

Western Kentucky University
TopSCHOLAR®

Masters Theses & Specialist Projects

Graduate School

Summer 2017

Personality Factors, Obsessive-Compulsive Behavior, and Sexual Fantasy as Predictors of Paraphilic Disorder Intensity

Ethan Jack Edwards

Western Kentucky University, ethan.edwards882@topper.wku.edu

Follow this and additional works at: <http://digitalcommons.wku.edu/theses>

 Part of the [Feminist, Gender, and Sexuality Studies Commons](#), [Gender and Sexuality Commons](#), [Other Psychology Commons](#), [Other Public Affairs, Public Policy and Public Administration Commons](#), and the [Sexuality and the Law Commons](#)

Recommended Citation

Edwards, Ethan Jack, "Personality Factors, Obsessive-Compulsive Behavior, and Sexual Fantasy as Predictors of Paraphilic Disorder Intensity" (2017). *Masters Theses & Specialist Projects*. Paper 2039.
<http://digitalcommons.wku.edu/theses/2039>

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Masters Theses & Specialist Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.

PERSONALITY FACTORS, OBSESSIVE-COMPULSIVE BEHAVIOR, AND
SEXUAL FANTASY AS PREDICTORS OF PARAPHILIC DISORDER INTENSITY

A Thesis
Presented to
The Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

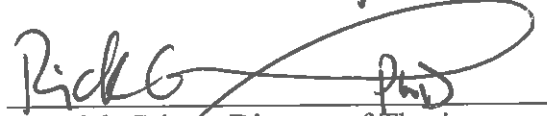
In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts

By
Ethan Jack Edwards

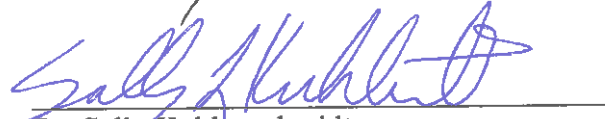
August 2017

PERSONALITY FACTORS, OBSESSIVE-COMPULSIVE BEHAVIOR, AND
SEXUAL FANTASY AS PREDICTORS OF PARAPHILIC DISORDER INTENSITY

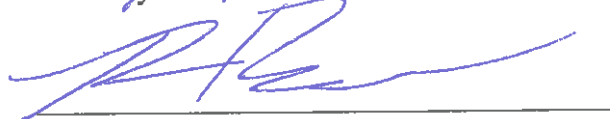
Date Recommended July 7, 2017




Dr. Rick Grieve, Director of Thesis



Dr. Sally Kuhlenschmidt



Dr. Reagan Brown

 7/19/17
Dean, Graduate Studies and Research Date

I dedicate this thesis to my parents, Vera and Richard Edwards, who always push me to continue through the hardships of life and are among the greatest of inspirations. Also, I dedicate this work to my friend Mary, who helped me to better understand myself and the atypical side of human sexuality.

ACKNOWLEDGEMENTS

I would like to thank my thesis committee: Dr. Rick Grieve, Dr. Sally Kuhlenschmidt, and Dr. Reagan Brown, for their continued support, encouragement, and feedback on this project. Despite the longevity of this thesis and the additional year required to complete it, their continued support on this project is what allowed me to press forward.

CONTENTS

Introduction.....	1
Paraphilia and Paraphilic Disorder Research and History	1
Paraphilia vs. Paraphilic Disorders	5
ICD-10 and the DSM-5 Distinctions	11
Paraphilic Disorders of the DSM-5.....	12
Exhibitionistic Disorder	13
Fetishistic Disorder	13
Frotteuristic Disorder	13
Pedophilic Disorder	13
Sexual Masochism Disorder	13
Sexual Sadism Disorder	14
Transvestic Disorder	14
Voyeuristic Disorder.....	14
Other Specified Paraphilic Disorder	14
Unspecified Paraphilic Disorder	14
Personality and the Paraphilias	15
Intensity.....	16
Paraphilic Continuum Models	17
Conventional Sexuality.....	19
Unconventional Sexuality.....	20
Paraphilic Disorders.....	21
Snapshots on Theories of Paraphilia and Abnormal Sexuality.....	21

Handedness, Hemispheric Distinctions, and Neuronal Migration.....	21
Neurotransmitters and the Monoamine Hypothesis.....	22
Obsessive-Compulsive Model	24
Limitations of Existing Research.....	25
Research Questions and Hypotheses	25
Methods.....	28
Participants.....	28
Measures	28
Sexual Fantasy Questionnaire.....	28
Mini-International Personality Item Pool	30
Brief Obsessive Compulsive Scale	32
Edwards Paraphilic Inventory.....	34
Exhibitionism.....	35
Fetishism.....	35
Frotteurism.....	36
Masochism	36
Sadism.....	36
Total Intensity	37
Transvestism	37
Voyeurism.....	37
Procedure	39
Website and Social Media Statistics	41
Main Website.....	41

Pinterest.....	42
Facebook.....	42
Google Plus.....	42
Twitter.....	43
Reddit.....	43
Results.....	44
Preliminary Analysis.....	44
Regression Analysis.....	52
Discussion.....	58
Hypothesis 1: Neuroticism and Openness to Experience (Imagination) Will Predict Levels of Paraphilic Intensity (EPI) measured with the Edwards Paraphilic Inventory (EPI)	58
Hypothesis 2: Obsessive-compulsive behavior will predict levels of PI as measured with the EPI	60
Hypothesis 3: Left-handedness or ambidextrousness will predict PI as measured with the EPI.....	60
Hypothesis 4: Anti-depressant, anti-psychotic, or anti-anxiety medications will predict PI measured with the EPI.....	61
Hypothesis 5: Exploratory and sadomasochistic sexual practices will predict levels of PI measured with the EPI.....	61
Argument for Intensity as a Factor in Paraphilic Disorder Diagnoses	62
General Implications.....	63
Clinical Implications.....	64

Limitations	64
Future Research	65
Conclusion	66
References.....	67
Appendix A: Demographics	85
Appendix B: Sexual Fantasy Questionnaire	87
Appendix C: Mini-International Personality Item Pool.....	92
Appendix D: Brief Obsessive-Compulsive Scale.....	95
Appendix E: Edwards Paraphilic Inventory	100

LIST OF FIGURES

Figure 1. Arrigo & Purcell (2001) Model of the Paraphilic Continuum	18
Figure 2. A Continuum Model for Paraphilic Categorization	19
Figure 3. Relationship Between Obsessive-Compulsive Behavior and EPI Intensity.....	55
Figure 4. Relationship Between SFQ-Sadomasochism and EPI Intensity	56
Figure 5. Relationship Between Agreeableness and EPI Intensity.....	57

LIST OF TABLES

Table 1. Overview of the Various Definitions of Paraphilia	3
Table 2. Example Scenarios for Discussion on Paraphilia versus a Paraphilic Disorder	9
Table 3. Neurotransmitter Levels on Sexual Appetite, Behavior, and Motivation.....	23
Table 4. Translation Examples from the DSM-5 to the EPI.....	39
Table 5. Gender Population and Sample Norms.....	44
Table 6. Age Population and Sample Distributions.....	44
Table 7. Ethnic Population and Sample Distributions	45
Table 8. U.S. PI Mean, Standard Deviation, Skewness, and Kurtosis.....	46
Table 9. Turk PI Mean, Standard Deviation, Skewness, and Kurtosis	46
Table 10. Website PI Mean, Standard Deviation, Skewness, and Kurtosis.....	46
Table 11. Correlations for the Paraphilic Subscales and Big Five Personality Factors.....	47
Table 12. Paraphilic Intensity Distribution of the Subscales	49
Table 13. Descriptive Statistics and Cronbach's Alpha for the Measures in the Study	50
Table 14. Intercorrelations for the Edwards Paraphilic Inventory and Study Variables ...	51
Table 15. Estimates for Predicting Paraphilic Intensity.....	53
Table 16. Estimates for Predicting Paraphilic Intensity Using Significant Predictors	54

PERSONALITY FACTORS, OBSESSIVE-COMPULSIVE BEHAVIOR, AND
SEXUAL FANTASY AS PREDICTORS OF PARAPHILIC DISORDER INTENSITY

Ethan Edwards

August 2017

104 Pages

Directed by: Dr. Frederick Grieve, Dr. Sally Kuhlenschmidt, and Dr. Reagan Brown

Department of Psychology

Western Kentucky University

Researchers vary on their definitions of paraphilia. A difference exists between an individual possessing a paraphilia versus an individual possessing a paraphilic disorder. Hanson (2010) proposed a dimensional model of sexual deviance that includes a measure of intensity. However, research on sexual intensity has been lacking. A majority of existing research focuses on the potential risk factors of possessing a paraphilia or paraphilic disorder (e.g., criminality). There is less focus on whom in the population has the potential to develop a paraphilia; or which factors predict paraphilic behavior.

The Big Five personality factors (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism), obsessive-compulsive behavior, and sexual fantasy (exploratory, intimacy, impersonal, and sadomasochism) were used to predict paraphilic intensity using the Edwards Paraphilic Inventory (EPI). Surveys were placed on Amazon Mechanical Turk ($n = 100$), the Celebrity Feet in the Pose website (via <https://celebrityfeetinthepose.com>), and its social media ($n = 163$) to reach a total of 263 participants.

Results indicated that obsessive-compulsive behavior, sadomasochism, and agreeableness significantly predicted the level of paraphilic intensity. Such findings support that paraphilic disorders are likely obsessive-compulsive in nature. Furthermore, agreeableness and paraphilic intensity were negatively correlated. This suggests that the lower the individual is in agreeableness, the higher the likelihood he or she falls on the

paraphilic spectrum. Lastly, those who practice sadomasochistic roleplay in the bedroom are likely to report higher levels of paraphilic intensity.

According to the United States sample, 1 out of every 10 participants reported some type of paraphilic activity. Individuals who participated in the survey from the website self-reported higher levels of paraphilic behavior than those who completed the survey from Amazon Mechanical Turk. In addition, these individuals are represented in more than one paraphilic category.

It remains unclear how large of a role pleasure plays in an individual seeking therapeutic or pharmacological help with paraphilic disorders. Pedophilic disorder was not examined due to ethical concerns with the United States and other various countries. Future research should examine education level and sexual orientation as predictors of paraphilic intensity.

Introduction

Since the development of the Kamasutra near the third century, publications on human sexuality have grown to encompass sexual practices reflecting the full range of possible human behavior (Doniger, 2002; 2007). Near the turn of the 17th century, Shakespeare wrote *Twelfth Night*, in which a female Countess fell in love with another woman who was disguised as a boy; such gender blends were accepted by the audiences of the time (Poland, 2006; Shakespeare, 1996). Three centuries later, science was applied to the psychology of sexuality by Kinsey, Martin, & Pomeroy (1948; 1953); who discussed sexual orientation, sexual outlet, and introduced the Heterosexual-Homosexual Rating Scale of measuring balance between homosexuality and heterosexuality. Following Kinsey's research, Masters and Johnson (1966; Masters, Johnson, & Kolodny, 1982) delved into the physiology of the human sexual response and proposed treatments for conditions such as premature ejaculation. In modern times, many questionnaires and surveys now provide the option of selecting "other" in addition to the male and female genders. Culturally, we are now able to openly discuss many more sexual acts, paraphilias, and sexual relationships (Ogas, 2012). However, there is a lack of research in a subcategory of human sexuality known as the paraphilias and paraphilic disorders (Wiederman, 2003). First, it is important to understand the background, definitions, and potential risks of the paraphilias and the paraphilic disorders.

Paraphilia and Paraphilic Disorder Research and History.

Researchers vary in their definitions of paraphilia (Moser, 2011). *The Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (American Psychiatric Association [APA], 2013), defines paraphilia as intense and persistent sexual interest in non-traditional methods that deviate from genital stimulation or foreplay with mature,

consenting human partners (APA, 2013). The World Health Organization (1992) classifies paraphilias as habitual, impulsive, and preferential sexual behavior, but does not consider paraphilias a problem so long as no psychological distress or detrimental effects are present. Kafka (1997, 2003) has defined paraphilias as disorders characterized by an alteration of sexual preference, volitional impairment, and an increase in sexual drive oriented behaviors. Kaplan & Krueger (2010) state that paraphilia is synonymous with hypersexuality because individuals with paraphilias exhibit the same symptomology as seen in people exhibiting hypersexuality, including intense sexual fantasies, sexual urges, and sexual behaviors. Fisher, Kohut, Gioacchino, & Fedoroff (2013) define paraphilias as persistent, unconventional, and problematic sexual interests. Arrigo & Purcell (2001) state that paraphilias exist on a continuum. On the one end, there is the relatively harmless voyeurism and on the other end there is lust murder. Arrigo & Purcell (2001) further state that essential components of paraphilic behavior involve fantasies, compulsive masturbation, and facilitators such as drugs or alcohol. The commonalities among all definitions indicate that paraphilias consist of altered sexual preference, intense sexual fantasies and interests, and non-traditional methods that deviate from typical genital stimulation or erotic foreplay. While there are numerous different paraphilias, this combined definition captures all paraphilias as a whole and is not tied to one specific paraphilia. An overview of all paraphilic definitions can be found in Table 1.

Table 1. Overview of the Various Definitions of Paraphilia.

	Sexual Drive	Problem	Sexual Focus	Relations	Other
DSM-5 (2013)	Interest and persistent desire	No, unless the paraphilia causes impairment in daily living	Nontraditional methods of arousal that deviate from genital stimulation and foreplay	Mature, consenting human partners	States a paraphilia without a paraphilic disorder is possible
ICD-10 (1992)	Habitual, impulsive, and preferential sexual behavior	No, unless psychological distress or detrimental effects on life are present	Derivation of sexual pleasure into atypical response	Classified as disorder(s) of psychosexuality, habit, impulse, and preference	Can be classified as a non-pathological aid to sexual excitement
Kafka (1997)	Increased sexual drive-oriented behavior	Yes, due to volitional impairment	Alteration of sexual preference	Volitional impairment/lack of control	Allows the possibility of a “normal” paraphilia
Kaplan & Kruegar (2010)	Synonymous with hypersexuality	No	Overemphasis on sexual-oriented behavior	Obsessive pursuit of casual or non-intimate sex	May engage in obsessive pornography indulgence
Fisher, Gioacchino, & Fedoroff (2013)	Persistent and atypical sexual interest	Yes	Unconventional and problematic sexual interests	Unclear whether or not pornography leads to paraphilias or sexual aggression	Laboratory experimentation vs. real world settings are inconclusive and do not equate
Arrigo & Purcell (2001)	Continuum and compulsive masturbation	Yes	Sexual fantasies and the use of sexual facilitators	Motivation and trauma towards an integrated paraphilic schema	States that paraphilias may be related to drug and alcohol use

Each definition from proposed researchers varies from one another. Persistence, or a set, continuous course of action, is a main factor in sexual drive (APA, 2013; Fisher et al.,

2013; Kaplan & Kruegar, 2010), while habitual and impulsive behavior comprise other factors in sexual drive behavior in accordance with the paraphilias (Arrigo & Purcell, 2001; Kafka, 1997; World Health Organization [WHO], 1992). Not all definitions state that paraphilias are a problem (Kaplan & Kruegar, 2010) unless there is significant distress or impairment (APA, 2013; WHO, 1992). However, Kafka (1997) argues that paraphilias are problematic due to volitional impairment where individuals with a paraphilia cannot control when and where their urges take place. Fisher, Kohut, Gioacchino, & Fedoroff (2013) argue that paraphilias border on disorders if abundant pornography bingeing leads to sexual aggression. Paraphilic focus, or sexual focus, is characteristic of all the definitions; this consists of nontraditional methods (APA, 2013), derivations (WHO, 1992), alterations (Kafka, 1997), and overemphasizing (Kaplan & Kruegar, 2010) with unconventional and problematic sexual interests and fantasies (Arrigo & Purcell, 2001; Fisher, Gioacchino, & Fedoroff, 2013).

The DSM-5 states that relationships among individuals with a paraphilia (if not a disorder) consist of mature, consenting human partners (APA, 2013). However, the potential volitional impairment (Kafka, 1997), obsession (Kaplan & Kruegar, 2010; WHO, 1992), pornography usage (Fisher et al., 2013), and potential trauma (e.g., sadomasochism; Arrigo & Purcell, 2001) can make relationships with others difficult due to approaching paraphilic disorder status. However, it is unclear how a relationship affects paraphilic disorders. It is possible to have a consensual, healthy relationship while engaging in paraphilic activities in a manner that does not impair life and as a non-pathological aid to sexual arousal (APA, 2013; WHO, 1997). Kafka (1997) considers the

possibility of a normal paraphilia, but such phrasing is oxymoronic at best. It is hard to determine what makes one paraphilia more normal than another.

Paraphilia vs. Paraphilic Disorders.

It is evident that researchers cannot agree upon a firm definition of paraphilia or paraphilic disorders. Moser (2010) argues that a distinction between paraphilia and paraphilic disorders is invalid and meaningless in practice. The distinctions between an individual with a paraphilia or one with a paraphilic disorder is in part due to the sexual predator laws (Wakefield, 2011). He believes the public feels safer knowing that there are diagnostic criteria for sexual predators. A lack of a sexual or paraphilic disorder for these sexual predators can create unrest in the social environment. It has been argued that paraphilic disorders exist in the DSM-5 in order to explain criminal behavior and sexual predators (Wakefield, 2011). It is possible for a behavior to be illegal, immoral, undesirable, or cause distress; however, this is not necessarily indicative of a mental disorder (Quinsey, 2012).

Paraphilic definitions may reflect societal pressures and ideals. Many of the previously discussed definitions of paraphilia are based on deviation from the normal ideals that society has placed on sexuality (Stewart, 2012). It is unclear what types of sexual behavior may be classified as a paraphilia (Stewart, 2012). Such ideology has made atypical sexual behavior vulnerable to societal condemnation and precluded from scientific study. Individuals may fear their spouses, friends, or other members of their social group will discover that they have a paraphilia and face social condemnation and rejection (Moser & Kleinplatz, 2006).

Individuals with a paraphilia may think that they have a psychiatric disorder based simply on having a paraphilia. The DSM-5 is unclear about the distinctions between a paraphilia and a paraphilic disorder. Table 1 showed definitions of paraphilia across different researchers (APA, 2013; Arrigo & Purcell, 2001; Fisher et al., 2013; Kafka, 1997; Kaplan & Krueger, 2010; WHO, 1992), but researchers are unclear in terms of how a paraphilia differs from a paraphilic disorder. If paraphilias and paraphilic disorders are indeed different, then there should be a measurable or significant difference that can be examined.

By definition, paraphilic behavior is contradictory of normal sexual behavior. Gagnon & Simon (1967) split sexual deviance into three categories consisting of normal, pathological, and sociological. Normal deviance consists of sexual behavior that is widespread, but occurs with low visibility as to not offend normative standards (Gagnon & Simon, 1967; Little, 1983). Pathological deviance are sexual behaviors that are enforced via law and mores due to high criminality (e.g., pedophiles, incest, bestiality, rape; Quinn & Forsyth, 2005). Sociological deviance is a set of sexual behaviors that require a unique form of social structure to survive and spread (Quinn & Forsyth, 2005). Quinn & Forsyth (2005) state this category of sexual deviance requires the recruiting of participants, the training of the participants, and then providing them with social support in sexual acts that consist of pornography, homosexuality, prostitution, and swinging. However, Strong & Devault (1988) split such behavior into four categories consisting of statistical (normalcy is based on the number of people engaging in the activity), biological (normalcy is the result of behaviors that relate to biological function such as reproduction), psychological (normalcy is the absence of negative emotional states such

as anxiety, guilt, or frustration), and moral (normalcy is based on cultural or historical context).

If the number of individuals engaging in a particular sexual act is very low, then that sexual behavior may be considered abnormal according to the statistical category. Hypothetically, if penile-vaginal intercourse is the most practiced sexual act, then it can be considered normal due to the large number of individuals participating in that sexual activity. The biological category states that normal sexual acts are only those that have a biological incentive, such as reproduction or a couple having children. All sexual behavior outside of a biological basis may be deemed abnormal. Furthermore, should a sexual act create negative emotional states such as anxiety or frustration, then those sexual acts may be deemed abnormal since sexual acts are themselves supposed to be pleasurable and induce feelings of euphoria. Last, what can be considered normal is relative to the self, others, and external standards. Each paraphilic definition reflects either the societal norm, the self (what "I" like), or the external (biological factors).

Kite (1990) provided a 30-item questionnaire to university students to identify what they viewed as normal sexual behavior. Students stated that what is normal is hard to define, and what is considered normal to one individual may be considered abnormal to another individual. In addition, students stated that normal is anything that a couple feels comfortable engaging in sexually. If a couple is comfortable with a sexual act, then that particular act is normal in the eyes of that couple. Furthermore, students stated that normal sexual behavior is any behavior that does not leave an individual with guilt feelings. This point of view relates to the psychological category proposed by Strong & Devault (1988). What is considered to be normal in terms of sexuality undergoes constant

re-examination due to changing societal standards regarding what is considered to be normal (Simon, 1999).

While society has believed that penile-vaginal intercourse to be the only civilized sexual practice (Ravi & Shroff, 2009), there are many variations to this paradigm that call into question whether penile-vaginal intercourse is the actual normal sexual practice. Now, oral and anal sex are gaining acceptance as civilized sexual practices across the world (Ravi & Shroff, 2009). According to the *International Statistical Classification of Diseases and Related Health Problems*, 10th Revision (ICD-10), the inclusion of fetishistic behavior during penile/vaginal intercourse results in the diagnosis of fetishism (WHO, 1992).

Individuals with a paraphilia have been more ready to declare that they have one (Sharma, 2003). Clubs have been founded that cater to specific paraphilias; erotic literature, photos, videos, equipment, advertising material, etc. are offered via clubs that cater to specific, or multiple, paraphilias (Sharma, 2003). Such clubs could give an individual the feeling that he or she is not alone, and that there are others who share his or her sexual preferences.

Prior to the release of the DSM-5, Blanchard (2010) called for a reworking of the definition of paraphilia to include sexual interest in copulatory or pre-copulatory (foreplay) behavior with consenting human partners. Unlike paraphilias, foreplay seems to have a common or universal definition. Foreplay is the erotic stimulation or sexual actions (e.g., kissing, touching, caressing) that precedes penile/vaginal intercourse (“Foreplay,” 2016a; “Foreplay,” 2016b; Palladini, 2012). Foreplay, however, does not always result in the completion of penile-vaginal intercourse. The definition of foreplay

does not state that the sexual act preceding intercourse has to be stereotypical behavior (e.g., kissing, touching).

Sexual foreplay is helpful to understanding paraphilias for a deviance or adherence to sexual normalization from a societal standpoint. Take, for example, the individuals (*a*, *b*, *c*, *d*) portrayed in Table 2:

Table 2. Example Scenarios for Discussion on Paraphilia versus a Paraphilic Disorder.

Individual a	Individual b	Individual c	Individual d
Prefers to use his or her fetish as foreplay prior to penile/vaginal intercourse and orgasm.	Prefers to use his or her fetish as both foreplay and during the act of penile/vaginal intercourse and orgasm.	Prefers to be sexually aroused to orgasm with his or her fetish instead of engaging in penile/vaginal intercourse.	Cannot achieve an erection without his or her fetish instigating sexual arousal.

Individual *a* enjoys his or her fetish as foreplay before engaging in coitus. Just because an individual prefers an atypical method of arousal does not mean that particular individual has a paraphilic disorder. Furthermore, if individual *a* proceeds to engage in penile/vaginal intercourse, it is clear, according to the ICD-10 definition, that the paraphilic foreplay is a non-pathological aid that precedes penile-vaginal intercourse. According to the established definitions of foreplay, this is considered normalized behavior since the act of foreplay itself led to penile-vaginal intercourse. Statistically, however, individual *a* engages in atypical sexual foreplay since the foreplay may not necessarily involve the act of kissing, caressing, or fondling breasts or other normalized sexual body parts. The behavior itself suggests that the paraphilias exist on a continuum. However, it does clarify that he or she has a paraphilia simply from the sexual arousal of

the atypical sexual behavior. Although, it does not mean that he or she has a paraphilic disorder.

Individual *b* drifts further away from the definition of foreplay because he or she enjoys using his or her fetish in the act of penile/vaginal intercourse itself. Such acts would indicate a deviation from the norm since it is not strictly penile/vaginal intercourse. However, because penile/vaginal intercourse always has additional movements and/or behaviors involved with it (e.g., kissing, rubbing), the act of including a fetish in penile/vaginal intercourse might be considered normal in the eyes of the individual with a fetish. However, it may still be possible for these individuals with a fetish to believe they are “sick.” A challenge in defining abnormal using a societal standard is that opinions vary on what is normal, but what is comfortable to one individual does not necessarily represent what is normal in society. Depending on the level of severity, a simple deviation from average is an insufficient criterion to state that a behavior is abnormal.

Individual *c* does not engage in penile-vaginal intercourse and prefers to be aroused to orgasm via the fetish. Such an act constitutes a disorder of sexual preference (according to ICD-10). It is important to distinguish between paraphilic interest, sexual stimulation, and criteria for impairment. Take for example, individual *d*. This individual needs his or her fetish in order to be sexually aroused. Individuals *a* and *b* are able and willing to perform typical sexual acts, such as intercourse. The ICD-10 would classify individuals *a* and *b* with a disorder of sexual preference (fetishism). However, these individuals do not meet criteria for a paraphilic disorder using the DSM-5, as there is no impairment or altering of social or daily functioning. Individual *c* has atypical sexual

interests that do not include penile/vaginal intercourse, yet that same individual may function satisfactorily in his or her activities of daily living or social functioning. Moser & Kleinplatz (2006) argue that, should functioning impairment exist in daily life, the impairment is the result of a significant other discovering an atypical sexual practice and responding aversively. It is inappropriate to say that the paraphilia itself is the cause for such impairment. The social or sexual embarrassment from an individual's partner discovering atypical sexual paraphilias or practice may be a missing factor in diagnoses from the ICD-10 or DSM-5.

Individuals with paraphilias may experience negative factors such as low self-esteem, social anxiety, social skills impairment, depressive symptoms, and socially deviant behavior (Briken & Basdeskis-Jozsa, 2010). There is a lack of current research on personality factors and the human sexuality subcategory of the paraphilias. It is important to understand the personalities that drive individuals who report one of the many paraphilias.

ICD-10 and the DSM-5 Distinctions.

The ICD-10 is less descriptive and more vague than the DSM-5 in its classification of the various paraphilic disorders. The ICD-10 provides a description of each paraphilia, but excludes criteria that the DSM-5 includes such as a time interval or distress in social, occupational, or other important areas of functioning.

The definition of a paraphilia was not changed from the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR; APA, 2000) to the DSM-5 (APA, 2013; McManus, Hargreaves, Rainbow, & Alison, 2013). The DSM-5 clarifies that a distinction between paraphilia and a paraphilic disorder exists, but the line

drawn between the two terms is ambiguous. Fedoroff (2011) argued that, once an individual's paraphilia was labelled, it would be hard for that individual to believe he or she does not have a disorder. However, the label of paraphilia does not automatically mean the diagnosis of a paraphilic disorder.

In fact, Keenan (2013) states that the inclusion of paraphilic disorders in the DSM-5 is redundant, unscientific, and stigmatizing and more of a social pressure than a scientific investigation. Even if a behavior is atypical or abnormal in comparison to normal behavior in society, this does not warrant a psychiatric diagnosis (Zonana, 2011). Psychiatric disorders in the DSM-5 result in an expectation of treatment or therapeutic intervention. However, a substantial portion of individuals who have a paraphilia do not seek out therapy services, and would rather indulge in their paraphilia than change (Getzfeld, 2006).

Paraphilic Disorders of the DSM-5.

In order to meet diagnostic criteria for any of the paraphilic disorders listed in the DSM-5, Fifth Edition (APA, 2013), there must be at least a six-month period in which recurrent and intense sexual fantasies have occurred. In addition, the paraphilic disorders create clinically significant distress or impairment in social, occupational, or other important areas of functioning as characterized via sexual fantasies, urges, or behaviors. Listing all known paraphilias in the DSM-5 is an impossible task as it is simply not possible to list all unconventional sexual behaviors. As previously discussed, paraphilias and paraphilic disorders are two different terms, accompanied with two different meanings and definitions. The DSM-5 identifies the following paraphilic disorders:

Exhibitionistic Disorder. Individuals diagnosed with exhibitionistic disorder experience intense and recurrent sexual arousal from exposing their genitals to an unsuspecting person, generally occurring in a public setting.

Fetishistic Disorder. Individuals diagnosed with fetishistic disorder experience recurrent and intense sexual arousal from either the use of nonliving objects or highly specific focus on non-genital body parts. Specifiers for fetishistic disorders include body parts, nonliving objects, or other.

Frotteuristic Disorder. Individuals diagnosed with frotteuristic disorder experience recurrent and intense sexual arousal from touching or rubbing against an unsuspecting person, usually taking place in a populated public setting such as a subway.

Pedophilic Disorder. Individuals diagnosed with pedophilic disorder have recurrent and intense sexually arousing fantasies, sexual urges, and behaviors involving sexual activity with a prepubescent child or children generally under the age of 13. Specifiers include exclusivity, or whether or not the individuals only experience sexual arousal from children with no other source, and non-exclusivity, in which individuals are aroused by children in addition to adults and similar-aged peers. Further specifiers include whether or not the individual is attracted to males, females, or both.

Sexual Masochism Disorder. Individuals diagnosed with sexual masochism disorder derive intense and recurrent sexual arousal from the act of being humiliated, beaten, bound, or otherwise made to suffer. In some cases, the specifier of asphyxiophilia is used to describe those individuals who practice achieving sexual arousal from the restriction of breathing.

Sexual Sadism Disorder. Individuals diagnosed with sexual sadism disorder experience recurrent and intense sexual arousal from the physical or psychological suffering or torture of another individual. Generally, individuals with this paraphilic diagnosis enjoy inflicting pain on others and derive sexual arousal and pleasure from such acts.

Transvestic Disorder. Individuals diagnosed with transvestic disorder experience recurrent and intense sexual arousal from cross-dressing. Specifiers for transvestic disorder include whether or not the transvestic disorder is accompanied with a fetish such as fabrics, materials, or garments, accompanied with autogynephilia (being aroused by thoughts or images of the self as a female).

Voyeuristic Disorder. Individuals diagnosed with voyeuristic disorder experience recurrent and intense sexual arousal arising from their observation of unsuspecting parties or individuals who are naked, in the process of disrobing, or engaging in sexual activity.

Other Specified Paraphilic Disorder. This diagnosis for a paraphilic disorder is reserved for individuals who possess symptoms characteristic of a paraphilic disorder that cause clinically significant distress or impairment in social, occupational, or other important area of functioning, but do not meet the full criteria for any of the disorders in the paraphilic diagnostic class. Other specified paraphilic disorder is reserved for when the clinician wishes to communicate the specific reason that the presentation does not meet criteria for any specific paraphilic disorder.

Unspecified Paraphilic Disorder. This diagnosis of paraphilic disorder is reserved for individuals who possess symptoms characteristic of a paraphilic disorder that

cause clinically significant distress or impairment in social, occupational, or other important area of functioning, but do not meet the full criteria for any of the disorders in the paraphilic diagnostic class. Unspecified paraphilic disorder is reserved for when clinicians choose not to communicate the specific reason that the criteria are not met for a specific paraphilic disorder.

Personality and the Paraphilias.

The five-factor model of personality has long been used to examine clinical functioning (Malouff, Thorsteinsson, & Schutte, 2005). The five-factor model consists of extraversion (assertive, energetic, trusting), agreeableness (cooperative, good-natured, trusting), conscientiousness (dependable, orderly, responsible), neuroticism (easily upset, maladjusted, not calm), and openness to experience (imaginative, independent-minded, intellectual; Costa & McCrae, 1991; John & Srivastava, 1999). Due to the bi-polar nature of personality traits (e.g., extraversion paired with introversion), these traits only represent a single pole. The prevalence of personality features within the paraphilias was examined by Lodi-Smith, Shepard, & Wagner (2014) using an online sample of 585 adults. Lodi-Smith et al. (2014) determined that exhibitionism and voyeurism were related to higher levels of narcissism in individuals; furthermore, they found that transvestism related to higher levels of openness to experience. In addition, gender differences were observed with sadomasochism with a high level of openness to experience in men and Machiavellianism in women. Overall, results of this study indicated that deviant sexual behaviors reflect antisocial personality functioning and a personal level of openness to experience that varies with specific paraphilic behaviors.

Lodi-Smith et al. (2014) concluded that further research is needed to understand how personality and the paraphilias are related.

Intensity.

Hanson (2010) proposed that the diagnosis of a paraphilia consists of three parts: sexual self-regulation, atypical sexual interests, and the intensity of sexuality. Sexual self-regulation is the ability of an individual to manage sexual thoughts, feelings, and behavior that is in line with his or her own interests while preserving the rights of others. Hanson (2010) discusses the levels of self-regulation, disorganized sexual behavior, and those individuals who are satisfied with their sexual lifestyle. Furthermore, Hanson (2010) states that individuals with disorganized sexual behavior experience ineffective attempts to regulate such behavior. Individuals who are satisfied with their sexual lifestyle have developed sufficient strategies to handle sexual urges (or the individual has a partner who indulges said urges) and have developed the ability to respect the rights of others.

Atypical sexual interests involve individuals who engage in diverse sexual activities. Individuals who report one type of paraphilic behavior often report other types of paraphilic behavior as well (Abel, Becker, Cunningham-Rathner, Mittelman, & Rouleau, 1988; Hanson, 2010; Heil & English, 2009). It is rare for an individual to only engage in one type of paraphilic behavior.

The intensity of paraphilias is perhaps the most important dimension proposed by Hanson (2010), as it has specific treatment and therapeutic implications. The disclosure of non-deviant, or non-criminal, paraphilias is voluntary (McManus et al., 2013); rather, it is the decision of the individual to disclose non-criminal paraphilic behavior or to seek

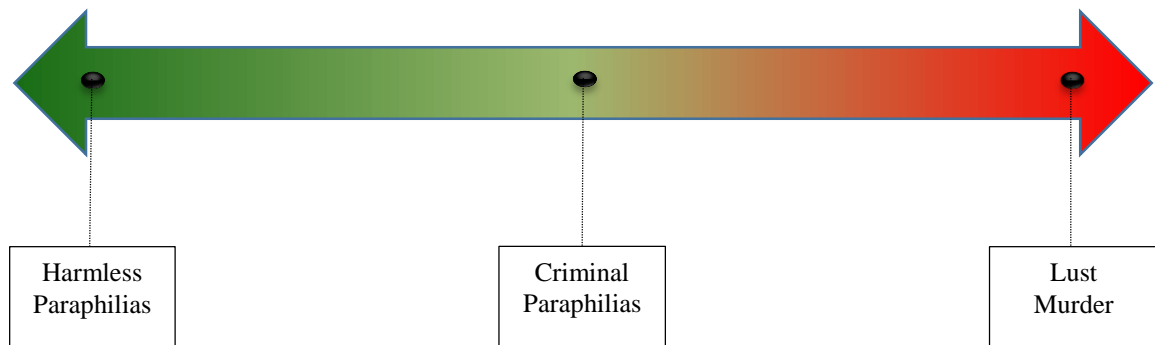
treatment. Furthermore, the discussion and treatment of non-criminal paraphilias is widely debated among the scientific community (McManus et al., 2013). If an individual does indeed have a non-criminal paraphilia, and this non-criminal paraphilia does not involve high severity among the three dimensions, then the benefit of treatment towards this individual does not outweigh the risk associated with it. On the other hand, if an individual reports a non-criminal paraphilia with high severity in all three dimensions to the point that the paraphilia interferes with daily tasks and functions, treatment is worth exploring. However, therapeutic methods (e.g., cognitive behavioral therapy) are primarily used for those individuals who possess deviant sexual paraphilias (e.g., pedophilia), while psychotropic medications show poor evidence of effective treatment towards such individuals (McManus et al., 2013). Intensity is important because it gives a patient perspective on the severity of the paraphilia.

The paraphilic continuum models attempt to explain the difference when using the term paraphilia compared to what is deviant and what is abnormal sexually. Just because an individual has a paraphilia, or practices abnormal sexuality, does not make that individual a deviant. Paraphilias are deviant in that they violate the law, but also may be a different type of sexuality (McManus et al., 2013).

Paraphilic Continuum Models.

In contrast to the categorical model of the DSM-5, Arrigo & Purcell (2001) viewed paraphilia on a severity continuum using only the DSM-5 paraphilic disorders (e.g., voyeurism is less extreme and less dangerous as compared to pedophilia). Arrigo & Purcell (2001) viewed paraphilia on the continuum shown in Figure 1.

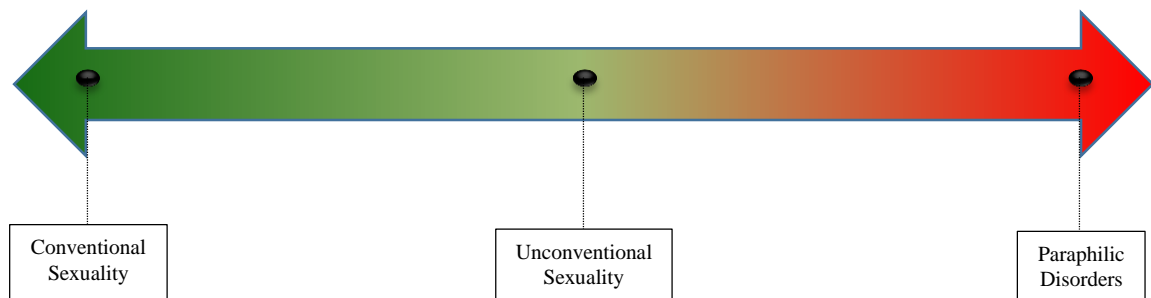
Figure 1. Arrigo & Purcell (2001) Model of the Paraphilic Continuum



Arrigo & Purcell (2001) argued that the paraphilias can be viewed on a criminal paraphilic continuum that involves harmless paraphilias (e.g. voyeurism), criminal paraphilias (pedophilia), and the more extreme paraphilias such as Erotophonophilia (lust murder). Erotophonophilia is defined as the brutal and sadistic killing of victims in order to achieve ultimate sexual satisfaction; circumstances in which these types of behaviors are displayed include serial sexual sadists and lust murderers (Arel & Osborn, 1992; Arrigo & Purcell, 2001). However, it can be argued that each paraphilia has the potential to become a criminal act. For example, if an individual with fetishistic disorder stole items for his or her fetish, this is a criminal act that derived from a potentially harmless paraphilia. Arrigo & Purcell (2001) stress that further research needs to be conducted on how to predict the change in paraphilic degree. For example, is an individual with a harmless paraphilia capable of committing lust murder in the near or far future? Being able to predict which individuals will continue on to commit lust murder is important to protect the rights and well-being of others. Furthermore, it is important to clarify whether behavioral traits, personality features, or other qualities can be used to diagnose a paraphilia and, if so, which features predict general adjustment or dangerousness.

In order to determine if it is possible to predict placement of individuals on a paraphilic severity continuum, it must first be established whether or not paraphilias themselves can be predicted (Arel & Osborn, 1992; Arrigo & Purcell, 2001). This paraphilic continuum model will help determine if this is a possibility. This continuum presents three categories on a spectrum including conventional sexuality, unconventional sexuality, and the paraphilic disorders. See Figure 2.

Figure 2. A Continuum Model for Paraphilic Categorization.



This continuum model is based on the three following categories:

Conventional sexuality. The term “conventional sexuality” is meant to reflect the sexual norms of a community, meaning that individuals who place towards the left end of the continuum are those who practice normal sexual positions and practices as defined by penile-vaginal intercourse in the Kamasutra (Ravi & Shroff, 2009) and the physiology of sex (Masters & Johnson, 1966). For example, normal sexuality can consist of sexual foreplay with breasts that leads to sexual excitation in either a male or a female, which can lead to penetration. This end of the continuum envelops the sexual acts and foreplay that have been mainstreamed and is viewed as “normal” from a North American societal standpoint (Briken & Basdeskis-Jozsa, 2010; Mounsey, 2013). However, it is important to note that, due to individual differences, the definition and what is viewed as normal

varies from person to person. Normal, in this end of the continuum, is taken from typical acts of sexual arousal that are meant to initiate a sexual response (e.g., fondling breasts, kissing, etc.). Individuals falling at this end of the continuum are free of sexual paraphilias or otherwise atypical desires. However, an individual may fall between “normal sexuality” and “the paraphilias,” indicating that both normal acts of sexual foreplay and arousal, as well as certain paraphilias, both initiate and begin the process of sexual excitation in either a male or female.

Unconventional sexuality. Individuals who place in the middle of the continuum have an atypical pleasure when it comes to sexuality or an unconventional sexual behavior that deviates from the norm (Wilson, 2014). These individuals may practice sexual masochism or cross-dressing without being diagnosed with a paraphilic disorder (Moran, 2013). Individuals may have more than one paraphilia (Lehne & Money, 2003). Individuals who place on or near this portion of the continuum have a confirmed paraphilia; however, the paraphilia does not interfere with overall levels of daily functioning (Moran, 2013). Those with a paraphilia who fall near the middle of this continuum simply have different sexual lifestyles when compared to the typical individual and are aroused by different foci.

In addition, Kafka & Hennen (2003) assessed sexual behavior and preoccupation associated with paraphilic (paraphilia/paraphilic disorders) behaviors in a sample of 120 men. Kafka & Hennen (2003) examined total sexual outlet (TSO) in order to determine how men with paraphilias and paraphilic disorder relieve sexual urges or desires. The most common TSO reported was masturbation, followed by penile-vaginal intercourse and oral sex. Results indicated that men with a paraphilia (without a paraphilic disorder)

self-reported an earlier age of onset of TSO-behavior. Age of onset was the only statistically significant difference between the paraphilia and paraphilic disorder groups (Kafka & Hennen, 2003; Moran, 2013).

Paraphilic disorders. Individuals who place in this area of the continuum meet the criteria listed in the DSM-5 for a diagnosis of a paraphilic disorder. The continuum model suggests there are variations, just differing in severity and frequency of occurrence.

Snapshots on Theories of Paraphilia and Abnormal Sexuality

Handedness, Hemispheric Distinctions, and Neuronal Migration. Researchers have demonstrated that left and right handedness is of particular interest in paraphilic and sexual disorders as it relates to hemispheric dominance. Blaney, Millon, & Kreugar (2014) noted that a difference in brain hemispheric dominance exists between individuals who are right-handed versus individuals who are left-handed. This led to a hypothesis proposed by Klar (2004) that neuronal migration and displacement may be more likely to occur in asymmetrical brains, and that this migration can result in homosexuality. Neuronal migration is the movement of neurons to specified locations in the cortex where synaptic connections with other neurons are established during the development of the human brain (Marin & Rubenstein, 2003). For example, a connection of neurons between the areas of the brain responsible for sexual arousal and the part of the cortex responsible for foot sensation (following the homunculus model of the cortex) may lead to developing a fetishistic disorder or associated paraphilia. Electrical excitation of this neuronal connection may lead to sexual arousal in response to the paraphilia foci.

Neurotransmitters and the Monoamine Hypothesis. Kafka (1997) examined side-effect reports of males who actively took a daily regimen of selective serotonin reuptake inhibitors (SSRIs). They determined that serotonin might have a role in the loss of sexual desire as well as sexual dysfunction (e.g., ejaculatory delay, erectile dysfunction). There is an inverse relationship between the amount of serotonin available and appetitive sexual behavior (satisfying a specific sexual behavior). Males taking a daily regimen of a SSRI had an inhibited, or decreased, desire for appetitive sexual behavior; conversely, lower levels of serotonin led to a disinhibition, or an increase in appetitive sexual behavior (Kafka, 1997). A positive relationship was identified with dopamine with an increased level of dopamine augmenting male sexual behavior and appetite, while a decreased level of dopamine decreased goal-motivated sexual behavior (Kafka, 1997). Men taking a dopamine agonist (e.g., L-DOPA in patients with Parkinson's disease) have been identified as having an increase in sexual desire as measured by self-report assessments of fantasies, erections, and activities (Kafka, 1997). Last, an inverse relationship was found with the neurotransmitter norepinephrine, with an increased level of norepinephrine leading to a reduction of paraphilic behavior and a decreased level of norepinephrine leading to an increase in paraphilic behavior (Kafka, 1997). A summary of these monoamine neurotransmitter effects can be found in Table 3.

Table 3. Neurotransmitter Levels on Sexual Appetite, Behavior, and Motivation.

Neurotransmitters	Increased Levels in Synapse	Decreased Levels in Synapse
Serotonin (5-HT)	Inhibits (decreases) appetitive sexual behavior	Disinhibits (increases) appetitive sexual behavior.
Dopamine (DA)	Augments male sexual behavior and increases sexual appetite	Decreases motivated sexual behaviors
Norepinephrine (NE)	Reduced paraphilic behavior	Increased paraphilic behavior

Originally, Pearson (1990) and Kafka & Coleman (1991) were the first to suggest that paraphilias might originate or develop as the result of central serotonin neurotransmission disturbance. As a result, the monoamine hypothesis was proposed and has four basic premises and examines three distinct monoamine neurotransmitters: norepinephrine, dopamine, and serotonin (Kafka, 1997). All three are thought to play key roles in the suppression or emergence of sexual arousal and behavior (Kafka, 1997; Kafka, 2003). The alteration of these three monoamines tends to result in an increase or decrease in sexual behavior in laboratory mammals (Kafka, 1997; 2003). On the contrary, while alteration of these monoamines can lead to an increase in sexual appetite and goal-motivation, it is possible for a decrease in sexual lust to occur with an increase or decrease in availability of a neurotransmitter in the synapse (Kafka, 1997; 2003). Medications such as antidepressants, psychostimulants, and neuroleptic drugs that alter certain monoamine neurotransmitter functioning have been shown to have effects on sexual behavior in humans, especially sexual appetite and lust (Kafka, 1997; 2003). Furthermore, monoamine manipulation not only increases or decreases sexual behavior,

but also has a marked effect on impulsiveness, anxiety, depression, compulsivity, and antisocial behavior (Kafka, 1997; 2003). If paraphilic behavior and disorders are indeed disorders of sexual appetite and impulse control, then monoamine disturbance can potentially explain why some individuals simply have paraphilias, while other individuals have more severe paraphilic disorders with an urge to act out their fantasies in reality. Following the monoamine hypothesis, medications (e.g., anti-depressant, anti-psychotic) that alter monoamine neurotransmission could lead to either an increase or decrease in paraphilic behavior.

Obsessive-Compulsive Model. Krueger & Kaplan (2001) stated that paraphilic disorders may be obsessive-compulsive in nature. Features of the behavior are obsessive fantasies and compulsive masturbation. Grant et al. (2006) examined how prominent sexual obsessions are within the obsessive-compulsive disorder (OCD) community. Out of 293 subjects with a diagnosis of obsessive-compulsive disorder, 73 (24.9%) reported a past history of sexual compulsions, while another 39 (13.3%) reported current sexual obsessions in addition to their primary OCD symptoms. Although one-fourth of the OCD sample had or currently has sexual obsessions, this does not reveal which came first, the paraphilic obsessions or the OCD. OCD itself can be a prelude to the emergence of sexual obsessions, but evidence also exists for sexual obsessions leading to a diagnosis of OCD (Gordon, 2002).

Furthermore, Gordon (2002) stated that individuals who experience OCD-related sexual ideation do not want to act out their thoughts, but instead want to stop thinking about them. The research seems to coincide with two distinct pathways paraphilic behaviors can take in relation to OCD: in the first pathway, the sexual obsessions lead to

compulsive masturbation in which the individual wants to feel the pleasure and in the second pathway, the obsessions and fantasies do not lead to masturbation. To clarify the second pathway, according to Gordon (2002), individuals are concerned about undesired thoughts and religious orientations (e.g., they are a slut, they are a queer, etc.). In this pathway, sexual obsessions rarely produce sexual arousal. However, in the first pathway, should an individual with a foot fetish (podophilia) have sexual fantasies about the feet of an individual, it is unclear whether these thoughts are obsessive-compulsive. Future research needs to ascertain if paraphilias and paraphilic disorders can lead to the development of OCD. Perhaps a future edition of the *Diagnostic and Statistical Manual of Mental Disorders* will add Obsessive Compulsive Disorder – Paraphilic Specifier if evidence supports this.

Limitations of Existing Research.

Little research exists on the role the Big Five personality factors have in relation to the paraphilic aspects of human sexuality. Research has demonstrated that individuals with OCD are at risk of developing a sexual obsession, or vice-versa (Gordon, 2002). However, there is a need for more research on OCD and paraphilias to evaluate whether individuals with paraphilic disorders or unconventional sexuality practices are more likely to have a diagnosis of OCD. In addition, there has been limited research in the area of the paraphilias and depression. The relationship between depression and the paraphilias has never been examined.

Research Questions and Hypotheses.

Being able to predict paraphilic behavior, including paraphilic disorders, is of importance to the community because it can identify stereotypes, threats, and scare tactics

that are associated with various paraphilias. Some paraphilias are viewed as harmless, while others are potentially dangerous should they shift from fantasy into reality (e.g., sadism). Identifying a score, or high potential risk, can possibly save a life or stop a crime from being committed in the future. The following factors will be used to predict paraphilic intensity consistent with the third factor of Hanson (2010): The Big Five personality factors (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience), the sexual fantasy questionnaire factors (exploratory, intimacy, impersonal, and sadomasochism), obsessive-compulsive behavior, handedness, and targeted medications (anti-depressant, anti-psychotic, or anti-anxiety). Last, it is unclear how prevalent certain paraphilic disorders are in the general population, as the DSM-5 only lists a prevalence rate for frotteuristic disorder. Joyal & Carpentier (2016) examined 1,040 persons from the Quebec, Canada, region and determined that nearly half of the sample expressed interest in at least one of the paraphilic behaviors. Furthermore, one-third of the sample stated they have experienced paraphilic practice (Joyal & Carpentier, 2016). Prevalence rates will be calculated (for the United States) in the current study from both normalized and high risk-paraphilic samples.

Hypothesis one states that neuroticism and openness to experience (imagination) will predict levels of paraphilic intensity (PI) measured with the Edwards Paraphilic Inventory (EPI). Hypothesis two states that obsessive-compulsive behavior will predict levels of PI measured with the EPI. Hypothesis three states that left-handedness or ambidextrous will predict PI measured with the EPI. Hypothesis four states that anti-depressant, anti-psychotic, or anti-anxiety medications will predict PI measured with the

EPI. Last, hypothesis five states that exploratory and sadomasochistic sexual practices will predict PI measured with the EPI.

Due to the unknown prevalence rates of the various paraphilic disorders (excluding frotteuristic disorder, as a prevalence rate is listed in the DSM-5), prevalence rates in the current study will be examined.

Methods

Participants

There were 263 participants who completed at least part of the survey. However, only 143 participants completed the survey in its entirety. Analyses indicated a middle-age sample ($M = 33.75$, $SD = 11.83$) with more males ($n = 176$; 75%) taking the survey than females ($n = 58$; 24%) and those reporting other gender ($n = 2$; 1%).

Participants were from 20 different countries, the United States of America ($n = 174$; 74%), Canada ($n = 8$; 3%), the United Kingdom ($n = 17$, 7%), Germany ($n = 7$; 3%), and Other ($n = 29$; 12%). Ethnic backgrounds included White ($n = 196$; 83%); Black, African American, or Negro ($n = 9$; 4%); Hispanic, Latino, or Spanish ($n = 13$; 6%); American Indian or Alaska Native ($n = 3$; 1%); Asian ($n = 10$; 4%); Native Hawaiian or Other Pacific Islander ($n = 1$, < 1%); and Bi-racial ($n = 4$; 2%).

Participants indicated taking certain medications. Medications were considered a targeted medication if they could be classified as an anti-depressant, anti-anxiety, or anti-psychotic medication ($n = 20$; 8%), while those taking other medications (e.g., diuretics, heartburn medications, etc.) were considered nontargeted medications ($n = 242$; 92%). Participants also indicated whether they were right-handed ($n = 196$; 81.33%), left-handed ($n = 31$; 12.86%), or ambidextrous ($n = 14$, 5.81%).

Measures

Sexual Fantasy Questionnaire. The Sexual Fantasy Questionnaire (SFQ) by Wilson (2010) is a standard quantification of sexual desires, preferences, and activities. The questionnaire itself consists of 40 items that are answered on a scale from 0 to 5: 0 (*Never*), 1 (*Seldom*), 2 (*Occasionally*), 3 (*Sometimes*), 4 (*Often*), and 5 (*Regularly*). Each

item is answered five times, once for each of the following categories: Daytime fantasies, fantasies during intercourse or masturbation, dreams while asleep, have done in reality, and would like to do in reality. Questions in the Sexual Fantasy Questionnaire break down human sexuality into four primary factors: *Exploratory*, *Intimacy*, *Impersonal*, and *Sadomasochistic*. The *Exploratory* primary factor explores group sex, promiscuity, mate-swapping, and other instances that signal the exploration of fetish identity and environment. For example, an *Exploratory* question asks if the participant has had daytime fantasies, fantasies during intercourse or masturbation, dreams while asleep, have done in reality, or would like to do in reality regarding sex with two other people. The *Intimacy* primary factor explores kissing passionately, oral sex, outdoor love, masturbating a partner, and other instances involving the states of feeling between two individuals. For example, an *Intimacy* question asks if the participant has experienced having intercourse with a loved partner in any of the five categories. The *Impersonal* primary factor explores sex with strangers, watching others, fetishism, looking at obscene pictures, and any other sexual act or activity that deviates from the typical. For example, an *Impersonal* question asks if the participant has been excited by material or clothing (e.g., rubber, leather, underwear) in any of the five answer categories. Last, the *Sadomasochistic* primary factor explores whipping and spanking, being forced to have sex, and other instances of domination and submission. For example, a *Sadomasochistic* question asks if the participant has been forced to perform a sexual act in any of the five assessment categories.

In order to obtain the scores for each primary factor, the item scores are summed over the 10 questions that comprise each primary factor to obtain a total score ranging

from 0 to 50. In addition, a total fantasy score can be obtained by summing all primary factor scores. However, the “daytime fantasies” category is the only category used to comprise the four factor scores, since all five categories are highly correlated with one another (Wilson, 2010).

Test-retest reliability ($r = .84$), percentage agreement on repeated items ($r = .90$), and Cronbach’s Alpha ($\alpha = .82$) were adequate (O’Donohue, Letourneau, & Dowling, 1997). Convergent validity of the Sexual Fantasy Questionnaire was supported in the finding that pedophiles have higher deviant fantasies of children than comparison subjects (O’Donohue et al., 1997).

Mini-International Personality Item Pool. The Mini-International Personality Item Pool (IP-IP) by Goldberg (1999) is a questionnaire that measures the Big Five Personality Traits: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Imagination/Openness to Experience. The questionnaire itself consists of 20 items that are answered on a scale of 1 to 5: 1 (*Very Inaccurate*), 2 (*Moderately Inaccurate*), 3 (*Neither Accurate Nor Inaccurate*), 4 (*Moderately Accurate*), and 5 (*Very Accurate*). The first trait, Extraversion, assesses sociability, talkativeness, and assertion. Highly extraverted individuals experience high amounts of energy, positive emotions, surgency, and are often perceived as attention seeking. One example of an Extraversion question asks whether the participant loves large parties. The second trait, Agreeableness, assesses compassion, friendliness, trust, and helpfulness towards others. A highly agreeable person is sympathetic to others, compassionate, and eager to help others. An example of an Agreeableness question asks if the participant trusts others. The third trait, Conscientiousness, assesses organization, dependability, and self-discipline. Highly

conscientious individuals prefer planned rather than spontaneous behavior and are often stubborn and obsessive. An example of a Conscientious question asks if the participant is able to complete tasks successfully. The fourth trait, Neuroticism, assesses anger, anxiety, depression, emotional stability, and impulse control. A highly neurotic person has a tendency to experience negative emotions such as fear, anger, and sadness; is prone to irrational ideas; and has high levels of stress. An example of a Neuroticism question asks if the participant gets irritated easily. The last trait, Openness to Experience, assesses the appreciation for art, emotion, adventure, unusual ideas, and curiosity. Highly open individuals possess an active imagination and experience a heightened level of creativity. An example of Openness to Experience questions asks if the participant has a vivid imagination.

For scoring administration, each item measures one of the Big Five Personality Traits. Using a 20-item test, each Big Five Personality Trait has four assessment items. Each item is keyed with a + sign or a – sign. Each sign denotes a change in scoring for that particular item. Items marked with a + sign, are to be scored in increasing numerical order in regards to the five answer choices (1 = *Very Inaccurate*, 2 = *Moderately Inaccurate*, 3 = *Neither Inaccurate nor Accurate*, 4 = *Moderately Accurate*, and 5 = *Very Accurate*). Items marked with a – sign are to be reverse scored in decreasing numerical order with regard to the five answer choices (5 = *Very Inaccurate*, 4 = *Moderately Inaccurate*, 3 = *Neither Inaccurate nor Accurate*, 2 = *Moderately Accurate*, and 1 = *Very Accurate*). Once all items have a numerical value, all numbers are summed to obtain a total scale score for each Big Five Personality Trait.

Mini-IPIP (four questions per factor) scores strongly correlate with the IPIP (10 questions per factor): Extraversion ($r = .77$), Agreeableness ($r = .70$), Conscientiousness ($r = .69$), Neuroticism ($r = .68$), and Imagination/Openness to Experience ($r = .65$; Goldberg, 1999).

Brief Obsessive Compulsive Scale. The Brief Obsessive-Compulsive Scale (BOCS) is a self-report measure of Obsessive-Compulsive Disorders (OCD) and obsessive-compulsive related disorders (Bejerot et al., 2014). The BOCS is derived from two other obsessive-compulsive measures: The Yale-Brown Obsessive-Compulsive Scale (Goodman et al., 1991) and the Children's Yale-Brown Obsessive-Compulsive Scale (Scahill et al., 1997). The questionnaire itself consists of a total of 22 questions across two different sections. The first section consists of 16 questions and assesses the following obsessive-compulsive domains: Contamination/cleanliness (e.g., afraid of getting germs from touching door handles or shaking hands), harming obsessions (e.g., fear of causing physical harm to self or others), sexual obsessions (e.g., unwanted or bad sexual thoughts about a stranger), checking (e.g., repeatedly checking of door locks), religion/magical thoughts/superstition (e.g., worried about being punished for sins), morality and justice (e.g., worrying about always doing the right thing), symmetry/exactness/ordering (e.g., the straightening of pens or paper on a surface), just right/repeating rituals/counting (e.g., the repeated turning on and off of appliances), hoarding and saving (e.g., saving old newspapers, cans, or toys), somatic obsessions (e.g., worrying that a part of your body is hideously ugly), and self-damaging behaviors (e.g., scratching and tearing at the skin or cutting oneself). After each question, an example is listed to help the individual understand what is being asked. For example, question one

asks if the respondent is worried about dirt, germs, or viruses. The example given below the question states, “Ex: Fear of getting germs from touching door handles, shaking hands or sitting in certain chairs or seats or fear of getting AIDS.” Each question has three possible answers. The three possible answers are: current, past, and never. The current answer reflects that the particular question is happening in the present or has occurred in life within the past week. If the compulsion or obsession has occurred previously (greater than one week ago), the past answer is appropriate. Finally, if the obsession or compulsion has not occurred at all, the never answer is selected. This section (Appendix D, Section 1) of the BOCS was not used in data analysis, and was primarily used to help the participant understand the difference between an obsession and a compulsion.

The second section of the BOCS consists of six questions that only assess current symptoms of OCD and are answered on a scale of 0 to 4: 0 (*None*), 1 (*Mild*), 2 (*Moderate*), 3 (*Severe*), and 4 (*Extreme*). Current implies symptomology that has occurred within the past week. For each participant, this is the only section (Appendix D, Section 2) used to determine an OCD score.

Reliability results indicated that sensitivities, specificities, and internal consistency for the Symptom Checklist Scale and the Severity Scale were high. The Symptoms Checklist scale sensitivity was $r = .85$ and the specificities were $r = .62$ to $r = .70$. Cronbach’s Alpha was also high ($\alpha = .81$). The Severity scale sensitivity was $r = .72$ and the specificities were $r = .75$ to $r = .84$. Cronbach’s Alpha was also high ($\alpha = .94$; Bejerot et al., 2014).

Edwards Paraphilic Inventory. The Edwards Paraphilic Inventory (EPI) is a list of questions developed for the current study to identify paraphilic behavior in the participants. The questions were designed to give the participant's perspective on how intense his or her sexual behaviors are and whether he or she views those behaviors as a problem.

Working with the dimensional model of paraphilias theorized by Hanson (2010), the Edwards Paraphilic Inventory consists of 24 items that are answered on a Likert scale of 0 to 4: 0 (*Very Untrue of Me*), 1 (*Untrue of Me*), 2 (*Sometimes True of Me*), 3 (*Usually True of Me*), or 4 (*Always True of Me*). Each of the 24 questions can be placed in one of three dimensional categories (sexual self-regulation, atypical sexual interests, and intensity of sexuality). In addition to the diagnostic criteria, some disorders contain specifiers denoting controlled environments. Scores across all 24 items will be summed to indicate a paraphilic intensity score ranging from 0 to 96. Paraphilic intensity is a measure of paraphilic urges as manifested through masturbation, fantasy, and volitional deterioration that interrupt activities of daily functioning (work, spending time with family, etc.). There are seven subscales in the EPI that, together, comprise the paraphilic intensity score. Each subscale measures one of the various paraphilic disorders. The intensity of each subscale score consists of three ranges: typical sexual practice, paraphilic behavior, and paraphilic disorder behavior, where the higher the intensity, the more likely an individual can be diagnosed with a paraphilic disorder. In the present study, the Cronbach's Alpha for the Edwards Paraphilic Inventory was high, $\alpha = .91$.

"Typical sexual practice" is the range at which no paraphilic behavior occurs or, at most, an individual is curious about that particular paraphilia. A score of 0 indicates a

lack of the paraphilic behavior in question (*Very Untrue of Me*); however, scores slightly above 0 (*Untrue of Me*), but below the paraphilic behavior score range, denote curiosity, or an interest to try, fantasize, or engage in the paraphilia.

“Paraphilic behavior” is the range at which paraphilia behavior occurs (*Sometimes True of Me*), but is not severe enough to interfere with daily life. Individuals who score in this range practice the particular paraphilia in question; however, the paraphilic practice does not impact their lives and is meant to be a sexual outlet via fantasy or with a consenting, human partner.

“Paraphilic disorder behavior” is the range at which the paraphilic fantasies begin to interfere with daily functioning and life activities (love, family, work, etc.). In this range, the higher the intensity of a particular paraphilia, the higher the chance of a paraphilic disorder. The scores from the subscales are combined to create the full-scale intensity score. The subscales and their respective ranges are listed below:

Exhibitionism. The Exhibitionism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about exposing one’s genitals to an unsuspecting person. The Exhibitionism subscale consists of five questions with a maximum paraphilic intensity range of 20. Individuals with a score approaching 20 are at risk for developing, or may have already developed, exhibitionistic disorder. A score between 0 and five indicates typical sexual practice, a score between six to 10 indicates paraphilic behavior, and a score greater than 10 indicates exhibitionistic disorder behavior.

Fetishism. The Fetishism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges due to a non-genital body part(s) (e.g., feet) or

nonliving object(s). The Fetishism subscale consists of four questions with a maximum paraphilic intensity range of 16. Individuals with a score approaching 16 are at risk for developing, or may have already developed, fetishistic disorder. A score between 0 and four indicates typical sexual practice, a score between five and eight indicates paraphilic behavior, and a score greater than eight indicates fetishistic disorder behavior.

Frotteurism. The Frotteurism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about touching or rubbing up against a non-consenting person. The Frotteurism subscale consists of two questions with a maximum paraphilic intensity range of 8. Individuals with a score approaching 8 are at risk for developing, or may have already developed, frotteuristic disorder. A score between 0 and two indicates typical sexual practice, a score of three or four indicates paraphilic behavior, and a score greater than four indicates frotteuristic disorder behavior.

Masochism. The Masochism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from being humiliated, beaten, bound, or made to suffer. The Masochism subscale consists of three questions with a maximum paraphilic intensity range of 12. Individuals with a score approaching 12 are at risk for developing, or may have already developed, masochistic disorder. A score between 0 and three indicates typical sexual practice, a score between four and six indicates paraphilic behavior, and a score greater than six indicates masochistic disorder behavior.

Sadism. The Sadism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about the physical or psychological suffering of another person. The Sadism subscale consists of two questions with a maximum paraphilic intensity range of 8. Individuals with a score approaching 8 are at risk for

developing, or may have already developed, sadistic disorder. A score between 0 and two indicates typical sexual practice, a score of three or four indicates paraphilic behavior, and a score greater than four indicates sadistic disorder behavior.

Total Intensity. The Total Intensity scale is a combined measure of all subscales for a total intensity score. The Total Intensity score consists of all 24 questions with a maximum paraphilic intensity range of 96. Individuals with a score approaching 96 are at risk for developing, or may have already developed, a paraphilic disorder. The paraphilic disorder in question will be based on the scores of the subscales. A score between 0 and 24 indicates typical sexual practice, a score between 25 and 48 indicates paraphilic behavior, and a score greater than 48 indicates paraphilic disorder behavior.

Transvestism. The Transvestism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from cross-dressing. The Transvestism subscale consists of five questions with a maximum paraphilic intensity range of 20. Individuals with a score approaching 20 are at risk for developing, or may have already developed, transvestic disorder. A score between 0 and five indicates typical sexual practice, a score between six and 10 indicates paraphilic behavior, and a score greater than 10 indicates transvestic disorder behavior.

Voyeurism. The Voyeurism subscale measures repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about spying on an unsuspecting person who is naked, in the process of undressing, or engaging in sexual activity. The Voyeurism subscale consists of three questions with a maximum paraphilic intensity range of 12. Individuals with a score approaching 12 are at risk for developing, or may have already developed, voyeuristic disorder. A score between 0 and three indicates

typical sexual practice, a score between four and six indicates paraphilic behavior, and a score greater than six indicates voyeuristic disorder behavior.

Pedophilic disorder was not included due to the nature of the disorder and ethical issues for the investigator and risk for participants. Furthermore, other-specified and unspecified paraphilic disorder were not included because they are too vague to adequately measure.

All diagnostic criteria for paraphilic disorders, as indicated by the DSM-5, were reworded for better comprehension by lay persons. In addition, all questions have accompanying headings related to the specific sexual disorder. For example, questions related to the fetishistic disorder have the following heading: “I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges due to a non-genital body part(s) (e.g., feet) or nonliving object(s).” Table 4 shows how the DSM-5 diagnostic criteria for fetishistic disorder were translated and reworded for better comprehension and understanding. See Table 4.

Table 4. Translation Examples from the DSM-5 to the EPI.

“I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges due to a non-genital body part(s) (e.g., feet) or nonliving object(s):”

DSM-5	Translation
In the past six months, I have had recurrent and intense sexual arousal from a nonliving object or a specific focus on a non-genital body part as seen through fantasies, urges, behaviors, or masturbation.	For at least six months.
These fantasies, sexual urges, or behaviors interrupt my daily activities such as work, school, or other important areas of functioning.	I have fantasized about this more than 3 times per day.
The sexual arousal and urges are not limited to articles of clothing or devices used for the sole purpose of pleasure and stimulation.	These sexual thoughts and fantasies are not simply due to the use of a vibrator or fleshlight.
In a controlled environment: This specifier is primarily applicable to individuals living in institutional or other settings where opportunities to engage in fetishistic behaviors are restricted.	I have fantasized about doing this only when it is forbidden to do (e.g., dressing rooms, public bathrooms).

Procedure

Administrators at the website <https://www.celebrityfeetinthepose.com> agreed to allow multiple surveys to be announced or linked to their website for research purposes. Visitors to the website and its affiliated social media had the option of clicking on a link that took them directly to the survey via the Qualtrics Survey System. Once all instructions and questionnaires were inserted into Qualtrics, the link to the survey was placed on the official website, the website’s social media, and Amazon Mechanical Turk. If the visitor clicked the link, he or she was taken to the survey page to begin answering

the questions. The surveys were randomly ordered for each participant. The Qualtrics Survey System had protection that prevented individuals from completing the survey more than once. Qualtrics used a technique called “Prevent Ballet Box Stuffing,” which allowed Qualtrics to track who had already completed the survey should the same participant try to complete the survey more than once. This worked by placing an internet cookie in his or her browser. Should the same participant try to complete the survey more than once, Qualtrics identified the internet cookie saved in his or her browser and thus, did not allow the participant to complete the survey a second time. Should a participant choose to complete the survey, the survey opened in a new tab or window in his or her internet browser. Taking the survey was optional and was not required to access the Celebrity Feet in the Pose website, its social media affiliates, or its content.

Surveys were also submitted to Amazon Mechanical Turk, which is a crowd source online marketplace. Participants here received compensation of \$0.50 for taking the surveys. Once a participant completed the entire survey, he or she received a code that granted him or her access to the \$0.50 compensation.

Due to ethical concerns, any individual stating an age below 18 was redirected out of the survey entirely and was prevented from completing the survey. The Qualtrics “Prevent Ballet Box Stuffing” option helped prevent participants from attempting to retake the survey with a false age if he or she was removed the first time due to an age under 18. The Amazon Mechanical Turk platform used a unique worker identification number that prevented a user from completing or accessing a survey more than once. Once a participant’s age range was identified below 18, the survey was automatically closed and the participant was re-directed back to the relevant homepage. In the informed

consent documents for the Celebrity Feet in the Pose website and its affiliated social media (Pinterest, Twitter, Facebook, and Reddit) and Amazon Mechanical Turk, participants were warned that these surveys contained sensitive and explicit sexual content.

Directions were posted at the beginning of each survey and requested the participant to answer questions as truthfully and honestly as possible. In addition, participants had the choice to not answer any questions. Those who decided to take the surveys were told via instructions that they did not have to finish the survey and could quit at any time by exiting out of the link. However, if the surveys were accessed via Amazon Mechanical Turk, the surveys had to be completed in their entirety for the monetary reward to be granted to the survey taker. Participants would not receive the code that granted access to the monetary reward (\$0.50) if they closed the survey prematurely or did not see the survey through to completion.

Website and Social Media Statistics

Hashtags were used when broadcasting survey links across the five types of social media outlets to which the website was connected: Pinterest, Facebook, Google Plus, Twitter, and Reddit. A hashtag is a word or phrase which is preceded by the “#” symbol that is used to identify messages regarding a specific topic. Examples include #feet, #thepose, #fetish, etc.

Main website (<https://www.celebrityfeetinthepose.com>). The Celebrity Feet in the Pose website receives, on average, 26,000 active users per month ranging across 121 different countries and is translated into 101 unique languages captured via Google Analytics (Google, 2016). In the one-year interval of March 2016 to March 2017, the

website alone received over 1,500,000 views. Anything posted to the website is immediately posted to the following social media:

Pinterest (via <https://www.pinterest.com/rheahayworth/>). The social network known as “Pinterest” launched in 2010 and allows users to visually share and discover new interests via “pinning” images or videos to their own boards, a collection of themed pins (Meng, 2014). The Celebrity Feet in the Pose Pinterest profile sees 3,100 average daily viewers via the analytical data captured from Pinterest’s own in-data analytics program. The Celebrity Feet in the Pose Pinterest profile consists of a collection of over 1,745 pins spread across 75 boards.

Facebook (via <https://www.facebook.com/Celebrityfeetinthepose>). Facebook is a popular social networking website that enables users to connect and share photos, videos, and moments with various friends, family, or coworkers; Facebook was created in 2004 by Mark Zuckerberg (Rouse, 2014). Facebook allows businesses and other profit or nonprofit organizations to create their own Facebook pages in order to advertise about their business. The Celebrity Feet in the Pose Facebook page currently has 733 likes¹ and 741 follows.

Google Plus (via <https://plus.google.com/u/0/+RheaHayworth/posts>). Google Plus is a social network that was launched in 2011 (Shervington, 2016). Google Plus allows users to share photos, update their statuses, keep in touch with friends, and create or join communities. The Celebrity Feet in the Pose Google Plus profile page currently

¹ A “like” on the Celebrity Feet in the Pose page consists of someone who likes the page and allows that individual to keep track of new and old posts.

has 315 followers² and has over 1,000,000 views since social media creation in May, 2015.

Twitter (via <https://www.twitter.com/Celebfeetpose>). Twitter is another online social networking website that allows users to send or read short messages called tweets that are limited to 140 characters (Kwak, Lee, Park, & Moon, 2010). Pictures can also be sent across the Twitter service to be seen by the various users of the Twitter platform. Currently, the Celebrity Feet in the Pose Twitter profile has 386 followers with an average of 24,440 impressions³ every month, over the last five months.

Reddit (via <https://www.reddit.com/r/fetish>). Reddit is an entertainment and social news networking service that resembles an online bulletin board (Rosen, 2013). Registered community members are able to submit content through text posts or using direct Uniform Reference Locators (URLs). Reddit allows its community members and users to communicate with one another by commenting and replying to direct text and links posted by other members. Survey links were uploaded to the indicated URL for Reddit community users and members to access.

² A “follower” is an individual on Google Plus who has followed the Celebrity Feet in the Pose Google Plus profile, enabling that individual to see updates from the Celebrity Feet in the Pose profile page. Whenever there is a new post, followers will automatically see it in their news feed along with other profiles they follow. A news feed is an electronic transmission of blogs, posts, pins, or other content that a social media user follows.

³ An “impression” is the number of times a particular tweet has been delivered to a Twitter user’s news feed or particular account (Twitter, n.d.).

Results

Preliminary Analyses.

The following tables (Tables 5, 6, and 7) show the gender, age, and race population norms from the 2015 United States census compared to the current study's sample of United States residents and the Amazon Mechanical Turk and Website samples. Only participants who completed the entirety of the surveys are included. The U.S. Study Sample contains participants from both the Turk and Website samples. The 2015 U.S. Census data were recalculated to exclude the following age ranges: Under 5 years, 5 to 9 years, and 10 to 14 years as they were excluded for this study's sample.

Table 5. Gender Population and Sample Norms.

Gender	2015 U.S. Census (<i>N</i>)	U.S. Study Sample (<i>n</i> = 126)	Turk Sample (<i>n</i> = 100)	Website Sample (<i>n</i> = 42)
Male	49.2%	65.1%	59.0%	92.9%
Female	50.8%	34.9%	41.0%	7.1%

Table 6. Age Population and Sample Distributions.

Age	2015 U.S. Census	U.S. Sample (<i>n</i> = 126)	Turk Sample (<i>n</i> = 100)	Website Sample (<i>n</i> = 42)
15 to 19 ¹	8.4%	1.6%	0%	11.9%
20 to 24	8.9%	5.5%	3.0%	11.9%
25 to 34	16.8%	38.1%	41.0%	33.3%
35 to 44	15.9%	24.6%	26.0%	21.4%
45 to 54	17.2%	18.3%	17.0%	16.7%
55 to 59	8.2%	4.7%	5.0%	2.4%
60 to 64	7.2%	5.5%	6.0%	2.4%
65 to 74	9.8%	1.6%	2.0%	0%
75 to 84	5.3%	0%	0%	0%
85+	2.3%	0%	0%	0%
Median age (years)	37.6 ²	35.5	36.5	36.5

¹All participants from data collection are 18 years or older.

²Median age cannot be recalculated; therefore, the median age for the U.S. Census includes the age groups that have been removed for recalibration.

Table 7. Ethnic Population and Sample Distributions.

Ethnicity	2015 U.S. Census (<i>N</i>)	U.S. Sample (<i>n</i> = 126)	Turk Sample (<i>n</i> = 100)	Website Sample (<i>n</i> = 42)
White	73.6%	83.3%	81.0%	90.4%
Black or African American	12.6%	4.0%	5.0%	0%
Hispanic, Latino, or Spanish		4.8%	5.0%	4.8%
American Indian or Alaska Native	0.8%	1.6%	1.0%	2.4%
Asian	5.1%	4.0%	6.0%	0%
Native Hawaiian or Other Pacific Islander	0.2%	0.8%	1.0%	0%
Bi-racial	3.0%	1.6%	1.0%	2.4%

The Edwards Paraphilic Inventory (EPI) consists of the following subscales:

Voyeurism, Fetishism, Exhibitionism, Frotteurism, Masochism, Sadism, and Transvestism. Each subscale measures the intensity levels for each sexual disorder listed in the DSM-5: Voyeurism measures voyeuristic disorder, Fetishism measures fetishistic disorder, Exhibitionism measures exhibitionistic disorder, Frotteurism measures frotteuristic disorder, Masochism measures sexual masochism disorder, Sadism measures sexual sadistic disorder, and Transvestism studies transvestic disorder. Pedophilic disorder was not included in the Edwards Paraphilic Inventory.

The paraphilic intensity (PI) mean and standard deviation of the studied paraphilic disorders in the United States sample can be found in Table 8; the Mechanical Turk sample in Table 9, and the Website sample in Table 10. Because the standard deviation of most measures is higher than the mean, the skewness and kurtosis levels are also shown.

Table 8. U.S. PI Mean, Standard Deviation, Skewness, and Kurtosis.

U.S. Sample	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
Voyeurism	1.23	2.25	1.85	2.57
Fetishism	2.10	3.89	1.89	2.59
Exhibitionism	0.74	2.13	3.71	15.85
Frotteurism	0.62	1.44	2.64	7.17
Masochism	1.35	2.69	2.08	3.77
Sadism	0.55	1.42	2.72	6.64
Transvestism	1.47	3.28	2.29	4.29
Total Intensity	7.85	12.19	1.71	2.36

Table 9. Turk PI Mean, Standard Deviation, Skewness, and Kurtosis.

Turk Sample	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
Voyeurism	1.10	2.05	1.96	3.25
Fetishism	1.30	3.21	2.84	7.76
Exhibitionism	.60	1.72	3.31	11.76
Frotteurism	.49	1.25	2.74	7.09
Masochism	.72	1.82	2.85	7.93
Sadism	.29	.96	3.91	16.64
Transvestism	.91	2.63	3.19	9.82
Total Intensity	5.19	9.60	2.33	5.84

Table 10. Website PI Mean, Standard Deviation, Skewness, and Kurtosis.

Website Sample	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
Voyeurism	2.21	2.96	1.01	-.37
Fetishism	6.60	4.90	-.032	-1.26
Exhibitionism	1.21	2.79	3.07	10.78
Frotteurism	1.29	2.03	1.51	1.63
Masochism	3.21	3.77	.95	-.10
Sadism	1.45	2.06	1.09	-.27
Transvestism	3.29	4.29	.98	-.32
Total Intensity	19.26	13.46	.37	-.45

Table 11 represents the matrix correlation for the subscales of the EPI and the Big-Five personality traits.

Table 11. Correlations for the Paraphilic Subscales and Big Five Personality Factors.

Variable	Voyeurism	Fetishism	Exhibitionism	Frotteurism	Masochism	Sadism	Transvestism	Extraversion	Agreeable	Conscientious	Neuroticism	Imagination
Voyeurism	-											
Fetishism	.34*	-										
Exhibitionism	.60***	.29***	-									
Frotteurism	.60***	.28***	.55***	-								
Masochism	.39***	.40***	.40***	.25**	-							
Sadism	.42***	.44***	.43***	.51***	.53***	-						
Transvestism	.25**	.28***	.27***	.27***	.52***	.41***	-					
Extraversion	-.09	.08	-.07	-.05	-.06	-.07	-.09	-				
Agreeable	-.00	-.00	-.03	.04	-.13	-.06	.23**	.23**	-			
Conscientious	-.14	-.21*	-.14	-.10	-.12	-.08	-.19*	.13	.08	-		
Neuroticism	.22**	.18*	.14	.22**	.17*	.27***	.29***	-.20**	-.02	.45***	-	
Imagination	-.01	-.02	-.02	.01	-.04	-.01	.17*	.16*	.10	.02	.02	-

* $p < .05$, ** $p < .01$, *** $p < .001$

According to the *DSM-5*, a majority of the prevalence rates for the paraphilic disorders are unknown with the exception of frotteuristic disorder, which affects about 30% of males in the United States general population. Table 12 shows the intensity distribution of the various paraphilic disorders, excluding pedophilic disorder and other or unspecified paraphilic disorders, in the United States, Amazon Mechanical Turk, and Website samples.

Table 12. Paraphilic Intensity Distribution of the Subscales.

Paraphilic Intensity Range	U.S. Sample (<i>n</i> = 126)	Turk Sample (<i>n</i> = 100)	Website Sample (<i>n</i> = 42)
<u>Voyeurism</u>			
0 to 3	107; 84.9%	87; 87%	30; 71.4%
4 to 6	14; 11.1%	10; 10%	7; 16.7%
7+	5; 4.0%	3; 3%	5; 11.9%
<u>Fetishism</u>			
0 to 4	102; 80.9%	89; 89%	15; 35.7%
5 to 8	11; 8.7%	5; 5%	9; 21.4%
9+	13; 10.3%	6; 6%	18; 42.9%
<u>Exhibitionism</u>			
0 to 5	120; 95.2%	97; 97%	38; 90.5%
6 to 10	5; 4.0%	3; 3%	3; 7.1%
11+	1; 0.8%	0; 0%	1; 2.4%
<u>Frotteurism</u>			
0 to 2	114; 90.5%	93; 93%	32; 76.2%
3 to 4	7; 5.5%	4; 4%	6; 14.3%
5+	5; 4.0%	3; 3%	4; 9.5%
<u>Sexual Masochism</u>			
0 to 3	105; 83.3%	93; 93%	25; 59.5%
4 to 6	11; 8.7%	4; 4%	8; 19%
7+	10; 7.9%	3; 3%	9; 21.4%
<u>Sexual Sadism</u>			
0 to 2	114; 90.5%	96; 96%	30; 71.4%
3 to 4	7; 5.5%	3; 3%	7; 16.7%
5+	5; 4.0%	1; 1%	5; 11.9%
<u>Transvestism</u>			
0 to 5	110; 87.3%	93; 93%	28; 66.7%
6 to 10	12; 9.5%	6; 6%	10; 23.8%
11+	4; 3.2%	1; 1%	4; 9.5%
<u>Total Intensity</u>			
0 to 24	113; 89.7%	94; 94%	29; 69.0%
25 to 48	12; 9.5%	6; 6%	12; 28.6%
49+	1; 0.8%	0; 0%	1; 2.4%

Table 13 shows the descriptive statistics and Cronbach's Alpha for all variables.

Table 13. Descriptive Statistics and Cronbach's Alpha for the Measures in the Study.

Variable	<i>M</i>	<i>SD</i>	α
Edwards Paraphilic Inventory (EPI)	9.16	12.38	.91
Extraversion (EXTRA)	9.79	4.21	.88
Agreeableness (AGREE)	14.63	3.78	.89
Conscientiousness (CONSCI)	14.75	3.19	.74
Neuroticism (NEURO)	10.29	3.95	.84
Imagination (IMAG)	14.33	2.14	.83
SFQ Exploratory (SFQ-E)	9.57	9.39	.89
SFQ Intimacy (SFQ-IN)	19.64	13.04	.93
SFQ Impersonal (SFQ-IM)	9.05	8.38	.85
SFQ Sadomasochism (SFQ-S)	5.95	8.57	.92
Obsessive-Compulsive (OCD)	3.15	3.96	.90

It should be noted that the EPI ($M = 9.16$, $SD = 12.38$) and the four Sexual Fantasy Questionnaire factors, SFQ Exploratory ($M = 9.57$, $SD = 9.39$), SFQ Intimacy ($M = 19.64$, $SD = 13.04$), SFQ Impersonal ($M = 9.05$, $SD = 8.38$), and SFQ Sadomasochism ($M = 5.95$, $SD = 8.57$), had a wide range of scores in which the standard deviations were near or greater than the mean.

Table 14 shows the intercorrelations for the Edwards Paraphilic Inventory and all study variables.

Table 14. Intercorrelations for the Edwards Paraphilic Inventory and Study Variables.

Variable	EPI	EXTRA	AGREE	CONSCI	NEURO	IMAG	SFQ-E	SFQ-IN	SFQ-IM	SFQ-S	OCD	HAND	TM
EPI	-												
EXTRA	-.06	-											
AGREE	-.14	.27***	-										
CONSCI	-.17*	.11	.09	-									
NEURO	.26**	-.23**	.00	-.44***	-								
IMAG	-.01	.19*	.10	.02	.01	-							
SFQ-E	.51***	.04	-.10	-.07	.20**	.11	-						
SFQ-IN	.30***	.08	-.01	-.01	.02	.20**	.76***	-					
SFQ-IM	.56***	-.03	-.01	-.12	.26***	.12	.86***	.72***	-				
SFQ-S	.69***	-.04	-.07	-.13	.25**	.10	.74***	.52***	.71***	-			
OCD	.41***	-.01	.16*	-.14	.42***	.02	.29***	.15*	.42***	.21**	-		
HAND	.06	-.06	.02	-.01	.08	.06	.12	.07	.11	.10	.14	-	
TM	-.00	-.02	.07	-.13	.16*	.06	-.15*	-.17*	-.07	-.04	.07	.06	-

* $p < .05$, ** $p < .01$, *** $p < .001$

Note:

EPI = Edwards Paraphilic Inventory, EXTRA = Extraversion, AGREE = Agreeableness, CONSCI = Conscientiousness, NEURO = Neuroticism, IMAG = Imagination, SFQ-E = Sexual Fantasy Questionnaire Exploratory, SFQ-IN = Sexual Fantasy Questionnaire Intimacy, SFQ-IM = Sexual Fantasy Questionnaire Impersonal, SFQ-S = Sexual Fantasy Questionnaire Sadomasochism, OCD = Obsessive-Compulsive Disorder, HAND = Handedness, TM = Targeted Medications

The Edwards Paraphilic Inventory (EPI) and obsessive-compulsive behavior (OCD) were significantly correlated, $r = .41, p < .001$. The EPI and conscientiousness were significantly correlated, $r = -.17, p < .05$. The EPI and neuroticism were significantly correlated, $r = .26, p < .01$. The EPI was significantly correlated with all four factors on the Sexual Fantasy Questionnaire (SFQ): SFQ Exploratory (SFQ-E), $r = .51, p < .001$; SFQ Intimacy (SFQ-IN), $r = .30, p < .001$; SFQ Impersonal (SFQ-IM), $r = .56, p < .001$; and SFQ Sadomasochism (SFQ-S), $r = .69, p < .001$.

The obsessive-compulsive behavior score and the neuroticism score were significantly correlated, $r = .42, p < .001$. Obsessive-compulsive behavior and agreeableness were significantly correlated, $r = .16, p < .05$. The obsessive-compulsive behavior score was significantly correlated with all four factors on the SFQ: SFQ-E, $r = .29, p < .001$; SFQ-IN, $r = .15, p < .05$; SFQ-IM, $r = .42, p < .001$; and SFQ-S, $r = .21, p < .01$.

Neuroticism was significantly correlated with three of four SFQ factors: SFQ-E, $r = .20, p < .01$; SFQ-IM, $r = .26, p < .001$; and SFQ-S, $r = .25, p < .01$. Furthermore, neuroticism was significantly correlated with OCD, $r = .42, p < .001$ and the targeted medications, $r = .16, p < .05$. Imagination was significantly correlated with one of four SFQ factors: SFQ-IN, $r = .20, p < .01$.

Regression Analysis.

Multivariable regression analysis was performed using the Big Five personality factors (extraversion, agreeableness, conscientiousness, neuroticism, openness to experience), the sexual fantasy questionnaire factors (exploratory, intimacy, impersonal, and sadomasochism), obsessive-compulsive behavior, handedness, and targeted

medications (anti-depressant, anti-psychotic, and anti-anxiety) as predictors and independent variables. The dependent variable in the analysis was the paraphilic intensity level total score using the Edwards Paraphilic Inventory.

There are five main hypotheses. First, of the Big-Five personality factors, neuroticism and openness to experience (imagination) will predict levels of Paraphilic Intensity (PI) measured with the Edwards Paraphilic Inventory (EPI). Second, obsessive-compulsive behavior will predict levels of PI measured with the EPI. Third, left-handedness or individuals who are ambidextrous will predict levels of PI measured with the EPI. Fourth, anti-depressant, anti-psychotic, or anti-anxiety medications will predict levels of PI measured with the EPI. Finally, exploratory and sadomasochistic sexual practices via the Sexual Fantasy Questionnaire (SFQ) will predict levels of PI measured with the EPI. All hypotheses were tested at once with one multivariable regression rather than each hypothesis separately. If each hypothesis was tested with a single regression, the probability of chance interfering with results is high.

Table 15 shows the regression analysis for predicting paraphilic intensity.

Table 15. Estimates for Predicting Paraphilic Intensity.

Variable	β	<i>SE</i>	<i>b</i>	<i>t</i>	<i>p</i>
(Constant)	18.23	7.47		2.44	.02
Extraversion	.09	.19	.03	.45	.66
Agreeableness	-.50	.21	-.15	-2.37	.02
Conscientiousness	-.18	.26	-.05	-.72	.47
Neuroticism	-.17	.24	-.06	-.74	.46
Imagination	-.32	.36	-.05	-.88	.38
SFQ Exploratory	-.23	.19	-.18	-1.24	.22
SFQ Intimacy	-.07	.09	-.08	-.78	.44
SFQ Impersonal	.25	.20	.17	1.30	.20
SFQ Sadomasochism	.99	.13	.69	7.40	.00
OCD	.95	.23	.30	4.14	.00
Handedness	-.88	1.55	-.03	-.56	.57
Targeted Medication	-.22	2.74	-.01	-.08	.94

Multiple regression analysis was used to test whether handedness, medications, obsessive-compulsive behavior, personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and imagination), and sexual fantasy (exploratory, intimacy, impersonal, and sadomasochism) predicted participants' ratings of paraphilic intensity. The results of the regression indicated the 12 predictors explained 55.2% of the variance ($R^2 = .552$, $F(12,118) = 14.34$, $p < .001$). Three of the predictors significantly predicted paraphilic intensity: SFQ Sadomasochism ($b = .69$, $p < .001$), obsessive-compulsive behavior ($b = .30$, $p < .001$), and agreeableness ($b = -.15$, $p < .05$).

A multiple regression was conducted again using only the significant predictors (SFQ Sadomasochism, obsessive-compulsive behavior, and agreeableness).

Table 16. Estimates for Predicting Paraphilic Intensity Using Significant Predictors.

Variable	β	SE	b	t	p
(Constant)	7.49	2.89		2.60	.01
Agreeableness	-.46	.19	-.141	-2.40	.02
SFQ Sadomasochism	.90	.08	.62	10.51	.00
OCD	.95	.19	.30	5.07	.00

The results of the regression indicated the three significant predictors explained 56.5% of the variance ($R^2 = .565$, $F(3,129) = 58.12$, $p < .001$).

Figures 3 through 5 show the graphs plotting the relationship among participants between obsessive-compulsive behavior and EPI intensity, SFQ-Sadomasochism and EPI intensity, and agreeableness and EPI intensity. These figures were included due to their significant findings within the multivariable regression equation. These graphs help explain why such a significance exists, plotting each participant's score to reveal the trend. The trendline is also shown in all figures.

Figure 3. Relationship Between Obsessive-Compulsive Behavior and EPI Intensity.

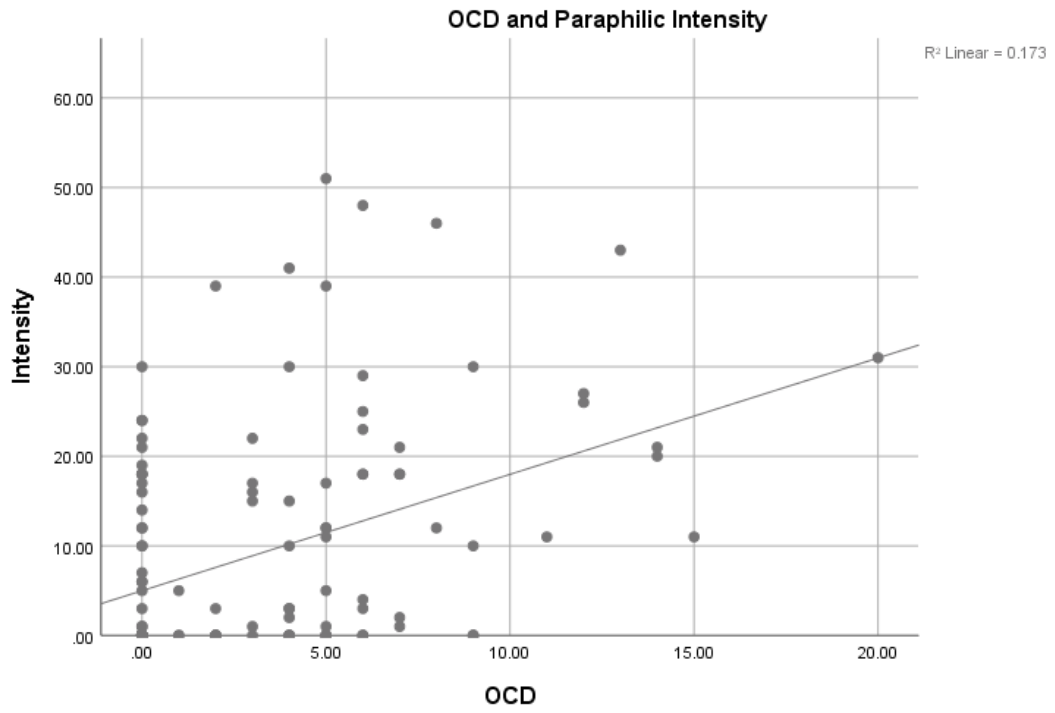


Figure 4. Relationship Between SFQ-Sadomasochism and EPI Intensity.

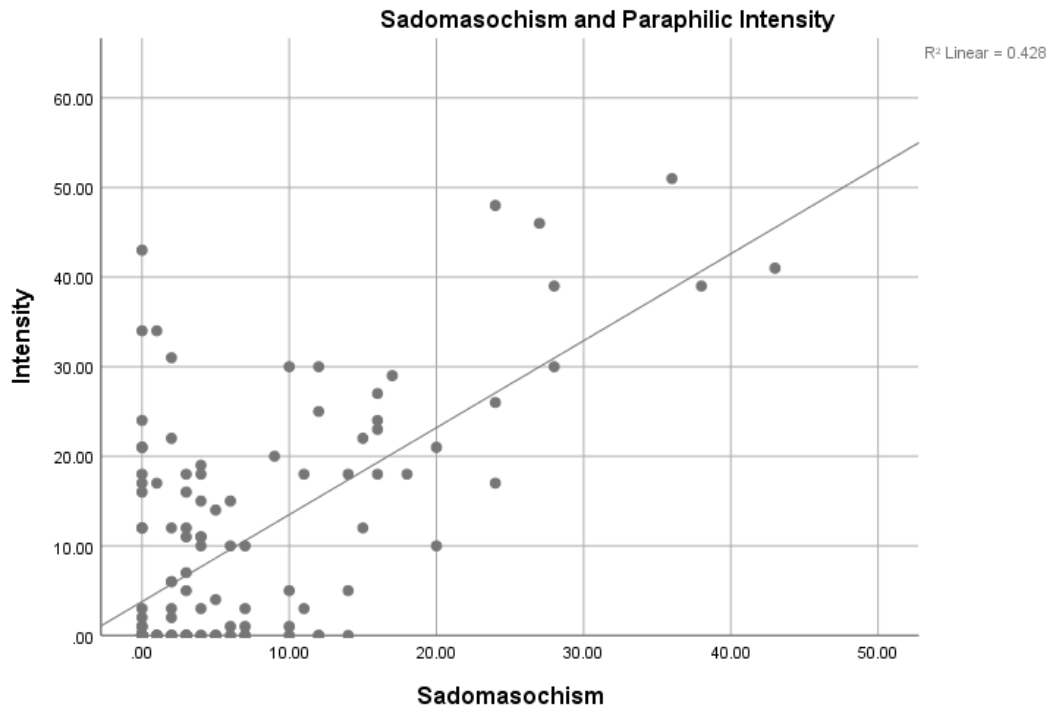
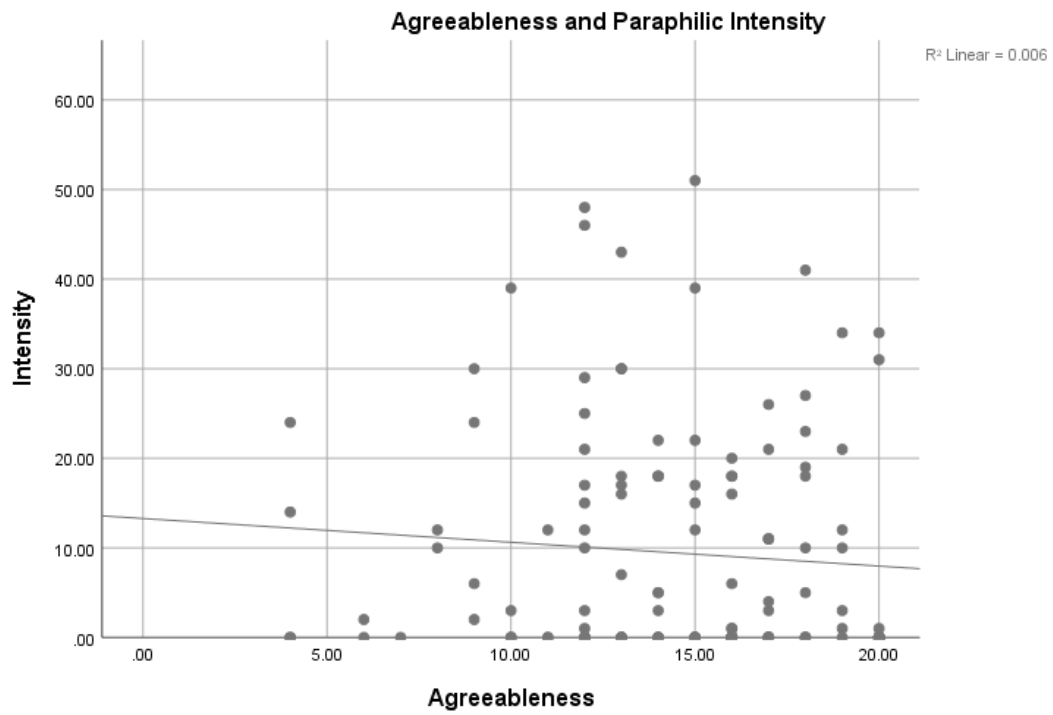


Figure 5. Relationship Between Agreeableness and EPI Intensity



Discussion

The purpose of this study was to determine which factors best predict paraphilic intensity (EPI total score). Little research exists on which factors predict paraphilic behavior or the strength of paraphilic urges. Furthermore, the EPI allows participants to rate their own level of paraphilic intensity. An individual, in terms of *The Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5), may meet criteria for the disorder, but determining such criteria is done in a yes or no, or all or nothing, fashion; either the patient meets criterion A, or the patient does not; the patient meets criterion B, or the patient does not, etc. The Edwards Paraphilic Inventory (EPI) was designed to show how the participant rates his or her sexual expression. The EPI score gives a participant's perspective on how severe his or her paraphilia(s) may be. Due to the pleasure that is created, people with a paraphilia may not view their symptoms as a problem warranting therapeutic or pharmaceutical intervention. The EPI appears to capture the participant's view of his or her own pleasure based on having a good level of internal consistency, $\alpha = .91$.

Hypothesis 1: Neuroticism and openness to experience (imagination) will predict levels of paraphilic intensity (PI) measured with the Edwards Paraphilic Inventory (EPI).

This hypothesis was not supported. Results revealed that only one of the Big Five personality factors (agreeableness) predicted scores on the EPI. A negative relationship was discovered between agreeableness and PI, indicating that the lower an individual is in agreeableness, the higher the likelihood the individual falls on the paraphilic spectrum. Conversely, the higher an individual is in the agreeableness personality trait, the less

likely a paraphilia or paraphilic disorder is present. Prior research conducted by Lodi-Smith et al. (2014) concluded that exhibitionism and voyeurism were related to higher levels of narcissism. In the present study, six of the seven paraphilic disorders (voyeurism, fetishism, Frotteurism, masochism, sadism, and transvestism) were significantly correlated with neuroticism. Lodi-Smith et al. (2014) determined that transvestism was related to high levels of openness to experience; which was confirmed in the current study (see Table 11). However, in the current study, transvestism was the only paraphilic subscale that was correlated with openness to experience.

While only one of the personality factors predicted scores on the EPI (agreeableness), there is a relationship between personality and the paraphilias observed in the present findings. Furthermore, neuroticism was significantly correlated with three of the four SFQ factors: exploratory (group sex, promiscuity, mate-swapping, and exploration of a fetishistic identity and environment), sadomasochism (whipping and spanking, being forced to have sex, and other instances of domination and submission), and impersonal (sex with strangers, watching others, fetishism, and sexual acts or activities that deviate from the typical). On the other hand, openness to experience (imagination) was significantly correlated with one of the four SFQ factors: intimacy (kissing passionately, oral sex, outdoor love, masturbating a partner, and other instances involving the state of feelings between two individuals).

A highly neurotic person has a tendency to experience negative emotions such as fear, anger, and sadness; is prone to irrational ideas; and has high levels of stress. The relationship between neurotic individuals and the exploratory sexual fantasy factors suggests that these individuals may seek and actively search for a different lifestyle that

might lead to happiness or satisfaction. Neurotic individuals may seek impersonal sexual experiences so that they do not feel pressured to perform when having sexual interaction with a stranger. Some neurotic individuals are shy, which further supports the finding of impersonality. These individuals may chase or pursue relationships that may comprise sadomasochistic sexual practices to indulge these negative feelings or take out such feelings (e.g., rage or anger indicating potential sadism) on a partner.

Hypothesis 2: Obsessive-compulsive behavior will predict levels of PI measured with the EPI.

This hypothesis was supported. Results revealed that obsessive-compulsive behavior significantly predicted levels of PI. Kruegar & Kaplan (2001) stated that paraphilic disorder may be obsessive-compulsive in nature. Such individuals suffer from obsessive sexual fantasies that lead to compulsive masturbation as a release from those obsessions. However, not all obsessive-compulsive disorder patients report a history or current sexual obsessions and they do not indicate whether the OCD led to the sexual obsessions or the sexual obsessions led to the OCD (Grant et al., 2006). The current research suggests that obsessive-compulsive behavior and paraphilias are significantly correlated.

Hypothesis 3: Left-handedness or ambidextrousness will predict PI measured with the EPI.

This hypothesis was not supported. This was based on the hypothesis of neuronal migration and a difference in brain hemispheric dominance between individuals who are left-handed versus right-handed (Blaney, Millon, & Kreugar, 2014; Klar, 2004).

Handedness was not a significant factor in predicting PI. Handedness was not correlated with any of the Big Five personality factors.

Hypothesis 4: Anti-depressant, anti-psychotic, or anti-anxiety medications will predict PI measured with the EPI.

This hypothesis was not supported. This hypothesis was based off the monoamine hypothesis proposed by Kafka (1997; 2003) in which an increase or decrease of the neurotransmitters norepinephrine, dopamine, and serotonin showed an increase or decrease in sexual behavior in laboratory mammals. However, limitations to this hypothesis exist in that only a few of the participants in the current study were taking the targeted medications (anti-depressant, anti-psychotic, or anti-anxiety). Most of the participants were not taking any medication. Future research should re-examine this hypothesis and the role of medications and how the affected neurotransmitters (serotonin, norepinephrine, and dopamine reuptake inhibitors, etc.) relate to the sexual disorders and PI.

Hypothesis 5: Exploratory and sadomasochistic sexual practices will predict levels of PI measured with the EPI.

This hypothesis was partially supported. The exploratory factor was not a significant predictor of PI; however, sadomasochism was a significant predictor of PI. This finding suggests that individuals who enjoy, either in fantasy or reality, sadomasochistic roles (sadistic or masochistic) are more likely to self-report higher levels of paraphilic behavior.

Argument for Intensity as a Factor in Paraphilic Disorder Diagnoses.

Paraphilias can be present without meeting criteria for the paraphilic disorder so long as the paraphilia does not interrupt the individual's activities of daily living (e.g., employment, social norms and obligations, etc.). Diagnosing a paraphilic disorder comes down to the intensity of the paraphilia as defined by whether the paraphilic urges interrupt activities of daily living, if an individual exhibits criminal behavior, and the extent to which an individual has acted on the sexual urges of the paraphilia.

Therefore, the typical diagnostic criteria of yes, the patient engages in the behavior, or no, the patient does not engage in the behavior, may not be applicable. It does not seem logical for an individual to seek intervention or treatment for paraphilic-related ego-syntonic symptoms. Using a Likert Scale to measure intensity will give a better understanding of whether a patient meets diagnostic criteria and whether the clinician views the patient's urges as a problem.

The EPI measures the intensity of all paraphilic disorders excluding pedophilic disorder. For example, an individual with voyeurism who spends countless hours every day watching the sexual interactions of others illegally or via pornography indicates a high level of intensity. However, such scales rely on the honesty of the patient; and such validity from a patient who believes his or her source of pleasure is being threatened, may lie and report his or her intensity as less severe than it is in actuality.

The EPI score and the Obsessive-Compulsive Disorder (OCD) score were significantly correlated as well as OCD being a significant predictor of paraphilic intensity. As these results suggest, as obsessive-compulsive symptomology increases, so does paraphilic intensity. This indicates that paraphilias mimic obsessions and that

individuals obsess over the paraphilias they possess. For example, if a person with a foot fetish obsesses and stares at pictures of a woman's feet, he or she may masturbate to relieve the obsession or urge, resulting in a compulsion. This theory has additional evidence in that obsessive-compulsive behavior is significantly correlated with paraphilic intensity. The stronger the obsession, the stronger the intensity, and the greater the need to masturbate.

General Implications.

Due to the content nature of the Celebrity Feet in the Pose website, the participants who completed the survey through the website or its affiliated social media are presumed to be at a higher risk for having a paraphilia or a paraphilic disorder. Celebrity Feet in the Pose's content shows images regarding fetishism; therefore, in theory, a majority of the participants who access the site on a daily basis are placed at a higher risk for having a fetishistic disorder or other type of paraphilia. If the website is used to examine pathological co-morbid paraphilic disorders, 1 out of every 10 participants had some type of paraphilia or paraphilic disorder behavior. This also holds true for the U.S. sample, in which 1 out of every 10 participants had some type of paraphilic behavior activity. Of the 13 participants who placed in the paraphilia range or above, the intensity levels are spread through a majority of the paraphilic conditions. As expected, the fetishistic intensity score for the participants via the website is high. However, the intensity score seems to be derived from all of the measured paraphilic conditions. The pattern of having a high score in one of the paraphilias, with lower scores across the remaining paraphilias, emerged for high intensity participants. However, there is insufficient data to state an explicit pattern of paraphilic behavior.

In addition, it might be beneficial in later editions of the DSM to add a sexual or paraphilic specifier under the obsessive-compulsive disorders. Should therapists and physicians treat paraphilic disorders like obsessive-compulsive disorders, perhaps better treatment methods and improved prognoses will occur.

Clinical Implications.

The data shows that individuals who report having a high intensity score in one paraphilia tend to have high intensity score in the other various paraphilias, though this is not always the case. The more dangerous paraphilias, sadism (sadistic behavior) and pedophilia (not examined in the current study, but dangerous), may or may not have other paraphilias present. A high intensity score in the sadism category should be considered carefully by the clinician to determine if the patient has the potential for malicious intent.

With obsessive-compulsive behavior being a significant predictor of PI, it may benefit both clinicians and patients to treat paraphilic disorders as obsessive-compulsive in nature. Protocols, therapies, and treatments for obsessive-compulsive disorder and related behavior may help alleviate paraphilic urges and fantasies should such fantasies become problematic.

Limitations.

Pedophilic disorder was not examined to protect participants who may have taken the survey from other countries from internet restricted laws. As a result, it is difficult to give a precise estimate of paraphilic intensity. Furthermore, although the DSM-5 lists the most common paraphilic disorders, the disorders listed are not all of the potential paraphilic disorders known. There are other paraphilias that have emerged over time that have come to incorporate the other-specified and unspecified paraphilic disorders that are

listed in the DSM-5 such as hebephilia (Burke, Levinson, & Thomas, 2013) and zoophilia (Williams & Weinberg, 2003). Although the popularity of each paraphilia remains a mystery, it would be impossible to include all known paraphilias in the DSM-5 or ICD-10. These other paraphilias, including pedophilic disorder, were not measured nor included in the calculation of paraphilic intensity.

Other limitations include the accuracy of self-report measures in that participants may not be entirely truthful when answering survey questions. Furthermore, not all participants completed the survey and results are based on the participants who completed all survey questions.

Future Research.

Future studies should examine education level and sexual orientation as predictors of paraphilic intensity. It is unsure whether paraphilias are hetero/homosexual specific, or occur in both. Furthermore, future research should focus on the relationships between OCD and paraphilia. Can obsessive-compulsive therapeutic or medical intervention help alleviate paraphilic symptomology and fantasy? This will allow researchers and clinicians alike to discover if individuals with severe paraphilic disorders respond to OCD treatment.

For the non-paraphilic sexual disorders, the intensity scale can be an indicator of whether the patient or individual will respond to treatment. If the intensity score is low, it is unlikely that an individual with a paraphilia will consider treatment. However, should the person receive a higher intensity score, he or she may be open to intervention to get back control of his or her life.

Conclusion.

The paraphilias are still a relatively unexplored part of human sexuality. It is challenging to measure this behavior because of the wide range associated with the paraphilias (e.g., non-deviant and deviant, what is normal versus abnormal). It is hard to study an area of interest should individuals be afraid of disclosing what they like sexually and whether such activities paint them as “abnormal” in the eyes of others. In addition, the level of severity, or intensity, plays a factor in how severe a paraphilia becomes and whether the paraphilia interrupts the overall quality of life. Rarely do persons come to a mental health professional and say they need help with paraphilias, largely in part due to the pleasure associated with sexual disorders.

Results indicated that obsessive-compulsive behavior, sadomasochistic sexual practice, and the agreeableness personality trait were significant predictors of paraphilic intensity. The more obsessive-compulsive behavior and the more an individual practices sadomasochistic roles during sexual play, the better the predicted value of paraphilic intensity. However, with the Big Five personality trait agreeableness, the less agreeable an individual, the higher the paraphilic intensity; while the more agreeable an individual, the lower the paraphilic intensity. Should clinicians and psychiatrists treat sexual disorders like obsessive-compulsive disorders, there might be a higher likelihood of treatment success.

REFERENCES

- Abel, G. G., Becker, J. V., Cunningham-Rathner, J., Mittelman, M., & Rouleau, J. (1988). Multiple paraphilic diagnoses among sex offenders. *Bulletin of American Academy of Psychiatry and the Law, 16*, 153-168.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, D.C.: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Association.
- Arel, G. G., & Osborn, C. (1992). The paraphilias: The extent and nature of sexually deviant and criminal behavior. *Psychiatric Clinics of North America, 3*, 675-687.
- Arrigo, B. A., & Purcell, C. E. (2001). Explaining paraphilias and lust murder: Toward an integrated model. *International Journal of Offender Therapy and Comparative Criminology, 45*, 6-31. doi: 10.1177/0306624X01451002
- Bejerot, S., Edman, G., Anckarsater, H., Berglund, G., Gillberg, C., Hofvander, B., Humble, M.B., Mortberg, E., Rastam, M., Stahlberg, O., & Frisen, L. (2014). The brief obsessive-compulsive scale (BOCS): A self-report scale for OCD and obsessive-compulsive related disorders. *Nordic Journal of Psychiatry, 68*, 549-59.
- Blanchard, R. (2010). The DSM diagnostic criteria for transvestic fetishism. *Archives of Sexual Behavior, 39*, 363-72.
- Blaney, P. H., Millon, T., & Krueger, R. F. (2014). *Oxford Textbook of Psychopathology*. United Kingdom: Oxford University Press.

- Briken, P., & Basdeskis-Jozsa, R. (2010). When sexual behavior gets out of control. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 53, 313-318.
- Burke, S., Levinson, D., & Thomas, V. (2013). *Pedophilia and Hebephilia: An Analysis of Deviant Sexual Interest Using the Abel Assessment for Sexual Interest-2*. Diss. Alliant International University, California School of Forensic Studies, Irvine, CA.
- Costa, P. T., & McCrae, R. R. (1991). *NEO PI-R: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Doniger, W. (2002). On the Kamasutra. *Intellectual Property*, 131, 126-129.
- Doniger, W. (2007). Reading the Kamasutra: The strange and the familiar. *Daedalus*, 136, 66-78.
- Fedoroff, J. P. (2011). Forensic and diagnostic concerns arising from the proposed DSM-5 criteria for sexual paraphilic disorder. *American Academy of Psychiatry and the Law*, 39, 238-241.
- Fisher, W. A., Kohut, T., Gioacchino, L. A. D., & Fedoroff, P. (2013). Pornography, sex crime, and paraphilia. *Current Psychiatry Reports – Sexual Disorders*, 15, 1-8. doi: 10.1007/s11920-013-0362-7
- Foreplay. (2016a) In *Merriam-Webster dictionary online*. Retrieved from <http://www.merriam-webster.com/dictionary/foreplay>
- Foreplay. (2016b). In *Oxford English dictionary online* (2nd ed.). Retrieved from <http://www.oed.com/view/Entry/72946?redirectedFrom=Foreplay#eid4026020>
- Gagnon, J. H. & Simon, W. (1967). *Sexual Deviance*. New York: Harper and Row.

- Getzfeld, A. R. (2006). *Essentials of abnormal psychology*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe*, (Vol. 7; pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Goodman, W., Rasmussen, S., Price, L., Mazure, L., Heninger, G., & Charney, D. (1991). Yale-Brown obsessive compulsive scale (Y-BOCS). *Verhaltenstherapie*, *1*, 226-233.
- Google. (2016). *Google analytics*. Mountain View, CA: Google.
- Gordon, W. (2002). Sexual obsessions and OCD. *Sexual and Relationship Therapy*, *17*, 343-354
- Grant, J. E., Pinto, A., Gunnip, M., Mancebo, M. C., Eisen, J. L., & Rasmussen, S. A. (2006). Sexual obsessions and clinical correlates in adults with obsessive-compulsive disorder. *Comprehensive Psychiatry*, *47*, 325-329. doi: 10.1016/j.comppsy.2006.01.007
- Hanson, K. R. (2010). Dimensional measurement of sexual deviance. *Archives of Sexual Behavior*, *39*, 401-404.
- Heil, P., & English, K. (2009). Sex offender polygraph testing in the United States: Trends and controversies. In D. T. Wilcox (Ed.), *The use of the polygraph in assessing, treating and supervising sex offenders: A practitioner's guide* (pp. 181-216). Chichester, England: Wiley.

- John, O. J., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York: Guilford.
- Joyal, C. C., & Carpentier, J. (2016). The prevalence of paraphilic interests and behaviors in the general population: A provincial survey. *The Journal of Sex Research, 54*, 161-171.
- Kafka, M. P. (1997). A monoamine hypothesis for the pathophysiology of paraphilic disorders. *Archives of Sexual Behavior, 4*, 343-358.
- Kafka, M. P. (2003). The monoamine hypothesis for the psychophysiology of paraphilic disorders: An update. *Annals of the New York Academy of Sciences, 989*, 86-94. doi: 10.1111/j.1749-6632.2003.tb07295.x
- Kafka, M. P., & Coleman, E. (1991). Serotonin and paraphilias: The convergence of mood, impulse, and compulsive disorders (letter). *Journal of Clinical Psychopharmacology, 11*, 223-224.
- Kafka, M. P. & Hennen, J. (2003). Hypersexual desire in males: Are males with paraphilias different from males with paraphilia-related disorders? *Sexual Abuse: A Journal of Research and Treatment, 15*, 307-321.
- Kaplan, M. S., & Krueger, R. B. (2010). Diagnosis, assessment, and treatment of hypersexuality. *Journal of Sex Research, 47*, 181-198. doi: 10.1080/00224491003592863
- Keenan, J. (2013). We're kinky, not crazy: Including "paraphilic disorders" in the DSM V is redundant, unscientific, and stigmatizing. *The Slate*. Retrieved from goo.gl/1FGKXR

- Kinsey, A., Martin, C., & Pomeroy, W. (1948). *Sexual behavior in the human male*.
Bloomington, Indiana: W. B. Saunders Company.
- Kinsey, A., Martin, C., & Pomeroy, W. (1953). *Sexual behavior in the human female*.
Bloomington, Indiana: W. B. Saunders Company.
- Kite, M. E. (1990). Defining normal sexual behavior: A classroom exercise. *Teaching of Psychology, 17*, 118-119.
- Klar, A. J. S. (2004). Excess of counterclockwise scalp hair-whorl rotation in homosexual men. *Journal of Genetics, 83*, 251-255.
- Krueger, R. B., & Kaplan, M. S. (2001). The paraphilic and hypersexual disorders: An overview. *Journal of Psychiatric Practice, 7*, 391-403.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? *International Worldwide Web Conference Committee*. Retrieved from <https://an.kaist.ac.kr/~haewoon/papers/2010-www-twitter.pdf>
- Lehne, G. K., & Money, J. (2003). Multiplex versus multiple taxonomy of paraphilia: Case example. *Sexual Abuse: A Journal of Research and Treatment, 15*, 61-72.
- Little, C. B. (1983). *Understanding deviance and control: Theory, research, and social policy*. Itasca, IL: F. E. Peacock.
- Lodi-Smith, J., Shepard, K., & Wagner, S. (2014). Personality and sexually deviant behavior. *Personality and Individual Differences, 70*, 39-44.
- Malouff, J. M., Thorsteinsson, E. B., & Schutte, N. S. (2005). The relationship between the five-factor model of personality and symptoms of clinical disorders: A meta-analysis. *Journal of Psychopathology and Behavioral Assessment, 27*, 101-114.

- Marin, O. & Rubenstein, J. L. (2003). Cell migration in the forebrain. *Annual Review of Neuroscience*, 26, 441-483.
- Masters, W. & Johnson, V. E. (1966). *Human sexual response*. Bronx, New York: Ishi Press International.
- Masters, W., Johnson, V. E., & Kolodny, R. C. (1982). *Sex and human loving*. New York: Little, Brown and Company, Inc.
- McManus, M. A., Hargreaves, P., Rainbow, L. & Alison, L. J. (2013). Paraphilias: definition, diagnosis, and treatment. *F1000Prime Reports*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3769077/>
- Meng, A. (2014). What is Pinterest, and how does it work? *Infront Webworks*. Retrieved from <https://www.infront.com/blogs/the-infront-blog/2014/1/20/what-is-pinterest-and-how-does-it-work#>
- Moran, M. (2013). DSM to distinguish paraphilias from paraphilic disorders. *Psychiatric News*, 36. Retrieved from <http://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2013.5a19>
- Moser, C. (2010). Problems with ascertainment. *Archives of Sexual Behavior*, 39, 1225-7.
- Moser, C. (2011). Yet another paraphilia definition fails. *Archives of Sexual Behavior*, 40, 483-485.
- Moser, C., & Kleinplatz, P. J. (2006). DSM-IV-TR and the paraphilias: An argument for removal. *Journal of Psychology & Human Sexuality*, 17, 91-109.
- Mounsey, C. (2013). *Developments in the histories of sexualities*. Lanham, Maryland: Bucknell University Press.

- O'Donohue, W., Letourneau, E. J., & Dowling, H. (1997). Development and preliminary validation of a paraphilic sexual fantasy questionnaire. *Sexual Abuse: A Journal of Research and Treatment*, 9, 167-178.
- Ogas, O. (2012). *A billion wicked thoughts: What the internet tells us about sexual relationships*. New York, NY: Penguin Group.
- Palladini, G. (2012). Towards an idle theatre: The politics and poetics of foreplay. *TDR: The Drama Review*, 56, 95-103.
- Pearson, H. J. (1990). Paraphilias, impulse control, and serotonin [letter]. *Journal of Clinical Psychopharmacology*, 10, 233.
- Poland, W.S. (2006). Clinician's corner: Polymorphously normal sexuality. *American Imago*, 63, 479-483.
- Quinn, J. F., & Forsyth, C. J. (2005). Describing sexual behavior in the era of the internet: A typology for empirical research. *Deviant Behavior*, 26, 191-207.
- Quinsey, V. L. (2012). Pragmatic and Darwinian views of the paraphilias. *Archives of Sexual Behavior*, 41, 217-20.
- Ravi, T. & Shroff, S. (2009). Sexual deviance. *MedIndia*. Retrieved from <http://www.medindia.net/patients/patientinfo/sexual-deviance.htm>
- Rosen, R. J. (2013). What is Reddit? *The Atlantic*. Retrieved from <https://www.theatlantic.com/technology/archive/2013/09/what-is-reddit/279579/>
- Rouse, M. (2014). Facebook. *What is*. Retrieved from whatis.techtarget.com/definition/Facebook.
- Scahill, L., Riddle, M. A., McSwiggin-Hardin, M., Ort, S. I., King, R. A., Goodman, W. K., Cicchetti, D., & Leckman, J. F. (1997). Children's Yale-Brown obsessive

- compulsive scale: Reliability and validity. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 844-852.
- Shakespeare, W. (1996). *The collected works of William Shakespeare (Wordsworth Royals Series)*. London, England: Wordsworth.
- Sharma, B. R. (2003). Disorders of sexual preference and medicolegal issues thereof. *American Journal of Forensic Medicine and Pathology*, 24, 277-282.
- Shervington, M. (2016). What is Google plus? A complete user guide (videos and blogs). *Martin Shervington*. Retrieved from <http://www.martinshervington.com/what-is-google-plus/>
- Simon, W. (1999). Sexual conduct in retrospective perspective. *Sexualities*, 2, 126-133.
- Stewart, R. S. (2012). Constructiong perversions: The DSM and the classification of sexual paraphilias and disorders. *Electronic Journal of Human Sexuality*, 15.
- Strong, B., & Devault, C. (1988). *Understanding our sexuality*. Charlottesville, VA: West Group.
- Twitter. (n.d.). Twitter help center. Retrieved from <https://support.twitter.com/articles/20171990>.
- Wakefield, J. C. (2011). DSM-5 proposed diagnostic criteria for sexual paraphilias: Tensions between diagnostic validity and forensic utility. *International Journal of Law and Psychiatry*, 34, 195-209.
- Wiederman, M.W. (2003). Paraphilia and fetishism. *The Family Journal: Counseling and Therapy for Couples and Families*, 11, 315-321.
- Williams, C. J., & Weinberg M. S. (2003). Zoophilia in men: A study of sexual interest in animals. *Archives of Sexual Behavior*, 32, 523-535.

Wilson, G. D. (2010). Measurement of sex fantasy. *Sexual and Relationship Therapy*, 25, 45-55. doi: 10.1080/14681990903550134

Wilson, G. (2014). *Variant sexuality: Research and theory*. New York, NY: Routledge.

World Health Organization. (1992). *International statistical classification of diseases and related health problems*, 10th Revision (ICD-10). Geneva, Switzerland; WHO.

Zonana, H. (2011). Sexual disorders: New and expanded proposals for DSM-5 – Do we need them? *American Academy of Psychiatry and the Law*, 39, 245-249.

Informed Consent

Form A (Website, Pinterest, Facebook, Google Plus, Twitter, and Reddit)

TITLE OF STUDY

Personality Factors, Obsessive-Compulsive Behavior, and Sexual Fantasies as Predictors of Individual Placement on a Paraphilic Continuum

PRINCIPAL INVESTIGATOR

Ethan J. Edwards

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: ethan.edwards882@topper.wku.edu

FACULTY ADVISOR #1

Dr. Rick Grieve

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: rick.grieve@wku.edu

FACULTY ADVISOR #2

Dr. Sally Kuhlenschmidt

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: sally.kuhlenschmidt@wku.edu

FACULTY ADVISOR #3

Dr. Reagan Brown

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: reagan.brown@wku.edu

INVITATION TO PARTICIPATE IN RESEARCH

Ethan J. Edwards invites you to participate in a research study about fetishes and human sexuality. This study is funded and sponsored by Celebrity Feet in the Pose. You, the participant, have been directed here via an access link from the website or affiliated social media. This study is exploring the range of sexual expression and personality factors. This study is being conducted to fulfill an academic requirement.

DESCRIPTION OF PARTICIPANT INVOLVEMENT

If you agree to be part of the research study, you will be asked to complete six brief surveys. Completing all surveys will take between 20 and 30 minutes.

BENEFITS

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may benefit others in the future and provide research on human sexuality that has been lacking.

CONFIDENTIALITY

If you are completing this survey outside of the United States, governments may have laws enabling the government to track individual data. Be mindful (in this study) of local legal restraints and history.

For those within the United States and Canada, the completion of this study is confidential and we will not ask for identifying information. We plan to publish the results of this study, but the information will be aggregated and will not include any information that would identify individuals.

All data will be kept on a password-protected computer with all files encrypted with an additional password.

COMPENSATION

You will not receive any payment for completing these surveys. You will not be expected to pay any costs related to the study.

RISKS AND DISCOMFORTS

Your name is not associated with the data and is anonymous. The researchers have taken steps to minimize the risks of this study. Even so, you may still experience some risks related to your participation. Some of the questions may make you feel uncomfortable or embarrassed. You may remember or think about things that bother you, or perhaps remember a traumatic event. At the completion of the survey, researchers will provide hotlines and outreach hotlines and websites that may be contacted should you decide to talk with a professional.

VOLUNTARY STUDY

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time during any of the surveys.

If you decide to withdraw before completion, the questionnaire responses will be deleted, but demographic data will be compiled (age, gender) to evaluate response rate bias.

CONTACT INFORMATION

If you have any questions about the study, you may contact the principal investigator, Ethan J. Edwards (ethan.edwards882@topper.wku.edu), or the faculty supervisor, Dr. Rick Grieve (rick.grieve@wku.edu).

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researchers, please contact the Western Kentucky University Office of Research Integrity:

Office of Research Integrity

Western Kentucky University

1906 College Heights Blvd. #11026

Bowling Green, Kentucky 42101

Office of Research Integrity Contact Information:

Phone: (270) 745-2129

Fax: (270) 745-4211

Email: ori@wku.edu

Informed Consent

Form B (Amazon Mechanical Turk)

TITLE OF STUDY

Personality Factors, Obsessive-Compulsive Behavior, and Sexual Fantasies as Predictors of Individual Placement on a Paraphilic Continuum

PRINCIPAL INVESTIGATOR

Ethan J. Edwards

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: ethan.edwards882@topper.wku.edu

FACULTY ADVISOR #1

Dr. Rick Grieve

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: rick.grieve@wku.edu

FACULTY ADVISOR #2

Dr. Sally Kuhlenschmidt

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: sally.kuhlenschmidt@wku.edu

FACULTY ADVISOR #3

Dr. Reagan Brown

Western Kentucky University – Clinical Psychology

1906 College Heights Blvd.

Bowling Green, Kentucky 42101

Email: reagan.brown@wku.edu

INVITATION TO PARTICIPATE IN RESEARCH

Ethan J. Edwards invites you to participate in a research study about fetishes and human sexuality. This study is funded and sponsored by Celebrity Feet in the Pose. You, the participant, have been directed here via an access link from the website or affiliated social media. This study is exploring the range of sexual expression and personality factors. This study is being conducted to fulfill an academic requirement.

DESCRIPTION OF PARTICIPANT INVOLVEMENT

If you agree to be part of the research study, you will be asked to complete six brief surveys. Completing all surveys will take between 20 and 30 minutes.

BENEFITS

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may benefit others in the future and provide research on human sexuality that has been lacking.

CONFIDENTIALITY

If you are completing this survey outside of the United States, governments may have laws enabling the government to track individual data. Be mindful (in this study) of local legal restraints and history.

For those within the United States and Canada, the completion of this study is confidential and we will not ask for identifying information. We plan to publish the results of this study, but the information will be aggregated and will not include any information that would identify individuals.

All data will be kept on a password-protected computer with all files encrypted with an additional password.

COMPENSATION

After completing the survey on Amazon Mechanical Turk, you will receive a code that grants you access to the compensation. You will be given \$0.50 upon entering the code when you have finished the surveys. You will not be expected to pay any costs related to the study.

RISKS AND DISCOMFORTS

Your name is not associated with the data and is anonymous. The researchers have taken steps to minimize the risks of this study. Even so, you may still experience some risks related to your participation. Some of the questions may make you feel uncomfortable or embarrassed. You may remember or think about things that bother you, or perhaps remember a traumatic event. At the completion of the survey, researchers will provide hotlines and outreach hotlines and websites that may be contacted should you decide to talk with a professional.

VOLUNTARY STUDY

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time during any of the surveys.

If you decide to withdraw before completion, the questionnaire responses will be deleted, but demographic data will be compiled (age, gender) to evaluate response rate bias.

CONTACT INFORMATION

If you have any questions about the study, you may contact the principal investigator, Ethan J. Edwards (ethan.edwards882@topper.wku.edu), or the faculty supervisor, Dr. Rick Grieve (rick.grieve@wku.edu).

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researchers, please contact the Western Kentucky University Office of Research Integrity:

Office of Research Integrity

Western Kentucky University

1906 College Heights Blvd. #11026

Bowling Green, Kentucky 42101

Office of Research Integrity Contact Information:

Phone: (270) 745-2129

Fax: (270) 745-4211

Email: ori@wku.edu

Debriefing

Debriefing for a study on human sexuality and the paraphilias

This study was an investigation into the relationships between personality, obsessive-compulsive (OCD) behavior and various patterns of sexual behavior. In this study, we asked about current medications to evaluate any role of neurotransmitters and sexual behavior. For those with ongoing concerns, here are some resources for further assistance:

1. Sex Addicts Anonymous Website: <https://saa-recovery.org>
2. Sexaholics Anonymous 12-Step Recovery Program:
<http://www.recovery.org/topics/about-the-sexaholics-anonymous-12-step-recovery-program/>
3. National Sexual Assault Hotline: <https://rainn.org>
4. Pornography Helpline: 1-800-583-2964

If you need to talk with someone, it is recommended that you seek out medical, therapeutic or counseling services in your area. We may not legally provide individual advice at a distance.

Thank you for your participation in this study.

APPENDIX A

Please answer the following questions truthfully and honestly:

Q1 Age:

Q2 Gender:

- Male
- Female
- Other

Q3 Country of Residence:

- United States of America
- Canada
- United Kingdom
- Germany
- Italy
- Other (please specify): _____

Q4 Ethnicity:

- White
- Black, African American, or Negro
- Hispanic, Latino, or Spanish
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Other Race or Origin (Please Specify) _____

Q5 Primary Language:

- English
- Mandarin
- Spanish
- Hindi/Urdu
- Arabic
- Portuguese
- Bengali
- Russian
- Japanese
- Other (Please Specify): _____

Q6 Secondary Language

- English
- Mandarin
- Spanish
- Hindi/Urdu
- Arabic
- Portuguese
- Bengali
- Russian
- Japanese
- Other (Please Specify): _____

Q7 Please indicate your handedness:

- Right-handed
- Left-handed
- Ambidextrous (both)

Q8 Please list current medications that you are taking:

APPENDIX B

Please indicate how often you fantasize about the themes below at various times, how often you do them, and how often you would like to do them if given the opportunity. In each column, put a number between 0 and 5 to indicate your frequency as follows: Never = 0, Seldom = 1, Occasionally = 2, Sometimes = 3, Often = 4, Regularly = 5

	Daytime fantasies	Fantasies during intercourse or masturbation	Dreams while asleep	Have done in reality	Would like to do in reality
<p>1. Making love out of doors in a romantic setting (e.g., field of flowers, beach at night).</p> <p>2. Having intercourse with a loved partner.</p> <p>3. Intercourse with someone you know but have not had sex with.</p> <p>4. Intercourse with an anonymous stranger.</p> <p>5. Sex with two other people.</p> <p>6. Participating in an orgy.</p> <p>7. Being forced to do something.</p> <p>8. Forcing someone to do something.</p> <p>9. Homosexual activity.</p>					

<p>10. Receiving oral sex.</p> <p>11. Giving oral sex.</p> <p>12. Watching others have sex.</p> <p>13. Sex with an animal.</p> <p>14. Whipping or spanking someone.</p> <p>15. Being whipped or spanked.</p> <p>16. Taking someone's clothes off.</p> <p>17. Having your clothes taken off.</p> <p>18. Making love elsewhere than bedroom. (e.g., kitchen, bathroom).</p> <p>19. Being excited by material or clothing. (e.g., rubber, leather, underwear).</p> <p>20. Hurting a partner.</p> <p>21. Being hurt by a partner.</p> <p>22. Mate-swapping.</p>					
---	--	--	--	--	--

<p>23. Being aroused by watching someone urinate.</p> <p>24. Being tied up.</p> <p>25. Tying someone up.</p> <p>26. Having incestuous sexual relations.</p> <p>27. Exposing yourself provocatively.</p> <p>28. Transvestism (wearing clothes of the opposite sex).</p> <p>29. Being promiscuous.</p> <p>30. Having sex with someone much younger than yourself.</p> <p>31. Having sex with someone much older than yourself.</p> <p>32. Being much sought after by the opposite sex.</p> <p>33. Being seduced as an "innocent".</p> <p>34. Seducing an "innocent".</p>					
--	--	--	--	--	--

<p>35. Being embarrassed by failure of sexual performance.</p> <p>36. Having sex with someone of different race.</p> <p>37. Using objects for stimulation. (e.g., vibrators, candles).</p> <p>38. Being masturbated to orgasm by a partner.</p> <p>39. Looking at pornographic pictures or films.</p> <p>40. Kissing passionately.</p>					
--	--	--	--	--	--

APPENDIX C

Q1 Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is 1. Very Inaccurate, 2. Moderately Inaccurate, 3. Neither Accurate Nor Inaccurate, 4. Moderately Accurate, 5. Very Accurate as a description of you.

	Very Inaccurate	Moderately Inaccurate	Neither Accurate Nor Inaccurate	Moderately Accurate	Very Accurate
1. I am the life of the party.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Sympathize with others' feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Get chores done right away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I have frequent mood swings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Have a vivid imagination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Don't talk a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Am not interested in other people's problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Often forget to put things back in their proper place.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Am relaxed most of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Am not interested in abstract ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Talk to a lot of different people at parties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Feel others' emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Like order.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Get upset easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Have difficulty understanding abstract ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Keep in the background.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Am not really interested in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Make a mess of things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Seldom feel blue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I do not have a good imagination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX D, SECTION 1

Q1 "Obsessions" are distressing thoughts, ideas, feelings, fantasies, images (pictures) or impulses that keep coming into your mind even though you do not want them to. Since obsessions cause distress, compulsions are readily carried out to reduce it.

"Compulsions" are habits, rituals or behaviors, you feel you have to do, although you may know that they do not make sense, or are excessive. At times you may try to stop from doing them, but this might not be possible. While most compulsions are observable behaviors, some compulsions may be hidden mental acts that go on in your head such as silent checking, or repeating certain words to yourself each time you have disturbing thoughts.

Check the obsessions and compulsions that trouble you right now (during the past week) in the "Current" box. If they have occurred previously but not any longer, check the box marked "Past". There are examples of each symptom to help you decide if you have an obsessive-compulsive symptom. If you never have had the obsession or compulsion, check the box marked "Never".

	Current	Past	Never
1. I am worried about dirt, germs, virus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I wash my hands very often or in a special way to be sure I am not dirty or contaminated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I fear that my actions might harm others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I fear I will lose control and do something I don't want to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have unpleasant forbidden or perverse sexual thoughts, images or impulses that frighten me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I must check the stove or other electrical appliances, that I have locked the door or make sure that things have not disappeared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. My dirty words, thoughts and curses directed towards God bothers me; I have a fear of offending God.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. In order to prevent something terrible to happen I must have special thoughts or acts done in a special way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>9. I am occupied with morality issues, justice, or what is right or wrong.</p>	○	○	○
<p>10. How things are placed or how they are positioned is important to me. It needs to feel "just right" (but isn't associated with magical thinking).</p>	○	○	○
<p>11. I get a compelling urge to put things in a special order.</p>	○	○	○
<p>12. I have a compelling urge to repeat certain actions until it feels just right.</p>	○	○	○
<p>13. I must follow strong impulses to collect and hoard things.</p>	○	○	○
<p>14. I have worries that I look peculiar; I am concerned that something is wrong with my looks.</p>	○	○	○
<p>15. I do things that injure my body.</p>	○	○	○

APPENDIX D, SECTION 2

Respond according to the situation during the last seven days (including today).

Q1 Approximately how much of your time is occupied by obsessive-compulsive problems?

- None.
- Occasional symptoms or less than one hour per day.
- Frequent obsessive-compulsive symptoms or 1-3 hours per day.
- Very frequent symptoms or more than 3 and up to 8 hours a day.
- Almost constantly or more than 8 hours per day.

Q2 On the average, what is the longest amount of consecutive waking hours per day that you are completely free of obsessive-compulsive problems?

- No symptoms.
- Long symptom-free interval, more than 8 consecutive hours/day symptom-free.
- Moderately long symptom-free interval, more than 3 and up to 8 consecutive hours/day symptom-free.
- Short symptom-free interval, from 1 to 3 consecutive hours/day symptom-free.
- Extremely short symptom-free interval, less than 1 consecutive hour/day symptom-free.

Q3 How much do your obsessive-compulsive problems interfere with your everyday life, work or school, or social functioning?

- No interference.
- Mild; slight interference with social or occupational/school activities, but overall performance not impaired.
- Moderate; definite interference with social or occupational/school performance, but still manageable.
- Severe interference; causes substantial impairment in social or occupational/school performance.
- Extreme; incapacitating interference.

Q4 How much distress do your obsessive-compulsive problems cause you?

- None.
- Mild; not too disturbing.
- Moderate; disturbing, but still manageable.
- Severe; very disturbing distress.
- Extreme; near constant and disabling distress.

Q5 How much control do you have over your obsessive-compulsive problems? How successful are you in stopping or diverting them? If you rarely try to resist, please think about those rare occasions on which you did try.

- Complete control.
- Much control; usually able to stop or divert obsessive-compulsive problems with some effort/concentration.
- Moderate control, sometimes able to stop or divert obsessive-compulsive problems only with difficulty.
- Little control, rarely successful in stopping or dismissing obsessive-compulsive problems but they can be delayed for the moment.
- No control, are rarely able, even momentarily, to ignore obsessions or refrain from performing compulsions; they cannot even be delayed for the moment.

Q6 Have you been avoiding doing anything, going anyplace or being with anyone in order to avoid your obsessive-compulsive problems?

- No deliberate avoidance.
- Mild, minimal avoidance.
- Moderate, some avoidance; clearly present.
- Severe, much avoidance; avoidance prominent.
- Extreme, very extensive avoidance; does almost everything he/she can to avoid triggering symptoms.

APPENDIX E

Please select the best answer to each question that describes you using the following choices: 0. Very Untrue of Me, 1. Untrue of Me, 2. Sometimes True of Me, 3. Usually True of Me, 4. Always True of Me.

Q1 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about spying on an unsuspecting person who is naked, in the process of undressing, or engaging in sexual activity:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such sexual urges with a non-consenting person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about doing this only when it is forbidden to do (e.g., dressing rooms, public bathrooms).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges due to a non-genital body part(s) (e.g., feet) or nonliving object(s):

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about this more than 3 times per day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These sexual thoughts and fantasies are not simply due to the use of a vibrator or fleshlight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about doing this only when it is forbidden to do (e.g., dressing room, shoe store).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about exposing my genitals to an unsuspecting person:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such sexual urges with a non-consenting person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about exposing my genitals to children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about exposing my genitals to physically, mature persons.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about exposing my genitals to both children and physically, mature individuals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about touching or rubbing up against a non-consenting person:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such sexual urges with a non-consenting person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from being humiliated, beaten, bound, or made to suffer:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such thoughts while engaged in work/occupational, school, or social settings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized about being choked and unable to breathe.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from thinking about the physical or psychological suffering of another person:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such sexual practice with a non-consenting person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 I have had repetitive and intense sexual arousal via fantasies, thoughts, and urges from cross-dressing:

	Very Untrue of Me	Untrue of Me	Sometimes True of Me	Usually True of Me	Always True of Me
For at least six months.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fantasized such thoughts while engaged in work/occupational, school, or social settings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sexually aroused by fabrics, materials, or garments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sexually aroused by thoughts or images of self as female.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sexually aroused by thoughts or images of self as male.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

