing in God or a higher power versus being a nonbeliever, or being single versus being married. A simple marker of how an individual's identity begins to change can be seen in the individual's title (e.g., mother, father, doctor, lawyer). Pornography users can also be conceptualized as having a change in identity after a certain point in their use.

Various areas of impact previously addressed in the review of literature may be seen with this population through self-reflection. It was found that individuals who use pornography, both male, and female, have higher levels of negative symptoms such as depression, low self-esteem, and negative self-perception (Lewczuk et al., 2017). It was also found that users' body image is affected by comparing their physical appearance to pornographic images and their perception of attractiveness (Cranney, 2015). In men, it was also found that their satisfaction with their penis

size and their stomachs were negatively impacted by their pornography use (Cranney, 2015; Peter & Valkenburg, 2014). Women's body image and identity can also be impacted by pornography use. O'Reilly and colleagues (2007) found that women may no longer consider themselves adequate, necessary, or sexually attractive for their romantic partner, which provides support that their self-identity is now reimagined based on their beliefs about themselves and their relationships with others.

One focus of this study is to explicate the relationship between users' behavior and their identity relative to addictive patterns related to their pornography use. That is, individuals may define themselves by a moment or series of moments that they either willfully or coercively participate. These moments could be viewed as a Kairos event or series of events that can result in an identity forming schema that is unique from their "before" identity. Akin to substance abuse, pornography users or former problematic pornography users, may see themselves as having separate identities before their use and after their use. They could also see themselves as past addicts and recovering addicts. The connection becomes clear as there is a moment where this change becomes the before-and-after identity.

Instrument Considerations

There are a number of measures that have been used to assess the potential problematic sexual behavior including Problematic Pornography Use Scale (PPUS; Kor et al., 2014), the Compulsive Pornography Consumption scale (CPC; Noor et al., 2014), the Cyber Pornography Use Inventory (CPUI) (Grubbs, Sessoms, Wheeler, & Volk, 2010) and Cyber Pornography Use Inventory (CPUI-9) (Grubbs, Volk, Exline, & Pargament, 2015), Cognitive and Behavioral Outcomes Scale (CBOSB) (McBride, 2006), the Sexual Compulsivity Scale (SCS; Kalichman, Johnson, Adiar, & Rompa, 1994), the Hypersexual Behavior Inventory (Reid, Garos &

Carpenter, 2011), the Pornography Cravings Questionnaire (Kraus & Rosenberg, 2014), and the Hypersexual Behavior Consequences Scale (Reid et al., 2012). Each of these scales addresses problematic sexual behavior in one form or another.

Problematic Pornography Use Scale (PPUS)

The Problematic Pornography Use Scale (PPUS; Kor et al., 2014) was developed to measure problematic pornography use due to the lack of instruments that could provide insight into this growing issue (Kor et al., 2014). This scale follows the concept of addiction models in order to understand the relationship between an individual's pornography use and impact of functioning in various domains. Through an addiction-based conceptualization, an individual's pornography use can be conceptualized as having similar features to other addictions, such as substance use and gambling (Brand et al., 2011; Carnes & Wilson, 2002; Goodman, 1993). The scale has 21 items that assess four domains related to pornography use: distress and functional problems, excessive use, control difficulties, and use to escape negative emotions. Several studies have been conducted to validate the PPUS and have found strong validity and reliability (Darvish & Nikmanesh, 2017; Kor, Potenza, Hoff, Porter, & Kraus, 2017; Kor et al., 2014). Despite this scale's reliability and validity, the scale has two issues precluding its use in this study. The first is that the scale is too long to be used as a brief measure (Noor, Rosser, & Erickson, 2014). The second is that this scale measures four domains of which none address the relationship between beliefs and identity.

Compulsive Pornography Consumption (CPC)

The Compulsive Pornography Consumption scale (CPC; Noor et al., 2014) was developed to address the issues that researchers found when trying to measure the consumption

of sexually explicit media (Noor et al., 2014). The scale attempts to measure an individual's compulsive pornography consumption, which the researchers define as synonymous with pornography addiction, by bridging the gap between measuring the relationships between the consumption of sexually explicit media and compulsive sexual behaviors. The scale contains five items, uses Likert scaling, and mirrors the criteria for obsessive-compulsive disorder found in the DSM with the tone of each survey question being inclusive of pornography (Rosser, Noor, & Iantaffi, 2014).

This scale was considered for this study because the research considers compulsive pornography consumption similarly to diagnosable mental disorders. Those who consider themselves as having a disorder may also identify themselves through this disorder. But while this scale can identify individuals who have compulsive issues with pornography, it does not assess how it impacts the users' identity.

Cyber Pornography Use Inventory (CPUI)

The Cyber Pornography Use Inventory (CPUI) seeks to measure how the perceived addiction may be related to other domains of psychological functioning (Grubbs, Sessoms, Wheeler, & Volk, 2010; Grubbs et al., 2015). Grubbs et al. (2010) suggested the CPUI based on the characteristics of addictive behaviors. It was considered that these characteristics are due to an inability to stop the behaviors, that there are significant negative impacts as a result of those behaviors, and there is a level of obsession with these behaviors. The CPUI was modeled after the Internet Sex Screening Test, which was originally developed by Delmonico (Delmonico & Griffin, 2008).

This inventory is a 40-item scale with six subscales that include compulsion, social use, efforts, guilt, isolation, and interest (Egan & Parmar, 2013; Sessoms, 2011). Through testing, this

scale was found to have good reliability in the subscales of compulsivity and social use (Grubbs, Stauner, Exline, Pargament, & Lindberg, 2015) but lacked in guilt and isolation (Egan et al., 2013). This scale only measures Internet pornography use and does not consider other media. Despite the positive attributes of this scale, it does not measure the needed aspects for this study, specifically identity.

Cognitive and Behavioral Outcomes Scale (CBOSB)

The CBOSB was developed by McBride (2006) for the purpose of measuring the worries of negative consequences associated with sexual practices and their use. This scale provides insight into the extent to which individuals worry about the consequences of their sexual practices, if those practices caused pain or injury to others, if they caused problems in their relationships, and if these behaviors impacted their school and work (McBride, 2006). This scale contains six domains: legal/occupational, psychological/spiritual, social, physical (pain, injury), financial, and other physical pain such as disease or pregnancy (McBride et al., 2007; Womack, Hook, Ramos, Davis, & Penberthy, 2013). This scale provides additional insight into how sexual behaviors associated with pornography use could influence the relationships and identity of the user. The scale, however, is primarily focused on sexual behaviors and self-reflection on consequences of individuals' actions and not its impact on identity or beliefs about themselves or their use. Due to this scale not addressing pornography as the sexual behavior and there being no measure for its impact on identity, this scale was not considered a tenable instrument for this study.

Sexual Compulsivity Scale (SCS)

The Sexual Compulsivity Scale (SCS; Kalichman, Johnson, Adiar, & Rompa, 1994) measures an individual's sexual desires or urges, the way the individual reacts to them, and the

negative impact of these behaviors. This scale was considered because it includes questions that investigate the impact on relationships and the individual's struggle to manage his or her sexual thoughts and behaviors (McBride, Reece, & Sanders, 2008). There are several issues with using this scale. First, the scale has been primarily used with participants who are not generalizable with the majority of studies because they were expected to be hypersexual and have sexual preoccupation (Kalichman & Rompa, 1995; Lee, Ritchey, Forbey, & Gaither, 2009). Second, the SCS does not specifically measure pornography use. Lastly, the relationship between compulsive sexual behaviors and identity is not measured or addressed. Due to the lack of specificity to pornography use and identity, this scale is not considered a tenable measure in addressing the research questions in this study.

Hypersexual Behavior Inventory (HBI)

The Hypersexual Behavior Inventory (HBI; Reid, Garos & Carpenter, 2011) is a 19-item self-report measure that focuses on domains associated with hypersexual behaviors. The inventory contains items that measure how individuals use sex to cope with emotional distress and the extent to which individuals feel they are unable to control their sexual thoughts, feelings, and behaviors (Reid & Garos, 2007). The scale also attempts to measure the extent to which individuals experience negative consequences through their sexual activities (Reid, Harper, & Anderson, 2009). The HBI has shown consistency with its validity through multiple studies (Reid, Li, et al. 2011; Reid, Garos & Carpenter, 2011) and considerations toward hypersexual type disorders in the future (Reid et al., 2012; Reid, Garos, & Fong, 2012). The content of the scale is focused on how individuals' sexual behaviors and thoughts impact their daily functioning and to what severity.

The HBI provides significant insight into the individual's dysfunction and its impact on the individual's daily life. The HBI was considered for this study because of the way it measures individuals' perception of how their hypersexual behaviors impact their lives and their perception of themselves. However, it does not measure the specific impact on the individuals' identity. A final aspect of this scale that prevents it from meeting the specific needs of this study is that the scale measures hypersexual behaviors and not specifically pornography use. While the literature has demonstrated correlations between hypersexual behaviors, promiscuity, and pornography use (Villena, Contreras, & Chiclana, 2017), this scale does not specify that pornography use is the only or primary hypersexual behavior.

Pornography Cravings Questionnaire (PCQ)

The Pornography Cravings Questionnaire (PCQ; Kraus & Rosenberg, 2014) was created by adapting statements from measures designed to assess alcohol and drug craving (Bohn, Krahn, & Staehler, 1995) and consists of a pool of 20 items that include 5 dimensions of pornography craving behaviors (Allen et al., 2017). The five domains are perceived control over use, mood changes, psychophysiological reactivity, desire, and intention to use pornography (Kraus et al., 2014). The PCQ provides significant information about sexual behaviors related to Internet pornography and has been shown to have strong psychometric properties (Allen et al., 2017). This questionnaire was considered for this study due to specifically measuring the relationship between pornography use and dysfunction in the various domains of the individual. Despite this relationship, the questionnaire does not provide a significant enough emphasis on how pornography impacts the identity of the user.

Hypersexual Behavior Consequences Scale (HBCS)

The Hypersexual Behavior Consequences Scale (HBCS; Reid et al., 2012) was developed to address the consequences of hypersexual behaviors that the Cognitive and Behavioral Outcomes of Sexual Behaviors Scale (McBride et al., 2008) and the Compulsive Sexual Behavior Consequences Scale (CSBCS; Muench et al., 2007) did not measure. This scale was considered for this study because it includes a focus on self-reflection about consequences that impact people's current life experiences based on their past hypersexual behaviors. Reliability and validity for the HBCS were high in the initial study. Despite this positive testing, the HBCS focuses on hypersexual behaviors and not exclusively on pornography use. Also, the scale measures the perception of consequences from the hypersexual behaviors and not how those behaviors have impacted people's identity or beliefs about themselves.

Despite the strong validity and reliability of the different instruments reviewed for this study, there were no instruments in the current literature that provided a way that could measure the relationship between pornography use, its influence on identity, and the pornography users' internalization and externalization of their use. The need for an instrument to provide a way to measure how an external stimulus can impact internal functioning was necessary to understand the relationship between pornography use and identity. Developing instruments that are inclusive of the external stimulus influencing internal functioning was necessary due to the gap in the scales that measure the different aspects of pornography use.

Centrality Event Scale

The Centrality Event Scale (CES; Berntsen & Rubin, 2006) was developed to measure how significant life events impact identity. This scale was considered based on its high reliability (Boals, 2010; Robinaugh and McNally, 2011; Smeets, Giesbrecht, Raymaekers, Shaw, &

Merckelbach, 2010) and because it addresses the change in identity people experience. This scale was developed to examine how the effects of traumatic events impact the individual's identity formulation. This scale is a 20-item survey that contains three subscales: if the event, or series of events, was a reference point for the generation of expectations and attribution of meaning to other events in the person's life; if the event, or series of events, was perceived as a central component of personal identity; and if the event, or series of events, was regarded as a turning point in the life story (Berntsen et al., 2006). Identifying the measuring objective of each subscale is necessary to identify whether this scale can provide further usefulness for this study.

The first subscale involves if the event, or series of events, was a reference point for the generation of expectations and attribution of meaning to other events in the person's life. This was also referred to by Boals (2010) as the individual having an impact on daily inferences. Having had an impact on individuals' daily perceptions and interactions further plays a role in the continuation of their self-perceptions through their beliefs of themselves (Newby & Moulds, 2011). To understand what the impact of daily inferences looks like, Pillemer (1998) explained these anchoring events in a person's life are "a lasting reminder of the way things are" (p. 74). In cases that include a series of traumatic events, an individual can exist in a state of mental hypervigilance (Ehlers & Clark, 2000), which causes a level of recurring intrusion, leading to a disturbance in the individual's daily life (Newby et al., 2011). This subscale suggests that an event, or series of events, can echo through daily functioning long after the event has occurred. Though this subscale does not reference pornography use as the series of events, there is support to consider that daily or frequent use of pornography can cause this same impact in daily inferences, therefore influencing meaning toward other events in users' lives.

The second subscale investigates if the events have become a central component of personal identity. A person's self-understanding comprises the results of several specific stories that define who a person is through a narrative form, as opposed to declarative terms (Fitzgerald, 1988). Considered another way, this personal identity could be defined as a person's self-schema (Brewer, 1996). The importance of people's identities is rooted in their life experiences (Cramer, 2004), beliefs about themselves and their behaviors (Stedman, 2002; Schwartz, Montgomery, & Briones, 2006), and system of values (Mecklbaum, 2011). In this study, how a person's identity is formulated is essential to the impact of these events and how a person defines himself or herself.

The final subscale of the CES identifies if the life event, or series of events, was regarded as a turning point at which the person's life story changed. According to Pillemer (1998), a turning point in a life story is "a specific episode or series of episodes that appears to alter or redirect the ongoing flow of the life course" (p. 76). It is important to understand that recognizing how a life event or events are interpreted through self-reflection and how identifying those events as a catalyst for change in the individual's life story is necessary to conceptualizing this subscale. This turning point is not a simple change from one identity to another, but an entry into a *kairos* moment, a span of time when a change in people's beliefs about themselves was incurred and modified their identity (Kinneavy & Eskin, 2000; McFadden & Thibault, 2006).

The scale was originally designed around traumatic events and identity. Berntsen and Rubin (2007) contemplated the connection between unexpected traumatic events and the impact on the person's mind. They considered how these imbalances could cause violations in the schemata of the person, causing him or her to accommodate the violation to manage the trauma (Berntsen et al., 2007). It is important to recognize that trauma is not always limited to a single

event but can include the exposure and experiencing of events over time (Berntsen et al., 2006), which is supported through the CES. Identifying trauma, in a context that implies more damage in neurological understandings, begins to shape the picture of how the trauma schemes can be relative to more than single events. It is further argued that these traumatic memories remain accessible, causing a constant influence on the way the individual interprets non-traumatic experiences with future events (Berntsen et al., 2006), which has been previously identified as implicit memories and the lack of time stamping by Siegel (2001). The CES was created through this theory as a way to measure the extent to which a traumatic memory forms a reference point (Berntsen & Rubin, 2006). Understanding how an event can influence the individual's identity is essential to understanding how the normal path of identity formulation can deviate and the lens through which the individual sees the world can be altered.

The CES showed promise with its reliability and validity, making it a tenable scale in measuring the impact of life events and identity. However, this scale does not encompass pornography as the series of events that influences identity. In comparison to the other reviewed scales, the CES demonstrates the closest relation to the needed measures for this study, connecting behaviors and experiences with impact on life and identity. It can provide a bridge between the concepts outlined in this study and bring a collective understanding of their relationship to the field of mental health.

Summary

Pornography can cause a level of distress in people, at times beyond what they can comprehend. This chapter has bridged the gap between the use of pornography and the impact that pornography can have on individuals and their identity. This chapter reviewed how

pornography use has evolved over the years and how it can cause problematic symptomology in mental health and life domains. The chapter has also demonstrated that this dysfunction can cause changes in the identity through a Kairos event. Scales and assessments were discussed to provide insight into the impact that pornography use has in the different areas of the individual user and their relevance to this study. Despite the various domains that these scales measure, they do not specifically provide a way to measure the impact that pornography use has on the individual in the areas outlined in the research questions. Chapter 3 provides a discussion on the methods for conducting the study, as well as data collection, analysis, and selection of participants.

CHAPTER THREE: METHOD

This chapter will focus on the methodology used to investigate the two aspects of this study. The first aspect is to assess the reliability and validity of the Centrality of Event Scale (CES) modified for pornography use, which is called the Centrality of Event Scale- Pornography (CES-P). The second aspect of this study is to assess the validity and factor structure of the CES-P as it relates to pornography use and other factors that have shown some relationship to problematic pornography use in other research. The chapter will briefly review the research purpose followed by the research questions and hypotheses. The chapter will then review the research design, including the process for selecting participants and the research instruments used. The chapter will further discuss the procedures used for the data processing and analysis. A section on ethical considerations is included, followed by a summary of the chapter.

Research Design

This study will use exploratory factor analysis with oblimin (oblique) rotation consistent with best practices for sexuality researchers (Sakaluk & Short, 2017) in order to investigate the potential latent factors of underlying variability in the correlation matrix for the initial item battery. Weakest loading items of any of the factors that have cross-loadings of <0.3 will be removed. Bivariate correlations will be examined, and convergent, discriminant, and incremental validity of the CES-P will be evaluated. The three subscales of the CES-P will be of principle interest, as well as one of the primary hypotheses. Findings will be analyzed, reported, and discussed in Chapter 4.

Selection of Participants

Participants will be recruited through the use of Mechanical Turk (MTurk) with a sample size of approximately 500 participants. MTurk provides a random sample with various ages, ethnicities, religions, genders, and levels of pornography use (Stewart et al., 2015). Three exclusions will be made to ensure the study's validity: (a) participants must be 18 years of age or older, (b) only individuals who used pornography in the last 6 months will be permitted to take the survey, and (c) individuals who do not give consent to participate in the study will be excluded from proceeding with the survey.

Instrumentation

Demographic Information

This study will use standard questions to identify the demographics. These questions will include identification of the participant's gender, relationship status, age, religious affiliations, education, employment status, ethnicity, and age at which the participant began using pornography.

Pornography use. The survey will include qualitative questions that will provide the participant's frequency, duration, and severity of pornography use. These questions will identify if the individual is a past pornography user, a current pornography user, or both over his or her lifetime. To further understand the participant's frequency of use, the survey will identify how often he or she uses pornography by week, months, and six months. In addition, the survey will measure frequency of masturbation by times per day and frequency of masturbation multiple times in one day per week. To understand duration, the survey will identify how long the individual uses pornography each time he or she uses it.

Centrality of Event Scale for Pornography (CES-P). There are numerous valuable instruments measuring hypersexuality, perceived addiction, online behaviors, and attitudes toward pornography, but there is still a relative void of instruments specifically assessing the impact that pornography use has on an individual. The CES-P is a modification of the CES to identify how an individual's pornography use impacts the same subscales previously described in the preceding chapters. The CES-P fills the void the previously reviewed scales (PPUS, CPC, CBOSB, etc.) do not address. The modified scale identifies whether individuals' pornography use became a reference point for other experiences in their life, whether their pornography use impacted their identity, and whether their pornography use became a significant influence on their life stories.

Modifying the CES to include pornography use allows the scale to measure the relationship between individuals' pornography use and the impact on their identity and how they make meaning of their world and experiences. This is important because there is a void in the literature regarding this relationship. The significance of this relationship can help mental health professionals and researchers understand the real impact pornography has, beyond what is currently understood in the research. In addition, by modifying the CES to the CES-P, a measure becomes available that can increase the larger body of knowledge regarding how pornography use behaviors impact beliefs and thus impact self-identity.

The CES-P was developed from the CES, which contains three subscales: if the event, or series of events, was a reference point for the generation of expectations and attribution of meaning to other events in the person's life; if the event, or series of events, was perceived as a central component of personal identity; and if the event, or series of events, was regarded as a turning point in the life story (Berntsen et al., 2006). To measure the effects of pornography use

on identity, the CES was modified to the CES-P by changing the language in the scale to include pornography use (Appendix A). Through changing this language, the scale encourages participants to reflect on their problematic pornography use as the series of events that replace the events found in the CES. This allows for the assessment of how the relationship between their pornography use and their identity has impacted their life.

Subscale 1: My pornography use has become a reference point for meaning with other events in my life. Originally this subscale was the event(s) that becomes a reference point for meaning with other events in the individual's life. The original CES focused this question toward the concept that trauma and other significant life events can cause a deviation in the meaning making of the individual. For this study, the CES-P considers the individual's pornography use and behaviors as the lens that adjusts his or her meaning making. This altered perspective is expected to modify the way the individual experiences relationships, social interactions, and other events.

Subscale 2: My pornography use is a central component of my identity. Originally this subscale was the event or events that was a central component of the individual's identity. Through using the methods of the original scale, the correlation between an individuals' pornography use and identity can be identified. Individuals' beliefs toward their behaviors have a direct impact on their identity. Considering the behaviors with pornography use that individuals engage in, their beliefs toward these behaviors and their use can impact identity.

Subscale 3: My pornography use was a turning point in my life story. Originally this subscale was the event or events that was a turning point in the individual's life story. While it makes sense to define this event as the first exposure to pornography, this study considers this turning point not as a single moment, but as a Kairos event; a collection of self-reflection of

people's behaviors leading to internalization of their beliefs about their use and self. To identify when this internal transformation occurs, the task falls on the participant to identify the timing of this kairos event, rather than the researcher.

Validity and reliability testing. To test the validity of the CES-P, additional scales are necessary to use in congruence for this study. In the plethora of assessments, scales, and questionnaires, there were no scales that aligned exactly with the CES or the CES-P. Two scales, however, can provide aspects of the CES-P: the Hypersexual Behavior Inventory and the Cyber Pornography Use Inventory.

The Hypersexual Behavior Inventory (HBI; Reid, Garos, & Carpenter, 2011) is composed of a 19-item self-report measure that focuses on domains associated with hypersexual behaviors: how individuals use sex to cope with emotional distress; the severity with which individuals feel they are unable to control their sexual thoughts, feelings, and behaviors; the extent to which individuals experience negative consequences through their sexual activities; and how individuals' sexual behaviors and thoughts impact their daily functioning (Reid, Harper, & Anderson, 2009; Reid & Garos, 2007). The HBI has shown consistency with its validity and reliability through multiple studies (Reid, Li, Gilliland, Stein, & Fong, 2011; Reid, Garos, & Carpenter, 2011) and provides a good measure for how sexual behaviors can impact daily functioning and be used for emotional regulation.

The Cyber Pornography Use Inventory (CPUI; Grubbs et al., 2010) seeks to measure how the perceived addiction may be related to other domains of psychological functioning (Grubbs, Sessoms, Wheeler, & Volk, 2010; Grubbs, Volk, Exline, & Pargament, 2015). Grubbs, Sessoms et al. (2010) suggested the scale based on the characteristics of addictive behaviors. It was considered that these characteristics are due to an inability to stop the behaviors, that there are

significant negative impacts as a result of those behaviors, and that there is a level of obsession with these behaviors. This inventory is a 40-item scale with six subscales that include compulsion, interest, efforts, guilt, isolation, and social use (Egan & Parmar, 2013; Sessoms, 2011). This scale will be used to help validate the CES-P because the CPUI includes measures that reflect properties and dysfunction associated with addiction, which can impact users' beliefs about themselves and their behaviors. Through the concept of addiction, the relationship between participants' pornography using behaviors and their self-perception of identity can be observed.

Catch trial. To identify participants providing flawed data through automatic survey completion software, and participants who do not read each question on the survey, the survey will include strategically placed items called catch trial items. The study will include four catch trial questions at different portions of the survey. The first three questions will require a specific answer (I am a human, I live on Earth, and I plan to get paid for my participation in this study). The survey will conclude with a single question that will identify if the participant answered the survey questions honestly or if he or she randomly selected answers to complete the survey. Individuals who do not answer one of the four catch trial questions correctly will be eliminated from the study.

Research Procedures

Data Collection

Approval through the institutional review board will be sought before any data collection. Once the study is approved to proceed, a test survey will be created and administered through MTurk. This will serve as the pilot study of the survey. Participants will be requested through MTurk. The presentation of the survey to participants will include a narrative that explains the

premise of the survey and states that the survey is assessing pornography use, self-perceptions of pornography use, and the self-perceived impact of pornography use on the individual.

Research Questions

Research Question 1

Does the CES-P maintain the factor structure of the original CES?

Hypothesis 1. The CES-P maintains the factor structure of the original CES.

Null hypothesis: The CES-P does not maintain the factor structure of the original CES.

The CES has been used in multiple research studies and has demonstrated strong validity and reliability. While some of the vocabulary in the CES has been changed to create the CES-P, it is expected to demonstrate similar levels of validity. Identifying if the CES-P maintains the same factor structure as the CES will support if the scale measures what it proposes it measures.

Research Question 2

Is there a positive correlation between levels of pornography use and scores on the CES-P?

Hypothesis 2. There is a positive correlation between levels of pornography use and scores on the CES-P.

Null hypothesis: There is not a positive correlation between levels of pornography use and scores on the CES-P.

Individuals who identify themselves as having problematic or addictive pornography use have been observed having higher levels of cognitive dissonance. It is expected that higher levels of pornography use will correlate with higher scores on the three subscales found in the CES-P because higher dysfunction in life domains due to pornography use is expected to correlate with higher levels of use.

Research Question 3

Do individuals who self-identify as religious score higher on the CES-P than nonreligious individuals?

Hypothesis 3. Individuals who self-identify as religious score higher on the CES-P than nonreligious individuals.

Null hypothesis: Individuals who self-identify as religious will not score higher on the CES-P than nonreligious individuals.

Individuals who identify as religious and use pornography have been shown to have more internal conflict than nonreligious populations (Abell et al., 2006; Thomas, 2016; Grubbs et al., 2010). This internal struggle would also be observed in their beliefs about their pornography use and with their perception of their identity. It is expected that religious individuals will have higher scores on the CES-P than nonreligious individuals.

Data Processing and Analysis

Data will be collected and uploaded into IBM SPSS Statistics version 25 with PROCESS macro for SPSS (Hayes, 2013). Data will be reviewed for any missing information, incomplete

surveys, or clear irregularities in survey answers. Also, participants who answered the fourth catch trial question as not being honest with their answers will be excluded. Preliminary data screening will provide scores that will allow the researcher to see if the measures are normally distributed. Transformation of data will be conducted if any assumptions are violated. Once this is completed with no violations, the assumption of linearity will be tested and screened for outliers. The outliers will then be individually reviewed for consideration of their validity and inclusion or exclusion in the study.

Ethical Considerations

Before collecting data, multiple ethical precautions will be conducted. The first is that approval from the institutional review board will be obtained. Consultation and supervision will be received through the institution and ethical guidelines for research from the American Counseling Association. Informed consents that include a description of the survey will be read by the participants before they have access to the survey and will require their agreement to begin the survey. Participants who do not agree to the informed consent will not receive access to any of the survey questions.

The participants' welfare and ethical treatment are considered a top priority. Participants' confidentiality is essential to ensuring client safety. Through the use of Mechanical Turk, the participants' identifying information will not be available to the researchers, maintaining their confidentiality. A final consideration is a risk to participant welfare through the study. Due to the absence of experimental treatment being provided, the participants will not have treatment withheld, placebo, or treatment plus preventing participants from being harmed. Due to the content of the survey, there may be psychologically distressing aspects to the participant. To

address this potential concern, a narrative will be included at the end of the survey with contact information for mental health assistance.

Summary

This chapter provided a discussion of the purpose of the study followed by the research questions and hypotheses. The research design was reviewed, including how participants and research instruments were chosen. Research procedures were explained, followed by the data analysis procedures and how the data will be processed. The chapter concludes with the ethical considerations the researchers accepted to protect the participants in the study.

CHAPTER FOUR: RESULTS

The purpose of this study is to investigate the relationship between beliefs, pornography use, and identity and to bridge the gap in the research. If pornography use becomes a central component of the pornography user's identity, that may act as a reference point for meaning making with other events in the user's life. Testing the validity and reliability of the CES-P will provide data on the psychometric properties of the scale, which will then be used to further explore the relationship between identity and pornography use. It is important for mental health professionals to recognize these self-defining perceptions because they can impact case conceptualization, goal setting, and treatment outcomes. Understanding how these central events in an individual's life have impacted the meaning of other events and self-identity requires the use of instruments that can assist with identifying how these events affect the individual. The CES has demonstrated the ability to assess these aspects, but it does not examine pornography use as the central life event specifically. Thus, the CES-P was developed. Further testing of its validity is required, which is part of the purpose of this study.

Data Screening

A sample of 1,227 participants was acquired through data collection from MTurk in March 2018. The data were screened through several methods to remove participants whose responses would threaten the study's validity. Participants were given multiple demographic items, questions about their pornography use, and informed consent. The first step in the data screening removed participants who did not answer the catch trial questions and the informed consent correctly. This removed 51 participants. Two cases where participants selected the same consecutive responses 20 or more times were removed. Any participant who did not spend an

average of at least 1 second per item answered were removed from the sample. This removed 25 participants. The variance was calculated on the 19 subscales with any participant who scored zero and any four of them were eliminated. There were no participants removed during this step. Since this study focuses on problematic pornography users, we eliminated any respondent who did not indicate any response above 1 on the CPUI and who had not used pornography in the 30 days prior to participating in the study. This eliminated 510 participants. Finally, participants who gave the same response to all of the CES-P items were not included in the analysis. This eliminated 142 participants. These procedures resulted in a final sample of 497 participants.

Participant Demographics

Demographics of the viable participants were reviewed after data screening ($N = 497$) and demonstrated that 55.7% of participants were male, 42.9% were female, and 1.4% selected “other” to describe their gender. Participants’ ages ranged from 18 to 72 ($M = 35.3$, $SD = 11.1$). The majority of the sample was Caucasian (74.9%); 10.3% described their race as African American, 7.5% Hispanic, 5.3% Asian, 0.4% American Indian or Alaska Native, and 1.6% chose “other.” The participants’ highest reported level of education was collected. A plurality of participants (38.1%) endorsed having at least a bachelor’s degree; the remaining participants endorsed a high school diploma or GED (14.5%), college freshman (5.4%), college sophomore (8.1%), college junior (4.8%), college senior (3.2%), trade or technical school (10.9%), master’s degree (12.5%), professional degree (1.8%), or doctorate (0.4%). Employment status revealed that the majority of participants (65.6%) selected “employed for wages,” 15.2% chose self-employed, 4.9% not employed, 4.0% homemaker, 6.1% student, 0.8% military, 2.6% retired, and 0.8% unable to work. Participants reported their relationship status as follows: currently married or have a life partner (41.9%), single and never in a relationship (4.6%), single and not currently

in a relationship but have been in a serious relationship in the past (15.5%), in a noncommitted dating relationship (5.8%), in a monogamous dating relationship (25.2%), married but legally separated (1.2%), divorced (5.2%), and widowed (0.4%). Regarding marital history, the largest number was never married (49.1%), followed by participants who had been married once (40.2%). The rest identified as married twice (9.5%), married three times (1.0%), or married more than three times (0.2%). See Table 4.1 for demographic information.

Table 4.1
Participant Demographics

	<i>N</i> or Range	% or <i>M</i>
Age	18-72	38.1
<u>Gender</u>		
Male	275	55.7
Female	212	42.9
Other	7	1.4
<u>Racial Identity</u>		
Caucasian/White	371	74.9
African American	51	10.3
Hispanic	37	7.4
Asian	26	5.2
American Indian or Alaska Native	2	0.4
Other	8	1.6
<u>Educational Background</u>		
High School diploma or equivalent (e.g., GED)	72	14.7
College Freshman	27	5.4
College Sophomore	40	8.1
College Junior	24	4.8
College Senior	16	3.2
Trade, Technical, or Vocational Training	54	10.9
Bachelor's Degree	189	38.1
Master's Degree	62	12.5
Professional Degree	9	1.8
Doctorate	2	.4
<u>Employment Status</u>		

Employed for Wages	324	65.6
Self-Employed	75	15.2
Not Employed	24	4.8
Homemakers	20	4.0
Students	30	6.1
Military	4	0.8
Retired	13	2.6
Unable to Work	4	.8
<u>Marital History</u>		
Never Married	243	49.1
Married Once	199	40.2
Married Twice	47	9.5
Married Three Times	5	1.0
Married More than Three Times	1	0.2
<u>Current Relationships Status</u>		
Currently Single – Never in a Relationship	23	4.6
Single – Not Currently in a Relationship	77	15.5
Non-committed Dating Relationship	29	5.8
Monogamous Dating Relationship	125	25.2
Married/With a Life Partner	208	41.9
Married, but Legally Separated	6	1.2
Divorced	26	5.2
Widowed	2	0.4
<u>Household Annual Income</u>		
Under \$10,000	21	4.2
\$10,000- \$19,999	47	9.5
\$20,000- \$29,000	66	13.3
\$30,000- \$39,999	62	12.5
\$40,000- \$49,999	63	12.7
\$50,000- \$59,999	57	11.5
\$60,000- \$69,999	42	8.5
\$70,000- \$99,999	77	15.5
Over \$100,000	61	12.3

Participants endorsed the following religious affiliations: no religious affiliation (41.8%), Protestant (12.5%), nondenominational Christian (15.2%), Catholic (14.3%), Jewish (1.8%), New Age or Wiccan (3.4%), Buddhist (0.8%), Hindu (1.0%), Mormon (0.8%), Muslim (1.0%), and other (7.3%). See Table 4.2 for demographic information. Belief in God was also collected;

a plurality stated that “I believe there is a God” (42.9%), followed by “I sometimes believe there is a God” (23.6%), “I used to believe there was a God but do not anymore” (16.7%), and “I do not believe there is a God and I cannot say that I have ever believed in a God” (16.7%). A final religion-oriented survey question asked, “To what degree does religion or faith affect your everyday life and decision-making?” A plurality of participants chose none at all (44.2%), followed by a little (23.8%), a moderate amount (15.5%), a lot (8.1%), and a great deal (8.5%). See Table 4.2.

Table 4.2

Religious Demographics

	<i>N</i> or Range	% or <i>M</i>
Protestant (e.g., Methodist, Baptist, or other Non-Catholic Christian Denomination)	62	12.5
Catholic	71	14.3
Christian (Non-Denominational)	75	15.2
Mormon	4	0.8
Muslim	5	1.0
Hindu	5	1.0
Jewish	9	1.8
Buddhist	4	0.8
New Age or Wiccan	17	3.4
None	207	41.8
Other	36	7.3

Which of these statements comes closest to express what you believe about God?

I don't believe there is a God.	213	42.9
I sometimes believe there is a God	117	23.5
I used to believe there was a God but do not	83	16.7

anymore		
I do not believe there is a God and I cannot say that I have ever believed in a God	83	16.7

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

A great deal.	42	8.5
A lot.	40	8.0
A moderate amount	77	15.5
A little	118	23.7
None at all	219	44.2

Several questions were asked to understand the participants' pornography use. Due to the need to understand the participants' pornography use in qualitative terms, the survey collected data on participants' use in a week, the past month, and the past 6 months. The participants could choose from several answers, which included 0 times, 1–3 times, 4–6 times, 7–9 times, and 10 or more times per week. The majority of participants (51.3%) selected 1–3 times per week. Other responses included 0 times (24.3%), 4–6 times (11.5%), 7–9 times (5.6%), and 10 or more times (7.2%). When asked about their use in the last month, participants reported using 1–3 times (29.0%), 4–6 times (25.4%), 7–9 times (14.7%), and 10 or more times (31.0%). When asked about their use in the last six months, participants reported using 1–3 times (4.6%), 4–6 times (15.5%), 7–9 times (15.1%), and 10 or more times (64.8%). See Table 4.3 for pornography use data.

Table 4.3

Pornography Use Statistics

	<i>N</i> or Range	% or <i>M</i>
Average Hours of Pornography Used per Week	0-72	2.54
Pornography Use in the Past Week		
0 Times	121	24.3
1-3 Times	255	51.3
4-6 Times	57	11.5
7-9 Times	28	5.6
10 or More Times	36	7.2
Pornography Use in the Past Month		
1-3 Times	144	29.0
4-6 Times	126	25.4
7-9 Times	73	14.7
10 or More Times	154	31.0
Pornography Use in the Last 6 Months		
1-3 Times	23	4.6
4-6 Times	77	15.5
7-9 Times	75	15.1
10 or More Times	322	64.8

Data Analysis

Data analysis was performed using IBM SPSS Statistics Version 25. Data screening used multiple processes to remove participants who would increase the probability of threats to validity. An exploratory factor analysis was then conducted to identify variability and to identify any weak or cross-loading factors. The data were then reviewed for correlations between the factors and the other items included in the study.

Principal Axis Factoring of the Initial Item Battery

The initial item battery of the CES-P consisted of 20 items and was assessed for factorability. The Kaiser-Meyer-Olkin measure of sampling adequacy (.947) was greater than .60, and all items were correlated with one another at greater than .3, indicating acceptable factorability. Principal axis factoring (PAF) with oblimin (oblique) rotation was used. The original PAF kept all factors having an eigenvalue of at least 1: all items had an absolute factor loading of at least 0.3. The weakest-loading items were iteratively removed on any of the factors that had cross-loadings less than 0.3 as a means to refine the instrument and decrease noise. The scree plot suggested two meaningful factors that consisted of nine and seven items and together explained 61.36% of the total variance of the remaining 16 items (see Table 4.4).

Table 4.4

Final Factor Structure (Pattern Matrix) of Principal Axis Factor Analysis (PAF) with Oblique Rotation

	Factors		
	1	2	R^2
I often see connections and similarities between my pornography use and my current relationships with other people.	.841		.71
My pornography use can be seen as a symbol or mark of important themes in my life.	.827		.68
My pornography use has become a reference point for the way I understand myself and the world.	.790		.62
I automatically see connections and similarities between my pornography use and other experiences in my life.	.766		.59
I feel that my pornography use has become a part of my identity.	.754		.57
My pornography use has become a reference point for the way I understand new experiences.	.637		.41

I feel that my pornography use has become a central part of my life story.	.636	.40
My pornography use is making my life different from the life of most other people.	.598	.36
My pornography use tells a lot about who I am.	.499	.25
My pornography use has permanently changed my life.	.804	.65
I often think about the effects that my pornography use will have on my future.	.777	.60
My pornography use has significantly impacted my daily life.	.759	.58
If I had never used pornography, I would have had different relationships today.	.656	.43
When I reflect upon my future, I often think about my pornography use.	.623	.39
My pornography use has affected the way I think and feel about other experiences.	.599	.36
I believe that people who use less pornography have a different way of looking upon themselves than I have.	.441	.19

Factor 1: Identity. The first factor consists of nine items that assess to what degree one believes that one's pornography use impacts one's identity. In the CES-P this included the subscale that "My pornography use is a central point of my identity." The items address the users' internalization of their use (e.g., "My pornography use is making my life different from the life of most other people," "I feel that my pornography use has become a central part of my life story," "My pornography use tells a lot about who I am," "I feel that my pornography use has become a part of my identity"). The items also address the users' recognition of a turning point in their life stories (e.g., "My pornography use has become a reference point for the way I understand new experiences," "I automatically see connections between my pornography use and other experiences in my life," "I often see connections and similarities between my pornography

use and my current relationships with other people”). This subscale has a high internal consistency (Cronbach’s $\alpha = .926$).

This factor is expected to be positively related with the CPUI subscales but should have its strongest relationship with the *CPUI-Efforts* subscale because pornography users who score highly on *Factor 1* would likely be on the path to acceptance relative to their reliance on and integration of their pornography use as a part of their psychological and behavioral patterns. *Factor 1* should have its weakest relationship with the *CPUI-Negative Affect* subscale because those pornography users who score highly on *Factor 1* should have habituated and integrated their use into their lives in a way that limits activation of negative emotions. The correlations between *Factor 1* and the three subscales of the CPUI were statistically significant and revealed the expected pattern of strength and direction. As expected, *Factor 1* had the strongest relationship with *CPUI-Efforts* ($r = .521$) and the weakest relationship with *CPUI-Negative Affect* ($r = .199$). See Table 4.5.

Factor 2: Externalization. The second factor consists of seven items that assess to what degree pornography users believe that their pornography use has influenced their past, currently influences their present, and may influence their future relative to their personal relationships and their interpretation of life events. *Factor 2* includes the two items that assess the degree to which pornography use has become a turning point in users’ life stories and a reference point for everyday inferences. The items assess the externalization of the users’ use (e.g., “My pornography use has permanently changed my life,” “I often think about the effects that my pornography use will have on my future,” “My pornography use has significantly impacted my daily life,” “If I had never used pornography, I would have had different relationships today,” “When I reflect on my future, I often think about my pornography use,” “My pornography use

has affected the way I think and feel about other experiences,” “I believe that people who use less pornography have a different way of looking upon themselves than I have”). This subscale has a high internal consistency (Cronbach’s $\alpha = .862$).

This factor is expected to be positively related with the HBI subscales because the HBI includes subscales that measure aspects of externalization of sexual behavior. *Factor 2* should have its strongest relationship with *HBI-Consequences*, which is particularly focused on external impacts of sexual behavior. As expected, *Factor 2* was positively related to three subscales of the HBI and had its strongest relationship with the *HBI-Consequences* subscale (see Table 4.5).

The two factors address aspects of the relationship between pornography users’ perceptions of their identity, how they perceive their world and themselves, and their pornography use. During the factor analysis, four questions were eliminated due to cross-loading. These included “My pornography use has permanently changed my life,” “If I were to weave a carpet of my life, my pornography use would be in the middle with threads going out to many other experiences,” “My pornography use makes my life different from the life of most people,” and “My pornography use has become a reference point for the way I look upon my future.”

Table 4.5. Pearson *rs*, Means, and SDs

	1	2	3	4	5	6	7	8
(1) CES-P-Identity	1	.721**	.480**	.396**	.603**	.407**	.521**	.199**
(2) CES-P-Externalization		1	.643**	.436**	.667**	.557**	.595**	.425**
(3) HBI- Control			1	.604**	.768**	.599**	.487**	.484**
(4) HBI-Coping				1	.531**	.366**	.353**	.227**
(5) HBI-Consequences					1	.551**	.578**	.371**
(6) CPUI-Compulsivity						1	.521**	.199**

(7) CPUI-Efforts								1	.425**
(8) CPUI-Negative Affect									1
	Mean	1.72	1.90	1.83	2.49	1.61	2.84	2.28	2.50
	SD	0.84	0.84	0.90	0.97	0.83	2.19	1.85	2.12

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

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

Research Question 1

The first research question sought to determine whether the CES-P maintained the factor structure of the original CES. This was not supported because the CES had only one factor and the CES-P analysis identified two unique but highly correlated factors ($r = .721$).

Research Question 2

The second research question sought to determine whether there is a positive correlation between levels of pornography use and scores on the CES-P. To determine significance in this relationship, several items were included in the study to understand participants' pornography use. There were significant correlations between the two factors and these questions. The strongest correlations were found between each factor and how many hours a week the individual uses pornography (*Identity* at $r = .276$ and *Externalization* at $r = .234$). Additionally, frequency of masturbation per week (*Identity* at $r = .235$ and *Externalization* at $r = .245$) and frequency of masturbation multiple times in one day per week (*Identity* at $r = .235$ and *Externalization* at $r = .245$) both had statistically significant but relatively weak correlations with the two CES-P subscales (see Table 4.6).

Research Question 3

The final research question sought to determine whether individuals who self-identify as religious score higher on the CES-P than nonreligious individuals. To measure this relationship, participants completed the Religious Commitment Inventory (RCI). There was a statistically significant correlation with both factors (*Identity* at $r = .201$ and *Externalization* at $r = .322$). As expected, individuals who scored higher on religiosity were more likely to score higher on each of the CES-P subscales. This supported the research hypothesis that religious pornography users would have higher scores on the CES-P than individuals who were less religious (see Table 4.6).

Table 4.6. Pearson r s, Means, and SDs

	1	2	3	4	5	6
(1) CES-P-Identity	1	.721**	.201**	.201**	.235**	.276**
(2) CES-P-Externalization		1	.322**	.175**	.245**	.234**
(3) RCI- Personal			1	-.010	-.019	.020**
(4) How often do you masturbate multiple times in one day?				1	.672**	.290**
(5) How many times do you masturbate per week?					1	.464**
(6) On average, how many times a week do you use pornography?						1
Mean	1.72	1.90	1.87	1.10	3.95	2.51
SD	0.84	0.84	1.08	1.07	3.81	3.79

Summary

A sample of 497 adults who reported using pornography in the past month was used in this study. Principal axis factoring was conducted to answer the first research question: Does the CES-P maintain the factor structure of the original CES? Two factors emerged from this process: identity and externalization. Since the CES maintains a single factor and the CES-P emerged with two factors, the first hypothesis was not supported despite the two factors from the CES-P having a strong correlation with each other.

A correlation analysis was conducted to answer the second question: Is there a positive correlation between levels of pornography use and scores on the CES-P? Hours of use per week, masturbation per week, and masturbation per day all correlated significantly with both factors, identity and externalization, in the CES-P. This relationship supports the hypothesis that participant scores on the CES-P are correlated with levels of pornography use.

The final research question was, Do individuals who self-identify as religious score higher on the CES-P than nonreligious individuals? To determine the answer, the RCI was used to measure religious commitment and how this correlated with CES-P scores. The result was significant correlations with both identity and externalization factors. This supported the hypothesis that religious individuals would score higher on the CES-P than nonreligious users. However, these results demonstrated statistical significance in several ways and will be discussed in greater detail in Chapter 5.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study is grounded in previous work that suggests that individuals' interpretation of events in their lives can result in an integration of those events as core to their identity and a reference point for interpreting future experiences. Historically, this work has been applied to singular traumatic events or series of events that "change" a person going forward. The Centrality of Events Scale (CES) was designed to assess the degree to which traumatic events have become a part of a person's identity (Bernstein & Rubin, 2006). In the research on hypersexuality and problematic pornography use, religious pornography users are much more likely to label themselves addicted (Grubbs et al., 2015). That is, it appears possible that some pornography users may integrate the idea of their use into their personal identity. The CES was modified to develop an instrument that could assess pornography use identification so that those treating individuals for problematic pornography use could better meet the needs of their clients. This study focused on identifying the latent factors of the CES-Pornography and assessing its reliability and validity.

The previous chapter included the results of the data analysis. This chapter provides additional findings and their significance. This chapter also includes discussion of each of the three research questions investigated in the study. It also explains implications for practice, implications for counselor educators and supervisors, limitations of the study, and suggestions for future research.

Summary of Findings and Implications

Participants for this study were recruited through Amazon's Mechanical Turk (MTurk) in March 2018. A sample of 1,227 participants completed a survey that included the CES-P, RCI,

HBI, and CPUI. Of the participants who completed the survey, 497 were retained through data screening. The participants were between the ages of 18 and 77 years ($M = 35.3$, $SD = 11.1$) and most often male (55.7%), Caucasian (74.9%), married or had a life partner (41.9%), bachelor's degree (38.1%), nondenominational Christian (15.2%) and employed (65.6%). This study included three research questions, which are further discussed below.

Research Question 1

The first research question sought to determine whether the CES-P maintained the same single-factor structure as the original CES. This was not supported because the CES-P analysis identified two unique but highly correlated factors ($r = .721$). The two factors that emerged were identity and externalization. These findings suggest that the CES-P may be an instrument that can bridge the gap between meaning making and identity with pornography use. Additionally, it can be placed in the literature on how other problematic behaviors can impact individuals' identities and experiences.

Research Question 2

The second research question sought to determine whether there is a positive correlation between levels of pornography use and scores on the CES-P. This hypothesis was supported because there was a significant correlation between scores on pornography use and scores on the CES-P for the same participants. Despite the increase in research on identity formulation (Short et al., 2012) and the increase in research on pornography use (Kuss et al., 2014), there has not been any research that bridges the gap between the two.

This study contributes to the greater body of knowledge within several domains. The first is in the area of pornography use. Recent research in problematic pornography use has helped explain that individuals' beliefs about their pornography use are correlated (Exline et al., 2017;

Kvalem et al., 2014) but has not addressed the impact of those beliefs about pornography on individuals' identities. Another domain is the area of identity formulation through self-perception and self-reflection. Individuals using pornography at a level they perceive as problematic often struggle with the internalization of their behaviors, especially religious users (Stack, Wasserman, & Kern, 2004). This internalization impacts their beliefs about themselves, as well as their self-perceptions (Poulsen et al., 2013). This study provides support for how pornography using behaviors may be internalized by users, which then impacts their identity. The final domain is the externalization of their pornography use. Support for the internalization of an individual's pornography use, as previously discussed, is thoroughly studied. However, the externalization of an individual's use is not. There is no research into how pornography use can change users' perceptions of their interactions with others, meaning making, and engagement in future relationships. The data demonstrate that there is a significant correlation between beliefs about behaviors and externalization in other areas of the users' lives.

Research Question 3

The final research question sought to determine if individuals who self-identify as religious score higher on the CES-P than nonreligious individuals. This hypothesis was supported by the finding that religious pornography users tended to have higher scores on the CES-P, and nonreligious users tended to have lower scores on the CES-P. This was expected because the literature has demonstrated that religious individuals who use pornography are more likely to see themselves as addicted to pornography than nonreligious individuals (Thomas, 2016; Abell et al., 2006; Grubbs et al., 2010; Kwee et al., 2007). It has also been observed that dysregulation with religious pornography users is common (Reid et al., 2014) and that they have higher rates of sexual shame (Volk et al., 2016). Also, religious individuals who use pornography

see their use as a defining factor in the way they navigate life and engage in social relationships (Arel, 2015; Kaufman, 1989). Through this support, it was hypothesized that religious users would score higher on the CES-P in both externalization and identity. This study not only adds to the literature on religious users of pornography but also adds a dimension that their use may impact their identity formulation and their perspective of relationships and meaning making.

Limitations of the Study

The first limitation to this study was the assumption that the CES measures the three domains that it suggests that it measures while being both a reliable and valid instrument. Despite the support in the literature, it remains an assumption that the CES measures these domains and has reliability and validity. A second assumption about the CES is that the subscales measure what they propose they measure. Although supported in the literature, this remains an assumption because the CES-P is an adaption of the original CES.

The second limitation considered is the participants. The first part of this limitation is an assumption that the participants taking the survey have the cognitive ability to self-reflect on their experiences. It further assumes that they understand the questions and can formulate responses to the questions that articulate their experiences. Since the data are self-reported by the participants, their information could be reported inaccurately. The second limitation with the participants is that their report of their pornography use is based on their interpretation of pornography. The survey did not specify what constitutes pornography, so the participants defined what pornography is to them. This creates an assumption that the participants can identify their engagement in pornographic materials as pornography. A final limitation is the participants' familiarity with using electronic devices and the Internet. Due to the increase of Internet pornography users, it is hypothesized that individuals who have the competency to find

and use MTurk would also have competency with other Internet-based activities. The frequency of their interactions with the Internet may increase their susceptibility to both an increase in pornography use and a higher potential for that use to be problematic compared to individuals who have limited access to the Internet and electronic devices. An additional facet to these participants is that the participants who completed the surveys had to have access to the Internet since MTurk requires Internet access. This requirement may have caused the sample to exclude individuals who use pornography through delivery methods other than online. Since the surveyed population does not include these individuals, it limits the reach in which pornography use can be understood on a more generalizable level.

The next limitation of the study is the assumption that the other instruments in the study also measure what they state they measure. These include the HBI, the CPUI, and the RCI. These scales all have support for their reliability and validity in the literature, but, as with the CES, they remain assumptions and should be considered as such.

Another assumption is in the use of Amazon's Mechanical Turk (MTurk) for data collection. As briefly discussed earlier, this limitation is based on the assumption that MTurk will provide a high-diversity sample of participants who use pornography. This sample may not be generalizable to all pornography users. Also, MTurk users have been reported to have lower self-esteem, lower emotional stability, and lower extraversion (Goodman, Cryder, & Cheema, 2013). MTurk users are also typically younger and better educated (Paloacci et al., 2010) making them less representative of the overall population. Since MTurk users must have Internet access, this population may not include individuals in more impoverished situations because they may not have the same resources to access both the Internet and Internet pornography.

A final limitation is the CES-P. Having had no prior testing before this study, its validity and reliability were previously unknown. Because this is the first study including the CES-P, the scale's validity and reliability, despite demonstrating strong data, include only one sample. Additional studies replicating this instrument are necessary to identify the strength of this scale further.

Suggestions for Future Research

Future research should continue exploring the multiple facets revealed by this study. The first consideration is continued work with the CES-P and its continued validation through testing and additional studies. To achieve additional validation, the research should include conducting a confirmatory analysis and then an exploratory analysis to see if the two-factor structure is better. Further investigation should include more deeply examining religious populations, gender differences, and types of pornography users. An additional consideration should be increasing the focus on how identity and meaning making can be derived from a person's behaviors. Self-defining identity and meaning making through behaviors would have significant implications in the fields of behavioral sciences, psychology, and counseling. Based on this study's findings, the correlation between the beliefs people have about themselves can be based on their behaviors, and those behaviors can bear significant influence on their meaning making (e.g., caring person, bad person, borderline, ADHD, etc.). This theory predicts significant effects in the pathological and cognitive processes that individuals engage in and the overall impact on their mental health, functioning, and quality of life. The theory also goes beyond pornography using behaviors and requires additional focus in future research to understand the magnitude of this correlation.

Clinical Implications

For Counselors

There are multiple areas in which this study has clinical implications for counselors. The first is the impact of behaviors on identity. While this study focused on the behaviors of an individual's pornography use, additional considerations should be made for how other behaviors can impact the individual's identity. Examples could be substance abusers, trauma survivors, or individuals with mental health diagnoses such as ADHD, bipolar disorder, or borderline personality disorder. This study's findings have more implications for counselors than simply pornography use and identity. This study provides a foundation for additional considerations of how individuals see their behaviors as a definition of self. This study's findings should be applied in clinical settings to promote self-actualization, an understanding of self, and the cognitive abilities of clients.

The next area of consideration is with the theory of externalization. Counselors should consider that pornography use can impact not only the externalization and meaning making for clients but also their perceptions of how their behaviors have a deeper impact. Similar to identity, clients who struggle with the self-reflection of their behaviors may also be experiencing an impact on their meaning making with other relationships and areas of their life. This internalization is important to consider in clinical practice because this relationship may influence more than just current functioning with clients. It may also cause long-term and consistent dysregulation. This influence provides a barrier not only in which treatment can be successfully implemented, but also in how it can be sustained after treatment is over.

The next area of consideration of clinical implication is for treating individuals with pornography use. Since there is no current diagnosis associated with problematic pornography

use in the DSM, the training and development of how to treat it remain in their early phases of development. Therefore, there is no evidenced-based model treating problematic pornography use. Due to this lack of support through the DSM, the treatment of pornography use and pornography addiction is managed in multiple ways that may be ineffective or unethical. Additional research on the impact of problematic pornography use should be investigated so that better treatment modalities can be developed. The results of this study could inform the development of treatment modalities through correlating the impact of pornography use and other behaviors on the individual preventing treatment interventions from being sustainable. In addition, this study can provide additional clinical support for counselors who may feel inadequate with how to address problematic pornography use.

A final area of consideration for counselors is with religious populations. Research has shown that religious individuals who use pornography have higher levels of dysfunction (Chisholm & Gall, 2015; Gilliland, South, Carpenter, & Hardy, 2011). Counselors should be mindful that this relationship exists and can cause additional barriers to successful treatment. This study's findings support the theory that religious individuals may have additional dysfunction due to their pornography use and that greater influence on identity and externalization may be seen in clinical and counseling settings.

For Counselor Educators and Supervisors

Clinical implications for counselor educators and supervisors include providing education in the previously discussed areas. Implications also include the education and elaboration of counselors' understanding of this study's findings. Counselor educators and supervisors should understand how identity and externalization can be impacted by the individual's behaviors, especially with pornography use. Emphasizing the growing problem of pornography use is

becoming more essential due to the prevalence of the issues in clinical settings. It is also important to emphasize supervision that can nurture an understanding of this study's findings so that counselors can recognize, comprehend, and treat this concerning and growing issue.

This study also informs supervisors of the parallel processing that their supervisees may experience regarding behaviors. Implications for this could be found through the supervisees' professional identity in how they perceive their abilities as a counselor, their interactions with their clients, and their behaviors as a counselor. Additionally, the values of the supervisor, or the counselor, could impede their perception of the individuals pornography use. As suggested through this study the perception of pornography use can be influenced through religious beliefs with the same influence being on religious supervisors and counselors. Transference of values, as well as the perception of when a client's pornography use is problematic, may be observed in more religious supervisors and counselors with their clients and therefore, influence treatment and outcomes.

Summary of Chapter

This chapter presented a summary of the findings, clinical implications, study limitations, and recommendations for future research. There were three main findings. First, the CES-P has a two-factor structure, which is different from the original one-factor CES. Second, there was a correlation between pornography use and scores on the CES-P. Third, there was a statistically significant correlation with both factors (*Identity* at $r = .201$ and *Externalization* at $r = .322$), and, as expected, individuals who scored higher on religiosity were more likely to score higher on each of the CES-P subscales. Potential areas for future research include further validation of the CES-P through additional testing, using this scale with other populations, further examination with other demographics, and the inclusion of additional variables. The findings from this study

inform counselors on the impact that pornography using behaviors have on the user's identity and externalization through meaning making. The findings also provide counselor educators with the ability to prepare students, have informed supervision, and provide education regarding the influences of problematic pornography use.

Summary of Study

The investigation into the literature about pornography use, identity, and meaning making provided no connection between the three constructs, reflecting a gap in research. The modification of the CES to the CES-P allowed for a way to measure this impact. Through this study, there was an observable influence between the two factors that came out of the development of the CES-P, identity and externalization. This study also found support for a correlation between religiosity of individuals who use pornography and their scores on the CES-P. The results of this study provide support for the theory that people's behaviors, specifically their pornography using behaviors, can affect their identity and meaning making.

This study recruited participants through MTurk, and of the 1,227 participants, 497 were kept after screening. Factor analysis found that the CES-P had two factors, identity and externalization, which differed from the single-factor CES. It was further discovered that there was a correlation between participants' pornography use and their scores on the CES-P. Finally, it was found that religious participants had higher scores on the CES-P than nonreligious participants. The CES-P has potential to increase the larger body of knowledge about identity, meaning making, and pornography use.

References:

- Allen, A., Kannis-Dymand, L., & Katsikitis, M. (2017). Problematic internet pornography use: The role of craving, desire thinking, and metacognition. *Addictive behaviors, 70*, 65-71. doi: 10.1016/j.addbeh.2017.02.001
- Allen, M., Emmers, T., Gebhardt, L., & Giery, M.A. (1995). Exposure to pornography and acceptance of rape myths. *Journal of Communication, 45*(1), 5-26. doi: 10.1111/j.1460-2466.1995.tb00711.x
- Anderson, T.L., & Mott, J.A. (1998). Drug-related identity change: Theoretical development and empirical assessment. *Journal of Drug Issues, 28*(2), 299-327. doi: 10.1177/002204269802800203
- Attwood, F. (2005). What do people do with porn? Qualitative research into the consumption, use, and experience of pornography and other sexually explicit media. *Sexuality & Culture, 9*(2), 65-86. doi: 10.1007/s12119-005-1008-7
- Attwood, F. (2011). The paradigm shift: Pornography research, sexualization and extreme images. *Sociology Compass, 5*(1), 13-22. doi: 10.1111/j.1751-9020.2010.00356.x
- Baltazar, A., Helm Jr., H. W., McBride, D., Hopkins, G., & Stevens Jr., J. V. (2010). Internet pornography use in the context of external and internal religiosity. *Journal of Psychology and Theology, 38*(1), 32. doi: 10.1177/009164711003800103
- Baltieri, D. A., de Souza Gatti, A. L., de Oliveira, V. H., & Aguiar, A. S. J. (2016). A validation study of the Brazilian version of the pornography consumption inventory (PCI) in a

- sample of female university students. *Journal of forensic and legal medicine*, 38, 81-86.
doi: 10.1016/j.jflm.2015.11.004
- Beech, N. (2011). Liminality and the practices of identity reconstruction. *Human Relations*, 64(2), 285-302. doi: 10.1177/0018726710371235
- Bergner, R. M., & Bridges, A. J. (2002). The significance of heavy pornography involvement for romantic partners: Research and clinical implications. *Journal of Sex & Marital Therapy*, 28(3), 193-206. doi: 10.1080/009262302760328235
- Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour research and therapy*, 44(2), 219-231. doi: 10.1016/j.brat.2005.01.009
- Berntsen, D., & Rubin, D. C. (2007). When a trauma becomes a key to identity: Enhanced integration of trauma memories predicts posttraumatic stress disorder symptoms. *Applied Cognitive Psychology*, 21(4), 417-431. doi: 10.1002/acp.1290.
- Black, D. W., Kehrberg, L. L., Flumerfelt, D. L., & Schlosser, S. S. (1997). Characteristics of 36 subjects reporting compulsive sexual behavior. *The American Journal of Psychiatry*, 154(2), 243. doi-org.ezproxy.liberty.edu/10.1176/ajp.154.2.243.
- Boals, A. (2010). Events that have become central to identity: Gender differences in the centrality of events scale for positive and negative events. *Applied Cognitive Psychology*, 24(1), 107-121. doi: 10.1002/acp.1548

- Boeringer, S. B. (1994). Pornography and sexual aggression: Associations of violent and nonviolent depictions with rape and rape proclivity. *Deviant Behavior, 15*(3), 289-304. doi: 10.1080/01639625.1994.9967974
- Brand, M., Laier, C., Pawlikowski, M., Schächtle, U., Schöler, T., & Altstötter-Gleich, C. (2011). Watching pornographic pictures on the internet: Role of sexual arousal ratings and psychological–psychiatric symptoms for using internet sex sites excessively. *Cyber-psychology, Behavior and Social Networking, 14*(6), 371–377. doi: 10.1089/cyber.2010.0222
- Brosi, M. W., Foubert, J. D., Bannon, R. S., & Yandell, G. (2011). Effects of women’s pornography use on bystander intervention in a sexual assault situation and rape myth acceptance. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors, 6*(2), 26-35. Retrieved from *SocINDEX with Full Text*, EBSCOhost (accessed September 13, 2017).
- Burton, D. L., Leibowitz, G. S., & Howard, A. (2010). Comparison by crime type of juvenile delinquents on pornography exposure: The absence of relationships between exposure to pornography and sexual offense characteristics. *Journal of Forensic Nursing, 6*(3), 121-129. doi: 10.1111/j.1939-3938.2010.01077.x
- Buzzell, T. (2005). Demographic characteristics of persons using pornography in three technological contexts. *Sexuality & Culture, 9*(1), 28-48. doi: 10.1007/BF02908761
- Buzzell, T. (2005). The effects of sophistication, access and monitoring on use of pornography in three technological contexts. *Deviant Behavior, 26*(2), 109-132. doi: 10.1080/01639620590518988

- Campbell, L., & Kohut, T. (2017). The use and effects of pornography in romantic relationships. *Current opinion in psychology, 13*, 6-10. doi: 10.1016/j.copsyc.2016.03.004
- Carnes, P. J., & Wilson, M. (2002). The sexual addiction assessment process. In P. J. Carnes, & K. M. Adams (Eds.), *Clinical management of sex addiction* (pp. 3–20). New York: Brunner-Routledge.
- Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., McNamara Barry, C., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of adolescent research, 23*(1), 6-30. doi: 10.1177/0743558407306348
- Catlin, G., & Epstein, S. (1992). Unforgettable experiences: The relation of life events to basic beliefs about self and world. *Social cognition, 10*(2), 189-209. doi: 10.1521/soco.1992.10.2.189
- Chisholm, M., & Gall, T. L. (2015). Shame and the X-rated addiction: The role of spirituality in treating male pornography addiction. *Sexual Addiction & Compulsivity, 22*(4), 259-272. doi: 10.1080/10720162.2015.1066279
- Clarkson, J. & Kopaczewski, S. (2013). Pornography addiction and the medicalization of free speech. *Journal of Communication Inquiry, 37*(2), 128-148. doi: 10.1177/0196859913482330
- Cooper, A., & Mcloughlin, I. P. (2001). What clinicians need to know about internet sexuality. *Sexual and Relationship Therapy, 16*(4), 321-327. doi: 10.1080/14681990126947

- Cooper, A., McLoughlin, I. P., & Campbell, K. M. (2000). Sexuality in cyberspace: Update for the 21st century. *CyberPsychology & Behavior*, 3(4), 521-536. doi: 10.1089/109493100420142
- Cooper, A., Putnam, D. E., Planchon, L. A., & Boies, S. C. (1999). Online sexual compulsivity: Getting tangled in the net. *Sexual Addiction & Compulsivity*, 6, 79–104. doi: 10.1080/10720169908400182
- Corne, S., Briere, J., & Esses, L. M. (1992). Women's attitudes and fantasies about rape as a function of early exposure to pornography. *Journal of Interpersonal Violence*, 7(4), 454-461. doi: 10.1177/088626092007004002
- Cramer, P. (2004). Identity change in adulthood: The contribution of defense mechanisms and life experiences. *Journal of Research in Personality*, 38(3), 280-316. doi: 10.1016/S0092-6566(03)00070-9
- Cranney, S. (2015). Internet pornography use and sexual body image in a Dutch sample. *International Journal of Sexual Health*, 27(3), 316-323. doi: 10.1080/19317611.2014.999967
- Daneback, K., Træen, B., & Månsson, S. A. (2009). Use of pornography in a random sample of Norwegian heterosexual couples. *Archives of Sexual Behavior*, 38(5), 746-753. doi: 10.1007/s10508-008-9314-4
- Darshan, M. S., Sathyanarayana Rao, T. S., Manickam, S., Tandon, A., & Ram, D. (2014). A case report of pornography addiction with dhat syndrome. *Indian Journal of Psychiatry*, 56(4), 385–387. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4279299/>

- Darvish, M., & Nikmanesh, Z. (2017). Psychometric properties of the Persian version of problematic pornography use scale (pornography addiction). *Journal of Psychological Models and Methods*, 27 (8), 49-63. Retrieved from <http://www.sid.ir/en/journal/>.
- Delmonico, D. L. & Griffin, E. J. (2008). Online sex offending: Assessment and treatment. In D.R. Laws. & W. T. O'Donohue (Eds.), *Sexual deviance: Theory, assessment, and treatment* (2nd ed.) (pp. 459–485). New York: The Guilford Press.
- Demare, D., Briere, J., & Lips, H. M. (1988). Violent pornography and self-reported likelihood of sexual aggression. *Journal of Research in Personality*, 22(2), 140-153. doi: 10.1016/0092-6566(88)90011-6
- DiClemente, C. C. (2017). *Addiction and change: How addictions develop and addicted people recover*. Guilford Publications. ISBN 1-57230-057-4
- D'orlando, F. (2011). The demand for pornography. *Journal of Happiness Studies*, 12(1), 51-75. doi: 10.1007/s10902-009-9175-0
- Egan, V., & Parmar, R. (2013). Dirty habits? Online pornography use, personality, obsessionality, and compulsivity. *Journal of sex & marital therapy*, 39(5), 394-409. doi: 10.1080/0092623X.2012.710182
- Entwistle, D. N. (2015). *Integrative approaches to psychology and Christianity: An introduction to worldview issues, philosophical foundations, and models of integration*. Wipf and Stock Publishers.

- Exline, J. J., Wilt, J. A., Stauner, N., Harriott, V. A., & Saritoprak, S. N. (2017). Self-forgiveness and religious/spiritual struggles. In *Handbook of the Psychology of Self-Forgiveness* (pp. 131-145). Springer, Cham.
- Fetzner, M. G., McMillan, K. A., Sareen, J., & Asmundson, G. J. (2011). What is the association between traumatic life events and alcohol abuse/dependence in people with and without PTSD? Findings from a nationally representative sample. *Depression and anxiety, 28*(8), 632-638. doi: 10.1002/da.20852
- Ford, M. E., & Linney, J. A. (1995). Comparative analysis of juvenile sexual offenders, violent nonsexual offenders, and status offenders. *Journal of Interpersonal Violence, 10*(1), 56-70. doi: 10.1177/088626095010001004
- Foubert, J. D., & Bridges, A. J. (2017). Predicting bystander efficacy and willingness to intervene in college men and women: The role of exposure to varying levels of violence in pornography. *Violence against women, 23*(6), 692-706. doi: 10.1177/1077801216648793
- Frings, D., & Albery, I. P. (2015). The social identity model of cessation maintenance: Formulation and initial evidence. *Addictive Behaviors, 44*, 35-42. doi: 10.1016/j.addbeh.2014.10.023
- Garcia, F., & Thibaut, F. (2010). Sexual addictions. *The American Journal of Drug and Alcohol Abuse, 36*(5), 254-260. doi: 10.3109/00952990.2010.503823
- Gilliland, R., South, M., Carpenter, B. N., & Hardy, S. A. (2011). The roles of shame and guilt in hypersexual behavior. *Sexual Addiction & Compulsivity, 18*(1), 12-29. doi: 10.1080/10720162.2011.551182

- Goodman, A. (1993). Diagnosis and treatment of sexual addiction. *Journal of Sex and Marital Therapy, 19*(3), 225–251. doi: 10.1080/00926239308404908
- Gordon, D. F. (1974). The Jesus people: An identity synthesis. *Urban Life and Culture, 3*(2), 159-178. doi: 10.1177/089124167400300202
- Granfield, R., & Cloud, W. (1996). The elephant that no one sees: Natural recovery among middle-class addicts. *Journal of Drug Issues, 26*(1), 45-61. doi: 10.1177/002204269602600104
- Griffiths, M. (2000). Does internet and computer" addiction" exist? Some case study evidence. *CyberPsychology and Behavior, 3*(2), 211-218. doi: 10.1089/109493100316067
- Grimes, P. (2016). Perceived addiction to pornography, level of distress and their correlates. doi: 10.15760/honors.345
- Grubbs, J. B., Exline, J. J., Pargament, K. I., Hook, J. N., & Carlisle, R. D. (2015). Transgression as addiction: Religiosity and moral disapproval as predictors of perceived addiction to pornography. *Archives of Sexual Behavior, 44*(1), 125-136. doi: 10.1007/s10508-013-0257-z
- Grubbs, J. B., Sessoms, J., Wheeler, D. M., & Volk, F. (2010). The cyber-pornography use inventory: The development of a new assessment instrument. *Sexual Addiction & Compulsivity, 17*(2), 106-126. doi: 10.1080/10720161003776166
- Grubbs, J. B., Stauner, N., Exline, J. J., Pargament, K. I., & Lindberg, M. J. (2015). Perceived addiction to internet pornography and psychological distress: Examining relationships

- concurrently and over time. *Psychology of Addictive Behaviors*, 29(4), 1056. doi: 10.1037/adb0000114
- Grubbs, J. B., Wilt, J. A., Exline, J. J., Pargament, K. I., & Kraus, S. W. (2017). Moral disapproval and perceived addiction to internet pornography: A longitudinal examination. *Addiction*, 113(3), 496-506. doi: 10.1111/add.14007
- Grubbs, J., Exline, J., Pargament, K., Volk, F., & Lindberg, M. (2017). Internet pornography use, perceived addiction, and religious/spiritual struggles. *Archives of Sexual Behavior*, 46(6), 1733-1745. doi: 10.1007/s10508-016-0772-9
- Hald, G. M., & Malamuth, N. M. (2008). Self-perceived effects of pornography consumption. *Archives of Sexual Behavior*, 37(4), 614-25. doi: 10.1007/s10508-007-9212-1
- Hald, G. M., Malamuth, N. M., & Yuen, C. (2010). Pornography and attitudes supporting violence against women: Revisiting the relationship in nonexperimental studies. *Aggressive Behavior*, 36(1), 14-20. doi: 10.1002/ab.20328
- Harkness, E. L., Mullan, B., & Blaszczynski, A. (2015). Association between pornography use and sexual risk behaviors in adult consumers: a systematic review. *Cyberpsychology, Behavior, and Social Networking*, 18(2), 59-71. doi: 10.1089/cyber.2014.0343
- Hilton, D. L. (2013). Pornography addiction - a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3(1), 20767. doi: 10.3402/snp.v3i0.20767
- Hilton, D., & Watts, C. (2011). Pornography addiction: A neuroscience perspective. *Surgical Neurology International*, 2, 19. doi: 10.4103/2152-7806.76977

- Hijar, K. (2011). Flash men, jolly fellows, and fancy books: nineteenth-century new york, the nation, and sexuality in print. *Journal of Urban History*, 37(3), 451–459.
doi:10.1177/0096144211400294
- Hosley, R., Canfield, K., O'Donnell, S. L., & Roid, G. (2008). Father closeness: Its effect on married men's sexual behaviors, marital, and family satisfaction. *Sexual Addiction & Compulsivity*, 15(1), 59-76. doi: 10.1080/10720160701878761
- Hovens, J. G., Giltay, E. J., Wiersma, J. E., Spinhoven, P., Penninx, B. W., & Zitman, F. G. (2012). Impact of childhood life events and trauma on the course of depressive and anxiety disorders. *Acta psychiatrica scandinavica*, 126(3), 198-207. doi: 10.1111/j.1600-0447.2011.01828.x
- Hughes, K. (2007). Migrating identities: The relational constitution of drug use and addiction. *Sociology of Health & Illness*, 29(5), 673-691. doi: 10.1111/j.1467-9566.2007.01018.x
- Jensen, M. P., Romano, J. M., Turner, J. A., Good, A. B., & Wald, L. H. (1999). Patient beliefs predict patient functioning: further support for a cognitive-behavioural model of chronic pain. *Pain*, 81(1-2), 95-104. doi: 10.1016/S0304-3959(99)00005-6
- Joyal, C. C., Cossette, A., & Lapierre, V. (2015). What exactly is an unusual sexual fantasy?. *The journal of sexual medicine*, 12(2), 328-340. doi: 10.1111/jsm.12734
- Kafka, M.P., & Hennen, J. (2002). A DSM-IV Axis I comorbidity study of males (n=120) with paraphilias and paraphilia-related disorders. *Sexual Abuse: Journal of Research and Treatment*, 14(4), 349–366. doi: 10.1023/A:1020007004436

- Kalichman, S. C., & Rompa, D. (1995). Sexual sensation seeking and sexual compulsivity scales: Reliability, validity, and predicting HIV risk behavior. *Journal of Personality Assessment, 65*(3), 586–601. doi: 10.1207/s15327752jpa6503_16
- Kalman, T. P. (2008). Clinical encounters with internet pornography. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry, 36*(4), 593-618. doi: 10.1521/jaap.2008.36.4.593
- Kaufman, J. S., Allbaugh, L. J., & Wright, M. O. D. (2018). Relational wellbeing following traumatic interpersonal events and challenges to core beliefs. *Psychological trauma: theory, research, practice, and policy, 10*(1), 103. doi: 10.1037/tra0000253
- Kearney, M. H., & O'sullivan, J. (2003). Identity shifts as turning points in health behavior change. *Western Journal of Nursing Research, 25*(2), 134-152. doi: 10.1177/0193945902250032
- Kendler, K. S., Hettema, J. M., Butera, F., Gardner, C. O., & Prescott, C. A. (2003). Life event dimensions of loss, humiliation, entrapment, and danger in the prediction of onsets of major depression and generalized anxiety. *Archives of general psychiatry, 60*(8), 789-796. doi: 10.1001/archpsyc.60.8.789
- Kendler, K. S., Kessler, R. C., Walters, E. E., MacLean, C., Neale, M. C., Heath, A. C., & Eaves, L. J. (2010). Stressful life events, genetic liability, and onset of an episode of major depression in women. *Focus, 8*(3), 459-470. doi: 10.1176/foc.8.3.foc459
- Kingston, D. A., Malamuth, N. M., Fedoroff, P., & Marshall, W. L. (2009). The importance of individual differences in pornography use: Theoretical perspectives and implications for

treating sexual offenders. *Journal of sex research*, 46(2-3), 216-232. doi:
10.1080/00224490902747701

Kinneavy, J. L., & Eskin, C. R. (2000). Kairos in Aristotle's rhetoric. *Written Communication*, 17(3), 432-444. doi: 10.1177/0741088300017003005

Kohut, T., Fisher, W. A., & Campbell, L. (2017). Perceived effects of pornography on the couple relationship: Initial findings of open-ended, participant-informed, “bottom-up” research. *Archives of sexual behavior*, 46(2), 585-602. doi: 10.1007/s10508-016-0783-6

Konkolý Thege, B., Woodin, E. M., Hodgins, D. C., & Williams, R. J. (2015). Natural course of behavioral addictions: A 5-year longitudinal study. *BMC Psychiatry*, 15(1), 4. doi: 10.1186/s12888-015-0383-3

Kor, A., Potenza, M. N., Hoff, R. A., Porter, E., & Kraus, S. W. (2017). OP-51: Psychometrics properties of a problematic pornography use scale and associations with psychological and clinical characteristics in US military veterans. *Journal of Behavioral Addictions*, 6(S1), 25-26. Retrieved from <http://go.galegroup.com/ps/anonymous?id=GALE%7CA483829717&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=20625871&p=AONE&sw=w&authCount=1&isAnonymousEntry=true>

Kor, A., Zilcha-Mano, S., Fogel, Y. A., Mikulincer, M., Reid, R. C., & Potenza, M. N. (2014). Psychometric development of the problematic pornography use scale. *Addictive behaviors*, 39(5), 861-868. doi: 10.1016/j.addbeh.2014.01.027

Koski-Jannes, A. (2002). Social and personal identity projects in the recovery from addictive behaviors. *Addiction Research and Theory*, 10(2), 183-202.

- Kraus, S., & Rosenberg, H. (2014). The pornography craving questionnaire: Psychometric properties. *Archives of Sexual Behavior*, 43(3), 451-462. doi: 10.1007/s10508-013-0229-3
- Kruisselbrink Flatt, A. (2013). A suffering generation: Six factors contributing to the mental health crisis in North American higher education. *College Quarterly*, 16(1), n1. Retrieved from <https://eric.ed.gov/?id=EJ1016492>
- Kuss, D., D Griffiths, M., Karila, L., & Billieux, J. (2014). Internet addiction: A systematic review of epidemiological research for the last decade. *Current pharmaceutical design*, 20(25), 4026-4052. Retrieved from <http://www.ingentaconnect.com/content/ben/cpd/2014/00000020/00000025/art00006>
- Kvalem, I. L., Træen, B., Lewin, B., & Štulhofer, A. (2014). Self-perceived effects of internet pornography use, genital appearance satisfaction, and sexual self-esteem among young Scandinavian adults. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 8(4). doi: 10.5817/CP2014-4-4
- Kwee, A. W., Dominguez, A. W., & Ferrell, D. (2007). Sexual addiction and Christian college men: Conceptual, assessment, and treatment challenges. *Journal of Psychology & Christianity*, 26(1), 3-13. Retrieved from <http://alexkwee.com/wp-content/uploads/2013/07/kweedominguezferrell07.pdf>
- Laier, C., Pekal, J., & Brand, M. (2014). Cybersex addiction in heterosexual female users of internet pornography can be explained by gratification hypothesis. *Cyberpsychology, Behavior, and Social Networking*, 17(8), 505-511. doi: 10.1089/cyber.2013.0396

- Lambert, N. M., Negash, S., Stillman, T. F., Olmstead, S. B., & Fincham, F. D. (2012). A love that doesn't last: Pornography consumption and weakened commitment to one's romantic partner. *Journal of Social and Clinical Psychology, 31*(4), 410-438. doi: 10.1521/jscp.2012.31.4.410
- Landripet, I., & Štulhofer, A. (2015). Is pornography use associated with sexual difficulties and dysfunctions among younger heterosexual men?. *The journal of sexual medicine, 12*(5), 1136-1139. DOI: 10.1111/jsm.12853
- Lee, T. T., Ritchey, K. A., Forbey, J. D., & Gaither, G. A. (2009). Psychometrics and comparison of the compulsive sexual behavior inventory and the sexual compulsivity scale in a male college student sample. *Sexual Addiction & Compulsivity, 16*(2), 146-167. doi: 10.1080/10720160902905512
- Leeman, R. F., PhD., & Potenza, Marc N, M.D., PhD. (2013). A targeted review of the neurobiology and genetics of behavioral addictions: An emerging area of research. *Canadian Journal of Psychiatry, 58*(5), 260-273. doi: 10.1177/070674371305800503
- Levin, M. E., Lillis, J., & Hayes, S. C. (2012). When is online pornography viewing problematic among college males? Examining the moderating role of experiential avoidance. *Sexual Addiction & Compulsivity, 19*, 168–180. doi: 10.1080/10720162.2012.657150
- Lewczuk, K., Szmyd, J., Skorko, M., & Gola, M. (2017). Treatment seeking for problematic pornography use among women. *Journal of behavioral addictions, 6*(4), 445-456. doi: 10.1556/2006.6.2017.063
- Leyton, M., PhD. (2013). Are addictions diseases or choices?. *Journal of Psychiatry & Neuroscience: JPN, 38*(4), 219-21. doi: 10.1503/jpn.130097

- Lindgren, J. (1993). Defining pornography. *University of Pennsylvania Law Review*, 141(4), 1153-1275. Retrieved from <http://www.jstor.org/stable/3312343>
- Linz, D. G., Donnerstein, E., & Penrod, S. (1988). Effects of long-term exposure to violent and sexually degrading depictions of women. *Journal of personality and social psychology*, 55(5), 758. doi: 10.1037/0022-3514.55.5.758
- Love, T., Laier, C., Brand, M., Hatch, L., & Hajela, R. (2015). Neuroscience of internet pornography addiction: A review and update. *Behavioral sciences*, 5(3), 388-433. doi: 10.3390/bs5030388
- Mahoney, K. E. (1987). Defining pornography: An analysis of bill C-54. *McGill LJ*, 33, 575. Retrieved from <http://heinonline.org/HOL/LandingPage?handle=hein.journals/mcgil33&div=32&id=&page=>
- Manning, J. C. (2006). The impact of internet pornography on marriage and the family: A review of the research. *Sexual Addiction & Compulsivity*, 13(2-3), 131-165. doi: 10.1080/10720160600870711
- McBride, K. R. (2006). Measuring sexual compulsivity among young adults. *Dissertation Abstracts International B: The Sciences and Engineering*, 67(4-B), 1953.
- McBride, K. R., Reece, M., & Sanders, S. A. (2007). Predicting negative outcomes of sexuality using the compulsive sexual behavior inventory. *International Journal of Sexual Health*, 19, 51–62. DOI: 10.1300/J514v19n04_06

- McBride, K. R., Reece, M., & Sanders, S. A. (2008). Using the sexual compulsivity scale to predict outcomes of sexual behavior in young adults. *Sexual Addiction & Compulsivity, 15*(2), 97-115. doi: 10.1080/10720160802035816
- McFadden, S. H., & Thibault, J. M. (2006). Chronos to kairos: Christian perspectives. *Aging and the Meaning of Time: A Multidisciplinary Exploration, 229*.
- McGrath, A. E. (2016). *Christian theology: An introduction*. John Wiley & Sons.
- McIntosh, J., & McKeganey, N. (2000). Addicts' narratives of recovery from drug use: constructing a non-addict identity. *Social Science & Medicine, 50*(10), 1501-1510. doi: 10.1016/S0277-9536(99)00409-8
- Mealey, A. M. (2016). *The identity of Christian morality*. Routledge.
- Mendez, M. F., & Shapira, J. S (2011). Internet pornography and frontotemporal dementia. *The Journal of Neuropsychiatry and Clinical Neurosciences, 23*(2), E3-E3. doi: 10.1176/jnp.23.2.jnpe3
- Mikorski, R., & Szymanski, D. M. (2017). Masculine norms, peer group, pornography, Facebook, and men's sexual objectification of women. *Psychology of Men & Masculinity, 18*(4), 257. doi: 10.1037/men0000058
- Miller, C. R. (1992). Kairos in the rhetoric of science. *A rhetoric of doing: Essays on written discourse in honor of James L. Kinneavy, 310-327*. Retrieved from http://www.jstor.org/stable/20865965?seq=1#page_scan_tab_contents.
- Muench, F., Morgenstern, J., Hollander, E., Irwin, T., O'Leary, A., Parsons, J. T., Wainberg, M. L. & Lai, B. (2007). The consequences of compulsive sexual behavior: The preliminary

- reliability and validity of the compulsive sexual behavior consequences scale. *Journal of Sexual Addiction and Compulsivity*, 14, 207–220. doi: 10.1080/10720160701480493
- Myers, L. J., Speight, S. L., Highlen, P. S., Cox, C. I., Reynolds, A. L., Adams, E. M., & Hanley, C. P. (1991). Identity development and worldview: Toward an optimal conceptualization. *Journal of Counseling & Development*, 70(1), 54-63. doi: 10.1002/j.1556-6676.1991.tb01561.x
- Nelson, L. J., Padilla-Walker, L. M., & Carroll, J. S. (2010). “I believe it is wrong but I still do it”: A comparison of religious young men who do versus do not use pornography. *Psychology of Religion and Spirituality*, 2(3), 136-147. doi: 10.1037/a0019127
- Noor, S. W., Rosser, B. S., & Erickson, D. J. (2014). A brief scale to measure problematic sexually explicit media consumption: Psychometric properties of the compulsive pornography consumption (CPC) scale among men who have sex with men. *Sexual addiction & compulsivity*, 21(3), 240-261. doi: 10.1080/10720162.2014.938849
- Norris, F. H. (1992). Epidemiology of trauma: frequency and impact of different potentially traumatic events on different demographic groups. *Journal of consulting and clinical psychology*, 60(3), 409. doi: 10.1037/0022-006X.60.3.409
- Odlaug, B. L., Lust, K., Schreiber, L., Christenson, G., Derbyshire, K., Harvanko, A., ... & Grant, J. E. (2013). Compulsive sexual behavior in young adults. *Annals of Clinical Psychiatry*, 25(3), 193-200. Retrieved from https://www.researchgate.net/profile/Katherine_Lust/publication/255707757_Compulsive_sexual_behavior_in_young_adults/links/02e7e5304b65f24ca5000000.pdf.

- Olmstead, S. B., Negash, S., Pasley, K., & Fincham, F. D. (2013). Emerging adults' expectations for pornography use in the context of future committed romantic relationships: A qualitative study. *Archives of Sexual Behavior, 42*(4), 625-635. doi: 10.1007/s10508-012-9986-7
- O'Reilly, S., Knox, D., & Zusman, M. E. (2007). College student attitudes toward pornography use. *College Student Journal, 41*(2), 402-406. Retrieved from <http://go.galegroup.com/ps/anonymous?id=GALE%7CA163679010&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=01463934&p=AONE&sw=w&authCount=1&isAnonymousEntry=true>
- O'Rourke, E., Haimovitz, K., Ballweber, C., Dweck, C., & Popović, Z. (2014, April). Brain points: A growth mindset incentive structure boosts persistence in an educational game. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 3339-3348). ACM. doi: 10.1145/2556288.2557157
- Owens, E. W., Behun, R. J., Manning, J. C., & Reid, R. C. (2012). The impact of internet pornography on adolescents: A review of the research. *Sexual Addiction & Compulsivity, 19*(1-2), 99-122. doi: 10.1080/10720162.2012.660431
- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science, 23*(3), 184-188. doi: 10.1177/0963721414531598
- Park, C. L. (2005). Religion and meaning. *Handbook of the psychology of religion and spirituality, 2*, 357-379.

- Patterson, R., & Price, J. (2012). Pornography, religion, and the happiness gap: Does pornography impact the actively religious differently?. *Journal for the Scientific Study of Religion, 51*(1), 79-89. doi: 10.1111/j.1468-5906.2011.01630.x
- Paul, B., & Jae, W. S. (2008). Gender, sexual affect, and motivations for internet pornography use. *International Journal of Sexual Health, 20*, 187–199. doi: 10.1080/19317610802240154
- Paul, P. (2005). *Pornified: How pornography is transforming our lives, our relationships, and our families*. Macmillan.
- Peer, E., Vosgerau, J., & Acquisti, A. (2014). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavior research methods, 46*(4), 1023-1031. doi: 10.3758/s13428-013-0434-y
- Perry, S. L. (2017). Does viewing pornography diminish religiosity over time? Evidence from two-wave panel data. *The Journal of Sex Research, 54*(2), 214-226. doi: 10.1080/00224499.2016.1146203
- Peter, J., & Valkenburg, P. M. (2014). Does exposure to sexually explicit internet material increase body dissatisfaction? A longitudinal study. *Computers in Human Behavior, 36*, 297-307. doi: 10.1016/j.chb.2014.03.071
- Pfefferbaum, B., Seale, T. W., Brandt, E. N., Pfefferbaum, R. L., Doughty, D. E., & Rainwater, S. M. (2003). Media exposure in children one hundred miles from a terrorist bombing. *Annals of Clinical Psychiatry, 15*(1), 1-8. doi: 10.3109/10401230309085664
- Philaretou, A. G., Mahfouz, A. Y., & Allen, K. R. (2005). Use of internet pornography and men's well-being. *International Journal of Men's Health, 4*(2), 149. doi: 10.3149/jmh.0402.149

- Popovic, M. (2011). Pornography use and closeness with others in men. *Archives of Sexual Behavior, 40*(2), 449-456. doi: 10.1007/s10508-010-9648-6
- Poulsen, F. O., Busby, D. M., & Galovan, A. M. (2013). Pornography use: Who uses it and how it is associated with couple outcomes. *Journal of sex research, 50*(1), 72-83. doi: 10.1080/00224499.2011.648027
- Raviv, M. (1993). Personality characteristics of sexual addicts and pathological gamblers. *Journal of Gambling Studies, 9*(1), 17-30. doi: 10.1007/BF01019922
- Raymond, N.C., Coleman, E., & Miner, M.H. (2003). Psychiatric comorbidity and compulsive/impulsive traits in compulsive sexual behavior. *Comprehensive Psychiatry, 44* (5), 370-380. doi: 10.1016/S0010-440X(03)00110-X
- Regnerus, M. D. (2007). *Forbidden fruit*. New York: Oxford University Press.
- Reid, R. C. (2010). Differentiating emotions in a sample of men in treatment for hypersexual behavior. *Journal of Social Work Practice in the Addictions, 10*(2), 197-213. doi: 10.1080/15332561003769369
- Reid, R. C., Carpenter, B. N., & Lloyd, T. Q. (2009). Assessing psychological symptom patterns of patients seeking help for hypersexual behavior. *Sexual and Relationship Therapy, 24*(1), 47-63. doi: 10.1080/14681990802702141
- Reid, R. C., Garos, S., & Carpenter, B. N. (2011). Reliability, validity, and psychometric development of the hypersexual behavior inventory in an outpatient sample of men. *Sexual Addiction & Compulsivity, 18*(1), 30-51. doi: 10.1080/10720162.2011.555709

- Reid, R. C., Garos, S., & Fong, T. (2012). Psychometric development of the hypersexual behavior consequences scale. *Journal of Behavioral Addictions, 1*(3), 115-122. doi: 10.1556/JBA.1.2012.001
- Reid, R. C., Karim, R., McCrory, E., & Carpenter, B. N. (2010). Self-reported differences on measures of executive function and hypersexual behavior in a patient and community sample of men. *International Journal of Neuroscience, 120*(2), 120-127. doi: 10.3109/00207450903165577
- Reid, R.C., & Garos, S. (2007). A new measure of hypersexual behavior: Scale development and psychometrics, poster presented at the Annual Convention of the American Psychological Association, San Francisco, CA.
- Reid, Rory C., Bruce N. Carpenter, Joshua N. Hook, Sheila Garos, Jill C. Manning, Randy Gilliland, Erin B. Cooper, Heather McKittrick, Margarit Davtian, and Timothy Fong. "Report of findings in a DSM-5 field trial for hypersexual disorder." *The journal of sexual medicine* 9, no. 11 (2012): 2868-2877. doi: 10.1111/j.1743-6109.2012.02936.x
- Resick, P. A., Williams, L. F., Suvak, M. K., Monson, C. M., & Gradus, J. L. (2012). Long-term outcomes of cognitive-behavioral treatments for posttraumatic stress disorder among female rape survivors. *Journal of consulting and clinical psychology, 80*(2), 201. doi: 10.1037/a0026602
- Robinaugh, D. J., & McNally, R. J. (2011). Trauma centrality and PTSD symptom severity in adult survivors of childhood sexual abuse. *Journal of traumatic stress, 24*(4), 483-486. doi: 10.1002/jts.20656

- Robinson, S. L. (2010). Defining pornography. *Social Sciences Journal*, *10*(1), 15. Retrieved from <https://repository.wcsu.edu/cgi/viewcontent.cgi?article=1076&context=ssj>
- Rogala, C., & Tydén, T. (2003). Does pornography influence young women's sexual behavior?. *Women's Health Issues*, *13*(1), 39-43. doi: 10.1016/S1049-3867(02)00174-3
- Rosser, B. S., Noor, S. W., & Iantaffi, A. (2014). Normal, problematic, and compulsive consumption of sexually explicit media: Clinical findings using the compulsive pornography consumption (CPC) scale among men who have sex with men. *Sexual addiction & compulsivity*, *21*(4), 276-304. doi: 10.1080/10720162.2014.959145
- Ryan, S., & Mercer, S. (2012). Implicit theories: Language learning mindsets. In *Psychology for language learning* (pp. 74-89). Palgrave Macmillan, London. Retrieved from https://link.springer.com/chapter/10.1057/9781137032829_6
- Schreiber, L. R. N., Odlaug, B.L., & Grant, J. E. (2012). Compulsive sexual behavior: Phenomenology and epidemiology. In J. E. Grant, & M. N. Potenza (Eds.), *The Oxford handbook of impulse control disorders* (pp. 165–175). New York, NY: Oxford University Press.
- Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. *Human Development*, *49*(1), 1-30. doi: 10.1159/000090300
- Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and Health*, *9*(3), 161-180. doi: 10.1080/08870449408407475

- Sessoms, J. (2011). The cyber pornography use inventory: Comparing a religious and secular sample. Retrieved from <http://digitalcommons.liberty.edu/honors/247/>
- Seto, M. C., Maric, A., & Barbaree, H. E. (2001). The role of pornography in the etiology of sexual aggression. *Aggression and Violent Behavior, 6*(1), 35-53. doi: 10.1016/S1359-1789(99)00007-5
- Shaw, S. M. (1999). Men's leisure and women's lives: The impact of pornography on women. *Leisure Studies, 18*(3), 197-212. doi: 10.1080/026143699374925
- Shinebourne, P., & Smith, J. A. (2009). Alcohol and the self: An interpretative phenomenological analysis of the experience of addiction and its impact on the sense of self and identity. *Addiction Research & Theory, 17*(2), 152-167. doi: 10.1080/16066350802245650
- Short, M. B., Black, L., Smith, A. H., Wetterneck, C. T., & Wells, D. E. (2012). A review of internet pornography use research: Methodology and content from the past 10 years. *Cyberpsychology, Behavior, and Social Networking, 15*(1), 13-23. doi: 10.1089/cyber.2010.0477
- Short, M. B., Kasper, T. E., & Wetterneck, C. T. (2015). The relationship between religiosity and internet pornography use. *Journal of Religion and Health, 54*(2), 571-583. doi: 10.1007/s10943-014-9849-8
- Simpson, A., Oster, C., & Muir-Cochrane, E. (2017). Liminality in the occupational identity of mental health peer support workers: A qualitative study. *International Journal of Mental Health Nursing*. doi: 10.1111/inm.12351

- Smallwood, J., Schooler, J. W., Turk, D. J., Cunningham, S. J., Burns, P., & Macrae, C. N. (2011). Self-reflection and the temporal focus of the wandering mind. *Consciousness and cognition, 20*(4), 1120-1126. doi: 10.1016/j.concog.2010.12.017
- Smeets, T., Giesbrecht, T., Raymaekers, L., Shaw, J., & Merckelbach, H. (2010). Autobiographical integration of trauma memories and repressive coping predict post-traumatic stress symptoms in undergraduate students. *Clinical Psychology & Psychotherapy, 17*(3), 211-218. doi: 10.1002/cpp.644
- Specht, J., Egloff, B., & Schmukle, S. C. (2011). Stability and change of personality across the life course: The impact of age and major life events on mean-level and rank-order stability of the big five. *Journal of Personality and Social Psychology, 101*(4), 862. doi: 10.1037/a0024950
- Stack, S., Wasserman, I., & Kern, R. (2004). Adult social bonds and use of internet pornography. *Social science quarterly, 85*(1), 75-88. doi: 10.1111/j.0038-4941.2004.08501006.x
- Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity. *Environment and Behavior, 34*(5), 561-581. doi: 10.1177/0013916502034005001
- Stein, D. J., Black, D. W., Shapira, N. A., & Spitzer, R. L. (2001). Hypersexual disorder and preoccupation with internet pornography. *American Journal of Psychiatry, 158*(10), 1590-1594. doi: 10.1176/appi.ajp.158.10.1590
- Stewart, D. N., & Szymanski, D. M. (2012). Young adult women's reports of their male romantic partner's pornography use as a correlate of their self-esteem, relationship

quality, and sexual satisfaction. *Sex Roles*, 67(5-6), 257-271. doi: 10.1007/s11199-012-0164-0

Stewart, N., Ungemach, C., Harris, A. J., Bartels, D. M., Newell, B. R., Paolacci, G., & Chandler, J. (2015). The average laboratory samples a population of 7,300 Amazon Mechanical Turk workers. *Judgment and Decision making*, 10(5), 479-491.

Stone, J. (2008). To practice what we preach: The use of hypocrisy and cognitive dissonance to motivate behavior change. *Social and Personality Psychology Compass*, 2(2), 1024-1051. doi: 10.1111/j.1751-9004.2008.00088.x

Sunstein, C. R. (1986). Pornography and the first amendment. *Duke Law Journal*, 589. Retrieved from <http://heinonline.org/HOL/LandingPage?handle=hein.journals/duk1r1986&div=30&id=&page=>

Szymanski, D. M., Feltman, C. E., & Dunn, T. L. (2015). Male partners' perceived pornography use and women's relational and psychological health: The roles of trust, attitudes, and investment. *Sex Roles*, 73(5-6), 187-199. doi: 10.1007/s11199-015-0518-5

Tarver, M., J.C.L. (2010). The effects of pornography addiction on marital consent. *Studia Canonica*, 44(2), 343-367. Retrieved from <https://search.proquest.com/openview/642940d7b5fa051167dc1dac68160476/1?pq-origsite=gscholar&cbl=36815>

Thoits, P. A. (2013). Self, identity, stress, and mental health. In *Handbook of the sociology of mental health* (pp. 357-377). Springer Netherlands. doi: 10.1007/978-94-007-4276-5_18.

- Thomas, J. N. (2013). Outsourcing moral authority: The internal secularization of evangelicals' anti-pornography narratives. *Journal for the Scientific Study of Religion*, 52(3), 457-475. doi: 10.1111/jssr.12052
- Thomas, J. N. (2016). The development and deployment of the idea of pornography addiction within American evangelicalism. *Sexual Addiction & Compulsivity*, 23(2-3), 182-195. doi: 10.1080/10720162.2016.1140603
- Twohig, M. P., Crosby, J. M., & Cox, J. M. (2009). Viewing internet pornography: For whom is it problematic, how, and why?. *Sexual Addiction & Compulsivity*, 16(4), 253-266. doi: 10.1080/10720160903300788
- Tylka, T. L., & Kroon Van Diest, A. M. (2015). You looking at her "hot" body may not be "cool" for me: Integrating male partners' pornography use into objectification theory for women. *Psychology of Women Quarterly*, 39(1), 67-84. doi: 10.1177/0361684314521784
- Ullman, S. E., Relyea, M., Peter-Hagene, L., & Vasquez, A. L. (2013). Trauma histories, substance use coping, PTSD, and problem substance use among sexual assault victims. *Addictive Behaviors*, 38(6), 2219-2223. doi: 10.1016/j.addbeh.2013.01.027
- Villena, A., Contreras, M., & Chiclana, C. (2017). Consequences of pornography use. *The Journal of Sexual Medicine*, 14(5), e254. doi: 10.1016/j.jsxm.2017.04.254
- Volk, F., Thomas, J., Sosin, L., Jacob, V., & Moen, C. (2016). Religiosity, developmental context, and sexual shame in pornography users: A serial mediation model. *Sexual Addiction & Compulsivity*, 23(2-3), 244-259. doi: 10.1080/10720162.2016.1151391

- Voros, F. (2009). The invention of addiction to pornography. *Sexologies, 18*(4), 243-246. doi: 10.1016/j.sexol.2009.09.007
- Watson, M. A., & Smith, R. D. (2012). Positive porn: Educational, medical, and clinical uses. *American Journal of Sexuality Education, 7*(2), 122-145. doi: 10.1080/15546128.2012.680861
- Weinberg, M., Williams, C., Kleiner, S., & Irizarry, Y. (2010). Pornography, normalization, and empowerment. *Archives of Sexual Behavior, 39*, 1389–1401. doi: 10.1007/s10508-009-9592-5
- Wetterneck, C. T., Burgess, A. J., Short, M. B., Smith, A. H., & Cervantes, M. E. (2012). The role of sexual compulsivity, impulsivity, and experiential avoidance in internet pornography use. *The Psychological Record, 62*(1), 3-18. doi: 10.1007/BF03395783
- White, M. A., & Kimball, T. G. (2009). Attributes of Christian couples with a sexual addiction to internet pornography. *Journal of Psychology and Christianity, 28*(4), 350-360.
- Willoughby, B. J., Carroll, J. S., Nelson, L. J., & Padilla-Walker, L. M. (2014). Associations between relational sexual behaviour, pornography use, and pornography acceptance among US college students. *Culture, Health & Sexuality, 16*(9), 1052-1069. doi: 10.1080/13691058.2014.927075
- Wilson, G. (2016). Eliminate chronic internet pornography use to reveal its effects. *Addicta: The Turkish Journal on Addictions, 3*, 209-221. doi: 10.15805/addicta.2016.3.0107

- Winters, J., Christoff, K., & Gorzalka, B. B. (2010). Dysregulated sexuality and high sexual desire: Distinct constructs?. *Archives of Sexual Behavior, 39*(5), 1029–1043. doi: 10.1007/s10508-009-9591-6
- Womack, S. D., Hook, J. N., Ramos, M., Davis, D. E., & Penberthy, J. K. (2013). Measuring hypersexual behavior. *Sexual Addiction & Compulsivity, 20*(1-2), 65-78. doi: 10.1080/10720162.2013.768126.
- Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W.,...& Conner, L. (2003). The Religious Commitment Inventory – 10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50*(1), 84-96. doi: 10.1037/0022-0167.50.1.84.
- Wright, P. J., Bae, S., & Funk, M. (2013). United States women and pornography through four decades: Exposure, attitudes, behaviors, individual differences. *Archives of Sexual Behavior, 42*(7), 1131-1144. doi: 10.1007/s10508-013-0116-y
- Xiuqin, H., Huimin, Z., Mengchen, L., Jinan, W., Ying, Z., & Ran, T. (2010). Mental health, personality, and parental rearing styles of adolescents with internet addiction disorder. *Cyberpsychology, Behavior, and Social Networking, 13*(4), 401-406. doi: 10.1089/cyber.2009.0222
- Yanos, P. T., Roe, D., & Lysaker, P. H. (2011). Narrative enhancement and cognitive therapy: A new group-based treatment for internalized stigma among persons with severe mental illness. *International Journal of Group Psychotherapy, 61*(4), 576-595. doi: 10.1521/ijgp.2011.61.4.576

Yau, Y., & Potenza, M. (2014). This issue: Problematic internet use and behavioral addictions.

Psychiatric Annals, 44(8), 365-367. doi: 10.3928/00485713-20140806-03

Yeh, M., McCabe, K., Hough, R. L., Lau, A., Fakhry, F., & Garland, A. (2005). Why bother with beliefs? Examining relationships between race/ethnicity, parental beliefs about causes of

child problems, and mental health service use. *Journal of Consulting and Clinical*

Psychology, 73(5), 800-807. doi: 0.1037/0022-006X.73.5.800

Young, K. S. (2007). Cognitive behavior therapy with Internet addicts: treatment outcomes and implications. *CyberPsychology & Behavior*, 10(5), 671-679. doi:

10.1089/cpb.2007.9971

Yucel, D., & Gassanov, M. A. (2010). Exploring actor and partner correlates of sexual satisfaction among married couples. *Social Science Research*, 39(5), 725-738. doi:

10.1016/j.ssresearch.2009.09.002

Appendix A

Appendix B

DEMOGRAPHIC INFORMATION

1. Gender:

 Female Male Other, Please specify: _____

2. Age: _____

3. Ethnicity:

 Multi-ethnic/racial Native American African American
 Asian American Caucasian/Euro-American
 Hispanic or Latin American Other, Please specify: _____

4. Educational Background—Highest level of school completed:

 Less than 7 years
 Junior high school
 Partial high school (10-11th grade)
 High school graduation
 Partial college/post high school training (1 year or more)
 Standard college graduation
 Graduate/professional degree

5. Employment Status—Current employment status:

 Employed full-time Employed part-time Full-time homemaker
 Retired School/ Student Unemployed
 Other, Please specify: _____

6. Annual Income—Approximate annual, gross household income:

 less than \$25,000 \$50,001-\$75,000 \$100,001-\$130,000
 \$25,001-\$50,000 \$75,001-\$100,000 more than \$130,000

7. Religious Preference—Religious preference:

 Buddhist Islamic Hindu Christian/Catholic
 Christian/Non-denominational Christian/Protestant
 Atheist Agnostic Other, Please specify: _____

Appendix C

GLOBAL RELIGIOUSNESS

1. How often do you attend religious services? .

- | | |
|--|--|
| <input type="checkbox"/> Never | <input type="checkbox"/> 2-3 times a month |
| <input type="checkbox"/> Less than once a year | <input type="checkbox"/> Nearly every week |
| <input type="checkbox"/> Once a year | <input type="checkbox"/> Every week |
| <input type="checkbox"/> Several times a year | <input type="checkbox"/> More than once a week |
| <input type="checkbox"/> Once a month | |

2. About how often do you pray?

- | | |
|--|---|
| <input type="checkbox"/> Never | <input type="checkbox"/> Several times a week |
| <input type="checkbox"/> Less than once a week | <input type="checkbox"/> Once a day |
| <input type="checkbox"/> Once a week | <input type="checkbox"/> Several times a day |

3. To what extent do you consider yourself a religious person?

- | | |
|---|---|
| <input type="checkbox"/> Not religious at all | <input type="checkbox"/> Moderately religious |
| <input type="checkbox"/> Slightly religious | <input type="checkbox"/> Very religious |

4. To what extent do you consider yourself a spiritual person?

- | | |
|---|---|
| <input type="checkbox"/> Not spiritual at all | <input type="checkbox"/> Moderately spiritual |
| <input type="checkbox"/> Slightly spiritual | <input type="checkbox"/> Very spiritual |

Appendix D**BELIEF IN GOD****Directions: Select one statement.****Which of these statements comes closest to expressing what you believe about God?**

- I don't believe in God.
- I don't know whether there is a God and I don't believe there is any way to find out.
- I don't believe in a personal God, but I do believe in a Higher Power of some kind.
- I find myself believing in God some of the time but not at others.
- While I have doubts, I feel that I do believe in God.
- I know God really exists, and I have no doubts about it.

Appendix E

Informed Consent

You are invited to be in a research survey which is a study about the Impact of Family-of-Origin Experience, Spirituality, Sexual Behavior, Sexual Attitudes, Relationships, and attitudes about pornography. As compensation, one dollar will be made available to participants who complete it. We ask that you read this form and ask any questions you may have before agreeing to participate in the survey. You have received the opportunity to participate in this survey through your arrangement with Amazon Mechanical Turk.

Confidentiality

The records of this study will be kept private and anonymous. We are asking for your honest response to all the questions. Research records will be stored securely and only researchers will have access to the records. Publications from this research study will only report on statistical information as no personal information will be requested from you.

Contacts and questions

The researcher conducting this study is Fred Volk. Please feel free to send the questions to fvolk@liberty.edu.