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THE RELATIONSHIP OF SELF-ESTEEM ON PORNOGRAPHY VIEWERSHIP AND RELATIONSHIP SATISFACTION IN GERMAN COUPLES

Trenton McClure

University of Kentucky, trenton.mcclure@uky.edu

Author ORCID Identifier:

 <https://orcid.org/0000-0003-2838-1266>

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Trenton McClure, Student

Dr. Donald Bruce Ross, Major Professor

Dr. Hyungsoo Kim, Director of Graduate Studies

THE RELATIONSHIP OF SELF-ESTEEM ON PORNOGRAPHY VIEWERSHIP
AND RELATIONSHIP SATISFACTION IN GERMAN COUPLES

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in Family Sciences in the
College of Agriculture, Food and Environment
at the University of Kentucky

By
Trenton McClure
Lexington, Kentucky
Co- Directors: Dr. Donald Bruce Ross, Assistant Professor of Family Sciences
and
Dr. Nathan Wood, Associate Professor of Family Sciences

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<https://orcid.org/0000-0003-2838-1266>

ABSTRACT OF THESIS

THE RELATIONSHIP OF SELF-ESTEEM ON PORNOGRAPHY VIEWERSHIP AND RELATIONSHIP SATISFACTION IN GERMAN COUPLES

The current study aimed to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of pornography viewership at the individual and dyadic level. Using the VSA model, this study utilized the pairfam dataset, which is a nationally representative German sample. Data from 369 participants were analyzed using three structural equation models; a combined male and female anchor model, a male only anchor model, and a female only anchor model. This current study found that males' and females' self-esteem was significantly related to higher levels of relationship satisfaction for themselves and for their partner. Males frequency of viewing pornography with their partner was associated with an increase in relationship satisfaction for their partner. Frequency of individually viewing pornography for females was found to be associated with a decrease in relationship satisfaction for their partner. Female self-esteem was associated with higher frequency of viewing pornography together with their partner. Overall, varying definitions of what pornography may be, the perceptions of pornography being viewed in the relationship, and the impact it has on couple relationships were explored.

KEYWORDS: Pornography, Self-esteem, Relationship Satisfaction

Trenton McClure

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By
Trenton McClure

Donald Bruce Ross, PhD

Co-Director of Thesis

Nathan Wood, PhD

Co-Director of Thesis

Hyungsoo Kim, PhD

Director of Graduate Studies

07/22/2020

Date

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The Relationship of Self-Esteem on Pornography Viewership and Relationship
Satisfaction in German Couples

Introduction

Pornography has varying meanings and purposes for the estimated 69.7 million people in the United States that view internet pornography (Borgogna et al., 2018). National surveys indicate that between 55–70% of men and 30–40% of women under 40 years of age report viewing pornography in a given year (Perry & Schleifer, 2018), and up to 87% of young adult men (18–25 years of age) and 34% of young adult women (18–25 years old) report viewing pornography regularly (Grubbs et al., 2015). Since the internet has made pornography more available in the United States (Manning, 2006), researchers have identified both positive influences (e.g., Griffiths, 2012; Hilton, 2013; Young, 2008) and negative influences (e.g., Campbell & Kohut, 2017; Kohut et al., 2017; Montgomery-Graham et al., 2015) associated with viewing pornography and couple satisfaction. Therefore, this has provided some mixed empirical findings about the influences of pornography. This may be because an individual's perception and usage of viewing pornography will make viewing pornographic material either enticing or distasteful. One such perception of pornography is that pornography use is a form of sexual expression wherein individuals can enhance their understanding of sexuality either for themselves or with a romantic partner (Poulsen et al., 2012). Another perception is that viewing pornographic images and messages will shape the conscious or unconscious expectations of the viewer regarding gender performance, body image, intimacy, and sexual relations in ways that can negatively affect actual and romantic relationships (Perry & Schleifer, 2018).

Research on pornography continues to experience mixed empirical findings when it comes to relational outcomes and the attitudes of individuals viewing pornography. Some of the controversies behind research on pornography is complicated by the morally charged subject of sexual behaviors in general. For instance, religious individuals tend to strongly disapprove of viewing pornography (Grubbs et al., 2015) and advocate for censoring pornography (Lykke, & Cohen, 2015) but view pornographic material with some frequency (Grubbs et al., 2015). This relationship introduces the concept of moral incongruence, which in general, is the experience of one's behavior and values being misaligned (Grubbs & Perry, 2019). Despite a large number of religious individuals who report disapproval of viewing pornography, they continue to think that their pornography viewership is incongruent with their religious values (Grubbs & Perry, 2019). These incongruent feelings have possibly led religious individuals to report greater levels of depression in daily life (Nelson et al., 2010), lower levels of sexual satisfaction (Perry & Whitehead, 2018), and greater levels of relational distress (Leonhardt et al., 2018; Perry, 2016). Thus, indicating that moral incongruence around viewing pornography for religious individuals may provide another avenue by which the self-perceived effects of viewing pornography may arise (Grubbs & Perry, 2019). Many individuals, not just among religious individuals, experience moral incongruence; which could be a factor explored to help expound on the experience of pornography viewership and individual and relationship outcomes (Grubbs & Perry, 2019). The concept of moral incongruence may help explain both individual and relational distress while viewing pornography for religious and non-religious individuals. A recent study done by Perry (In Press) found that married individuals who were viewing pornography and morally disapproved of it

reported their marital quality as declining when their frequency of viewing pornography increased. Married individuals in Perry's study who did not disapprove of pornography had their marital quality unrelated to their frequency of viewing pornography. This indicates possible connections between the positive and negative effects of viewing pornography if moral incongruence is accounted for. Thus, moral incongruence could be an important explanatory variable used to identify the differences in positive and negative experiences for individuals rather than trying to draw conclusions strictly from pornography viewership (Grubbs & Perry, 2019).

Gender differences and the perceptions of the impact pornography has on the relationship vary between men and women. Men viewing pornography have generally been associated with negative attitudes and satisfaction for their partners because women tend to report greater negative affection to hypothetical scenarios presented to them of a partner's use of sexual media (Clark & Wiederman, 2000) and when females perceived their partners were frequently viewing pornography, they experienced lower levels of psychological stress and relationship satisfaction (Szymanski et al., 2015). Women's use of pornography has been found to have either a positive or neutral relationship with their partner's satisfaction (Bridges & Morokoff, 2011; Poulsen et al., 2013). Studies have shown that men tend to interpret women's use of sexual media as a positive attempt to enhance the couple's sexual excitement (Clark & Wiederman, 2000). It still needs to be explored why these gender differences exist, but they may be attributed to use of frequency (Wright et al., 2019) and the material being viewed (Kohut et al., 2018).

Numerous studies continue to be devoted to analyzing the positive and negative influences of those personally viewing pornography, the interplay it has in couple

relationships, and how these differing outlooks have impacted social policy concerning viewing pornography (Cottle et al., 1989; Newstrom & Harris, 2016; Rasmussen, 2016). Recent studies have reported a collection of perceived positive effects of viewing pornography, which include improved sexual communication, enhanced sexual comfort, and more sexual experimentation (Kohut et al., 2017). A number of other studies have shown an association with a more openness to discuss sexual desires (Daneback et al., 2009), exploring new sexual behaviors (Weinberg et al., 2010), and increased sexual knowledge (Hald et al., 2013).

The rise in viewing pornography has also revealed some potential negative causes and consequences for individuals and relational outcomes. For instance, when women know their male partners are viewing pornography, women tend to be more concerned with their sexual attraction toward their own body and feel the need to perform the same sexual acts their partner is viewing (Zitzman & Butler, 2009) which could potentially be associated with a lower level of self-esteem. Along with sexual performance, women tend to pay more attention to perceived body flaws and engage in social comparison to the often unrealistic physique of women depicted in pornographic material (Bridges et al., 2003). Some women may fear that if they fail to accommodate their partner's sexual desires that he formulates through watching pornography, then they may perceive their self-worth in a negative light (Bridges et al., 2003). Men's pornography use may have indirect effects (lower self-esteem) on their partner and which is related to poor relationship quality and less sexual satisfaction (Stewart & Szymanski, 2012).

With there being varying results in the current field of pornography research, this study will not be aimed to view pornography as either good or bad but will explore how a

partner's frequency of viewing pornography may influence an individual partner's self-esteem and impact how the relationship satisfaction is perceived. The theoretical framework that is guiding this study is the vulnerability-stress-adaptation model developed by Karney and Bradbury (1995). The theoretical framework of vulnerability-stress-adaptation provides the context needed to help explain how adaptive processes and enduring vulnerabilities within romantic relationships account for variations in marriage stability and satisfaction. The vulnerability-stress-adaptation model examines fluctuations within marriages because of the interplay between adaptive process, enduring vulnerabilities, and related stressors. Therefore, by examining the current literature on pornography and applying the vulnerability-stress-adaptation model, this study will examine the varying definitions of what pornography may be, the impact viewing pornography may have on self-esteem and couple relationships, and how couples may apply adaptive processes in their relationship to achieve the desired level of marital satisfaction.

Literature Review

History and Evolution of Pornography

The word "pornography" made its first appearance in the Oxford English Dictionary in 1857 (Thauvette, 2012). Before pornography could cement its place in the Oxford English Dictionary, terms like "bawdy" and "erotic" were being used to describe sexually revealing artwork and poems (Thauvette, 2012). The words "bawdy" and "erotic" have moved freely in historical periods and are what has shaped the early understanding of sexuality; with "bawdy" capturing the essence of sexual acts with a

connotation of crude, filthy, or lewd and “erotic” representing the sensual and romantic acts of sex (Thauvette, 2012).

Certain historical periods such as the 1880’s in England and the 1950’s in the United States have created rifts of how individuals define and accept personal relations of sexuality (Rubin, 2010). These struggles that have been expressed between individuals have created laws, social practices, and ideologies that affect how sexuality is experienced (Rubin, 2010). For instance, one such law that has been invoked is the Comstock Act in 1873. This was the first federal anti-obscenity law to be passed in the United States and made it a federal crime to make, advertise, sell, or send through the mail any material deemed obscene (Rubin, 2010). The Supreme Court did begin to whittle down certain regulations regarding the Comstock Act in 1975 but it was still a crime to make, advertise, or sell any sexually explicit material if it has any other purpose besides sexual arousal (Rubin, 2010).

Although research on sexual topics have expanded over the years (Kinsey, 1953), studies examining the effects of pornography consumption were essentially nonexistent before the 1970’s (Rasumussen, 2016). It was not until 1969, when the Supreme Court struck down state laws policing the private possession of obscene materials (*Stanley v. Georgia*, 1969), that researchers began to examine pornography's effects (for an in-depth summary of these legal issues, see Funston, 1971). Also, in 1969 the US Commission on Obscenity and Pornography, which was the first government funded research enterprise, was created with the intent to gather empirical findings on the use of pornography and its assumed harms (Kohut et al., 2019).

Methodological Approaches of Pornography Research

Now in 2019, 50 years after the US Commission on Obscenity and Pornography was instituted, recent studies seem to have found that somewhere between 10-99% of men, and 0-88% of women view pornography (Campbell & Kohut, 2017; Hong et al., 2006; O'Reilly et al., 2007). These studies illustrate the intricacies of pornography research and investigating how many people are viewing pornography and how frequently they are viewing. Previous research have identified certain differences in estimates of pornography research across study samples. Some of these differences in study samples that have been shown to suppress or facilitate individuals in seeking out pornography are in relation to age (Wright, 2013; Wright et al., 2013), sexual orientation (Træen et al., 2006), religiosity (Perry, 2016, 2018; Rasmussen & Bierman, 2016, 2017), and social desirability (Rasmussen et al., 2018).

Another factor that likely explains some of the variation in pornography studies are the considerable differences in how “viewing pornography” is conceptualized. This variability with how viewing pornography is empirically understood and assessed has become a serious impediment for this field of study and continues to be an unresolved barrier (Kohut et al., 2019). There are also diverse terms that are frequently used to refer to or searched for concerning pornography studies and the differences in terminology can be obscured (Kohut et al., 2019).

Definition of Pornography and Varying Interpretations

Derived from a Greek term for “writing about whores” (porno = “whore”, graphy = “writing”), the word’s modern application has been interpreted inconsistently among many (Short et al., 2012) and has led some to abandon

the term in favor of the phrase “sexually explicit materials” (Peter & Valkenburg, 2010). Referring to either pornography or sexually explicit materials have created an element of ambiguity with these two terms and their interpretation. Most empirical research on defining pornography have two approaches; an emphasis on structure of pornography, and function of pornography (Kohut et al., 2019). The structural definition of pornography is focused on illustrating the nature and content of the pornography being viewed, while the definition of functional pornography focus on the intent and function of viewing.

Some definitions of pornography have been operationalized as the viewing of sexually explicit material used or intended to increase personal sexual arousal (Maddox et al., 2011) but this definition still has varying applications and interpretations among individuals. Images of nudity often portray a consensus of pornography because viewing images of exposed bodies verify to many the image’s explicitness (Thauvette, 2012). To some, the images of nudity may not classify as pornography because it is not intended to or is creating any personal sexual arousal (Maddox et al., 2011). Pornography can be understood as any material intended to create or enhance sexual feelings or thoughts for the viewer and simultaneously be containing explicit exposure/descriptions of the genitals and provide clear and explicit sexual acts, such as vaginal intercourse, anal intercourse, oral sex, or masturbation (Hesse & Pedersen, 2017). Being able to create a definitive term of what pornography is has been an issue and is a common critique and limitation of many pornography studies (Kohut et al., 2019; Manning, 2006). Another common issue on pornography studies is that conceptual definitions of pornography vary among academics and layperson’s; which presents challenges in studying and conducting

empirical research on pornography and what pornography represents (Kohut et al., 2019). Furthermore, the topic and discussion of what pornography is comes with a wide range of meanings which is not only dependent on cultural, social, and historical contexts but also on individuals' own experiences and beliefs (Ciclitira, 2002).

Self-Esteem

Self-esteem is an evaluation of our worthiness as individuals, level of confidence in ourselves, and the self-perception that we are an inherently good and a valuable person (Neff, 2011). Self-esteem comes from thinking we are good at certain attributes that have significance to us, but not good with attributes we do not personally value. Self-esteem will fluctuate based on how the individual perceives their worth or unworthiness.

Previous research has debated if self-esteem is truly a fundamental human need, but it has been shown to have an important influence on relationship satisfaction, health, occupation, and other important life outcomes (Orth et al., 2012). For this study, the possible relationships between self-esteem impacting viewership of pornography and relationship satisfaction will be examined.

Previous research has found that self-esteem and relationship satisfaction have been positively correlated (Orth et al., 2012). Meaning that individuals with a higher level of self-esteem are willing to express more relationship building behaviors and individuals with low self-esteem show more dysfunctional relationship damaging behaviors. For instance, when there is a perceived threat to self-esteem within a relationship, individuals with a high level of self-esteem are seen more frequently seeking opportunities to enhance their connection with their relationship partner because they expect their actions to be received and believe their partner will be responsive to their needs (Zeigler-Hill et

al., 2011). These reciprocal interactions between partners often emphasize the importance of positive qualities partners are seeking in a relationship.

Individuals' self-esteem levels and perception of the relationship may be influenced by how their value may be perceived by their partner. It is believed that feelings of self-worth can stem from the perceptions of how an individual may appear to others. This theoretical perspective of how individuals attach a value of self-worth because of the perceptions of others is known as the 'looking glass self' (Cooley, 1956; Mead, 1934). According to the "looking glass self", an individual's self-esteem level can develop through interactions with others and that projects a reflection of those others' appraisals about oneself. In context with this study, the 'looking glass self' may suggest that individuals who are aware that their partners are using pornography may incorporate perceptions of their self-worth when being compared to the unrealistic physiques of actors being portrayed in pornographic material (Bridges et al., 2003).

Pornography Related to Higher Relationship Satisfaction

Pornography viewership and positive attitudes toward pornography have been trending up in the last few decades (Price et al., 2016). As more individuals continue to view pornography, research has found that exposure to sexually explicit material enhances sexual knowledge, one's sexuality, perceptions of sexual intercourse, and overall well-being (Hald & Malamuth, 2008). Sexually explicit material has also been reported to assist in sexual and relationship satisfaction (Maddox et al., 2011; Manning, 2006), increase sexual excitement, and expand one's sexual expertise by introducing novel ideas (Olmstead et al., 2013; Weinberg et al., 2010).

Australian pornography subscribers were asked what they felt the effects of pornography were in their own lives (McKee et al., 2008). A majority of subscribers reported that pornography had positive effects which included making viewers feel less restrained about the concept of sex, became more open-minded about sex, became increasingly more tolerant of other peoples' sexualities, giving pleasure, provided sexually educational insight, helped sustained sexual interest in long-term relationships, helped viewers become more attentive to their partner's sexual desires, and helped viewers talk to their partners about sex (McKee et al., 2008). These same perceived benefits were found in a sample of Dutch young adults (Hald & Malamuth, 2008), who revealed that pornography had more positive than negative effects on their attitudes toward sex, their sex life, their attitudes toward the opposite sex and with their life in general; with the effects being greater for men than for women.

Research has also differentiated between when someone views pornography alone compared to with a romantic partner. Previous literature has found varying benefits to viewing pornography alone or together but research suggests pornography use may be less harmful to committed relationships to watch pornography together if it is watched to enhance their sexual experience (Cooper et al., 2002). Regarding measurements of commitment, infidelity, communication, relationship adjustment, and sexual satisfaction, Maddox et al. (2011) found that couples in which both partners viewed pornography only with each other reported similar relationship quality to individuals who never viewed pornography and reported more commitment to the relationship and sexual satisfaction than did solitary viewers. Couples who mutually viewed pornography together reported

higher dedication to the relationship and sexual satisfaction than did solitary viewers (Maddox et al., 2011).

Women have reported that watching pornography together as a couple was a positive experience (Bridges et al., 2003). Unlike men, who historically prefer to watch sexually explicit material alone (Carroll et al., 2018), women have reported using pornography as coupled with their sexual activity (Albright, 2008; Kohut et al., 2018).

Multiple surveys of women whose companions used pornography have felt that their partner's consumption added variety to their sex lives (Bridges et al., 2003). Additionally, women shared some positive statements regarding their partner's pornography use, such as "My partner's use of pornography leads to variety in our sexual relationship" and "My partner's use of pornography does not affect the intimacy in our relationship" (Bridges et al., 2003). In fact, some women may even view their partner's pornography use as enhancing their sexual relationship (Bridges et al., 2003). Pornography use among women has been associated with positive experiences with sex (Rogala & Tydén, 2003), may increase communication between partners regarding sexual fantasies and desires (Daneback et al., 2009), and can expand women's' sexual horizons (Weinberg et al., 2010).

Pornography Related to Lower Relationship Satisfaction

Data from the General Social Survey (GSS) displays consistent correlations between pornography consumption (viewing a pornographic video or website in the previous 30 days) and divorce, with the correlational relationship gaining in strength over time (i.e., individuals who viewed pornography were on average 60% more likely to be divorced than those who did not) (Doran & Price, 2014). Studies have found that this

correlation between pornography consumption and divorces, describes the probability of divorce doubling for married couples who view pornography (Perry & Schleifer, 2018).

A perception about viewing pornographic images is that it will shape the conscious or unconscious expectations of the viewer regarding gender performance, body image, intimacy, and sexual relations in ways that can negatively affect actual and romantic relationships (Perry & Schleifer, 2018). This perception could influence individuals to believe that viewing pornography is a dishonest and deceptive behavior regarding the couple relationship (Resch & Alderson, 2014). Studies have found that spouses have spent considerable effort hiding and lying about their online activities and that dishonesty triggers hurt and betrayal as much as, or more as, infidelity to the relationship (Resch & Alderson, 2014).

High rates of pornography use have also been associated with greater levels of depression among men, more negative feelings about romantic partners, and engagement in risky sexual behaviors (Willoughby et al., 2016). Other research indicates that both men and women report being less satisfied with their partner's affection, physical appearance, and sexual performance and a higher desire for sexual activity without emotional involvement and commitment (Maddox et al., 2011). Pornography can reduce satisfaction with partners and relationships through compare and contrast effects, reduce commitment by increasing the appeal of alternative relationships, and increase acceptance of infidelity (Rasmussen, 2016).

Theoretical Framework

A strong amount of spousal support tends to create gratifying marriages which can buffer spouses from psychological distress, negative life events, and any unwanted

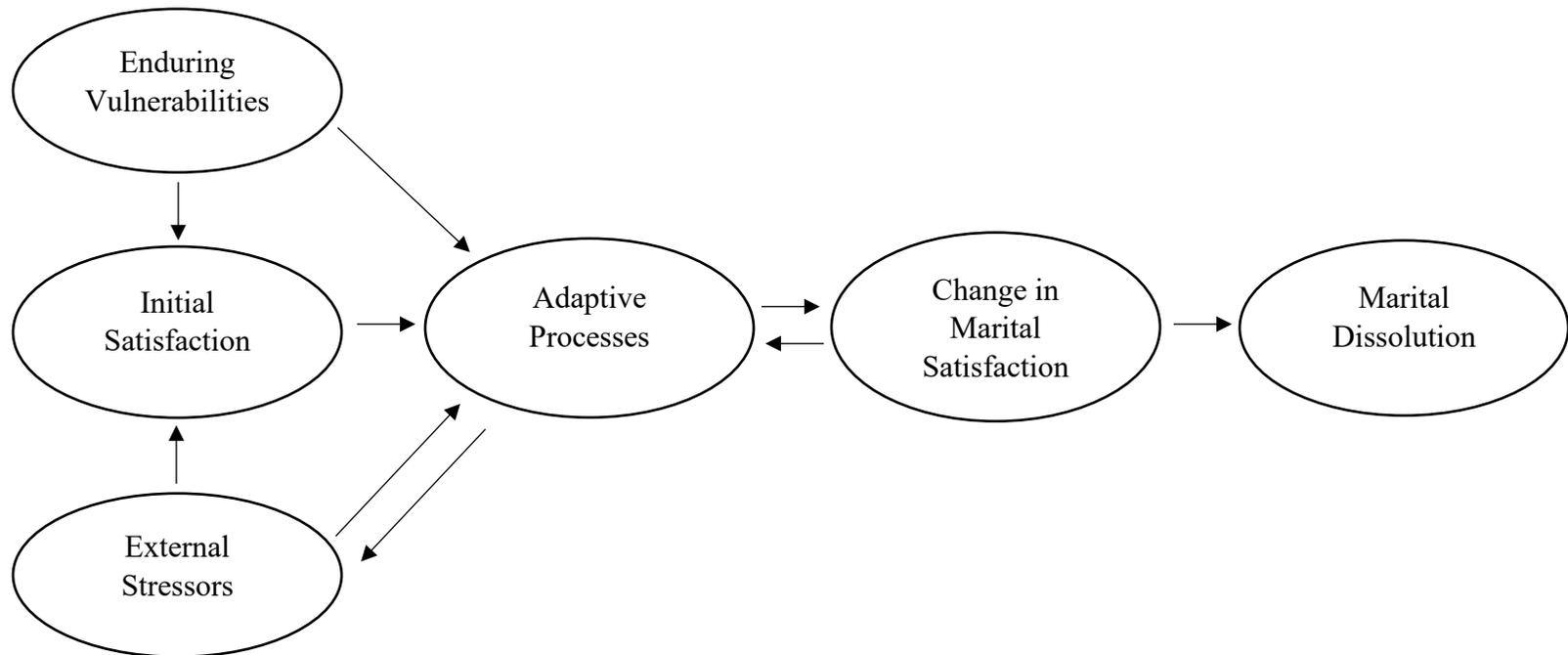
variability within the relationship that could have negative consequences for the physical and emotional well-being of both spouses (Brock & Lawrence, 2008). Even with the support of a spouse, the definition and value of marital satisfaction are fluid throughout relationships and among individuals which creates a unique challenge on how to measure and understand marital satisfaction appropriately. Hence, it must be understood that the idea of what marital satisfaction is will change with time. The reason this may be is that individuals are complex and consist of an array of perceptions that range from specific, concrete, and evaluative (Karney, 2010). With individuals being complex, if a couple desires to stay happily married, they must find a way to adapt, identify, and focus on specific perceptions that will last through the relationship.

Providing a theoretical framework for this study can help further the exploration of marital satisfaction, the effects that viewing pornography may have on marital relationships, and the impact viewing pornography has on individuals and relationships. Thus, the Vulnerability-Stress-Adaptation (VSA) model is the explanatory framework that will be used to help describe how perceptions of marital quality change over time and how couples learn to adapt their perceptions of marital satisfaction. The VSA model (see Figure 1) describes how marital satisfaction changes over time because of adaptive processes within the relationship (e.g., solving problems, explaining each other's behavior, understanding a spouse's perspective) (Karney, 2010). These adaptive processes themselves are facilitated or constrained by a spouse's enduring vulnerabilities (e.g., personality traits, childhood experiences) and the taxing circumstances a spouse may encounter outside the relationship (e.g., workload, financial strains, health problems) (Karney, 2010).

In addition to the effects of enduring vulnerabilities and stressful circumstances on marriage, the VSA model suggests that these sources of influence on marital satisfaction, independent as they may seem, are highly interactive with each other. That is, among individuals with enduring vulnerabilities, those who continuously encounter stressful circumstances (in and out of the relationship), will have a hard time maintaining their ideal marital relationship, and the couples most at risk for relationship problems, are couples who struggle with numerous enduring vulnerabilities (Karney, 2010). Previous literature to strengthening marriages and other intimate relationships focuses almost exclusively on adaptive processes, for example teaching couples a set of skills for resolving problems and dealing with disappointments when they arise (Karney, 2010), but this may not be enough. Individuals attempting to rely on adaptive processes, while coping with significant enduring vulnerabilities, may not be able to change their behaviors altogether. Even couples that know perfectly well how to respond to each other effectively may lose their capacity for effective adaptive processes when under stress.

With the VSA model, Karney and Bradbury (1995) have instituted an explanatory framework to account for the variances of adaptive processes, enduring vulnerabilities, and their interplay with each variable. Karney and Bradbury's research has also examined previous theoretical perspectives such as social exchange theory (Thiabaut & Kelly, 1959), behavioral theory, attachment theory (Bowlby, 1969), and crisis theory (Hill, 1949; McCubbin & Patterson, 1982). These theories were integrated into the vulnerability-stress-adaptation model to account for certain gaps the previously listed theoretical perspectives have and explain how marital satisfaction is everchanging within relationships.

Figure 1: The Vulnerability-Stress-Adaptation Model of Marriage (Karney & Bradbury, 1995)



The longitudinal association between life stressors and marital outcomes has been researched to a considerable degree, but research also suggests that stressful events affect adaptive processes as well (Karney & Bradbury, 1995). External circumstances that spouses experience also affect how effectively couples adapt and can influence any longitudinal effects of stressful events and marital outcomes. For instance, when the VSA model is applied to this current study it can analyze how an individual, or a couple, views their current level of self-esteem (initial satisfaction) and partner satisfaction and how the variable of viewing pornography (adaptive processes) will interact with existing enduring vulnerabilities and external stressors in the relationship. Once one partner begins an adaptive process in their life, such as viewing pornography, this adaptive process begins interacting with existing enduring vulnerabilities. Viewing pornography may have an impact on the individual, the couple, and certain effects of viewing sexually explicit material may impact the level of satisfaction with the relationship and self-esteem for the individual. Another example of adaptive processes within the relationship may be about a spouse's ability to communicate (adaptive processes) with their partner as to why they started viewing pornography (adaptive processes) and how it makes them feel. It is then possible for a positive change in marital satisfaction to occur if a partner perceives that pornography can increase sexual excitement within the relationship and expand one's sexual competence with certain novel acts that were viewed (Olmstead et al., 2012; Weinberg et al., 2010). Or a negative change in marital satisfaction could occur because a partner believes viewing pornographic images is dishonest in a relationship, which then may subsequently trigger feelings of infidelity in the relationship (Resch & Aldersson,

2014) and create a belief that viewing pornography will negatively affect the marriage relationship (Perry & Schleifer, 2018).

Another important link in the VSA model, when applying the concept of viewing pornography within a relationship, is the association of how observed adaptive processes come to affect reports of marital quality. The VSA model proposes that both appraisals and negative behavior exhibited towards viewing pornography can provide an exchange between spouses that could create subsequent interactions and impact marital quality (Karney & Bradbury, 1995). Subsequent conversations could ensue and help couples to learn how they may be able to overcome stressful events because they interact with each other. If there is repeated exposure to failures of adaptation within the relationship, marital quality is likely to decline and the probability of marital instability will increase (Karney & Bradbury, 1995).

In summary, the vulnerability-stress-adaptation model accounts for an array of variables within marriage relationships. Variables that factor into marriage stability such as broad demographic variables and enduring vulnerabilities are also accounted for and help explain observed sequences in marital interactions. Adaptive processes also help explain the effects that enduring vulnerabilities have on marriage relationships, thus, mediating the effects of stress and vulnerability on marital outcomes. This framework helps account for variations in marital outcomes and stability, both between and within couples, by focusing on the interaction between stress and vulnerability and the effect on adaptive processes. This framework can account for both change and stability in marital satisfaction and when changes in marital satisfaction are likely to occur. The vulnerability-stress-adaptation model can be the needed framework for this study and

provide the necessary guidance to help portray how some individuals may turn to pornography as an adaptive process for their life and relationship and how viewing pornography may impact self-esteem and relationship satisfaction.

The Current Study

The current study aims to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of pornography viewership at the individual and dyadic level. As evident by the research literature, self-esteem has been shown to be significantly associated with relationship satisfaction (Orth et al., 2012). What is less known, however, is how the viewership of pornography, both individually and as a couple, may mediate this association and ultimately what impact it may have on the couples' perception of relationship satisfaction. The theoretical framework of vulnerability-stress-adaptation guides the current study of analysis by providing the needed context to help explain how adaptive processes and enduring vulnerabilities within couples account for variations in marriage stability and satisfaction. The vulnerability-stress-adaptation model accounts for fluctuation within marriages because of the interplay between adaptive process, enduring vulnerabilities, and related stressors. Therefore, varying definitions of what pornography may be, the perceptions of pornography being viewed in the relationship, and the impact it has on couple relationships will vary based on the individual's actions, intent, and adaptability to sustain marriage stability when viewing pornography.

The current study will utilize three longitudinal, structural equation models; a combined male and female anchor model (Figure 2), a male anchor only model (Figure 3), and a female anchor only model (Figure 4) for this analysis. Each anchor in their

respective samples will be viewed dyadically, with their partner, to examine if there are any reciprocal processes between the couple. Examining these associations dyadically will allow for a better understanding of how both spouses view the quality of the relationship and if viewing pornography impacts that quality. Dyadic data analysis proposes that each member of the dyad influences their partner in their behavioral, emotional, and cognitive characteristics. Consequently, partners cannot be considered independent from one another due to reciprocal influence and interactions (Fitzpatrick et al., 2016). Thus, through the three structural equation models being utilized in this study, it will allow for an analysis of any potential reciprocal processes that each actor (male or female) in these models may have on themselves and their partner with viewing pornography and relationship satisfaction.

Research Question 1. Will husbands' and wives' level of self-esteem be related to their own frequency of viewing pornography?

Research Question 2. Will husbands' and wives' frequency of viewing pornography be associated with their own and their partner's perception of relationship satisfaction?

Research Question 3. Will husbands' and wives' level of self-esteem be related to the frequency of viewing pornography together as a couple?

Research Question 4. In turn, will the frequency of viewing pornography together as a couple be associated with husbands' and wives' perception of relationship satisfaction?

Research Question 5. Will husbands' and wives' self-esteem be related to their own and their partner's perception of relationship satisfaction?

FIGURE 2: Model Male and Female Anchor

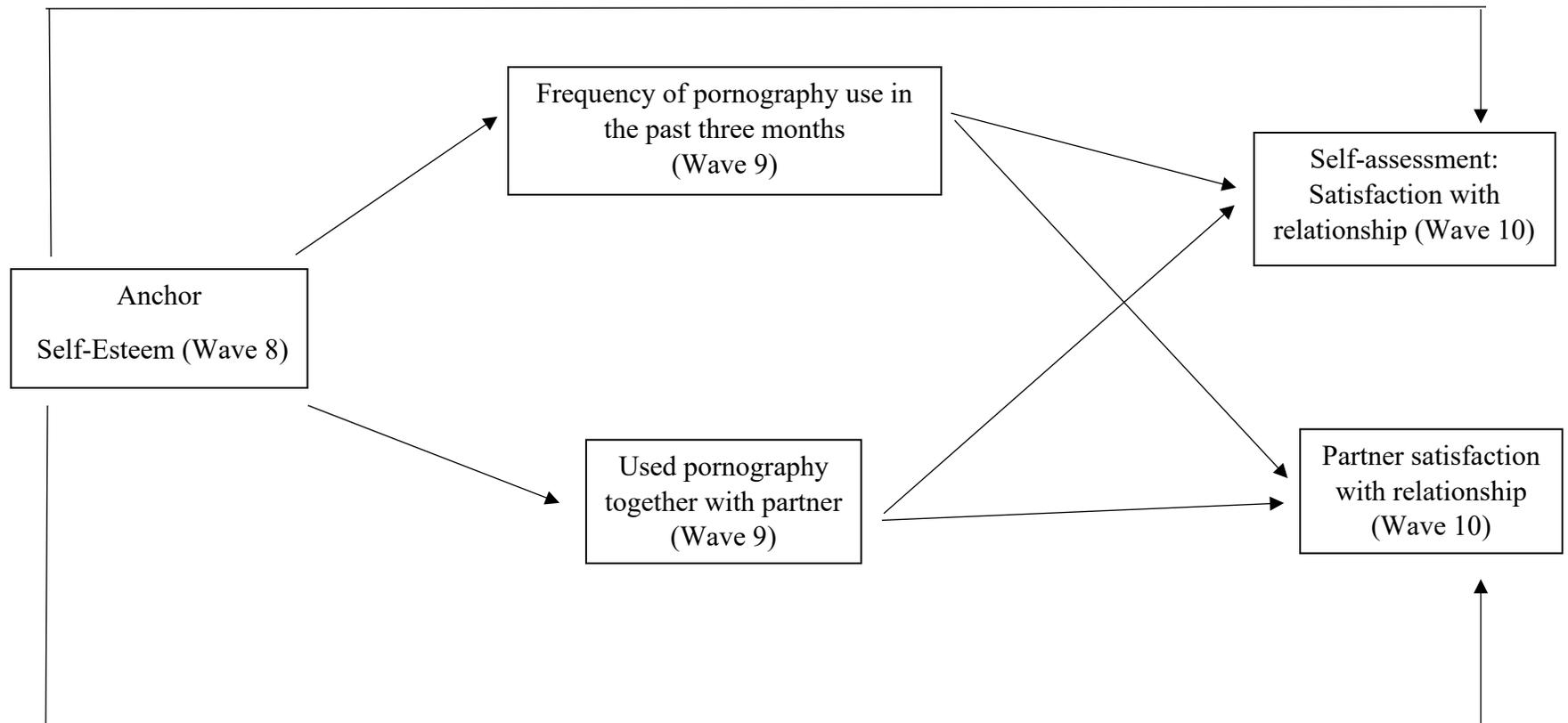


FIGURE 3: Model Male Anchor

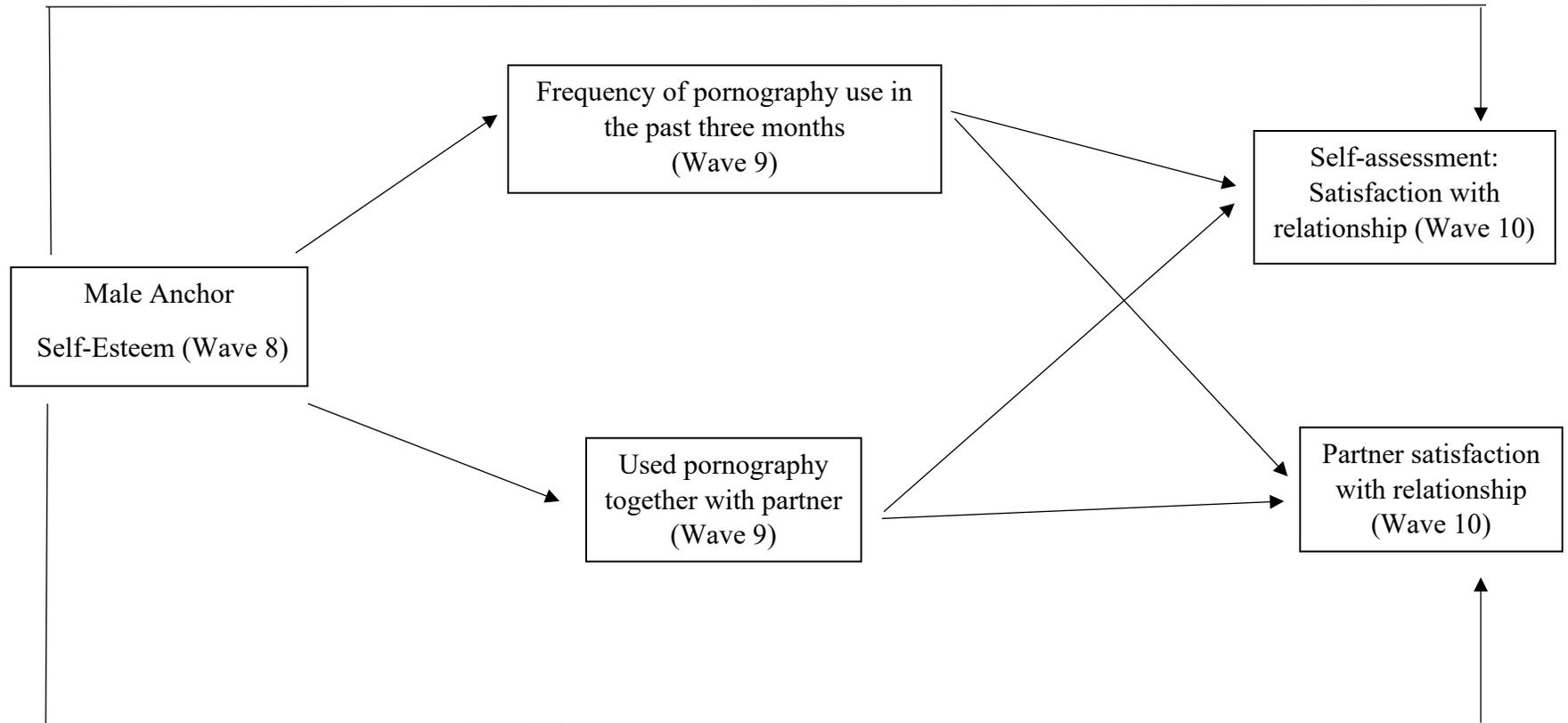
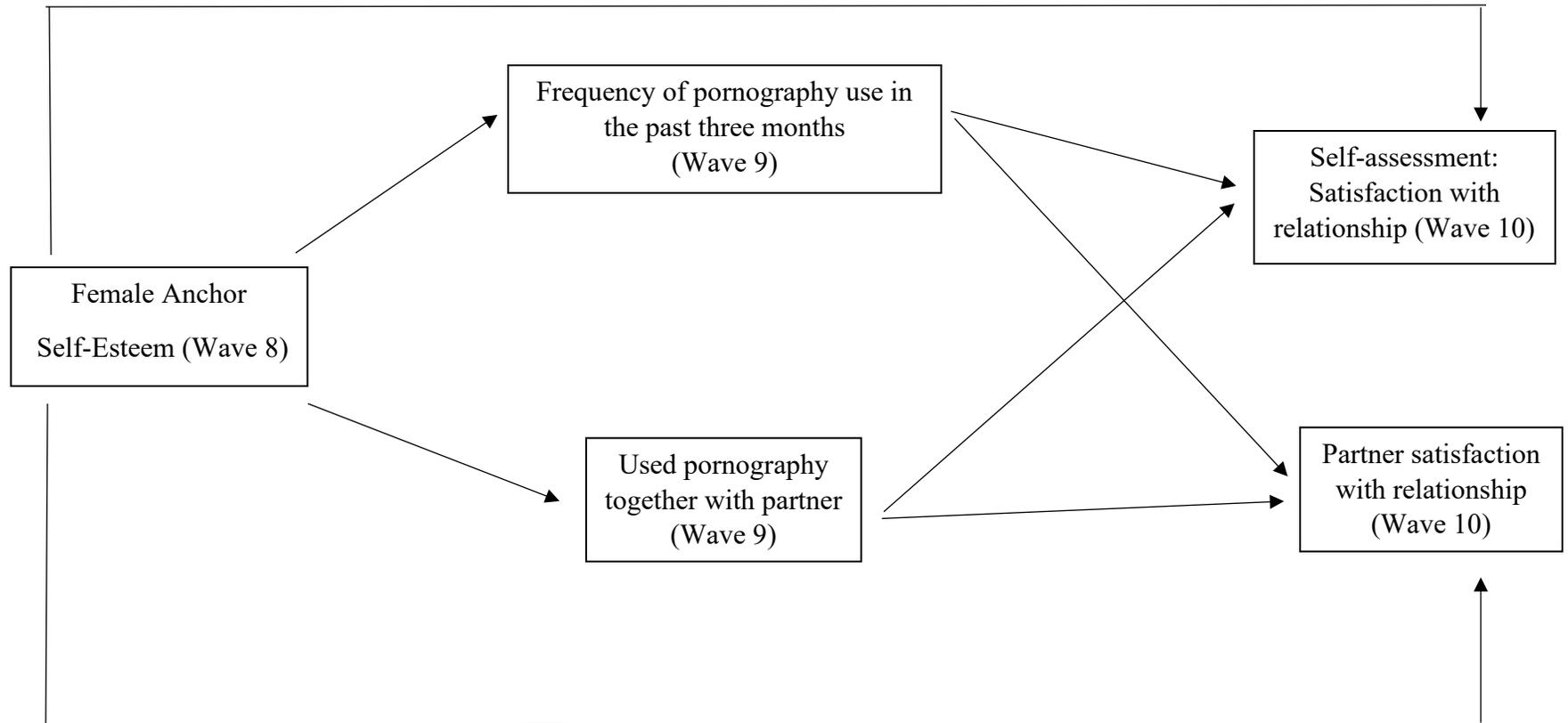


FIGURE 4: Model Female Anchor



Method

Participants

Data for this paper comes from the German Panel Analysis of Intimate Relationships and Family Dynamics (pairfam), coordinated by Josef Brüderl, Sonja Drobnič, Karsten Hank, Bernhard Nauck, Franz Neyer, and Sabine Walper. Pairfam is funded as a long-term project by the German Research Foundation (DFG) (Huinink et al., 2011; Brüderl et al., 2019). Pairfam was initially started with the intent to provide an empirical basis for improving how to understand the everchanging family dynamics and couples. The creators of the pairfam dataset firmly believe that progress in family research depends on the unifying expertise of various disciplines, integrating theoretical models, and using longitudinal approaches with representative data (Huinink et al., 2011; Brüderl et al., 2019). Pairfam aims to not only analyze how families are affected by an economic or social-structural standpoint but to also focus on other aspects such as psychological factors. This pairfam data covers the age span from adolescence to late adulthood and multiple generations of individuals, which allows for a distinct investigation into developmental issues, differing pathways regarding relationship development, and conjoined influences among family members. To overcome part of the current challenges with researching families, pairfam aimed to address challenges such as descriptive demands, individual perspectives on linked lives, cross-domain effects, selection and adaptation across the life course, and multilevel context and social embeddedness. By focusing on these challenging domains when it comes to family research, pairfam could than conduct thorough research on four conceptual issues, (1)

couple dynamics and partnership stability, (2) childbearing, (3) parenting and child development, and (4) intergenerational relationships.

To obtain reliable and long-term data on the development of families and generational relationships, pairfam followed a multi-cohort approach with a so-called anchor person at the center of each familial unit. Each anchor person was selected randomly from private households in Germany and born in three cohorts 1971-73, 1981-83, 1991-93. Each anchor person, their partners, parents, and children are interviewed on a yearly basis. The pairfam data started with a total of 12,402 anchors, parents, and children, (plus their 3,743 partners) who were randomly selected to be interviewed for this dataset and each interview process was conducted in Waves (Huinink et al., 2011; Brüderl et al., 2019). A total of 10 Waves have been administered, with the first Wave being conducted in 2008/09 (Huinink et al., 2011; Brüderl et al., 2019) with the intent of continuing to run the study till 2022.

The current study will utilize a subset of male and female anchors who identified as heterosexual married cohabitating couples (married and living within the same residence) during Wave's 1-10. Data for the age of anchors for this current study were collected during Wave 1 and ranged from 24-47 ($M = 30.95$). This study also only used anchors who have reported using pornography in the last 3 months. Anchors who have or are currently viewing pornography answered a simple "yes" or "no" question to assess if they view any pornographic material (see Appendix B). The use of pornography question was stated as such: "Have you watched pornographic films or looked at pornographic pictures online, in videos, on television, or on your mobile phone in the past 3 months? Pornography includes any display whose main goal is to depict persons engaging in

sexual activities.” (Huinink et al., 2011; Brüderl et al., 2019). Since this is a dichotomous variable it was not used for the analysis of this current study but was used for identifying participants who have viewed pornography. A total of 369 married cohabitating couples (296 males, 73 females) who reported that they have or are viewing pornography during Waves 9 were used for this current study. Demographic characteristics for both the anchor and partner in this study were filtered by age, ethnicity, length of the relationship and religious denomination obtained at the time of the interview. Other variables were identified to possibly to see if they had an impact on the current study such as frequency and desire of sexual frequency, sexual communication, sexual satisfaction, and sexual competence. These variables were identified to see if any possible relationships would affect the results of the anchor’s and partner’s self-esteem. These variables are not presented in the current models because they did not fit well with the model of fit indices.

Procedure

This study utilized participant data from pairfam as a secondary dataset. Data used for this study comes from the anchors who self-identified as married cohabitating (married and living within the same residence) respondents and self-reported viewing pornography within the past three months. All the data used in this study came from the same pairfam dataset but responses were separated into a combined anchor dataset, male anchor only dataset, and female only anchor dataset during the analysis portion. Data for all married cohabitating anchors which responded during Waves 1, 8, 9, and 10 were used in this study. The reasoning for choosing anchors from the previously listed waves is because pairfam introduced questions regarding pornography usage during Waves 8

and 9. Any form of sensitive or identifying information from respondents was kept confidential during the data collection process.

Measurements

Self-esteem. This measurement was assessed by an adapted version of the Self-Esteem Scale (Rosenberg, 1965). Responses collected in Wave 8 were used for this study. Respondents were asked to rate their level of self-esteem on three items from the original 10-item scale with response options ranging from “Not at all” (1) to “Absolutely” (5) on a Likert scale (Huinink et al., 2011; Brüderl et al., 2019; Rosenberg, 1965). Questions used to analyze self-esteem were “Sometimes I believe I am worthless”, “I like myself just the way I am”, and “All in all, I am pleased with myself” (Huinink et al., 2011; Brüderl et al., 2019). Higher scores indicated higher levels of self-esteem. The measure for self-esteem had good internal consistency for the combined anchors dataset ($\alpha = .801$) the male anchor dataset ($\alpha = .752$) and for the female anchor dataset ($\alpha = .894$) (see Appendix A).

Frequency of pornography use. Two items were used to assess the frequency of watching pornographic material and they were gathered in Wave 8 but responses collected in Wave 9 were used for this study for longitudinal purposes (see Appendix B). The first item pertained to the frequency of viewing pornography in the past month and included all of the male and female anchors individually for those who answered yes to viewing pornography in the previous item. Responses regarding the frequency of pornography use questions ranged from “Once per month or less” (1) to “Daily” (6) on a Likert scale, with higher scores indicating a greater frequency of viewing. The second item assessed pornography use as a couple together (Huinink et al., 2011; Brüderl et al.,

2019). Respondents who are in a relationship and view pornography together with their partner within the past three months had their answer responses range from “Always with my partner” (1) to “Always without my partner” (5) on a Likert scale, with higher scores indicating a greater frequency of viewing alone. Responses from the second item were reverse-coded, which now indicate that lower scores represent individuals are mostly watching by themselves.

Relationship satisfaction. Participants responded to a 2-item questionnaire to assess their satisfaction with their current relationship by asking questions regarding the perceived quality of the relationship (Huinink et al., 2011; Brüderl et al., 2019) (see Appendix C). The items on satisfaction were asked to all participants who were in a relationship. The items were taken from the German version of the Relationship Assessment Scale (RAS) from Sander and Böcker (1993). Relationship quality questions were administered in Waves 1-10, but only the respondent’s answers in Waves 10 were used. Questions regarding respondents’ satisfaction with the relationship were stated as “All in all, how satisfied are you with your relationship?” with responses ranging from “Very Dissatisfied” (0) to “Very Satisfied” (10) on a Likert scale, with a higher score indicating a higher level of satisfaction with the relationship. Questions regarding respondents’ partners’ perceived satisfaction with the relationship were stated as such: “What do you think: how satisfied is [name of current partner] with your relationship?” with responses ranging from “Very Dissatisfied” (0) to “Very Satisfied” (10) on a Likert scale with a higher score indicating a higher level of perceived satisfaction within the relationship. Pearson correlations for the combined anchors dataset ($r = .397, p < .001$), the male only dataset ($r = .378, p < .001$), and the female only dataset ($r = .479, p < .001$)

yielded a positive relation between anchors reported self-assessment of the relationship satisfaction and partners' reported satisfaction with the relationship.

Demographic variables. Participant age, race, marriage/relationship length, and religiosity, were accounted for in all models as demographic variables. Participant age was assessed as using a categorical item, which increased in five-year increments and ranged from 24-47 years of age. The age of the anchor's partner was also assessed using a categorical item, which increased in 9-year increments and ranged from 24-63.

Respondents indicated their race by selecting from 5 categorical options. Religiosity was assessed by respondents indicating from 7 categorical options, followed by the frequency of church attendance.

Analytic Strategy

The current study utilized three longitudinal, structural equation models; a combined anchor only model (Figure 2), a male anchor only model (Figure 3), and a female anchor only model (Figure 4) to assess the association between perceived level of self-esteem and relationship satisfaction individually and dyadically for both husbands and wives. This relationship was further tested through the mediating role of individual and dyadic frequencies of viewing pornographic material. The pairfam dataset was used and divided into a combined anchor only dataset, male anchor only dataset, and female anchor only dataset and utilized for the respective structural equation models. This was due to the restrictions of the data and the collection process. Independent *t*-tests were utilized to compare the means of the male and female anchors and the current study variables to determine if any of the sample means were significantly different.

Preliminary analyses examined a bi-variate correlation matrix of all study variables. Data

was collected with SPSS 25 and analyses were run through AMOS 25.0 (Arbuckle, 2014) to obtain estimates. Full information maximum likelihood (FIML) was used to account for missing data. FIML is preferable to other methods because it allows all available data to be utilized when estimating model parameters and standard errors (Enders, 2001). Standardized coefficients were reported in analyzes. A range of fit indices were used to assess the goodness-of-fit, including the Chi-square statistic/degrees of freedom ratio, comparative fit index (CFI), and the root mean square error approximation (RMSEA). CFI values that are greater than 0.95 and RMSEA values that are less than 0.08 are considered as acceptable model of fit (Hu & Bentler, 1999). A χ^2/df ratio below 3.0 indicates acceptable model fit (Carmines & McIver, 1981).

Existing research has shown that standardized coefficients may be biased in dyadic analyses when comparing for actor and partner effects simultaneously (Kenny et al., 2006), therefore, unstandardized coefficients were reported. Another purpose for using unstandardized coefficients is to avoid possible biases of variances in dyadic analyses with standardized coefficients because this can likely affect the standard error of the test statistic, making the test of statistical significance and the accompanying p-value and degrees of freedom biased.

Results

The purpose of the current study was aimed to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of viewing pornography. It is important to note that this study utilized the pairfam dataset to examine the differences between male and female anchors

and how they may differ between the study variables. Therefore, any references to male or female anchors are to represent husbands and wives, respectively.

The ensuing results will describe the analysis of the three path analysis models used for the combined anchors (Figure 2), male only anchors (Figure 3), female only anchors (Figure 4), and their respective partners. Each model contains the preliminary analyses of demographic characteristics for the male and female anchors and their partners. Independent t-tests, means, standard deviations, skewness, and range for the study variables was conducted to evaluate the differences between male and female anchors and their partners. Descriptive frequencies of pornography viewership and a correlation table for each dataset are also presented below. Proceeded by descriptions of the three structural equation models and analysis of the previously stated hypothesis.

Preliminary Analyses

Table 1 presents the demographic characteristics among the study variables in the model for the combined male and female anchors for this study. Table 1 helps portray how the total population in this sample (n=369) responded to reports of viewing pornography and the impact that may have had on their satisfaction with the relationship.

Table 1: Demographic Characteristics for Male and Female Anchors

Characteristic	N	%
Age of Anchor		
24-29	7	1.9
30-35	174	47.1
36-41	3	0.8
42-47	185	50.2
Age of Partner		
24-33	78	23.4
34-43	173	51.9

Table 1: Demographic Characteristics for Male and Female Anchors Continued

Characteristic	N	%
44-53	83	24.9
54-63	1	0.3
Gender of Anchor		
Male	296	80.2
Female	73	19.8
Length of Relationship		
0-5 years	98	26.3
5-10 years	111	29.9
10-15 years	75	20.4
15-20 years	46	12.5
20-25 years	13	3.5
Ethnicity		
German Native, no migration background	291	79.5
Ethnic-German Immigrant (Aussiedler)	17	4.6
Half-German	25	6.8
Turkish background	6	1.6
Other non-German background	27	7.4
Religiosity		
Christian, Roman Catholic	106	29.1
Christian, German Protestant	125	34.3
Islam	7	1.9
Judaism	3	.8
Other Christian denomination or group	9	2.5
No religion	114	31.3
Frequency of church/religious ceremonies		
More than once a week	1	.3
Once a week	11	3
One to three times a month	23	6.3
Several times a year	67	18.4
Seldom	148	40.7
Never	114	31.3

Note: Valid percentages were given to account for certain missing values.

An independent samples t-test was conducted to compare the mean difference between the study variables and the male and female anchors (See Table 2). The first independent sample t-test conducted was to compare the reported levels of self-esteem and differences in means for male and female anchors. There was a statistically significant difference between the mean scores of self-esteem for male anchors ($M=4.0034$, $SD=.70323$) and female anchors ($M=3.7215$, $SD=.98760$); $t(90.786)=2.299$, $p=.024$. These findings suggest there was a significant difference in means between male and female anchors reports of self-esteem in the sample. The average self-esteem report was .282 higher for male anchors as compared to female anchors.

The next independent sample t-test conducted was to compare the reported levels of frequency of viewing pornography in the past three months and differences in means for male and female anchors. There was a statistically significant difference between the mean scores of frequency of viewing pornography for male anchors ($M=2.89$, $SD=1.346$) and female anchors ($M=1.46$, $SD=.651$); $t(137.926)=11.290$, $p < .001$. These findings suggest there was a significant difference in means between male and female anchors reports of frequency of viewing pornography in the sample. The average frequency of viewing pornography report was 1.43 higher for male anchors as compared to female anchors.

The following independent sample t-test was used to analyze the reported levels of frequency of viewing pornography with a partner and differences in means for male and female anchors. There was a statistically significant difference between the mean scores for frequency of viewing pornography for male anchors ($M=1.3527$, $SD=.79325$) and female anchors ($M=2.7021$, $SD=1.71838$); $t(49.886)=-5.275$, $p < .001$. These findings

suggest there was a significant difference in means between male and female anchors reports of frequency of viewing pornography with their partner in the sample. The average frequency of viewing pornography with a partner report was 1.35 higher for female anchors as compared to male anchors.

The next independent sample t-test was conducted to view the reported levels of satisfaction with the relationship for anchors and any differences in means for male and female anchors. There was not a statistically significant difference between the mean scores of relationship satisfaction for male anchors ($M=7.47$, $SD=2.005$) and female anchors ($M=7.77$, $SD=2.170$); $t(366)=-1.111$, $p=.267$. These results suggest that the difference in reported levels of satisfaction with the relationship for anchors is more likely a product of chance for male and female anchors in this study.

The last independent sample t-test was used to view the reported levels of satisfaction with the relationship for the anchor's partner and if there were any differences in the means for male and female partners. There was not a statistically significant difference between the mean scores of relationship satisfaction for male partners ($M=7.65$, $SD=2.034$) and female partners ($M=7.80$, $SD=1.938$); $t(271)=-.475$, $p=.636$. These results suggest that the difference in reported levels of satisfaction with the relationship for partners is more likely a product of chance for male and female partners in this study.

Table 2: Independent T-Test for Male and Female Anchors and Partners

Study Variables	Male Anchor		Female Anchor		t(40)	p	Cohen's d
	Mean	SD	Mean	SD			
SE	4.0034	.70323	3.7215	.98760	2.299	.024	90.786
Freq of P. use in past 3 mo.	2.89	1.346	1.46	.651	11.290	<.001	137.926
Use of P. with partner	1.3527	.79325	2.7021	1.71838	-5.275	<.001	49.886
SA: Sat. with rel.	7.47	2.005	7.77	2.170	-1.059	.292	104.481
Partner sat. with rel.	7.65	2.034	7.80	1.938	-.489	.626	75.194

Note: SE self-esteem, *Freq* frequency, *P* pornography, *SA* self-assessment, *Sat* satisfaction, *Rel* relationship. Mean parameter values for each of the analyses are shown for the male anchors ($n = 296$) and female anchors ($n = 73$), as well as the results of t tests (assuming unequal variance not assumed) comparing the parameter estimates between the study variables.

Table 3 provides the descriptive frequencies of both male and female anchors and how often they were viewing pornography on an individual level. Also, the combined reports from the anchors within this study indicated that at least 4.6% of both male and female anchors reported as always viewing pornography with their partner with 54.7% reporting that they always watch pornography without their partner present.

Table 3: Male and Female Anchors Frequency of Viewing Pornography

	Frequency	%
Once a month	77	20.9
Two to three times a month	69	18.7
Once a week	73	19.8
Two to three times a week	44	11.9
More than three times a week	31	8.4
Daily	5	1.4
Does not apply	63	17.1
I don't want to answer	2	.5
Don't know	5	1.4
<i>Total</i>	369	100

The demographic characteristics and correlations were started by combining both male and female anchors to examine any potential correlations between the anchors and the study variables (See Table 4). Means, standard deviations skewness, and range among the study variables were also presented in Table 4. Examination of the distributions revealed that male and female anchor relationship satisfaction and the anchor's partner's relationship satisfaction had a negative skewness of -1.625 and -1.458, respectively; which indicates that most of the participants reported higher levels of satisfaction. Use of pornography with a partner had a positive skewness of 2.138, indicating that the majority of male and female anchors reported higher levels of frequently viewing pornography individually.

It was found that male and female anchors' self-esteem was significantly and positively associated with how they perceived their relationship satisfaction to be ($r = .138, p = .008$) and how the male and female anchor's partner viewed their relationship satisfaction as well ($r = .156, p = .010$). Male and female anchors who reported viewing pornography in the past three months were found to be significantly and negatively

related to them viewing pornography frequently with the anchor's partner ($r = -.272, p < .001$). It was also found that male and female anchors use of viewing pornography with their partner was significantly and positively associated with how the male and female anchor's viewed their relationship satisfaction ($r = .151, p = .011$) and how the anchor's partner perceived their relationship satisfaction ($r = .152, p = .025$). Male and female anchor's self-evaluation of their relationship satisfaction was significantly and positively related to how their partner assessed their relationship satisfaction ($r = .397, p < .001$).

Table 4: Correlations for Male and Female Anchors and Partners

	1	2	3	4	5	6
1. SE	--					
2. Freq of P. use in past 3 mo.	.110	--				
3. Use of P. with partner	.114	-	--			
4. SA: Sat. with rel.	.138**	-.099	.151*	--		
5. Partner sat. with rel.	.156**	-.099	.152*	.397***	--	
6. Age of Anchor	.042	-.088	.032	-.081	-.084	--
<i>Mean</i>	3.9476	2.66	1.5729	7.53	7.68	30.95
<i>SD</i>	0.77453	1.365	1.11760	2.039	2.014	5.435
<i>Skewness</i>	-0.952	.428	2.138	-1.625	-1.458	-.243
<i>Range</i>	1-5	1-6	1-5	0-10	0-10	16-38

SE self-esteem, *Freq* frequency, *P* pornography, *SA* self-assessment, *Sat* satisfaction, *Rel* relationship

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

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

It became necessary to distinguish any differences between how male and female anchors would answer the pairfam dataset. In the sample of male anchors, only 1.4% of respondents indicated that they always viewed pornography with their partner and 62.2% of male anchors reported viewing pornography without their partner. Table 5 provides the

descriptive frequencies of male anchors and how often they were viewing pornography on an individual level.

Table 5: Male Anchors Frequency of Viewing Pornography

	Frequency	%
Once a month	47	15.9
Two to three times a month	55	18.6
Once a week	69	23.3
Two to three times a week	44	14.9
More than three times a week	31	10.5
Daily	5	1.7
Does not apply	41	13.9
I don't want to answer	2	.7
Don't know	2	.7
<i>Total</i>	296	100

Table 6 contains the demographic characteristics and correlations for all male anchors. Means, standard deviations skewness, and range among the study variables were also presented in Table 6. Examination of the distributions revealed that male anchor satisfaction with relationship satisfaction and the male anchor's partner's relationship satisfaction had a negative skewness of -1.549 and -1.444, respectively; which indicates that most of the male anchors reported higher levels of satisfaction. Male anchor viewing of pornography with a partner had a positive skewness of 2.918, indicating that the majority of male anchors reported higher levels of frequently viewing pornography individually.

Male anchors' self-esteem was found to be significantly and positively associated with how they viewed their relationship satisfaction ($r = .123, p = .034$) and how their partner viewed their own relationship satisfaction ($r = .148, p = .027$). It was also found that male anchors' frequency of viewing pornography was significantly and negatively

connected with the amount of pornography watched with their partner ($r = -.135, p = .037$). Male anchors' frequency of viewing pornography was significantly and negatively associated with the age of the anchor ($r = -.125, p = .049$). Male anchors' frequency of viewing pornography with their partner was significantly and positively associated with how their partner perceived their relationship satisfaction ($r = .182, p = .013$). Male anchors' self-assessment of their relationship satisfaction was significantly and positively connected with their partner's perception of their relationship satisfaction ($r = .378, p < .001$).

Table 6: Correlations for Male Anchors and Partners

	1	2	3	4	5	6
1. SE	--					
2. Freq of P. use in past 3 mo.	.093	--				
3. Use of P. with partner	.109	-.135*	--			
4. SA: Sat. with rel.	.123*	-.093	.116	--		
5. Partner sat. with rel.	.148*	-.065	.182*	.378***	--	
6. Age of Anchor	.048	-.125*	.044	-.083	-.096	--
<i>Mean</i>	4.0034	2.89	1.3527	7.47	7.65	31.22
<i>SD</i>	.70323	1.346	.79325	2.005	2.034	5.349
<i>Skewness</i>	-.905	.245	2.918	-1.549	-1.444	-.279
<i>Range</i>	1-5	1-6	1-5	0-10	0-10	16-38

SE self-esteem, *Freq* frequency, *P* pornography, *SA* self-assessment, *Sat* satisfaction, *Rel* relationship

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

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

In the sample of female anchors for this study, 17.8% of respondents indicated that they always viewed pornography with their partner and 24.7% of female anchors reported viewing pornography without their partner. Table 7 provides the descriptive

frequencies of female anchors and how often they were viewing pornography on an individual level.

Table 7: Female Anchors Frequency of Viewing Pornography

	Frequency	%
Once a month	30	41.1
Two to three times a month	14	19.2
Once a week	4	5.5
Does not apply	22	30.1
Don't know	3	4.1
<i>Total</i>	73	100

Table 8 contains the demographic characteristics and correlations for all female anchor respondents. Means, standard deviations skewness, and range among the study variables were also presented in Table 8. Examination of the distributions revealed that female anchor satisfaction with relationship satisfaction and the anchor's partner's relationship satisfaction had a negative skewness of -1.401 and -1.517, respectively; which indicates that most of the female anchors reported higher levels of satisfaction. Female anchors use of pornography within the past three months had a positive skewness of 1.126 indicating that the majority of female anchors reported lower levels of frequently viewing pornography within the past three months.

Female anchors' self-esteem was found to be significantly and positively related to how frequently they viewed pornography with their partner ($r = .373, p = .010$). A female anchors' frequency of viewing pornography was significantly and negatively related to how their partner viewed their relationship satisfaction ($r = -.490, p = .004$). It was also found that female anchors' self-assessment of their relationship satisfaction was

significantly and positively associated with how their partner viewed their relationship satisfaction ($r = .479, p < .001$).

Table 8: Correlations for Female Anchors and Partners

	1	2	3	4	5	6
1. SE	--					
2. Freq of P. use in past 3 mo.	-.148	--				
3. Use of P. with partner	.373**	-.185	--			
4. SA: Sat. with rel.	.218	-.089	.194	--		
5. Partner sat. with rel.	.226	-.490**	.029	.479**	--	
6. Age of Anchor	-.026	.015	.138	-.052	-.019	--
<i>Mean</i>	3.7215	1.46	2.7021	7.75	7.32	29.84
<i>SD</i>	.98760	.651	1.71838	1.834	2.025	5.672
<i>Skewness</i>	-.675	1.126	.352	-1.401	-1.517	-.068
<i>Range</i>	1-5	1-6	1-5	0-10	0-10	17-38

SE self-esteem, *Freq* frequency, *P* pornography, *SA* self-assessment, *Sat* satisfaction, *Rel* relationship

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

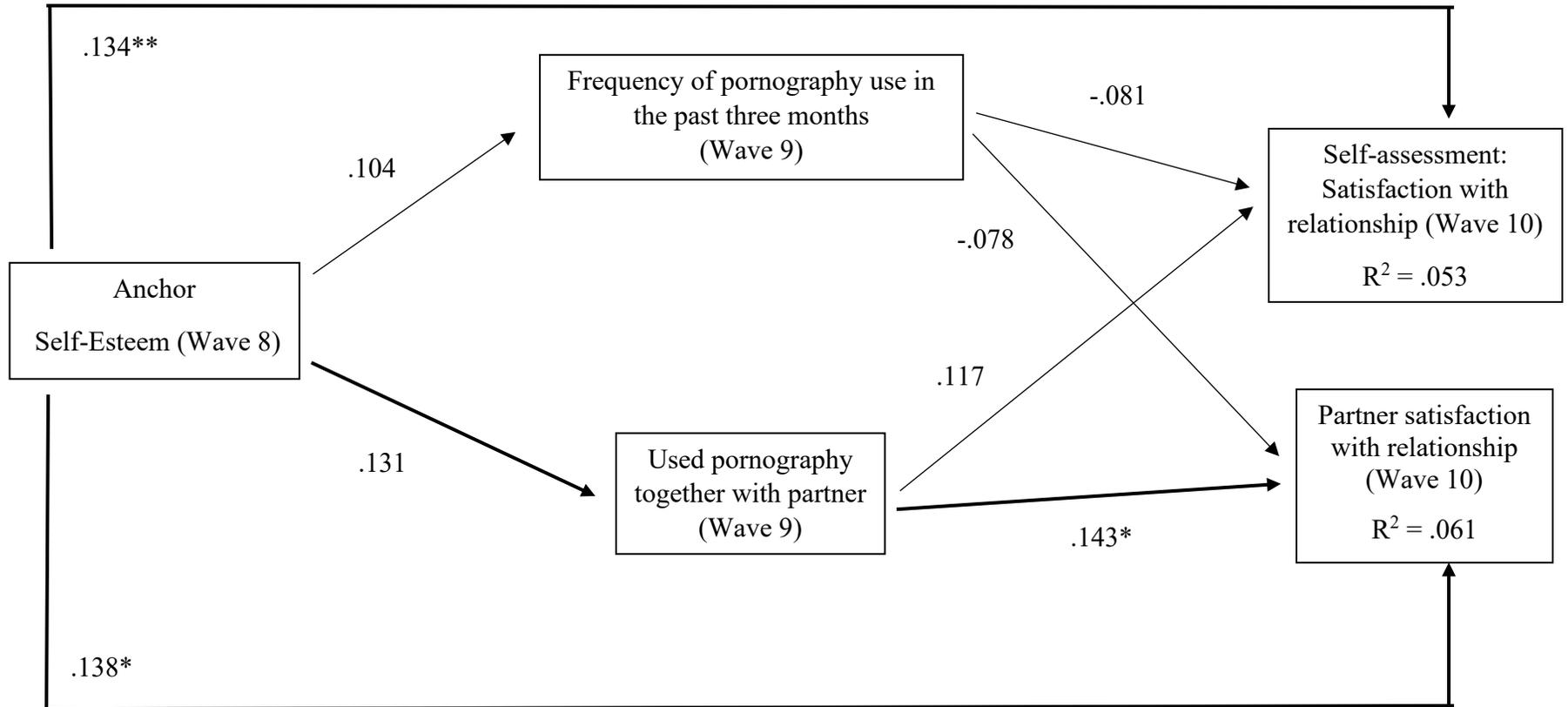
** Correlation is significant at the 0.01 level (2-tailed).

Structural Equation Modeling

This study utilized three structural equation models; a combined male and female anchor model, a male only anchor model, and a female only anchor model. Figure 5 presents the results of the structural equation model analysis and model fit of the association between both male and female anchors' self-esteem and relationship satisfaction, as well as the mediating role of viewing pornography. Model fit indices suggested the model for both male and female anchors fit the data reasonably well ($\chi^2(2, 369) = 2.337, p = .311$; RMSEA=0.021; 95% CI [.000, .108]; CFI=0.996; TLI=0.957). $\chi^2/df=1.169$.

It was found that there was a significant and positive association between male and female anchors' self-esteem and the male and female anchors' self-assessment of relationship satisfaction ($\beta = .134, p = .01$). As well as a significant and positive association for male and female anchors' self-esteem and the relationship satisfaction the male and female anchor's partner perceived ($\beta = .138, p = .020$). Male and female anchors' self-esteem was also found to be significantly and positively related to viewing pornography together with the male and female anchors' partner ($\beta = .131, p = .025$). It was also found that when male and female anchors reported viewing pornography together with their partner that it was significantly and positively associated with how the partner perceived the relationship satisfaction to be ($\beta = .143, p = .035$).

FIGURE 5: Model Male and Female Anchor Results



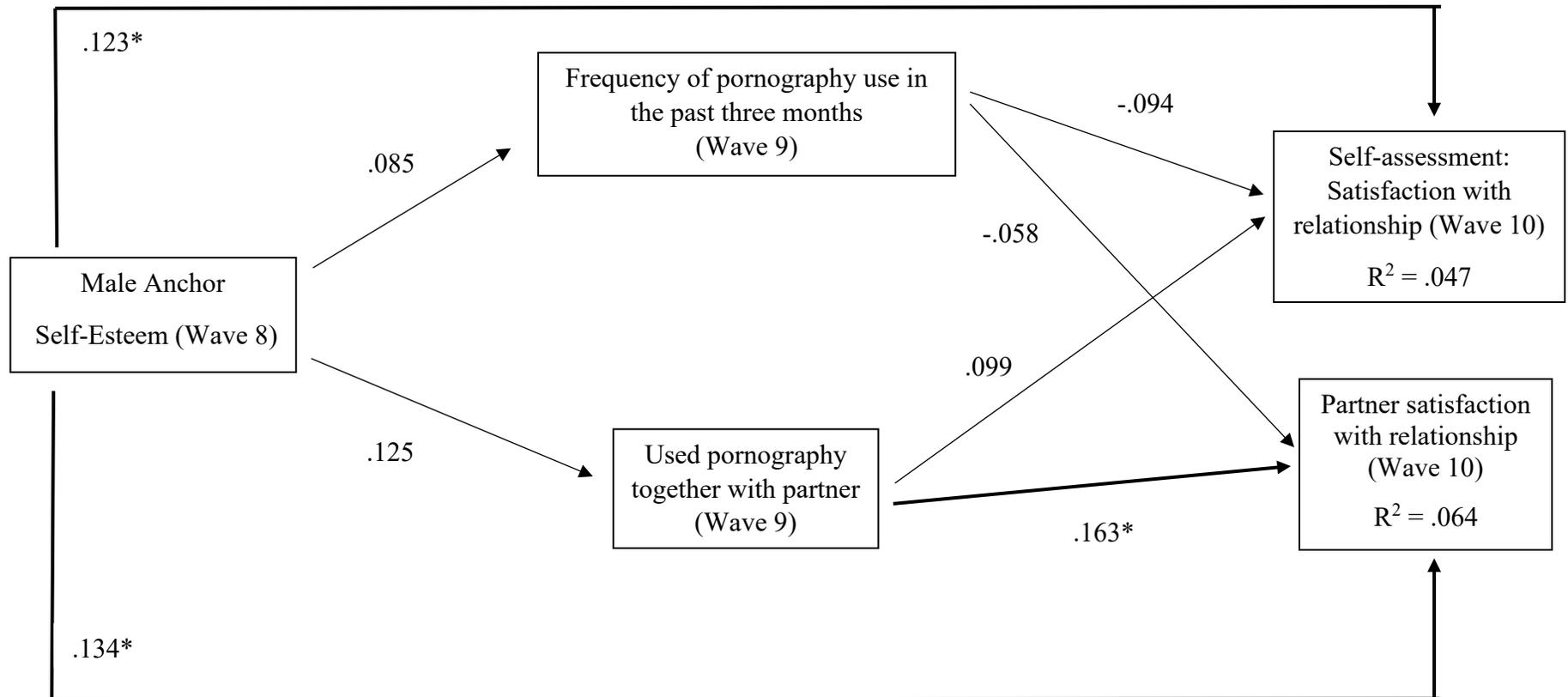
Note: $p^* < .05$; $** p < .01$; $*** p < .001$

Model fit indices: $(\chi^2(2, 369) = 2.337, p = .311; RMSEA = 0.021; 95\% CI [.000, .108]; CFI = 0.996; TLI = 0.957)$. $\chi^2/df = 1.169$

Figure 6 presents the results of the structural equation model analysis and model fit of the association for male anchors' self-esteem and relationship satisfaction, as well as the mediating role of viewing pornography. Model fit indices suggested the model for male anchors fit the data reasonably well ($\chi^2(2, 296) = 4.109, p = .128$; RMSEA=0.060; 95% CI [.000, .143]; CFI=0.955; TLI=0.526). $\chi^2/df=2.055$.

It was found that there was a significant and positive link between male anchors' self-esteem and the male anchors' self-assessment of the relationship satisfaction ($\beta = .123, p = .033$) and how their partner perceived the relationship satisfaction ($\beta = .134, p = .039$). It was also found that male anchors' who were viewing pornography with a partner was positively associated with how the male anchor perceived the relationship satisfaction to be ($\beta = .163, p = .022$).

FIGURE 6: Model Male Anchor Results



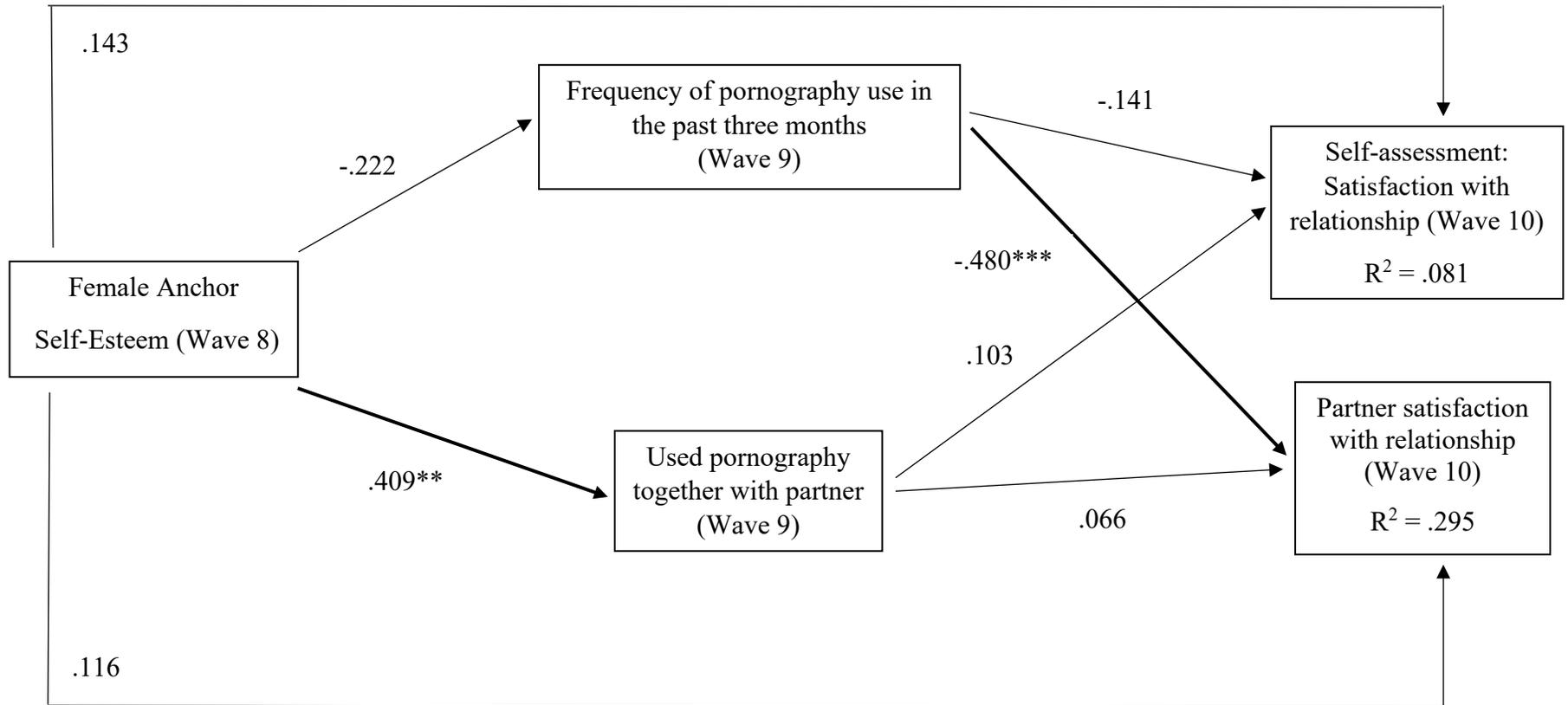
Note: $p^* < .05$; $** p < .01$; $*** p < .001$

Model fit indices: ($\chi^2(2, 296) = 4.109, p = .128$; RMSEA=0.060; 95% CI [.000, .143]; CFI=0.955; TLI=0.526). $\chi^2/df=2.055$

Figure 7 presents the results of the structural equation model analysis and model fit of the association for female anchors' self-esteem and relationship satisfaction, as well as the mediating role of viewing pornography. Model fit indices suggested the model for female anchors fit the data reasonably well ($\chi^2(2, 73) = .703, p = .704$; RMSEA=0.000; 95% CI [.000, .171]; CFI=1.000; TLI=1.901). $\chi^2/df=.351$. It is important to note that when an RMSEA = 0.0, a TLI is above 1.0, and the CFI = 1.0, this indicates that something may be wrong with the model. Based off of this current study and previous literature stated, the reason why something may be wrong with the model for the female anchors in this study is because of a small sample size or it could be due also to non-linear relationships. Results from the t-tests indicated that measures of self-esteem and pornography viewership are significantly different between male and female anchors. This could indicate that the current model works for male anchors (or mostly male anchors in the combined model), but not at all for female anchors. Perhaps there really is no connection between porn, self-esteem, and relationship satisfaction for women but there is for men? Perhaps this is due to less viewership or maybe interest in porn?

Female anchors' self-esteem was significantly and positively related to them viewing pornography with their partner ($\beta = .409, p = .002$). It was also found that female anchors frequency of viewing pornography within the past three months was significantly and negatively associated with their partner's perception of relationship satisfaction ($\beta = -.480, p < .001$).

FIGURE 7: Model Female Anchor Results



Note: $p^* < .05$; $** p < .01$; $*** p < .001$

Model fit indices: $(\chi^2(2, 73) = .703, p = .704; RMSEA=0.000; 95\% CI [.000, .171]; CFI=1.000; TLI=1.901). \chi^2/df=.351$

Regarding the research questions stated earlier in this study, Research Question 1, was interested in knowing if husbands' and wives' level of self-esteem would be related to their own frequency of viewing pornography? In this case, the path analysis models showed that male and female anchors' perceived level of self-esteem was not significantly related to their frequency of viewing pornography ($\beta = .104, p = .071$) and was not significant when the path analysis was viewed individually ($\beta = .085, p = .176$ for male anchors, $\beta = -.222, p = .105$ for female anchors, respectively).

In turn, Research Question 2 wanted to examine if husbands' and wives' frequency of viewing pornography would be associated with their own and their partner's perception of relationship satisfaction. The combined male and female anchor path analysis model revealed that male and female anchors' frequency of viewing pornography was not significantly connected with their own perception of the relationship satisfaction ($\beta = -.081, p = .172$), or how their partner perceived their relationship satisfaction ($\beta = -.078, p = .246$). When the anchors were separated into their own path analysis, it was found that male anchor's frequency of viewing pornography was not significantly associated with their perception of the relationship satisfaction ($\beta = -.094, p = .132$), and male anchor's frequency of viewing pornography was not significantly related to their partners' perception of the relationship satisfaction ($\beta = -.058, p = .410$). Likewise, female anchor's frequency of viewing pornography was not significantly related to their perception of the relationship satisfaction ($\beta = -.141, p = .315$) but their frequency of viewing pornography was significantly and negatively related to their partners' perception of the relationship satisfaction ($\beta = -.480, p < .001$).

Research Question 3 wanted to find if husbands' and wives' level of self-esteem would be related to the frequency of viewing pornography together as a couple. The path analysis for the male and female anchors revealed that the reported level of self-esteem was significantly and positively associated with the frequency of viewing pornography together as a couple ($\beta = .131$, $p = .025$). When the male and female anchors were examined within their own path analysis models it was found that male anchor's perceived level of self-esteem was not significantly related to the frequency of viewing pornography as a couple ($\beta = .125$, $p = .051$) but it was found that female anchors' level of self-esteem was significantly and positively related to the frequency of viewing pornography together as a couple ($\beta = .409$, $p = .002$).

Research Question 4 was then examined, which looked at how the frequency of viewing pornography together as a couple would be associated with husbands' and wives' perception of relationship satisfaction. The path analysis model for the male and female anchor's revealed that viewing pornography as a couple was not significantly related with the male and female anchor's perception of the relationship satisfaction ($\beta = .117$, $p = .053$). It was found that male anchors' self-reported frequency of viewing pornography together as a couple was not significantly associated with the male anchors' perception of relationship satisfaction ($\beta = .099$, $p = .123$). Female anchor's reported frequency of viewing pornography as a couple was also found to be not significantly associated with the female anchor's perception of relationship satisfaction ($\beta = .103$, $p = .509$).

Research Question 5 examined if husbands' and wives' self-esteem would be related to their own and their partner's perception of relationship satisfaction. The path

analysis model for the combined male and female anchors revealed that the perceived level of self-esteem was in fact significantly and positively related to their own ($\beta = .134$, $p = .010$) and their partner's ($\beta = .138$, $p = .020$) perception of the relationship satisfaction. When the male and female anchors path analysis were examined individually, it revealed that male anchors' perceived level of self-esteem was significantly and positively connected to their own perception of the relationship satisfaction ($\beta = .123$, $p = .033$) and was significantly and positively related to their partner's perception of the relationship satisfaction ($\beta = .134$, $p = .039$). However, female anchors' perceived level of self-esteem was not associated with their perception of the relationship satisfaction ($\beta = .143$, $p = .277$) or to their partner's perception of the relationship satisfaction ($\beta = .116$, $p = .410$).

Discussion

The current study was aimed to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of viewing pornography. Using existing data from the pairfam dataset, the three path analysis models used for this study identified a few relationships between the study variables and each research question. Research Question 1 examined if husbands' and wives' level of self-esteem would be related to their own frequency of viewing pornography. When this research question was applied to the combined anchors path analysis model, the results were not significant. When the male and female anchors was separated into their own path analysis models, the perceived level of self-esteem was found to be not significant as well and not a strong predictor on the frequency of viewing pornography on an individual. These results indicate that the participants within this

study did not have their level of self-esteem influence their frequency of viewing pornography. These results may be affected as findings indicated data was negatively skewed for the female anchors in the direction of reporting low frequency of pornography viewership. Additionally, a larger sample of females could provide greater detail into the relationship between this construct and self-esteem.

Research Question 2 of the current study was aimed at examining if husbands' and wives' frequency of viewing pornography would be associated with their own and their partner's perception of relationship satisfaction. Before discussing the implications of this research question, previous research literature has found that viewing pornography has been shown to assist in sexual and relationship satisfaction (Maddox et al., 2011; Manning, 2006), enhance sexual knowledge, and overall well-being (Hald & Malamuth, 2008); as well as, experience negative feelings about romantic partners (Willoughby et al., 2016), and being less satisfied with their partner's affection, physical appearance, and sexual performance (Maddox et al., 2011). Therefore, looking at the combined anchors path analysis model, the results for male and female anchors individual frequency of viewing pornography was found not to be significantly associated with their own or their partner's perception of relationship satisfaction.

The results from the path analysis model for male anchors show that male anchors' frequency of viewing pornography was not significantly related to their level of satisfaction with the relationship or impacting how satisfied their partner's relationship satisfaction. The responses from the male anchors within this study suggests that there was no significant relationship between male viewership of pornography and the level of satisfaction within the relationship.

A recent study conducted by Kohut et al. (2017) collected open-ended questions from 430 individuals who were in committed relationships where at least one partner was viewing pornography and the majority of the responses indicated that there were no negative impacts of viewing pornography on themselves, their partners, or in their relationships. These responses from the participants in Kohut's study could indicate the possibility that there are no perceived positive or negative impacts of viewing pornography on couples. While the findings of Kohut's study may not be generalizable from that study alone, it could provide the insight needed to understand why the frequency of viewing pornography was not significantly related to relationship satisfaction for the anchor or for their partner when the male and female combined model and the male anchor model were analyzed.

On the other hand, female anchor's frequency of viewing pornography was also not significantly related to their perception of how they viewed their relationship, but their frequency of viewing pornography was significantly and negatively related to their partners perceived level of relationship satisfaction. The previously reported skewness levels indicate that most of the female anchors in this study are not viewing pornography on a frequent basis and their partner's reported high levels of relationship satisfaction. It could be assumed that despite female anchor's frequency of viewing pornography that the partners of female anchors would indicate a high level of relationship satisfaction. Previous literature has even been stated how women's use of pornography has either a positive or neutral relationship with their partner's satisfaction (Bridges & Morokoff, 2011; Poulsen et al., 2013) and men tend to interpret women's use of sexual media as a positive attempt to enhance the couple's sexual excitement (Clark & Wiederman, 2000).

Despite previous research that has been stated, the female anchors within this study still found that as their individual viewership of pornography increased, their partner's satisfaction decreased. One possible explanation is that as individuals, or a partner, is viewing pornography it could influence the conscious or unconscious expectations of the viewer regarding gender performance, body image, intimacy, and sexual relations in ways that could negatively affect actual and romantic relationships (Perry & Schleifer, 2018). If conscious or unconscious expectations are being formulated by the pornography the female anchors are viewing, those expectations could be passed on to the partner and negatively impacting the relationship.

Research Question 3 was aimed at analyzing if husbands' and wives' level of self-esteem would be related to the frequency of viewing pornography together as a couple. The combined anchors path analysis model indicated that the male and female anchors' self-esteem was indeed significantly and positively associated with the amount of pornography they viewed with their partner. This suggests that male and female anchors within this study did view pornography more frequently with their partners when the anchors indicated a higher level of self-esteem.

It was previously stated that out of the 369 anchors from this study that 17.8% of female anchors reported as always viewing pornography with their partner, compared to the 1.4% of male anchors who reported as always viewing pornography with their partner. The percentage differences between male and female anchors who reported as always viewing pornography with their partner may have influenced the results for Research Question 3 and the analysis of the combined male and female anchor model. Now, when the male and female anchors were examined individually, male anchors'

perceived level of self-esteem was not significantly related to the frequency of viewing pornography as a couple but it was found that the female anchors' level of self-esteem was significantly and positively related to how frequently pornography was viewed together as a couple. Even though male anchors perceived level of self-esteem was not significantly related to frequency of viewing pornography as a couple, female anchors' reported self-esteem in the current study has significantly and positively related to reported frequency of pornography usage together. The findings indicate, then, that as female anchors' s self-esteem increases, then they are more likely to increase their frequency of viewing pornography together as a couple. This may provide evidence for why the path analysis model for the combined male and female anchor was found to be significantly and positively related between self-esteem and frequency of viewing pornography as a couple. Therefore, it was found that self-esteem was not related to the frequency of viewing pornography with a partner for the male anchors within this study, but female anchors self-esteem was related to the frequency of viewing pornography with their partner.

Research Question 4 examined how the frequency of viewing pornography together as a couple would be associated with husbands' and wives' perception of relationship satisfaction. The combined anchors path analysis model indicated that the results were not significantly related to the perception that male or female anchors had with their relationship satisfaction. Not surprisingly then, when the individual male and female anchors path analysis models were analyzed, it produced similar results as the combined dataset and found that male and female anchors self-reported frequency of viewing pornography together as a couple was also not significantly associated with their

partner's perception of the relationship satisfaction. Previously reported skewness levels indicated as well that the majority of the male and female anchors reported high levels of relationship satisfaction and lower levels of frequently viewing pornography as a couple. Which could possibly indicate that despite the frequency of viewing pornography with a partner, that it had little to no impact on relationship satisfaction for couples within this study. Previous literature has indicated that couples who mutually viewed pornography together reported higher dedication to the relationship and sexual satisfaction than did solitary viewers (Maddox et al., 2011). Recent research has also shown that viewing pornography together can create fewer problems for couples than using it with the spouse absent (Doran & Price, 2014) but the varying benefits to viewing pornography together may be dependent on if it is being watched with the intent to enhance a couple's sexual experience (Cooper et al., 2002). If not, then mutual consumption does still garner risks (Maddox et al., 2011). Despite previous findings on the perceived benefits and harms of viewing pornography together as a couple, the level of relationship satisfaction was not significantly affected for the participants in this study.

Research Question 5 examined if husbands' and wives' self-esteem would be related to their own and their partner's perception of relationship satisfaction. This was supported by the data. Even before the analysis was run for the path analysis model, the majority of the male and female anchors and their partner's in this study reported high levels of relationship satisfaction. The combined male and female anchors dataset indicated that the results were significantly and positively connected to both the male and female anchor's relationship satisfaction and how their partner viewed the relationship satisfaction. Conversely, the path analysis for the individual male and female models

revealed that male and female anchors perceived level of self-esteem was significantly and positively connected to their own perception of the relationship satisfaction and was significantly related to their partner's perception of the relationship satisfaction. The three path analysis models resulted in a significant association for both the anchors' and partners' relationship satisfaction and was in unison with how the anchors' partners viewed the relationship satisfaction. A possible explanation for these connections is that self-esteem and relationship satisfaction have been positively associated in past literature (Orth et al., 2012), thus, the male and female anchors within this current study provides evidence to support that self-esteem has been shown to be related to satisfaction within the relationship for both partners.

Limitations

Although the results of this study provide potential findings of a correlation between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of viewing pornography, there are still some natural limitations with this dataset and analysis. Most of the references included in this current study are using populations from the United States. Therefore, perceptions, frequency of viewing pornography, and the potential affects that viewing pornography may have on individuals and relationships are cited from individuals living in the United States. The population for the pairfam dataset is a German population. While this German population has furthered the research about viewing pornography, future studies are needed to be replicated with a nationally representative sample from the United States for comparative reasons and for greater generalizability of results.

Even though the model for the combined, male, and female anchors were structured the same, the model of fit indices for the female anchor only model may not necessarily have been a good fitting model. When the RMSEA = 0.0, the TLI is above 1.0 and the CFI = 1.0, this indicates that something may be incorrect with the model. Given the other two models fit reasonably well, the female anchor only model of fit indices was most likely impacted due to a small sample size. It may also indicate that the model could contain strongly non-linear relationships or variables. It is unclear why this difference may be here but based off of the theory and research that has been provided to support this model, the model of fit indices was likely affected because of the smaller sample size.

There are also a few limitations within this study using the pairfam dataset when it comes to an evaluation of husbands' and wives' perception of self-esteem and frequency of viewing pornography. Over half of the partners from married heterosexual anchors in Wave 8 did not answer questions regarding how they perceived their level of self-esteem. This provided insufficient data and could not be used to appropriately assess the effect that an anchor's self-esteem may influence their partner's self-esteem and vice-versa. Therefore, the data was insufficient, and that variable was needed to stay out of the model.

Another limitation within this current study is questions regarding viewing pornography and the frequency of viewing pornography were not asked until Wave 8. Therefore, the data does not report when participants started viewing pornography and if the anchors were viewing pornography before Wave 8. An assumption is having to be made that anchors' pornography usage was either non-existent or did not affect their level

of self-esteem, or relationship satisfaction before Wave 8 in the present sample. Potential implications of knowing when anchors started viewing pornography would allow for a more accurate longitudinal study. This would allow the analysis of this study to examine how perceived levels of self-esteem and relationship satisfaction were before the anchors started viewing pornography and compare it to future waves.

All of the measures for the study variables are self-reported, which introduces the potential for bias if respondents are not inclined to reveal their true pornography usage. Measures regarding self-esteem and relationship satisfaction were self-reported measures as well. Participants in the pairfam dataset may have self-indicated that they perceive their self-esteem and relationship satisfaction to be high, when in reality, a more thorough standardized scale to measure those variables may have revealed otherwise.

The definition of pornography given in the pairfam data was simply regulated to, “Pornography includes any display whose main goal is to depict persons engaging in sexual activities.” This description given in the pairfam data is focused on description of imagery. Most research on pornography has operationalized pornography as the intent of viewing sexually explicit material used or intended to increase personal sexual arousal (Maddox et al., 2011). Sexually explicit materials can include images of nudity which often portray a consensus of pornography because viewing images of exposed bodies verifies to many the image’s explicitness (Thauvette, 2012). To some, the images of nudity may not classify as pornography because it is not intended to or is creating any personal sexual arousal. For many, pornography can also be any material containing explicit exposure/descriptions of the genitals and provide clear and explicit sexual acts, such as vaginal intercourse, anal intercourse, oral sex, or masturbation (Hesse &

Pedersen, 2017). Being able to create a definitive term of what pornography is, description and intent of pornography being viewed, has been an issue and continues to be a common critique and limitation for pornography studies (Kohut et al., 2019; Manning, 2006), and for this current study.

Implications

These limitations notwithstanding, the current study has contributed to the literature on pornography use and romantic relationship satisfaction in several important ways. This current study aimed to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of viewing pornography at the individual and dyadic level. By using the three longitudinal structural equation models, the responses given by the male and female anchors and their partners in the pairfam data has furthered the research examining the relationship between an individual and their partner on how they each perceive their level of self-esteem, frequency of viewing pornography, and relationship satisfaction.

Research implications. The utilization of the pairfam dataset extends the existing literature when examining the effects that pornography has on relationship satisfaction and using dyadic data. The longitudinal nature of the pairfam dataset allowed for analysis of how the anchor's assessment of relationship satisfaction was impacted by the perception of their self-esteem with the mediating factor of viewing pornography. Wave 8 (collected in 2015/16), Wave 9 (collected in 2016/17), and Wave 10 (collected in 2017/18) were used in this study and allowed for a longitudinal analysis to see how the temporal ordering between study variables may impact each other. This study was able to expand upon previous research by including additional or more detailed questions in the

analysis. The pairfam dataset furthers the work of studies on pornography by not only asking questions about if an individual has viewed pornography but includes questions about how frequently pornography is being viewed in solitary or as a couple.

Theoretical implications. While the three analytical models for this study accounted for variations of self-esteem and relationship satisfaction, the VSA model provided the explanatory insight into the interactive processes that couples employ regularly. All three analytical models of this study discussed the impact that self-esteem has on relationship satisfaction when it is mediated through the frequency of pornography viewership. The interactive processes between self-esteem and relationship satisfaction are an excellent example of how adaptive processes are illustrating the potential changes in marital satisfaction.

For instance, the research for this current study found that husbands' and wives' evaluation of self-esteem was significantly associated with their own and their partners assessment of relationship satisfaction. When the VSA model is applied to this finding, it can help explain how self-esteem for one spouse may influence the level of relationship satisfaction for themselves and for their partner. The VSA model proposes that as an individual's level of self-esteem interacts with the constant flow of adaptive processes, potential stressors, and any preexisting enduring vulnerabilities, it can influence a new level of relationship satisfaction. It can be then be assumed that these interactive processes could influence a change in marital satisfaction or marital dissolution based on the theoretical structure of the VSA model and the association between self-esteem and relationship satisfaction.

Relationship education implications. The results from this study add to the existing literature on the effects that self-esteem may have on relationship satisfaction. Previous research on self-esteem has been shown to have an important influence on relationship satisfaction, health, and other important life outcomes (Orth et al., 2012). Relationship educators can apply the findings within this study to discuss self-esteem and relationship satisfaction with their clients. For instance, as the data from the male and female anchor combined model suggests, to increase partner relationship satisfaction, that as self-esteem increases so does viewing pornography as a couple, which in turn increases partner satisfaction. As the female anchors from this current study reported higher levels of self-esteem, it was associated with a higher frequency of viewing pornography together with their partner. Relationship educators can use this finding to illustrate the potential connection that self-esteem may have on the frequency of viewing pornography with a partner and the potential impact it might have on relationship satisfaction. These findings, along with previous empirical research have already indicated that viewing pornography with a partner can help assist in sexual and relationship satisfaction (Maddox et al., 2011; Manning, 2006) and relationship educators can use this information to help strengthen couple relationships.

Relationship educators will need to keep in mind that, from the results of this study, the female participants who were viewing pornography frequently as an individual had their partners indicate lower levels of relationship satisfaction. This association is not casual but important to remember for relationship educators because research suggests that couples who mutually view pornography together experience higher dedication to the relationship and sexual satisfaction than did solitary consumers (Maddox et al., 2011).

Lastly, male's frequency of viewing pornography with their partner was associated with an increase in relationship satisfaction for their partner. Relationship educators can then recall previous empirical findings that indicate how viewing pornography has been reported to assist in sexual and relationship satisfaction (Maddox et al., 2011; Manning, 2006), increase sexual excitement, and expand one's sexual expertise by introducing novel ideas (Olmstead et al., 2012; Weinberg et al., 2010). Overall, relationship educators should remember and be mindful of the potential role that moral incongruence may have on individuals and relationships when it is associated with viewing pornography and relationship outcomes (Grubbs & Perry, 2019). It is important to remember that how an individual perceives viewing pornography (positively or negatively) may impact how it affects relationship outcomes. The morally charged nature of the topic of pornography should not be ignored and relationship educators should keep the concept of moral incongruence in mind because it may provide the necessary information needed for relationship educators to assess if they should, or should not, recommend any of these suggestions to enhance relationship satisfaction through viewing pornography (Grubbs & Perry, 2019).

Future Directions

The current study is not a nationally representative sample of the United States. It was able to use the pairfam data to examine how the relationships between husbands' and wives' perceptions of self-esteem and relationship satisfaction was mediated through the frequency of viewing pornography at the individual and dyadic level but with a nationally represented German population. Doran and Price (2014) have also recognized that further studies about viewing pornography are needed to be replicated with a nationally

representative dataset for the United States. Being able to conduct this same research but with a representative sample of the United States would further the research on pornography by utilizing comparative studies and for creating greater generalizability of results.

Another future direction this current study could follow is what was previously stated as a limitation regarding the definition of pornography. The definition used in the pairfam data was simple and focused on the intent of the viewer; thus, creating some potential ambiguity for participants on the content of the material they are determining as pornography. This means that gathering descriptions of the pornographic material being viewed, and the intent of the viewer, is needed to research what pornography is and its potential ensuing effects. Special attention will also need to be made for the diverse terms of pornography listed by future participants and the differences in terminology will need to be acknowledged (Kohut et al., 2019). Pornography in this study was also only measured by asking participants if they have viewed and how frequently they view pornography. No attempt was made to identify what form of pornography was being viewed and why it was being viewed.

Future attempts at defining and researching pornography could include aspects if moral incongruence is occurring for the viewer because moral incongruence might be an important variable for individuals and their interpretation of pornography (Grubbs & Perry, 2019). It would also be intriguing to know if the anchor's spouse knew their partner was watching pornography and if that would impact future studies. Significantly more correlations could be explored through that data and used to analyze how that may have impacted both the anchor and partner's level of satisfaction within the relationship.

Future studies could lean on other theoretical work to explore the associations between self-esteem and relationship satisfaction with viewing pornography being the mediating factor. Yucel and Gassanov (2010) used the interpersonal exchange model of sexual satisfaction as a theoretical framework for their analysis of infidelity, pornography consumption, and marital satisfaction. The interpersonal exchange model of sexual satisfaction emphasizes the rewards and costs of sexual relationships and how that may have a reciprocal effect on relationships and sexual satisfaction (Yucel & Gassanov, 2010).

Conclusion

The current study aimed to examine the relationship between husbands' and wives' perceptions of self-esteem and relationship satisfaction as mediated through the frequency of pornography viewership at the individual and dyadic level. Using the vulnerability-stress-adaption model, this study utilized the pairfam dataset which is a nationally representative German sample. Data from 369 participants were analyzed using three structural equation models; a combined male and female anchor model, a male only anchor model, and a female only anchor model. This current study found that from the combined male and female anchor model, and the male anchor model, that males' and females' self-esteem was significantly related to higher levels of relationship satisfaction for themselves and for their partner. Males frequency of viewing pornography with their partner was associated with an increase in relationship satisfaction for their partner. Frequency of individually viewing pornography for females was found to be associated with a decrease in relationship satisfaction for their partner. The male and female combined model, and the female anchor model revealed that female

self-esteem was associated with higher frequency of viewing pornography together with their partner. Overall, varying definitions of what pornography may be, the perceptions of pornography being viewed in the relationship, and the impact it has on couple relationships were explored.

APPENDIX A
Self-Esteem Measurement Scale

Self-esteem	
Sometimes I believe I am worthless.	1: Not at all 2: 3: 4: 5: Absolutely
I like myself just the way I am.	1: Not at all 2: 3: 4: 5: Absolutely
All in all, I am pleased with myself.	1: Not at all 2: 3: 4: 5: Absolutely

APPENDIX B

Use of Pornography Measurement Scale

Use of pornography	
Have you watched pornographic films or looked at pornographic pictures online, in videos, on television, or on your mobile phone in the past 3 months?	1: Yes 2: No
Pornography includes any display whose main goal is to depict persons engaging in sexual activities.	

Frequency of pornography use	
How often have you watched pornographic films or looked at pornographic pictures in the past 3 months?	1: Once per month or less 2: 2-3 times per month 3: Once per week 4: 2-3 times per week 5: More than 3 times per week 6: Daily

Pornography use with partner	
How often have you watched pornographic films or looked at pornographic pictures together with your partner in the past 3 months?	1: Always together with my partner 2: Predominantly with my partner 3: Approximately 50/50 4: Predominantly without my partner 5: Always without my partner

APPENDIX C

Relationship Satisfaction Measurement Scale

Respondents satisfaction with relationship

All in all, how satisfied are you with your relationship?	0: Very dissatisfied
	1:
	2:
	3:
	4:
	5:
	6:
	7:
	8:
	9:
	10: Very Satisfied

Respondents partner's satisfaction with relationship/perceived

What do you think: how satisfied is [name of current partner] with your relationship?	0: Very dissatisfied
	1:
	2:
	3:
	4:
	5:
	6:
	7:
	8:
	9:
	10: Very Satisfied

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Vita

TRENTON MCCLURE

CHAPTER 2. **EDUCATION**

- MS** University of Kentucky, Family Sciences August 2020 (expected)
Chairs: Bruce, Ross, Ph.D. and Nathan Wood Ph.D.
- BS** Brigham Young University - Idaho, Marriage and Family Studies April 2017
Graduated Summa Cum Laude

CHAPTER 3. **RESEARCH EXPERIENCE**

- Thesis**, University of Kentucky, Lexington, KY July 2020
Advisor: Bruce Ross
Title: The Relationship of Self-Esteem on Pornography Viewership and Relationship Satisfaction in German Couples

CHAPTER 4. **TEACHING EXPERIENCE**

- University of Kentucky**, Lexington, KY Aug. 2018 - Current
Teaching Assistantship, Dr. Claudia Heath, Family Sciences Department

CHAPTER 5. **PRESENTATIONS AND INVITED LECTURES**

- Conference Presentation**, Wheatley Institute Conference, March 2017
- Conference Presentation**, Disciple–Leader Conference, Brigham Young University – Idaho, November 2015