RESEARCH THESIS

AN EXPLORATION OF THE CHARACTERISTICS, CORRELATES, AND UNDERLYING PSYCHOLOGICAL PROCESSES OF SEXUAL FANTASIES

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"I don't know where I'm going from here, but

I promise it won't be boring." - David Bowie

"I'm the only one who can write my story."

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THESIS ABSTRACT

The present thesis aimed to explore some of the key features and potential correlates of deviant sexual fantasies and sexual fantasies more generally, as well as the psychological processes involved in their onset, development, maintenance, and selection, and their relationship to behaviour. Chapter 1 introduces the key conceptual and definitional issues relating to the term *deviant sexual fantasies*. Following a review of definitions, this chapter concludes with a new and clearer definition of deviant sexual fantasies and sexual fantasies overall. Chapter 2 is a psychometric critique of the Wilson Sex Fantasy Questionnaire used in two subsequent chapters of the thesis. It further relates the conceptual and definitional issues of Chapter 1 to methodological challenges related to the study of sexual fantasies. The critique reveals that the questionnaire demonstrates good internal validity and reliability, and its main limitations regard its poor external validity and lack of norms. Recommendations are made to modernise the tool and adapt some of its measures. Chapter 3 presents a systematic review of studies using the Wilson Sex Fantasy Questionnaire with a variety of male populations but with a focus on non-forensic and non-clinical samples, as well as child molesters. The results reveal an overall consistent trend in the frequencies of fantasy themes across samples, with intimate fantasies being endorsed the most, followed by exploratory fantasies, then impersonal fantasies, and finally, sadomasochistic fantasies. Two studies also suggest a relationship between fantasy experience and personality type. For instance, self-actualising personalities endorsed intimate fantasies

the most whilst self-destructive personalities endorsed them the least, and self-destructive personalities fantasied the most overall whilst low affective personalities fantasised the least. It is proposed that differences in fantasy experience across personality types relate to their different abilities to emotionally regulate and to the way they relate to other people. Similarly, a negative relationship was identified between Cluster A personalities (paranoid, schizoid, schizotypal) and intimate fantasises, and Cluster B personalities (histrionic, narcissistic, borderline, antisocial) were observed to fantasise the most overall (compared to Cluster A and Cluster C: anxious, dependent, avoidant, obsessive-compulsive). Chapter 4 provided an opportunity to implement some of the recommendations from Chapter 2, using an adapted version of the WSFQ to explore the sexual fantasies of a non-forensic and non-clinical community sample. This empirical study focused on establishing relationships between sexual fantasies, sexual behaviour, pornography consumption, and childhood abuse in males and females. Notably, positive relationships were identified between frequency of sexual fantasising, frequency of masturbation, and frequency of pornography consumption, but future research is recommended to establish causality. In addition, emotional and physical abuse in childhood were positively related to masturbation frequency in males as adults, and sexual abuse victimisation was negatively related to frequency of sexual intercourse in females. Also, physically abused males fantasised more overall and emotionally abused males fantasised more intimate fantasies during masturbation, and more intimate fantasies and

sadomasochistic fantasies during sexual intercourse. Sexually abused females fantasised significantly more during masturbation and endorsed significantly higher rates of impersonal fantasies during masturbation and sexual intercourse. Sexually abused males fantasied higher rates of sadomasochistic fantasies during intercourse. Tentative hypotheses are offered that focus on the relationship between abuse type and sexual fantasy experience, as well as gender differences in coping style. Chapter 5 presents a case study of an adolescent male with high functioning autism, paranoid thinking, and violent revenge fantasies. This generated reflection on the relationship between fantasy and behaviour in general and illustrated the fruitfulness of broadening one's perspective by drawing on the literature from other areas of research. Lastly, Chapter 6 concludes this thesis with an exploration of the psychological processes involved in the onset, development, maintenance, and selection of sexual fantasies, as well as their relationship to behaviour, based on the main findings of preceding chapters, a model was developed.

CHAPTER 1

GENERAL INTRODUCTION

Deviant sexual fantasies have long been associated with sexual offending and the term *deviant* is often utilised to refer to the sexual fantasies of the sex offender population. However, research shows that sex offenders also engage with fantasy themes considered conventional and that members of the general population engage with both conventional and deviant fantasy themes. It is consequently simplistic and problematic to classify individuals according to the fantasy themes they endorse and to assume thematic congruence between fantasy and action; there may not always be a common theme and other factors also likely qualify the fantasy-action relationship including sexual arousal, affective states, and personality (Bartels & Gannon, 2011). Questions arise regarding the nature of the underlying psychological processes involved between (deviant) fantasy and (offending) behaviour; in other words, why do some individuals act upon their fantasies, whilst others do not?

The phrase *deviant sexual fantasies* will now be explored conceptually and definitionally. In the first instance, it is not clear what is understood by the term *deviant*. It seems generally implied that deviant sexual fantasies are statistically rare, and thematically unusual or abnormal, with a specific relevance to forensic and/or clinical sub-groups, and thus to offending behaviour and/or mental health disorders. Although thematically deviant sexual fantasies may also be statistically deviant (presumably experienced at lower frequencies than more conventional themes), this relationship cannot

be assumed. Statistical deviance, whether reflective of significantly lower or higher rates than the norm, may apply to some more thematically conventional fantasy themes, and might not apply to some thematically deviant themes.

In this thesis, the term *deviant* is used to define sexual fantasies that encapsulate a specific theme, regardless of statistical deviance. This theme is defined following a critique of Maniglio's (2011) interpretation of deviant sexual fantasies, which itself is derived from previous definitions, and following a critique of the description of deviant sexual fantasies by two prominent tools for clinical diagnosis: the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association; Fourth Edition, Text Revision, 2000; Edition 5, 2013), and the International Classification of Diseases (ICD, Edition 10; World Health Organization, 1992). Maniglio defines deviant sexual fantasies as follows:

"Fantasies containing themes involving infliction of harm or pain during sexual intercourse, illegal or socially unacceptable sexual behavior, or otherwise inappropriate or nonconsensual sexual activity" (p. 748; citing Carabellese, Maniglio, Greco, & Catanesi, 2011; Leitenberg & Henning, 1995; Maniglio, 2010).

A limitation of this definition concerns its vagueness. It is unclear what is meant by "socially unacceptable sexual behaviour" and "inappropriate […] sexual activity". Despite the existence of an

implicit social consensus regarding what is deemed acceptable and appropriate versus what is deemed unacceptable and inappropriate, such terms as *unacceptable* and *inappropriate* are vulnerable to subjective interpretation (e.g., individual attitudes and beliefs, moral codes of conduct), and so, a consistent definition across readers is unlikely. In terms of clinical practice and academia, ill-defined concepts are problematic in that the object under investigation is unclear, the validity and reliability of research methodologies and findings is questionable, and the inferences and hypotheses derived from them do not have a sound empirical basis. This being said, it is not proposed that labelling or categorisation are always useful or preferred more widely (e.g., stereotypes, stigma).

To minimise the above limitations, one might argue that it is helpful to define terms within already-existing robust frameworks of knowledge. For example, the law determines what is unacceptable and inappropriate, which Maniglio does refer to (i.e., "illegal […] sexual behaviour" and "nonconsensual sexual activity"), and it arguably integrates societal trends within it (e.g., normative attitudes and beliefs, moral codes of conduct) considering the mutual developmental influences between society and the law. A clinical framework might also prove useful in categorising behaviour as unacceptable or inappropriate. The DSM and ICD are used by clinicians to diagnose mental health disorders, and are often used forensically, despite these tools not being primarily designed for this purpose.

According to the DSM IV-TR, mental health disorders relating to sexual deviance are named paraphilias and are defined as "recurrent, intense sexually arousing fantasies, sexual urges or behaviors generally involving nonhuman objects, the suffering or humiliation of oneself or one's partner, or children or other nonconsenting persons that occur over a period of six months" (Criterion A), which "cause clinically significant distress or impairment in social, occupational, or other important areas of functioning" (Criterion B). Eight paraphilias have been identified: exhibitionism, fetishism, frotteurism, paedophilia, sexual masochism, sexual sadism, voyeurism, and transvestic fetishism, plus a residual category: paraphilia not otherwise specified. The DSM-5 further distinguishes between *paraphilias* and *paraphilic disorders*, where a paraphilia is defined by Criterion A (i.e., having a deviant sexual interest, for example, exhibitionism) and becomes a paraphilic disorder when Criterion B is also present (i.e., distress or impairment to the self and/or others caused by the deviant sexual interest, for example, *exhibitionism* becomes *exhibitionistic disorder*). Regardless of the distinction between paraphilia and paraphilic disorder, it can be inferred that deviant sexual fantasies thematically involve "nonhuman objects, the suffering or humiliation of oneself or one's partner, or children or other nonconsenting persons", as identified within the aforementioned paraphilias (see Table 1 for an overview of paraphilias and their individual characteristics).

Table 1. *Paraphilias and Disorders of Sexual Preference According to the Diagnostic and Statistical Manual for Mental Disorders (Fifth Edition) and the International Classification of Diseases (Tenth Edition)*.

Paraphilias / Disorders of Sexual Preference	DSM-5	ICD-10
Exhibitionism	"Recurrent, intense, sexually arousing fantasies or behaviors involving exposing one's genitals to another person without the latter's consent".	"A recurrent or persistent tendency to expose genitalia to strangers (usually of the opposite sex) or to people in public places, without inviting or intending closer contact. There is usually, but not inevitably, sexual excitement at the time of the exposure and the act is commonly followed by masturbation" (F65.2).
Fetishism	"Sexual interest in non-living objects or a particular on nongenital body parts as indicated by fantasies, urges, or behaviors".	"Reliance on some non-living object as a stimulus for sexual arousal and sexual gratification. Many fetishes are extensions of the human body, such as articles of clothing or footwear. Other common examples are characterized by some particular texture such as rubber, plastic or leather. Fetish objects vary in their importance to the individual: in some cases, they serve simply to enhance sexual excitement achieved in ordinary ways (e.g., having the partner wear a particular garment)" (F65.0).
Frotteurism	"Recurrent, intense, sexually arousing fantasies,	See F65.8.

	sexual urges, or behaviors involving touching and rubbing against a nonconsenting person. Such behaviors commonly occur in crowded public places (e.g., buses or trains)".	
Paedophilia	"Recurrent, intense, sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with children 13 years old or younger. The individual is at least age 16 years and at least 5 years older than the victim/s".	"A sexual preference for children, usually of prepubertal or early pubertal age. Some paedophiles are attracted only to girls, others only to boys, and others again are interested in both sexes" (F65.4).
Sexual masochism	"Sexual arousal to the act of being humiliated, beaten, bound, or made to suffer in some other manner".	"A preference for sexual activity which involves bondage or the infliction of pain or humiliation. If the subject prefers to be the recipient of such stimulation this is called masochism; if the provider, sadism. Often an individual obtains sexual excitement from both sadistic and masochistic activities" (F65.5).
Sexual sadism	"Deriving sexual excitement from the physical or psychological suffering (including humiliation) of another person".	
Voyeurism	"Observing nonconsenting individuals naked, undressing, or engaging in sexual activity".	"A recurrent or persistent tendency to look at people engaging in sexual or intimate behaviour such as undressing. This usually leads to sexual excitement and masturbation and is carried out without the observed people being aware" (F65.3).
Transvestic fetishism / Fetishistic transvestism	"Typically describes a heterosexual man being aroused by the thought of himself as a female and hence cross-dressing	The wearing of clothes of the opposite sex principally to obtain sexual excitement" (F65.1).

	(autogynephilia), or more rarely, a woman cross-dressing as a man (autoandrophilia)".	
Otherwise specified / Other disorders of sexual preference	"Applied when the paraphilia is not prevalent enough to include its own diagnosis; examples include telephone scatologia (obscene phone calls), necrophilia (sexual activity with corpses), zoophilia, coprophilia (being aroused by being defecated upon or defecating on others), and urophilia (being aroused by being urinated upon or urinating on others)".	"A variety of other patterns of sexual preference and activity may occur, each being relatively uncommon. These include such activities as making obscene telephone calls, rubbing up against people sexual stimulation in crowded public places (frotteurism), sexual activity with animals, use of strangulation or anoxia for intensifying sexual excitement, and a preference for partners with some particular anatomical abnormality such as an amputated limb. Swallowing urine, smearing faeces, or piercing foreskin or nipples may be part of the behavioural repertoire of sadomasochism. Masturbatory rituals of various kinds are common, but the more extreme practices, such as the insertion of objects unto the rectum or penile urethra, or partial self-strangulation, when they take the place of ordinary sexual contacts, amount to abnormalities. Necrophilia should also be coded here" (F65.8).

Note. Categories of the DSM-5 are reported on as described by Beech, Miner, and Thornton (2016, p.389). In the ICD, sexual sadism and sexual masochism are combined as sadomasochism (F65.5). Table 1 does not include the ICD's 'Multiple Disorders of Sexual Preference': "sometimes more than one abnormal sexual preference occurs in one person and there is none of first rank. The most common combination is fetishism, transvestism and sadomasochism" (F65.6), as this is not a standalone disorder. The unspecified category of the DSM and ICD has not been included.

The ICD-10 defines sexual deviance in terms of *Disorders of Sexual Preference*, which are fetishism, fetishistic transvestism, exhibitionism, voyeurism, paedophilia, sadomasochism, multiple disorders of sexual preference (i.e., having more than one disorder of sexual preference), other disorders of sexual preference, and as with the DSM, a residual category for unspecified sexual preferences (see Table 1 for an overview of disorders of sexual preference and their individual characteristics). According to the ICD-10, a disorder of sexual preference can be diagnosed if the individual experiences "recurrent intense sexual urges and fantasies involving unusual objects or activities", if the individual "acts on the urges or is markedly distressed by them", and if "the preference has been present for at least six months". This does not include the DSM-5 distinction between having a deviant sexual interest and having an interest that causes distress, though this may be highlighted in the ICD-11. According to the ICD, it can be inferred that deviant sexual fantasies involve unusual objects or activities, as identified within the aforementioned disorders of sexual preference.

According to the DSM and ICD, and in line with Maniglio's definition, deviant sexual fantasies might include the infliction of physical and/or sexual harm or pain onto others, though contrary to Maniglio, they may also include harm or pain inflicted upon the self

by another. The DSM and ICD further expand on this by including the infliction and receipt of psychological harm or pain in the form of "humiliation", and also "suffering" for the DSM, though it is unclear whether psychological harm or pain is limited to humiliation and suffering. Arguably, Maniglio's general use of the term *harm* could encompass psychological distress, but if this is the case, his definition would benefit from outlining this.

Though the manuals relate sexual deviance to masochistic behaviours, they do not explore the complexity of the relationship between consent and pain. Indeed, the receipt of a physical act that is generally delivered to cause pain will generate a qualitatively different experience in the consenting (e.g., physical pain is accompanied or replaced by pleasure) versus non-consenting individual (e.g., unlikely to experience pleasure in relation to or in lieu of physical pain), or in the masochist versus the victim. With regards to psychological pain, arguably this cannot be experienced by an individual who is consenting to being subjected to a situation that would typically lead to humiliation or suffering. Essentially, masochism is the physical, sexual and/or psychological enjoyment of a behaviour and/or situation that would under normal circumstances cause physical and/or psychological pain.

In line with the above, any text that discusses sexual deviance would benefit from distinguishing between *harm* (the injury that results from harmful behaviour) and *pain* (hurt experienced as a consequence of the injury); as previously suggested, whereas both the masochist and the victim will experience harm, only the victim

will experience associated pain. On that note, behaviour should perhaps be qualified as deviant for its nature and anticipated, rather than actual, outcome. Similarly, although deviance might oftentimes be akin to illegal and non-consensual behaviour, it cannot be solely characterised in those terms (e.g., a 'rape' that is role-played between two consenting adults can still be considered deviant in nature). Maniglio does appear to allude to this ("illegal or socially unacceptable sexual behavior, or otherwise inappropriate or nonconsensual sexual activity") but the lack of clarity and explanation means that his definition is not as informative as it could be. As aforementioned, it is unclear what is understood by "socially unacceptable sexual behavior" and "inappropriate […] sexual activity". It is also unclear what the distinctions are, if any, between these extracts and the phrases "illegal sexual behavior" and "non-consensual sexual activity". Furthermore, if there is an important distinction between "illegal or socially unacceptable sexual behavior" and "inappropriate or nonconsensual sexual activity", this should be reflected on, and if not, the repetition is redundant.

The DSM and the ICD specify that deviant sexual fantasies can involve nonhuman objects, which Maniglio does not, though he may indirectly include these within "socially unacceptable" or "inappropriate" sexual behaviours. The inclusion of nonhuman objects opens a discussion around the relationship between sexual arousal and the nature of the object that is sexually arousing. It is clear that in some cases, a non-sexual object can produce sexual arousal (e.g., shoe, latex), which links to the second conceptual and definitional

consideration relating to the phrase *deviant sexual fantasy*: what defines a fantasy as *sexual*? Generally, fantasies are characterised as sexual because of their sexual content (e.g., intercourse) and because they produce or enhance sexual arousal (Leitenberg & Henning, 1995). Considering the subjective nature of sexual arousal and the fact that certain non-sexual entities can produce or enhance it, it is proposed that a fantasy be deemed sexual solely on the basis of whether or not it sexually arouses the individual, regardless of content.

From this viewpoint, Maniglio's definition is restrictive as it limits the content of deviant sexual fantasies to deviant themes that are expressed within the context of "sexual intercourse", "sexual behavior", or "sexual activity". This does not account for all other behaviours that might be sexually arousing despite not being sexual in nature (e.g., whipping someone, wearing clothes of the opposite sex). The definition is also restricted to deviant physical acts ("intercourse", "behavior", "activity") so does not refer to the relationship between sexual fantasy, sexual arousal, and objects, people, and other living creatures.

A third and last conceptual and definitional consideration in relation to the phrase *deviant sexual fantasy* relates to how we define the term *fantasy*. This isn't explored by Maniglio or by the two diagnostic manuals. Leitenberg and Henning (1995) provide an overview of sexual fantasies, partly influenced by Wilson's (1978) work, which provides insight into the concept of fantasy itself. They propose that "a sexual fantasy can be an elaborate story, or it can be

a fleeting thought of some romantic or sexual activity. It can involve bizarre imagery, or it can be quite realistic. It can involve memories of past events, or it can be a completely imaginary experience. It can occur spontaneously or be intentionally imagined, or it can be provoked by other thoughts, feelings, or sensory cues. Sexual fantasies can take place outside of sexual activity, or they can occur during solitary masturbation or during sexual activity with a partner" (p. 470).

Regardless of how Leitenberg and Henning define the sexual element of fantasies ("romantic or sexual activity", "bizarre imagery", "quite realistic"), their overall description provides insight into the properties and underlying psychological processes of fantasies in general. It is suggested that fantasies can vary greatly in content and duration and can be triggered in various ways and contexts. The authors add that fantasies can be internally or externally generated ("by something one reads or sees", p. 469), or a combination of the two (citing Jones & Barlow, 1990), and that sexual arousal can also stimulate fantasies. They further highlight that fantasies can be entirely imaginative or that they can include elements of past events.

Importantly, if the content of an entity is produced solely from the recollection of past events, then it is a *memory*. Arguably, a fantasy is only created if it is partly composed from imagination, however small the contribution. Fantasies are also referred to as *thoughts* (Leitenberg & Henning, 1995), *interests* and *preferences* (e.g., Akerman & Beech, 2011). Though these terms may well

encompass fantasies, they will not be used interchangeably to avoid confusion regarding the object under investigation.

In the present thesis, the phrase *deviant sexual fantasy* will be used to describe a cognitive entity that is in part generated from the individual's imagination and can be triggered internally or externally, or a combination of both (see Figure 1 for a schematic definition of deviant sexual fantasies). This entity is sexually arousing to the individual engaging with it, regardless of its content, and it is deemed of a deviant nature if it involves non-sexual material, or non-sexual or sexual material that are harmful and may cause psychological and/or physical pain to the self and/or others if acted out. Of course, a fantasy may include a combination of sexual and non-sexual components, as well as deviant and non-deviant

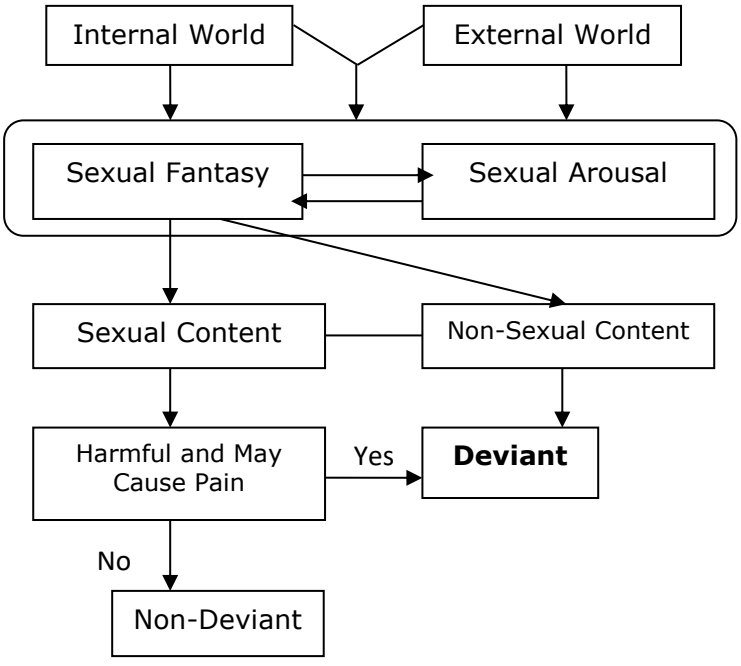


Figure 1. Schematic Definition of Deviant Sexual Fantasies.

components. If the primary purpose of a fantasy is to produce or enhance sexual arousal, then it is proposed that the theme of the

component that is most sexually arousing to the individual engaging with the fantasy, be used to define the overall fantasy theme. Lastly, sexual fantasies will be defined as deviant irrespective of statistical deviance and will not be used to qualify the sexual fantasies of a particular population.

CHAPTER 2

PSYCHOMETRIC CRITIQUE

A Critical Evaluation of the Wilson Sex Fantasy Questionnaire

ABSTRACT

Chapter 2 aims to critically evaluate the psychometric properties of the Wilson Sex Fantasy Questionnaire (Wilson, 1978), a tool that was designed to measure sexual fantasy experiences. The critique presents an overview of the tool, including its development, scoring, research and clinical applications, and norms. It then investigates the validity and reliability to the WSFQ and concludes that it demonstrates good internal and external validity, but that it has poor external validity and lacks norms. Recommendations are made to modernise the tool and adapt some of its measures.

INTRODUCTION

Deviant sexual fantasies are largely accepted to play a key role in the onset, development, and maintenance of sexual offending, and in sexual recidivism (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010; Quinsey, Lalumière, Rice, & Harris, 1995; Roberts, Doren, & Thornton, 2002; Tully, Browne, & Craig, 2014). Indeed, the main theories of sexual offending incorporate deviant sexual fantasies, such as Finkelhor's Precondition Theory (1984), Marshall and Barbaree's Integrated Theory (1990), Hall and Hirschman's Quadripartite Model (1992), Ward and Siegert's Pathways Model of Child Sexual Abuse (2002), and Ward and Beech's Integrated Theory of Sexual Offending (2006). In line with this, research on sexual recidivism identifies deviant sexual fantasies as one of the primary risk factors (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2004; Quinsey et al., 1995; Roberts et al., 2002). The relationship between deviant sexual fantasies and sexual offending has also been observed in adolescents (e.g., Hanson & Morton-Bourgon, 2005) and individuals with an intellectual disability (e.g., McGrath & Cumming, 2003). Not surprisingly, most assessment tools measuring risk of sexual violence include deviant sexual fantasies (see Table 2 for a sample of assessment tools that incorporate deviant sexual fantasies), which further highlights the weight attributed to them in decision-making within the criminal justice system (Tully et al., 2014).

Table 2. *Sample of Risk Assessment Tools Incorporating Deviant Sexual Fantasies*.

Assessment Tool	Author(s) and Date	Target Population
Sexual Violence Risk-20 checklist (SVR-20)	Boer, Hart, Kropp, & Webster (1997)	Adults
Risk for Sexual Violence Protocol (RSVP)	Hart, Kropp, Laws, Klaver, Logan, & Watt (2003)	Adults
Sex Offender Risk Appraisal Guide (SORAG)	Quinsey, Harris, Rice, & Cormier (1998)	Adults
STABLE-2007	Hanson, Harris, Scott, & Helmus (2007)	Adults
ACUTE-2007	Hanson, Harris, Scott, & Helmus (2007)	Adults
Structured Assessment of Risk and Need (SARN)	Home Office (2005)	Adults
Violence Risk Scale - Sex Offender Version (VRS-SO)	Wong, Olver, Nicholaichuk, & Gordon (2003)	Adults
Sex Offender Treatment Needs and Progress Scale	McGrath & Cumming (2003)	Adults
Vermont Assessment of Sex Offender Risk Manual (VASOR)	McGrath & Hoke (2001)	Adults
Treatment Intervention and Progress Scale for Sexual Abusers with Intellectual Disabilities (TIPS-ID)	McGrath & Cumming (2005)	Adults
Assessment, Intervention and Moving on Project 2 (AIM2)	Print, Griffin, Beech, Quayle, Bradshaw, Henniker, & Morrison (2007)	Young people
Juvenile Sex Offender Assessment Protocol-II (JSOAP-II)	Prentky & Righthand (2003)	Young people
Estimate of Risk of Adolescent Sexual	Worling & Curwen (2001)	Young people

Although deviant sexual fantasies have been empirically associated with sexual offending, the causal link or underlying theoretical basis remains somewhat uncovered and requires more extensive investigation (Hanson & Morton-Bourgon, 2004). Such research allows for a better understanding of how risk factors can be targeted in treatment (Mann et al., 2010). A barrier to valid and reliable research is a lack of clarity regarding the object under investigation. This may partly stem from the complexity of the object itself, as highlighted in Leitenberg and Henning's (1995) review of the concept of sexual fantasy. Indeed, sexual fantasies can vary in their content, from popular to more personal and even perhaps completely unique themes, and from simple plots to elaborate storylines. There are no boundaries to the properties of one's fantasy (e.g., content, duration, frequency).

Secondly, the lack of clarity stems from the inconsistent use of terminology, making it difficult to identify what concept is being measured and inferred about. The terms *fantasy*, *thought*, *interest*, and *preference* are sometimes used interchangeably within the literature on sexual behaviour. For instance, Leitenberg & Henning (1995) refer to shorter fantasies as "fleeting thoughts" (p. 470) and Akerman and Beech (2011) discuss *sexual interest* and *sexual arousal* under the umbrella term of *sexual preference* (p.4). This is understandable to a degree as thematic and conceptual overlaps between these entities is sensical and empirically-supported

(Akerman & Beech, 2011). Nonetheless, this should not lead to assumptions that these entities are necessarily related or the same (the distinction between sexual interest and sexual preference is explored in Chapter 6). In line with this, it cannot be assumed that methods designed to capture sexual interests and/or sexual arousal will also capture sexual fantasies, such as physiological (e.g., pupillometry, galvanic skin response, phallometry) and attentional measures (e.g., viewing time, information-processing; Akerman & Beech, 2011; Kalmus & Beech, 2005). Self-report measures, however, present the object under investigation more explicitly and are arguably likelier to capture the covert phenomenon of sexual fantasy (Leitenberg & Henning, 1995; Seifert, Boulas, Huss, & Scalora, 2015).

Self-report measures of sexual fantasy involve a) a narrative account during which individuals are requested to describe their favourite and/or primary sexual fantasies, also known as a clinical interview; b) a checklist, questionnaire, or selection of fantasies for which individuals indicate which items they have experienced, in what context, and at what frequency; and c) checklists and/or diaries individuals are requested to fill in over a period of time (Kalmus & Beech, 2005; Leitenberg & Henning, 1995; Wilson 2010). There are mixed opinions with regards to the usefulness of self-report measures. Such methods can be prone to biases and errors relating to recall, ability to introspect (e.g., degree of self-awareness and objectivity), fantasy selection (e.g., processes involved in selecting fantasies for checklists may lead to bias toward some types of

fantasies over others; fantasies reported are limited to experiences over a period of time determined by the researcher), and social desirability or impression management (Baumgartner, Scalora, & Huss, 2002; Hanson & Bussière, 2001; Leitenberg & Henning, 1995). In offenders, social desirability may be greater where disclosure of deviant fantasies might have legal implications, such as interfering with release (Banse, Schmidt, & Clabour, 2010). In fact, it has often been suggested that offenders underreport their experience of sexual fantasies (Baumgartner et al., 2002) or that offenders attempt to present as less deviant (Seifert et al., 2015). Other reasons for this might involve an attempt to avoid feelings of guilt and shame. Considering the sensitive nature of the topic of sex, impression management strategies may well also be implemented by the general population. It is worth considering that a sex questionnaire may in fact be a measure of how prude an individual is, rather than a genuine report of their sexual experiences.

Alternatively, the fact that self-report measures are less intrusive may contribute to reducing such effects as administration is more private, and thus respondents may find it easier to share genuine experiences (Colón Vilar et al., 2016; Holland, Zolondek, Abel, Jordan, & Becker, 2000). Self-report measures also appear easier and cheaper than other methodologies. Williams and colleagues (2009) go as far as stating that self-report is the only valid method of investigating sexual fantasies.

The present psychometric critique examines the Wilson Sex Fantasy Questionnaire (thereafter, WSFQ), introduced by Wilson

(1978) then Wilson and Lang (1981). It aims to critically evaluate the scientific properties of the WSFQ, its applicability to different populations, based on the available research, to explore the tool's clinical and research uses, as well as highlight some of its strengths and limitations.

THE WILSON SEX FANTASY QUESTIONNAIRE: AN OVERVIEW

Development of the Wilson Sex Fantasy Questionnaire

Wilson developed his 40-item questionnaire after scanning the scientific and clinical literature, and popular British sex magazines such as *Forum*. Items were selected to reflect a wide range of fantasies, "from the normal and innocuous to the deviant and relatively 'obscene'" (Wilson, 1988, p. 61). This process appears nonetheless based on Wilson's interpretation of what is characterised as a *normal* versus *deviant* fantasy, as there is no mention of the use of standard or devised definitions.

In addition, Wilson used principal components with varimax rotation to categorise the 40 items into four 10-item themes, as depicted in Table 3 (see Appendix A for full questionnaire). Though this illustrates how items statistically relate to one another, the author does not provide an explanation as to how each item qualitatively relates to its respective theme and other fantasies within it. Some items can also be classed as either active (e.g., giving oral sex) or passive (e.g., receiving oral sex) so although this distinction did not appear in Wilson's factor analysis, it can be used to compare groups.

Scoring the Wilson Sex Fantasy Questionnaire

Individuals are asked to rate each questionnaire item on a scale from 0-5 to describe how frequently they experience each fantasy (never - seldom - occasionally - sometimes - often - regularly) with regards to three conditions under which they may experience fantasies: daytime, during masturbation or intercourse, and dreams whilst asleep. Individuals are also asked to rate whether they have done a fantasy in reality and whether they would like to

Table 3. *Questionnaire Items According to Wilson's Four Themes*.

Theme	Definition	Items and Examples
Intimate	Fantasies involving closeness and physical proximity with other humans. Fantasies involving enjoyment of relationships and commitments.	Items 1, 2, 3, 10, 11, 16, 17, 18, 38, 40 Kissing passionately, oral sex
Exploratory	Fantasies involving sexual variety and impulsive sexual acts.	Items 5, 6, 9, 22, 26, 29, 32, 33, 34, 36 Group sex, mate-swapping
Impersonal	Fantasies involving physical distance from other humans and indirect sexual manifestations. Fantasies involving intimacy with inanimate objects or body parts (fetishism).	Items 4, 12, 13, 19, 23, 30, 31, 35, 37, 39 Sex with strangers, watching others
Sadomasochistic	Fantasies involving the infliction of pain on others as a means of obtaining sexual gratification. Fantasies involving paraphilias, whereby harming others is a means of obtaining sexual gratification.	Items 7, 8, 14, 15, 20, 21, 24, 25, 27, 28 Whipping and spanking, being forced to have sex

do the fantasy in reality using the same frequency scale. That way, it is also possible to explore sexual activity, or the individual's self-reported external experience, or acting out, of fantasies. As such, the WSFQ is also designed to explore the relationship between fantasising and doing. At the end of the questionnaire, individuals are asked to rate which of the 40 items they find most exciting a) in fantasy, and

b) in reality, and are also asked to briefly describe their favourite fantasy if this has been omitted in the questionnaire.

A criticism of the above scale is that the author does not provide characteristics and meaning for each of its points, including whether the distance between them is equal or not, and what the points, and distances between them, mean on a conceptual level (i.e., in terms of the object under investigation).

For each individual, an overall fantasy score (out of 200) is achieved by summing up the individual's response to each questionnaire item under the 'daytime fantasies' condition. The WSFQ manual explains "this is because the four fantasy columns are highly correlated, with Column 1 being central" (p.3, Cymeon Pty Ltd.; Column 1 is the 'daytime fantasies' condition). However, it is unclear why the manual mentions four conditions out of five only, and why it would mention four conditions at all when there are arguably only three fantasy conditions (i.e., daytime, during masturbation or intercourse, whilst asleep). Research by Wilson and Lang (1981) suggests that the overall fantasy score is a good indicator of sex drive or libido, where higher scores (i.e., the more the individual fantasises), are representative of a higher libido.

It is also possible to further break down the individual's fantasy score into four sub-scores (out of 50) reflective of the four themes, by summing up the individual's responses to the ten items per theme.

Applications of the Wilson Sex Fantasy Questionnaire

The WSFQ has various research and clinical applications, examples of which are depicted in Table 4. It has been used to

compare male and female experiences of sexual fantasies, for example to explore evolutionary theories (Ellis & Symons, 1990; Oser, 1997; Wilson, 1997). Gender differences have also been examined cross-culturally, in Japan (Iwawaki & Wilson, 1983) and in Spain (Sierra, Ortega, & Zubeidat, 2006). One study compared the sexual fantasies of heterosexual and homosexual males in India (Bhugra, Rahman, & Bhintade, 2006). From a biological perspective, the WSFQ has also been used to investigate the loss of libido in premenopausal females (Nyunt, Stephen, Fielding, Wheeler, Gibben, & Durgan, 2002), and the experience of sexual fantasies in men suffering from psychogenic erectile dysfunction (Lipsith, 2009). It has further been used to explore the sexual fantasies of deviant and non-deviant men to complement analyses of their cortical responses to paraphilic (e.g., fetishistic and sadomasochistic themes), heterosexual erotic (e.g., nude women, coitus, oral sex), and neutral (e.g., landscapes and street scenes) stimuli (Waismann, Fenwick, Wilson, Hewett, & Lumsden, 2003). The WSFQ is also used in the field of forensic psychology to assess risk in sex offenders (Baumgartner et al., 2002; Hudson, Wales, Bakker, & Wardf, 2002; Wilson, 1988) and has been used to investigate the relationship between a history of sex abuse in women and their experience of force fantasies (Covarrubias, 1996).

Norms for the Wilson Sex Fantasy Questionnaire

Though the WSFQ has been administered to various populations, its repeated application to specific groups is limited,

making it difficult to establish appropriate norms. The lack of norms encourages authors to compare their findings to previously

Table 4. *Examples of Applications of the Wilson Sex Fantasy Questionnaire (N = 8)*.

Author(s) and Date	Population(s)	Findings
Gosselin & Wilson (1980)	Males belonging to fetish clubs compared to 'normal' males (controls)	Controls and males with unusual sexual fantasies shared similar levels of intimate and exploratory fantasies. Males with unusual fantasies scored higher on impersonal and sadomasochistic fantasies.
Wilson & Lang (1981)	Male Londoners compared to female Londoners	Males fantasised almost twice as much as females, although females reported almost as many intimate fantasies. Males preferred active fantasies whereas females preferred passive fantasies.
Iwawaki & Wilson (1983)	Japanese male student teachers compared to Japanese female student teachers	Generally, Japanese individuals reported lower levels of fantasy than British samples. Identical gender differences were observed.
Baumgartner, Scalora, & Huss (2002)	Child molesters compared to non-sexual offenders	Child molesters reported higher levels of fantasy generally, and the exploratory and intimate scales. Child molesters reported higher levels of active fantasies.
Bhugra, Rahman, & Bhintade (2006)	Heterosexual Indian males compared to homosexual Indian males, urban samples	Homosexual males scored higher than heterosexual males on the intimate, exploratory, and impersonal measures.
Skovran, Huss, & Scalora (2010)	Inpatients from an American maximum	Psychopathic offenders (both sexual and non-sexual

	security forensic hospital. The sample compared psychopathic and non-psychopathic offenders (sexual and non-sexual)	offenders) reported higher levels of fantasy than non-psychopathic offenders.
Carlstedt, Bood, & Norlander (2011)	Male Swedish students compared to female Swedish students (completed affect scales)	Self-destructive and high affective personality types had more sexual fantasies compared to self-actualizing and low affective types. Males experienced higher levels of exploratory and impersonal fantasies.
Colón Vilar, Concepción, Galynker, Tanis, Ardalan, Yaseen, & Cohen (2016)	Inpatient males and inpatient females with mood or psychotic disorders	Males reported higher levels of fantasy on all four measures.

data, such as Wilson and Lang (1981)'s mean scores and standard deviations for non-variant males and non-variant females (across all four fantasy themes and overall fantasy score), and Gosselin and Wilson's (1980), and Wilson's (1988) mean scores and standard deviations for variant men. For instance, Baumgartner and colleagues (2002) made sense of their data by comparing these to results obtained with college males (Plaud & Bigwood, 1997) and non-offending variant males (Wilson, 1988). Colón Vilar and colleagues (2016) also compared their data to Plaud and Bigwood's (1997), and to Wilson and Lang's (1981). It is important to consider the potential implications of using old data to make sense of current trends. Societies, cultures, and laws change over time, which may render norms obsolete. At the very least, data comparisons should be

interpreted with a consideration for the context in which norms were developed. From a different viewpoint, comparing modern trends to aged ones can provide insight into shifts that have occurred over time, if applicable (e.g., it would be interesting to explore whether gender differences in fantasy experience are sustained). In essence, when using norms to make sense of data, it is valuable to make explicit the purpose of the comparison.

In light of the above, it is concerning that the WSFQ manual presents Wilson and Lang's (1981) results as normative data. Another reason for concern regards the nature of the sample from which the norms are derived. The sample consists of 50 females and 50 males, aged 18-40, recruited from the streets of London. The authors believe the sample represents a range of socio-economic statuses and marital and dating statuses. The data collated from this sample will thus unlikely be representative of other cultures, even perhaps other parts of the United Kingdom, due to its size and characteristics. Some key demographics are also missing, such as sexual preference, which may not have been as significant in 1981 than it is in 2017 but may account for some of the variance in the data.

It would be useful to establish norms across various populations, including non-offending and offending (e.g., child molesters, rapists, non-sexual offenders), variant and non-variant, whilst taking account of demographic variables such as age, gender, sexual preference, mental health, cultural background, and religious affiliation, to name a few. Without norms, it is difficult to make sense

of the various scores derivable from the WSFQ: the four theme scores, and overall fantasy score.

VALIDITY AND RELIABILITY OF THE WILSON SEX FANTASY QUESTIONNAIRE

In addition to appropriate norms, a psychometric tool should demonstrate good validity and reliability (Field, 2009; Kline, 1986).

Validity of the Wilson Sex Fantasy Questionnaire

Face Validity

At face value, the WSFQ appears to measure experiences of sexual fantasy.

Content Validity

Due to the subjective and generally intimate nature of sexual fantasies, it is difficult to devise a measure of sexual fantasy that will effectively tap into the experiences of every individual, or that the fantasies selected will be portrayed in a way that matches the individual's exact experience of that fantasy. For practical reasons, it would be unrealistic to present respondents with an extensive list of fantasies as completion time would interfere with response rates; for instance, shorter questionnaires yield less effects of boredom or tiredness. Secondly, it would be difficult to determine how long this list should be and when to stop adding to it.

It is useful to know for which population a tool is devised in order to determine content validity. If Wilson's selection of fantasies and derivation of fantasy themes is partly based on popular British media, it is likelier to tap into the fantasy experiences of the British population more so than it is other cultures. There is little detail about

the method underlying the selection of questionnaire items. Although Wilson describes scanning the literature, it is unclear what this entails, how he decided what literature to access, the nature of the data, and how he was then able to derive sexual fantasies from them. In essence, there is no evidence of a systematic protocol, including evidence that this protocol is reliable by use of a second qualified researcher. As such, it is difficult to assess whether or not the WSFQ truly tapped into the sexual fantasies of the general population at the time. It is also debatable whether the questionnaire stands the test of time and whether its items and themes are relevant to a contemporary population.

As themes can only be derived as long as they are reflected by the items (Meuwissen & Over, 1991), it could be argued that they are also biased towards representing the British population. Considering the tool was developed 39 years ago, it is now difficult to empirically support whether the fantasies and fantasy themes adequately reflected the fantasy themes of the sample from which they were derived. Additionally, the themes were determined through factor analysis but there is little information on how these were then labelled and defined, and the author has not reported on inter-rater agreements so it would appear that the four themes were devised based solely on Wilson's own professional judgement and experience. There is no evidence that a systematic protocol has been used to achieve this. Nonetheless, other research does support the presence of four fantasy themes (e.g., Baumgartner et al., 2002; Plaud & Bigwood, 1997; Sierra et al., 2006).

Considering the above, it is helpful that the WSFQ asks respondents to describe their favourite fantasy, if this has been omitted in the questionnaire. Nonetheless, research using the WSFQ does not appear to request this information; or at least, this has not been reported on within the published literature. It is also unclear at what stage a fantasy might be deemed popular enough to warrant inclusion on the WSFQ, if this is in fact the purpose of requesting this information.

In line with this, if there is a significant difference in the fantasy experiences of offenders and non-offenders (e.g., hypothesis that offenders engage with deviant fantasy themes and therefore offend), then a tool that aims to compare their experiences needs to be representative of these in the first place. For example, the WSFQ contains only one item potentially relating to paedophilic interests (item 30: "having sex with someone much younger than yourself") if this is what this item intends on measuring. Unfortunately the item does not specify age and could describe a scene with a child or an adult. As such, the sexual fantasies of sex offenders, and perhaps child molesters more specifically, may be underrepresented and questionnaire results will also misrepresent other measures, including fantasy frequency, fantasy themes endorsed, and libido. The same rationale could be used to explain gender differences. Furthermore, it is not reported whether the questionnaire was devised for a specific sexual preference (for simplicity, we shall consider heterosexual and homosexual preferences) and this information is not requested of the respondent. One item (item 9: "homosexual activity") categorises

homosexual sex as *exploratory*, however, for an individual who identifies as homosexual, this item may reflect normal intimate sexual activity. Consequently, results on the WSFQ may over represent homosexual individuals as endorsing the exploratory theme.

Predictive Validity

Several studies have used the WSFQ to establish relationships between fantasy frequency, fantasy themes, and different populations. In terms of gender differences, a common trend is that males fantasise more than females overall, with regards to exploratory and impersonal fantasy themes, and fantasies that depict an active role. In contrast, females tend to endorse fantasies of an intimate theme and passive roles.

Skovran and colleagues (2010) found that psychopathic offenders fantasised more generally than non-psychopathic offenders, although there were no significant trends with regards to the underlying four fantasy themes. Similarly, Colón Vilar and colleagues (2016) found no significant differences with regards to the four fantasy themes between groups with a mood or psychotic disorder, though they report higher fantasy rates on all four fantasy themes for Cluster B personality disorders (i.e., histrionic, narcissistic, borderline, and antisocial) compared to Clusters A (i.e., paranoid, schizoid, schizotypal) and C (dependent, avoidant, obsessive-compulsive). They also report that Cluster A personalities fantasised the least intimate fantasies. There is some evidence that non-offending males with variant fantasies can be distinguished from controls by higher scores on both the impersonal and sadomasochistic

fantasy themes (Gosselin & Wilson, 1981). Research also suggests that child molesters can be distinguished from non-sexual offenders by higher scores on the exploratory and intimate fantasy themes, but not on the impersonal and sadomasochistic fantasy themes (Baumgartner et al., 2002), as may have been theoretically predicted. On the other hand, Hudson and colleagues (2002) found that child molesters' pre-treatment scores on the impersonal and sadomasochistic fantasy themes were good predictors of recidivism.

It is difficult to make valid predictions based on the above research as it is either not discriminative enough (there is no significant difference between groups), research findings are contradictory, because there is insufficient research to support a predictive relationship, or because the relationship was established a few decades ago and is likely affected by contextual changes.

Construct Validity

Upon closer inspection, some of the fantasy items do not seem to fit as well within the questionnaire, as they are representative of either a negative sexual experience and negative affective response to it (item 35: "being embarrassed by failure of sexual performance"), a means to accessing a fantasy (item 39: "looking at obscene pictures or films"), or an emotional or physiological response to a fantasy (item 19: "being excited by material or clothing"; item 23: "being aroused by watching someone urinate"), rather than a sexual fantasy.

Similarly, certain items appear vague (e.g., item 30: "having sex with someone much younger than yourself"). This could be interpreted as having sex with a child or having sex with someone

who is younger but an adult. The use of vague terminology means that the data collated is vulnerable to subjective interpretation, and thus lack of validity. Specifying an age for the person in the fantasy could make it easier to interpret with regards to the respondent's age within a legal framework.

In terms of time measures, it is curious that the second measure 'during masturbation or intercourse' is not divided into the measures 'during masturbation' and 'during intercourse', as these are two distinct events, unless intercourse involves being masturbated by a partner, masturbating a partner, masturbating in the presence of a partner, or observing a partner masturbate. Presumably the experience of sexual fantasies during both events could be dependent on whether the individual is comfortable engaging with certain fantasies whilst with a partner (even if this can be kept secret), and whether the individual shares fantasies with their partner (the partner may encourage fantasies which the individual would not naturally engage with), for example.

Another issue relates to the ‘dreams whilst asleep’ measure, which, as is apparent within its label, appears to measure dreams rather than fantasies. Arguably, the two are conceptually distinct considering dreams are generally generated when the individual is unconscious, and thus lacks control over their content, whilst fantasies are generated when the individual is conscious and in control of content.

On a different note, it is worth considering that group differences (males versus females; offenders versus non-offenders)

could stem from differences in social desirability. For instance, women may underreport on impersonal and sadomasochistic themes, and males may underreport on intimate and exploratory themes as a way of conforming with social expectations of their gender roles and identities. In line with this, it is also possible that males experience less shame and guilt than women in sharing their sexual experiences, and so they feel more comfortable in reporting their genuine experiences compared to women. Some men may even feel a need to over report if they deem their genuine sexual experiences inadequate (e.g., they might feel they ought to fantasise more and fantasise more 'deviant' themes). Results from offenders may be prone to similar effects, for reasons earlier mentioned in the introduction. As such, the WSFQ might also be a measure of how prude someone is, how well or pressured they feel to identify with social stereotypes, or of how concerned they are about being released from a forensic setting.

Concurrent Validity

Although other measures of sexual fantasy exist, these have not been specifically compared to the WSFQ.

Reliability of the Wilson Sex Fantasy Questionnaire

Internal Reliability

With regards to the four fantasy themes, Baumgartner and colleagues (2002) report acceptable to excellent internal consistency with alpha values ranging from .83 to .92. Similarly, Skovran and colleagues (2010) report acceptable to excellent internal consistency with alpha values ranging from .77 to .92.

Unfortunately, more research is required before it is possible to assess reliability further. For example, it would be valuable to also measure test-retest reliability.

DISCUSSION

The WSFQ was developed in 1978 as a quantitative measure of sexual fantasy. It has been utilised to explore sexual fantasy experiences and other aspects of sexuality (e.g., libido, sexual satisfaction) in different populations, including males and females, heterosexuals and homosexuals, offenders and non-offenders, and across various cultures. This chapter aimed to critically evaluate the psychometric properties of the WSFQ and identified several strengths and weaknesses of the tool itself, but also in the way it has been utilised. The discussion focuses on the main ones, which pertain to content, structure, and external validity.

The WSFQ is a self-report measure that explicitly informs respondents of the object under investigation. This allows it to tap into sexual fantasy experiences by a) minimising the blurring of boundaries with other concepts such as sexual interest (even though these may well overlap); and b) reducing social desirability effects, if the respondent is permitted privacy during administration; though potential impacts of social desirability on responses should still be discussed, making reference to the general and individual contexts under which the questionnaire was administered (e.g., presence of others, purpose of tool administration). On the other hand, the WSFQ does not consistently encapsulate the concept of *fantasy*, with some questionnaire items instead referring to potentially related aspects

such as affect, physiological symptoms, or means of accessing sexually arousing material. There is also no evidence of a systematic and scientific approach in the selection of questionnaire items and the labelling of the fantasy themes. A qualitative interpretation of the four fantasy groups would be useful, rather than just presenting a statement of what statistical analysis led to establishing them.

The WSFQ is structured in a way that requests for respondents to report on their sexual fantasy experiences under three conditions: 'daytime', 'during masturbation or intercourse', and 'dreams whilst asleep'. Two main issues are apparent. Firstly, it seems legitimate to hypothesise that fantasy experiences whilst alone differ in many respects to fantasy experiences whilst in the company of another. Secondly, unless Wilson purposefully included a measure of *dreams* within his questionnaire, it is unclear how this concept can be used to measure *fantasies*; a key difference being that the former is presumably experienced unconscious, whilst the latter is experienced conscious. This being said, researchers have a tendency to only report on fantasy experiences during the 'daytime' measure, so this is only problematic when the tool is utilised in its entirety. In line with this, it is curious that researchers do not utilise (or at least do not report on) the remaining measures of the WSFQ considering the literature on sexual behaviour, including sexual offending, places much emphasis on (deviant) sexual fantasies as a precursor to sexual activity. Indeed, the WSFQ also asks respondents to report on their desire to act out each questionnaire item and whether this has been the case. It further asks respondents to name which questionnaire

item they find the most exciting in fantasy and reality. It would be interesting to explore whether a discrepancy in arousal exists in non-offenders who endorse deviant fantasy themes (i.e., a deviant sexual theme is sexually arousing in fantasy but not in reality), compared to sexual offenders (i.e., presumably, a deviant sexual theme is sexually arousing both in fantasy and reality). It would also be interesting to investigate whether researchers administer adapted or shortened versions of the WSFQ, and if they do not, what is to happen of the remaining data.

A last criticism of the WSFQ relates to its poor external validity. The questionnaire was developed in the United Kingdom in 1978. Wilson explains that he devised his list of fantasies by scoping both the scientific and popular literature, but the latter appears restricted to British sex magazines. Arguably, the four fantasy themes retrieved from his search are biased towards representing English sexual fantasies from that time. Despite this, Wilson himself has used the tool in Japan and contemporary research continues to utilise it, despite the fantasies selected and the overarching fantasy themes being almost four decades old. The WSFQ has also been used with the assumption that it equally reflects the range of sexual fantasies of males and females, heterosexuals and homosexuals, and offenders and non-offenders. However, if one of these groups is significantly underrepresented, inferences about fantasy frequency, for instance, will not be valid. In addition, though less problematic, the terminology used to describe the fantasies within the questionnaire would benefit from being modernised to support the ability for newer generations

to connect with the intended meaning of each item. Lastly, the data that is referred to as normative for the WSFQ is based on one sample of 100 Londoners in 1981. Though academics have a responsibility to critically evaluate the tools and data they use, the WSFQ manual should also not present data as normative when it is not.

Overall, the WSFQ would present as a useful tool if it is uplifted in its content using a systematic approach, if it is structurally modified, if appropriate norms are developed, and if it is used to its full potential. Not only does the WSFQ have the potential to support research on sexual fantasy experiences, but it has the potential to expand this to the study of sexual desire, and sexual behaviour.

CHAPTER 3

SYSTEMATIC REVIEW

Sexual Fantasy Prevalence and Themes of Adult Males on the Wilson Sex Fantasy Questionnaire: A Systematic Review

ABSTRACT

Chapter 3 presents a systematic review of the sexual fantasy themes (intimate, exploratory, impersonal, and sadomasochistic) and frequencies of adult males, as measured by the Wilson Sex Fantasy Questionnaire. It outlines the inclusion criteria for studies and samples, and the processes of quality assessment and data extraction. Overall, ten studies and 15 samples were selected, most of which were from the general population or the child molester population. As the majority of studies achieved a 'weak' quality rating, the results of the review should be interpreted with caution. An overall pattern of fantasy frequency was observed, regardless of sample demographics, with intimate fantasies being endorsed the most, followed by exploratory fantasies, impersonal fantasies, and finally, sadomasochistic fantasies. In addition, out of four affective personalities (self-actualising, high affective, low affective, self-destructive), self-actualising personalities endorsed intimate fantasies the most and self-destructive personalities endorsed them the least. Self-destructive personalities fantasised the most overall and low affective personalities fantasises the least. In terms of personality disorder, Cluster A diagnoses were associated with lower frequencies of intimate fantasies and Cluster B diagnoses fantasised the most on each of the four themes. Tentative hypotheses are offered in relation to a potential function of fantasies and of the relationship between fantasy and behaviour, including offending.

INTRODUCTION

Deviant sexual fantasies have long been hypothesised to guide sexual offending and this relationship has received empirical support. Research suggests that different typologies of sex offenders engage with deviant sexual fantasies, including rapists (e.g., Scully, 1993), child molesters (e.g., Looman, 1995), serial sexual offenders (e.g., a case study by Carabellese et al., 2010), sexual murderers of child and adult victims (e.g., Burgess, Hartman, Ressler, Douglas, & McCormack, 1986; Grubin, 1994; Maniglio, 2010; Prentky, Burgess, Rokous, Lee, Hartman, Ressler, & Douglas, 1989), sadistic sexual offenders with a diagnosis of psychopathy (MacCulloch, Snowden, Wood, & Mills, 1983), juvenile sex offenders (Zakireh, 2000), and juvenile sex murderers (Myers, 2002) with a diagnosis of conduct disorder (Myers & Blashfield, 1997; Myers, Burgess, & Nelson, 1998).

This being said, sex offenders also endorse non-deviant sexual fantasies (e.g., Baumgartner et al., 2002; Langevin, Lang, & Curnoe, 1998) and non-offenders endorse deviant sexual fantasies. In men, this includes themes of dominance, force, coercion, rape (Arndt, Foehl, & Good, 1985; Crépault & Couture, 1980; Gold & Clegg, 1990; Greendlinger & Byrne, 1987; Zurbriggen & Yost, 2004), sadism (Gray, Watt, Hassan, & MacCulloch, 2003), the sexual initiation of young girls (Crépault & Couture, 1980), and children (Becker-Blease, Friend, & Freyd, 2006; Briere & Runtz, 1989; Smiljanich & Briere, 1996). In women, themes include dominance (Arndt et al., 1985; Zurbriggen & Yost, 2004), suffering (Arndt et al., 1985), sadism (Gray et al., 2003) and children (Smiljanich & Briere, 1996).

In light of the above findings, this paper seeks a better understanding of sexual fantasy experiences across populations, with a focus on identifying relationships between fantasy frequency and fantasy themes in male offenders and non-offenders. As noted in Chapter 2, self-report tools, such as the Wilson Sex Fantasy Questionnaire, likely provide more valid and reliable measures of sexual fantasy. Though the tool's psychometric properties received some criticism, overall it provides a quantitative measure of sexual fantasy frequency and of four sexual fantasy themes during three contexts (insofar as is represented by the 40 items of the WSFQ), as well as a measure of sexual experience and sexual desire. By reviewing and extracting data from studies that all use the WSFQ, the hope is that a) the same entity is investigated across papers; b) this entity is sexual fantasy; c) other potential sources of variance are minimised; and d) valid and reliable inferences about the sexual fantasy experiences of male offenders and male non-offenders can be attempted.

METHOD

The systematic review was conducted following a step-by-step protocol developed by the authors, including study objectives, the identification of the target population and outcome measures, and strategies for searching the literature, excluding papers from the search results, quality assessing papers, and extracting data from remaining papers.

Literature search

Four databases (Medline, EMBASE, PsycINFO, and ASSIA) were searched using a combination of the following terms: sex fantasy, sex phantasy, or sex daydream, with male, men, man, or adult. The search strategy included variations of the words sex, fantasy, phantasy, daydream, male, and adult. An asterisk at the end of each word (i.e., sex*; daydream*; male*; adult*) or in lieu of the last letter of each word (i.e., fantas*; phantas*) indicated that the search engine should include variations (e.g., sexual fantasies) and plurals (e.g., daydreams). The database search was supplemented with a hand search of Google Scholar, but the grey literature was not consulted. The search for this review took place in November 2017.

Inclusion criteria

Studies were included in the next stage of the review if they: 1) were not review papers, discussion papers, books, book chapters, letters, commentaries, court cases, or conference proceedings; 2) were articles from peer-reviewed journals; 3) contained primary data collated from an independent sample of adult males; 4) were randomised or non-randomised controlled trial studies, pre-post studies without control groups, case-control, or cross-sectional studies; 5) were published in English; 6) were conducted in a Western country; 7) were published after 1996; and 8) explored sexual fantasies using the Wilson Sex Fantasy Questionnaire. All papers were examined for relevance by sifting through titles and abstracts. The method and results sections were consulted when the title and abstract were ambiguous, for example if sample characteristics, data

collection method, or nature of the data collated were unclear (see Figure 2 for a schematic overview of the selection process).

On a macrolevel, Criterion 6 attempts to minimise the impact of cross-cultural differences on group variance. Though it is acknowledged that variance is likely between Western countries, it is arguably lesser than between Western and Eastern countries. On a microlevel, the authors also considered the potential impact of socio-cultural and political differences within the same countries but as a function of time, thus Criterion 7. For instance, changes in attitudes towards sexuality as a healthy aspect of human functioning, and not a taboo topic, might encourage individual's to be more genuine in disclosing their sexual experiences (e.g., due to reduced feelings of guilt or shame associated with their sexual interests, preferences, fantasies, and activities). Arguably, this shift has been even greater in relation to female sexuality (e.g., increased gender equality) and homosexuality (e.g., legalisation of homosexual marriage). As such, this review considers male samples only.

In line with the above, technological advances have enabled people to access vast amounts of varied information (including pornography) and to connect with one another via social media platforms and other cyber communities, generally developed from a (sometimes sexual) common interest. As such, shifts in attitudes and beliefs towards sexuality and sex, and thus people's responses to these in research questionnaires, might also be impacted by such developments. Minimising the timeframe for inclusion of articles aimed to minimise group variance that might be explained by socio-

cultural, political, and technological differences. Criterion 7 was considered later during the screening process.

Initially, Criterion 8 specified that all self-report measures could be included in the systematic review, but this was later amended to only include studies using the WSFQ. As aforementioned, this was to allow for the extraction, analysis, and interpretation of data that pertains to the same object of investigation and has been collated as consistently as possible using the same measurement tool.

Following the application of Criteria 7 and 8, eleven papers were selected for the review. One article could not be located in full text, so the corresponding author was contacted but unfortunately the article was received after the deadline for the review and so was not included.

Figure 2 depicts the processes involved from the literature search to the selection of papers for quality assessment.

Quality assessment

A quality assessment worksheet (see Appendix B) was devised by the authors and used to determine the quality of each paper. The worksheet was an adapted version of the Effective Public Health Practice Project quality assessment tool for quantitative studies (see Thomas, Ciliska, Dobbins, & Micucci, 2004). It was used to examine each paper according to the following six measures:

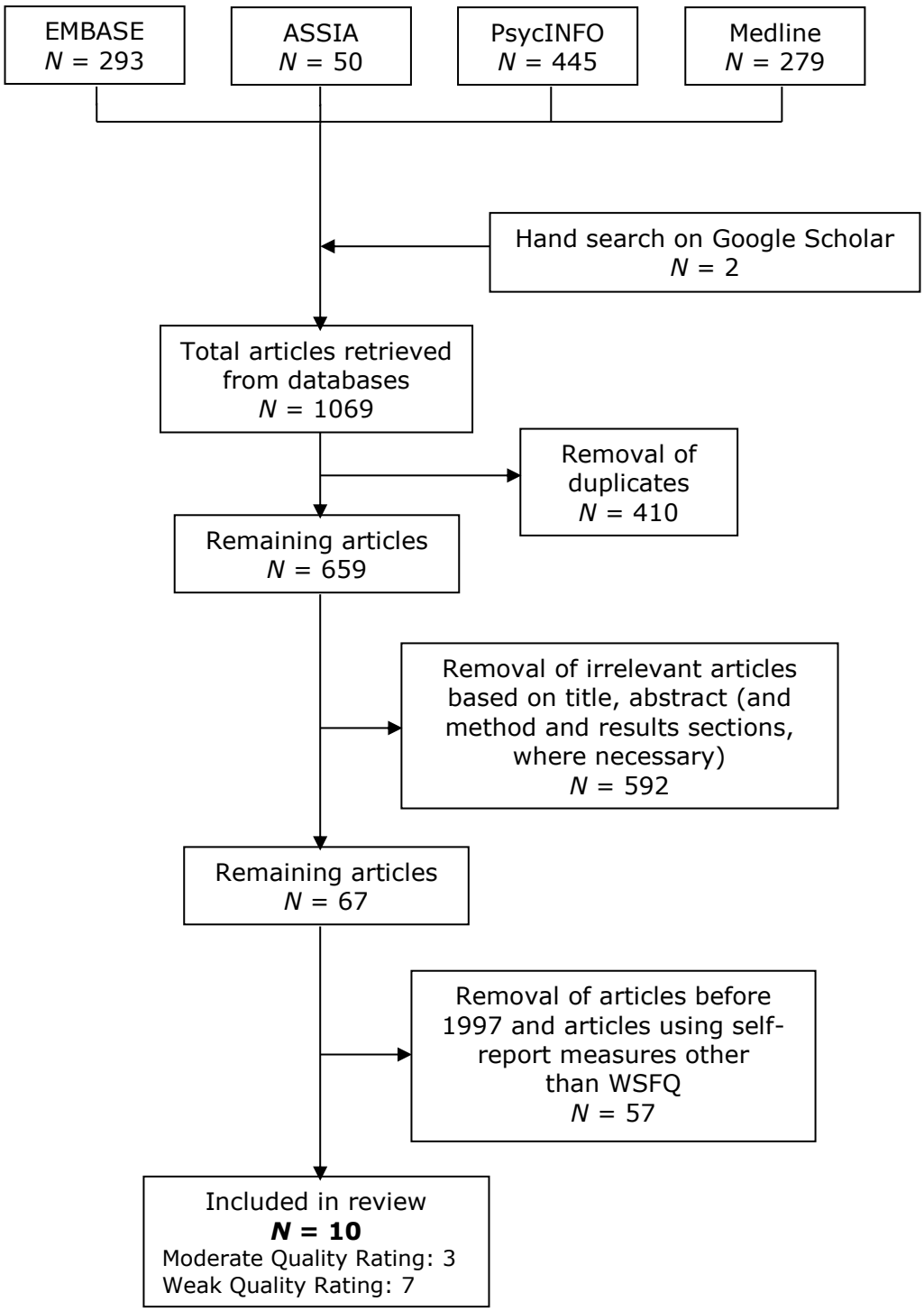


Figure 2. Processes Involved in Study Selection.

selection bias (how well the sample represents the target population, did participants consent to taking part), study design (study type, availability of pre-intervention data), data collection methods (validity and reliability, circumstances under which the WSFQ was

administered), confounding variables and controlling of confounders (e.g., demographics), statistical analyses (availability of descriptive data for the WSFQ, consideration for impact of study variables and potential confounding variables), and sample size (see Table 5 for quality rating of each article). Each measure was assessed for quality (i.e., weak, moderate, strong), determined by how well a paper considered it, adhered to it, and reported on it. An overall quality rating for each paper was then derived from the quality ratings on each of the six measures. Papers were attributed a strong quality rating if they achieved no weak ratings across the six quality measures (N = 0). They were attributed a moderate quality rating if they obtained one weak rating (N = 3), and were attributed a weak quality rating if they obtained two or more weak ratings (N = 7). Given the limited number of studies available, and given that the majority of the quality ratings were weak, no articles were excluded from the review at this stage. It is thus advised that subsequent hypotheses and inferences be interpreted with this in mind.

Twenty percent of selected papers (N = 2) *were* rated by a second rater, a qualified forensic psychologist, and the ratings of both raters were subsequently compared and any disagreements resolved through discussion.

Data extraction

A data extraction worksheet (see Appendix C) was devised by the authors and used to retrieve information about frequencies of fantasy themes, overall fantasy scores, and group comparisons from

papers when this was part of the study design. The quality assessment tool yielded little disagreement.

One paper (Baughman et al., 2014) provided the mean rating for each fantasy theme (e.g., a mean rating of 2.79 out of 5 on the intimate fantasy theme scale, with a possible score of 5 achievable per fantasy item) so the overall fantasy score for each theme was estimated by multiplying the mean rating by 10 (e.g., overall fantasy score of 27.9 out of 50 for the intimate theme, with a possible score of 50 achievable per fantasy theme).

Four papers (Allan, Grace, Rutherford, & Hudson, 2007; Baughman et al., 2014; Colón Vilar et al., 2016; Waismann et al., 2003) did not provide overall fantasy scores so these were estimated by summing the fantasy scores on each of the four fantasy subscales.

RESULTS

Across the ten selected papers, 15 samples were retrieved (see Figure 3 for a breakdown of samples): six non-forensic and non-clinical samples, one of which the authors of that study then split the sample into four groups based on affective personality type, four forensic samples, one clinical sample, and one sexually deviant sample. The present paper qualifies samples as *non-clinical and non-forensic* when participants have not been recruited for their clinical diagnosis and/or criminal conviction. Samples are described as *clinical* if participants were recruited for their clinical diagnosis, and samples were described as *forensic* if participants were recruited for their criminal conviction. The *sexually deviant* sample was referred to as such because participants were selected for their self-reported

deviant sexual interest (i.e., fetishism, sadomasochism, and transvestism).

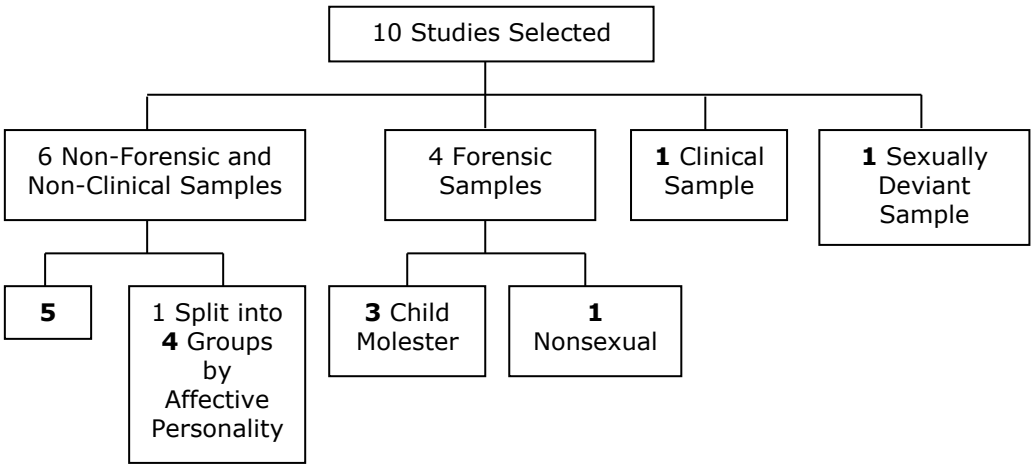


Figure 3. Breakdown of Selected Samples.

The four affective personalities are as follows (Carlstedt et al., 2011): self-actualising personalities experience high positive affect and low negative affect, high affective personalities experience both high positive affect and high negative affect, low affective personalities experience low positive affect and low negative affect, and finally, self-destructive personalities experience low positive affect and high negative affect.

The clinical sample involves individuals with a diagnosis of mood or psychotic disorder (schizophrenia, schizoaffective disorder, bipolar disorder, and major depressive disorder), and comorbid personality disorder (classified into Clusters A, B, C, as per the DSM IV; Colón Vilar et al., 2016). Cluster A disorders are referred to as the odd cluster and include paranoid, schizoid, and schizotypal personalities. Cluster B disorders are referred to as the dramatic cluster and include histrionic, narcissistic, borderline, and antisocial

personalities. Cluster C disorders are referred to as the anxious cluster and include dependent, avoidant, and obsessive-compulsive personalities.

Most of the studies provide means and standard deviations on each of Wilson's four fantasy themes as well as an overall fantasy frequency mean score. From these, attempts were made to explore trends in fantasy experience across the samples, to propose preliminary hypotheses, and draw tentative conclusions. It is important to note that this was achieved from a visual inspection of the data (see Table 5 for a summary of the data) and that most articles achieved a *weak* quality rating.

Table 5. *Summary of Data Extracted from and Quality Ratings of Selected Articles (N = 10)*.

Source And Quality Rating	Subjects and Setting	WSFQ Int. Mean (SD)	WSFQ Exp. Mean (SD)	WSFQ Imp. Mean (SD)	WSFQ Sado. Mean (SD)	WSFQ Overall Fant. Mean (SD)
Plaud & Bigwood (1997) Weak rating	116 heterosexual university students, aged 18-52, mean age 21.2 years Non-forensic and non-clinical community sample, United States	31.7 (9.31)	14.3 (7.87)	11.7 (6.77)	4.88 (5.71)	62.6 (23.9)
Baumgartner, Scalora, & Huss (2002) Weak rating	64 CM (46.9% intrafamilial, 53.1% extrafamilial) with no history of raping adult victims	28.1 (13.3)	13.6 (10.3)	13 (9.1)	4.8 (6.9)	59.6 (34.2)
	41 nonsexual offenders (NSO) with no history of	20.7 (12.7)	9.2 (9.6)	9.7 (9.8)	5.9 (8.4)	45.5 (35.9)

	sexual offences Maximum security inpatient facility, United States					
	CM fantasise about intimate and exploratory themes more than NSO. No significant difference on Impersonal and Sadomasochism subscales, though almost a significant difference on the Impersonal scale. Overall, CM fantasise more than NSO. Pillai's Trace = .13, $F(4, 100) = 3.71$, $p = .007$ Additional Passive and Active subscales. CM sample: Passive 8.3 (6.0); Active 9.4 (6.1) NSO sample: Passive 7.2 (7.2); Active 6.4 (6.9) CM fantasise about active roles more than NSO. No significant difference on Passive scale. Pillai's Trace = .07, $F(2, 102) = 3.69$, $p = .028$					
Waismann, Fenwick, Wilson, Hewett, & Lumsden (2003) Weak rating	28 paraphilics (23 declared fetishistic interests, 22 sadomasochistic activities, and 14 were transvestic), mean age 35.6 years	23.18 (11.1)	14.04 (8.4)	16.36 (8)	15.96 (8.8)	69.54
	34 heterosexual controls who did not declare any of the three 'variant' options, mean age 28.8 years All subjects were right-handed and free of serious physical and mental health problems. Both samples were predominantly Caucasian Non-forensic and non-clinical community sample, United Kingdom	20 (9.4)	9.2 (7.8)	8.65 (6.1)	2.71 (3.4)	40.56
	Independent t-tests conducted. Paraphilics fantasise about exploratory, impersonal, and sadomasochistic themes more than Controls ($p = .023$; $p < .001$; $p < .001$, respectively). The difference was greatest on the Impersonal and Sadomasochism					

	subscales. No significant difference on Intimate scale (reported as *ns*).					
Allan, Grace, Rutherford, & Hudson (2007) Weak rating	471 CM who are convicted or have admitted to sex offence against child under 16. Intellectual disabilities and active mental health issues excluded, but not depression Prison, New Zealand	23.69 (11.16)	10.89 (8.5)	11.39 (7.87)	4.12 (5.73)	50.09
Brain (2011) Weak rating	164 university students, age range 18-40, mean age 21.6 years	24.31 (11.2)	8.89 (7.7)	7.52 (6.6)	3.25 (4.9)	43.97 (26.1)
	99 sex offenders with index offence against child victim. Offenders with index offence against adult victim were excluded. Offenders receiving treatment Both community samples, United States	14.58* (10.3) *21.32** *(9.7)*	3.7* (4.7) *7.94 (4.1)*	3.46* (4.2) *7.02 (3.8)*	0.83* (2.0) *1.83** *(1.9)*	22.57* (17.9) *38.10** *(16.1)*
	Sex offender sample: fantasy theme and overall fantasy scores in italics are adjusted to reduce the influence of social desirability responding. Independent t-tests conducted. *Significantly different from student sample, $p \leq .005$. Additional Passive and Active subscales. Student sample: Passive 6.92 (4.9); Active 7.03 (5.3) Offender sample: Passive 3.25 (3.0)*; Active 3.58 (3.4)* Offender sample (adjusted): Passive 5.07 (2.8)*; Active 6.25 (3.1)					
Carlstedt, Bood, & Norlander (2011) Moderate rating	75 men grouped into four classes of affective personality Non-forensic and non-clinical community sample, Sweden					

	Self-destructive (low PA and high NA)	30.79 (8.70)	15.74 (9.44)	13.89 (8.83)	6.42 (8.64)	66.84 (27.85)
	Low affective (low PA and low NA)	22.42 (9.19)	10.08 (3.99)	5.5 (3.12)	1.42 (1.68)	39.42 (13.37)
	High affective (high PA and high NA)	28.65 (8.16)	13.25 (6.72)	11.6 (6.14)	4.8 (5.4)	58.3 (22.06)
	Self-actualizing (high positive affect and low negative affect)	31 (10.8)	8.0 (3.74)	6.5 (4.43)	3.5 (3.42)	49 (18.2)
Alleyne, Gannon, Ó Ciardha, & Wood (2014) Weak rating	80 university students, mean age 22.97 years Non-forensic and non-clinical community sample, United Kingdom	25.3 (11.74)	10.65 (7.69)	9.55 (6.43)	X	X
	Positive and statistically significant relationship between Exploratory scale and students' sexual interest in multiple perpetrator rape. $\beta = 0.26$, $p = .015$					
Baughman, Jonason, Veselka, & Vernon (2014) Moderate rating	190 university students (29.5% males from sample of 643) Non-forensic and non-clinical community sample, United States	27.9 (7.5)	19.3 (4.3)	15.9 (3.7)	13.4 (4.1)	76.5
Allen (2015) Weak rating	59 men, mean age 31.10 years. 45 heterosexual and 11 homosexual. Predominantly Caucasian sample. Non-forensic and non-clinical community sample, United Stated	26.32 (9.75)	14.2 (7.61)	12.49 (6.43)	8.47 (8.44)	61.49 (25.48)
Colón Vilar, Concepción, Galynker, Tanis, Ardalan, Yaseen, & Cohen (2016)	43 inpatients with mood or psychotic disorders (major depressive disorder, bipolar	26.79 (13.5)	12.42 (8.5)	10.93 (7.7)	4.26 (5.2)	54.4

Moderate rating	disorder, schizoaffective disorder, schizophrenia) and personality disorders (Clusters A, B, and C), but proportion of men with each disorder is not specified. Patients with primary substance use disorders, mental retardation, and dementia, were excluded.	
	Psychiatric inpatient facility, United States	

Note. SD: standard deviation; CM: child molester; NSO: non-sexual offender. An 'X' specifies that the information is unavailable.

In terms of overall fantasising, an inspection of the means suggests significant variance between samples, ranging from 38.10 to 76.50. However, variance between samples of the same population makes it difficult to quantify and qualify this population and to compare it to other groups, especially when these are also subject to significant variance within them. For example, comparing the non-forensic and non-clinical population with the child molester population would involve comparing an overall fantasy mean range of 40.56 to 76.50 (five samples) and 38.10 to 59.60 (three samples), respectively. Depending on which value is selected to represent the target population, one could infer that non-offenders fantasise at higher rates (e.g., 76.50 versus 38.10) or that child molesters fantasise at higher rates (e.g., 40.56 versus 59.60). As such, valid and reliable inferences about the overall fantasy experiences of different populations and to compare these with other populations.

Relative frequencies were calculated for each sample (see Table 6) to compare fantasy frequency across subscales and between groups. The paper by Alleyne et al. (2014) was not included as it does not include a fantasy frequency score on the sadomasochism subscale and overall fantasy score.

Table 6. *Relative Frequencies on the Four Fantasy Subscales (N = 9)*.

Source	Subjects	WSFQ Intimate	WSFQ Exploratory	WSFQ Impersonal	WSFQ Sadomaso.
Plaud & Bigwood (1997)	University students	50.64	22.84	18.69	7.80
Baumgartner, Scalora, & Huss (2002)	CM	47.15	22.82	21.82	8.05
	NSO	45.49	20.22	21.32	12.97
Waismann, Fenwick, Wilson, Hewett, & Lumsden (2003)	Sexually deviant but non-forensic and non-clinical	33.33	20.19	23.53	22.95
	Non-forensic and non-clinical controls	49.31	22.68	21.33	6.68
Allan, Grace, Rutherford, & Hudson (2007)	CM	47.29	21.74	22.74	8.23
Brain (2011)	University students	55.29	20.22	17.10	7.40
	CM	64.60	16.40	15.33	3.68
	CM (adjusted scores)	55.96	20.84	18.43	4.80
Carlstedt, Bood, & Norlander (2011)	Non-forensic and non-clinical				
	Self-destructive	46.06	23.55	20.78	9.60
	Low affective	56.87	25.57	13.95	3.60
	High affective	49.14	22.73	19.90	8.23
	Self-actualising	63.27	16.33	13.27	7.14
Baughman, Jonason, Vaselka, & Vernon (2014)	University students	36.47	25.23	20.78	17.52

Allen (2015)	Community males	42.80	23.09	20.31	13.77
Colón Vilar, Concepción, Galynker, Tanis, Ardalan, Yaseen, & Cohen (2016)	Inpatients with mood or psychotic disorder and personality disorder	49.25	22.83	20.09	7.83

With regards to the fantasy themes, an overall pattern is observable across samples: intimate fantasies are endorsed the most, followed by exploratory fantasies, then impersonal fantasies, and finally, sadomasochistic fantasies. Intimate fantasies are consistently experienced at higher rates than other themes across all samples and sadomasochistic fantasies are experienced at lower rates than other themes across all samples (with the exception of the sexually deviant sample who endorsed exploratory fantasies the least, Waismann et al., 2003). The difference in fantasy frequency between the exploratory and impersonal themes varies in significance and nature; for some samples the difference is greater (e.g., 25.23% and 20.78%, respectively, in Baughman et al., 2014) than others (e.g., 22.68% and 21.33%, respectively, in Waismann et al., 2003), and for three of the samples, the frequency hierarchy is reversed (i.e., 21.74% and 22.74% in Allan et al., 2007; 20.22% and 21.32%, in Baumgartner et al., 2002; and 20.19% and 23.53% in Waismann et al., 2003). The overall pattern across the four fantasy themes was not affected once the scores of child molesters were adjusted for the potential influence of social desirability responding (Brain, 2011).

On the intimate subscale, relative frequencies vary from 33.33% to 63.27%, with the sexually deviant sample fantasising the least and individuals with a self-actualising affective personality

fantasising the most (Carlstedt et al., 2011). The variance is greater within non-forensic and non-clinical samples, with relative frequencies ranging from 36.47% (excluding the deviant sample) to 63.27%. In comparison, the variance is lesser among child molesters, with relative frequencies ranging from 47.15% to 64.60% (or 55.96% when adjusted; Brain, 2011).

Less variability across samples was observed on the exploratory and impersonal subscales, with relative frequencies ranging from 16.33% to 25.57%, and from 13.27% to 23.53%, respectively. Individuals with self-actualising affective personalities fantasise exploratory themes the least and individuals with low affective personalities fantasised them the most. Individuals with self-actualising affective personalities fantasise impersonal themes the least and sexually deviant individuals fantasise them the most. Variance on both themes for the non-forensic and non-clinical samples, and the child molester samples is similar, ranging from 16.33% to 25.57%, and 16.40% (or 20.84% adjusted, Brain, 2011) to 22.82%, respectively, on the exploratory scale, and ranging from 13.27% to 23.53%, and 15.33% (or 18.43& adjusted, Brain, 2011) to 22.74% on the impersonal scale.

On the sadomasochism subscale, variability across samples is large, ranging from 3.6% to 22.95%, with individuals with low affective personality types engaging with sadomasochistic the least and the sexually deviant sample endorsing them the most. It is also noticeable that nonsexual offenders endorse this theme at 12.97% and that for all other samples, this rate is below 10%, except for two

non-forensic and non-clinical samples achieving rates of 17.52 and 13.77%. Interestingly, for these four samples, this equates to a reduction of intimate sexual fantasies, with the exploratory fantasies and impersonal fantasies remaining at similar frequencies to other samples. Also of interest, the non-forensic and non-clinical samples appear to endorse more sadomasochistic fantasies than child molesters (even with exclusion of the sexually deviant sample), with relative frequencies ranging from 6.68% to 17.52%, and from 3.68% (or 4.8% adjusted, Brain, 2011) to 8.23%, respectively.

Due to the limited availability of samples of a specific population, this section has focused on exploring the fantasy experiences of non-forensic and non-clinical samples, and child molester samples. However, there is also value in examining single samples independently and in relation to overall trends as this allows for the development of tentative hypotheses.

In their study, Carlstedt and colleagues (2011) examined the relationship between affective personality types and sexual fantasies. Although the authors do not distinguish between male and female data in their statistical analyses, it is possible to explore how the four affective personalities (self-actualising, high affective, low affective, and self-destructing) compare across the four fantasy subscales and overall fantasy scores. The same trend was observed across the four fantasy subscales, with all four affective personalities experiencing higher levels of intimate fantasies, followed by exploratory fantasies, then impersonal fantasies, and finally, sadomasochistic fantasies. As with other samples, the most prominent variability appeared within

the intimate theme, with relative frequencies ranging from 46.06% to 63.27%. Self-actualising personalities endorsed intimate fantasies the most, followed by low affective personalities, then high affective personalities, and finally, self-destructive personalities. In terms of overall fantasy scores, individuals with self-destructive personalities fantasised the most, followed by high affective personalities, then self-actualising personalities, and finally, low affective personalities.

Colón Vilar and colleagues (2016) examined the relationship between mood and psychotic disorders, personality disorder, and sexual fantasies. Statistical analyses did not discriminate between male and female data as no association was found between gender and these variables. The authors also found no associations between mood and psychotic disorders and the four fantasy themes, including when mood and psychotic disorders were analysed separately. With regards to personality disorder, Cluster B disorders were significantly and positively associated with fantasy frequency on each fantasy subscale, and Cluster A disorders were significantly and negatively associated with intimate sexual fantasies.

DISCUSSION

The present paper aimed to systematically review the sexual fantasies of adult male offenders and non-offenders. Ten articles using the Wilson Sex Fantasy Questionnaire were examined, the majority of which collated data pertaining to non-forensic and non-clinical samples and/or child molesters. Four articles also looked at either nonsexual offenders, sexually deviant men, affective

personalities, mood and psychotic disorders, and personality disorders.

A consistent observation was that intimate sexual fantasies are endorsed at higher rates, followed by exploratory sexual fantasies, then impersonal sexual fantasies, and finally, sadomasochistic sexual fantasies, regardless of forensic and clinical background. This pattern suggests that most populations engage with sexual fantasies across all four themes, congruent with the idea that sex offenders and non-offenders endorse deviant and non-deviant fantasy themes alike, and that other factors likely contribute to the fantasy-behaviour relationship, if there is one. For instance, the overreliance theory (Stein, 2007) proposes that sex offenders engage with deviant sexual fantasies at higher frequencies than non-offenders, making these more readily accessible both from internal and external cues, and thus increasing the likelihood of real-life enactment (Gee & Belofastov, 2007). It is nonetheless unclear why offenders might rely on deviant fantasies more to begin with. However, considering the pattern of fantasy frequency obtained in this review, this does not appear to be the case.

To exemplify the above, it is helpful to compare the non-forensic and non-clinical samples with the child molester samples, as there are more than two from each population. Both samples endorsed each theme at similar rates, in fact, some of the non-forensic and non-clinical samples engaged with sadomasochistic fantasies at higher frequencies than some of the child molester samples. The data is nonetheless vulnerable to misinterpretation,

mainly due to potential issues with the external validity of the WSFQ and self-report measures in general. As pointed out in Chapter 2, the WSFQ fantasy scales are constructed with fantasy items that may relate more to the non-forensic and non-clinical population than they do the child molester population (e.g., no questionnaire item explicitly measures paedophilia). It might therefore be unwise to compare the fantasy experiences of two groups when only one of those groups is represented by the tool of measurement. Additionally, the child molester population may be prone to overreporting non-deviant fantasy themes and to underreporting deviant themes in an attempt to impression manage. One study adjusted child molester scores for social desirability effects. Although this did decrease the frequency of intimate fantasies and increased the frequency of sadomasochistic fantasies, it also minimised the variance between the non-forensic and non-clinical sample, and the child molester sample. Furthermore, it is curious that the author did not adjust the scores of the non-forensic and non-clinical sample; presumably, members of the public might also wish to impression management considering the sensitive nature of the subject under investigation. It is also curious that this was the only study to adjust for social desirability.

Interestingly, it is rarely discussed what is being measured by fantasy frequency, besides from the more obvious: *how often a fantasy is fantasised*. For example, one might hypothesise that higher fantasy frequencies coincide with fantasy preferences. If this is the case, the aforementioned pattern of fantasy frequency may reflect a hierarchy of fantasy preference, and this review would suggest that

fantasy preference is the same across male populations, regardless of forensic and clinical background. This finding raises questions regarding the relationship between sexual fantasy and sexual behaviour, if this is hypothetically not primarily associated with fantasy frequency and theme. For instance, if sex offenders also prefer intimate fantasies, then why do they resort to deviant sexual behaviour, or sexual offending? On theory might be that for child molesters, sexual intimacy is achieved by interacting with children.

Nonetheless, if individuals endorse fantasies from all four themes and several different fantasies within each theme, then it is still unclear how an individual might go about selecting a fantasy from an extensive repertoire of varied items. Presumably, all fantasies reported on are effective in producing sexual arousal. If the individual had a single preferred sexual fantasy, then this may be relied on exclusively as it is a predictable and guaranteed source of arousal. One theory might be that fantasy retrieval is dependent on a set of conditions or the context in which the individual finds themselves, created from an interaction of the internal and external world, as pointed out in Chapter 1.

It is worth noting that the above is explored in terms of general trends for the samples identified in this review. Is it apparent that the overall pattern of fantasy frequency might be affected when additional confounders are explored, such as personality type. Although the overall pattern of fantasy frequency was observed across four types of affective personality (Carlstedt et al., 2011), two key findings were reported: self-actualising personalities endorse intimate fantasies the

most whilst self-destructive personalities endorse them the least, and self-destructive personalities fantasise the most overall whilst low affective personalities fantasise the least. Self-actualising individuals are reported to experience high positive affect and low negative affect. One might hypothesise that such persons have high self-esteem, good coping skills, and a positive outlook on life. On the other hand, self-destructive individuals are said to experience low positive affect and high negative affect. Such individuals might experience low self-esteem, poor coping skills, and a negative outlook on life. Regarding intimate fantasies, one theory is that the traits characteristic of self-actualising and self-destructive personalities are associated with one's desire or ability to relate to other people, which would be higher for the former than the latter. This may also explain why self-destructive personalities fantasise the most; they may resort to fantasising as a way of compensating for their difficulties interacting with and making sense of the real world. It is less clear why low affective personalities might fantasise the least. Such persons are reported to experience low positive affect and low negative affect. One theory is that fantasies sometimes serve to regulate one's negative internal state, such as with self-destructive personalities, and as such, low affective personalities engage with fantasising at lower frequencies because they present in a more apathetic way.

The second study (Colón Vilar et al., 2016) looking at personality type found a negative relationship between Cluster A 'odd' personality disorders (i.e., paranoid, schizoid, schizotypal) and

intimate fantasies. This is very congruent with the idea that Cluster A individuals tend to self-isolate, struggle to trust others, and to form long-term meaningful relationships. This study also reports that Cluster B individuals (i.e., histrionic, narcissistic, borderline, antisocial) fantasised more overall than Clusters A and C (i.e., anxious, dependent, avoidant, obsessive-compulsive). This is in harmony with the above hypothesis that one of the functions of fantasising is to regulate emotions. Indeed, Cluster B personalities are perhaps the most emotionally dysregulated, experiencing intense feelings that are difficult to manage, including very low sense of self-worth, which is very similar to the above description of self-destructive personalities.

This chapter aimed to compare the sexual fantasy experiences of male offenders and non-offenders, in light of repeated inferences within the literature that both groups are distinguishable from the types of fantasies they endorse and the frequency with which they endorse them. Although the present findings are based on a selection of papers that have been primarily rated as weak in quality, an interesting and consistent pattern of fantasy hierarchy has emerged across samples with intimate fantasies being endorsed the most, followed by exploratory fantasies, then impersonal fantasies, and finally, sadomasochistic fantasies. This suggests that the fantasy experiences of offenders and non-offenders do not significantly differ in terms of theme, with both groups endorsing deviant and non-deviant fantasy themes alike and at similar rates. In fact, some child molester samples even fantasised about deviant fantasies at lower

rates than non-offenders. This being said, it must be reiterated that the WSFQ arguably does not measure paedophilic fantasies, and thus is not equipped to measure the potential fantasies of child molesters. Nonetheless, these findings provide potential avenues for future research. Additional research on the relationship between fantasy and personality is also encouraged, as well as further explorations of the underlying meaning of frequency in the context of fantasy.

CHAPTER 4

EMPIRICAL STUDY

The Relationship Between Sexual Fantasies, Pornography Consumption, Childhood Abuse and Sexual Behaviour in Adult Males and Females.

ABSTRACT

Chapter 4 aimed to explore the relationships between sexual fantasies, sexual behaviour, pornography consumption, and childhood abuse. One hundred and thirty-three members of the general population completed an online survey including an adapted version of the Wilson Sex Fantasy Questionnaire. Positive relationships were identified between frequency of sexual fantasising, frequency of masturbation, and frequency of pornography consumption, but future research is recommended to establish causality. In males, emotional and physical abuse in childhood were positively associated with masturbation frequency. Physically abused males fantasised more overall and emotionally abused males fantasised more intimate fantasies during masturbation, and more intimate fantasies and sadomasochistic fantasies during sexual intercourse. In females, sexual abuse was negatively related to frequency of sexual intercourse, associated with higher rates of fantasy during masturbation, overall and with regards to impersonal fantasies, and associated with higher rates of impersonal fantasies during intercourse. Sexually abused males fantasied higher rates of sadomasochistic fantasies during intercourse. Tentative hypotheses are offered that focus on the relationship between abuse type and sexual fantasy experience, as well as gender differences in coping style.

INTRODUCTION

A substantial amount of literature theoretically and empirically relates deviant sexual fantasies to sex offenders and sex offending. However, research has shown that non-offender populations also endorse such fantasies, so it remains unclear what facilitates the transition from fantasy to offence, if this relationship exists.

The sexual fantasies of offenders and non-offenders cannot be distinguished based on theme alone. Although investigating fantasy content is potentially fruitful, it is essential to also examine the correlates and structural properties of this construct (Bartels & Gannon, 2011; Gee, Ward, Belofastov, & Beech, 2006). Various factors and underlying psychological processes are associated with the onset, development, and maintenance of sexual fantasies, all of which may provide insight into the fantasy-behaviour relationship. For instance, the roles of sexual arousal, cognition, affect, personality, and behaviour have been highlighted (for a review, see Bartels & Gannon, 2011), as well as the potential influences of the media, pornography, childhood abuse, modelled experience, and previous sexual experiences (Gee & Belofastov, 2007).

McGuire and colleagues (1965) propose that sexual fantasies develop over time from the process of masturbating to the memory of initial sexual experiences. Thus, aversive or traumatic events, such as child sexual abuse, might lead to the onset and development of deviant sexual fantasies (see Figure 4 for proposed schematic representation), which is congruent with the vast literature that identifies sexual abuse in the childhoods of sex offenders (e.g.,

Maniglio, 2011). This being said, not all victims of child sexual abuse go on to sexually offend (Gee & Belofastov, 2007; Maniglio, 2009), and not all sex offenders were sexually abused in childhood (van Wijk, Vermeiren, Loeber, Hart-Kerkhoffs, Doreleijers, & Bullens, 2006). Similarly, it could be speculated that not all victims of child sexual abuse go on to develop deviant sexual fantasies, and not all who have deviant sexual fantasies were sexually abused in childhood. It is also highly likely that some sex offenders do not endorse deviant sexual fantasies at all (see Figure 5 for an illustration of potential pathways from childhood sexual abuse to sexual offending). Similarly, it is not purported here that childhood sexual abuse is the sole contributing factor to the onset and development of deviant sexual fantasies.

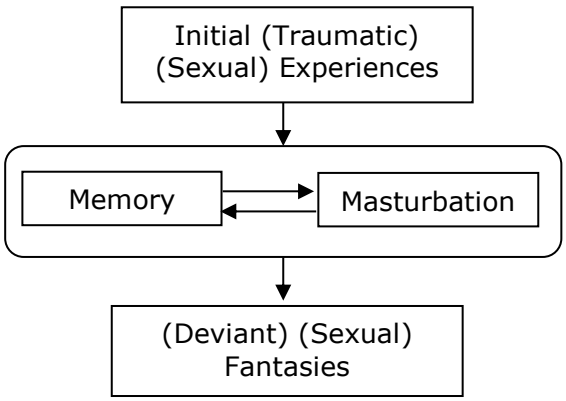


Figure 4. Proposed Schematic Representation of the Onset and Development of (Deviant) Sexual Fantasies (McGuire, Carlisle, & Young, 1965), Including Relationship Between Childhood Abuse and Deviant Sexual Fantasies.

Though useful, McGuire and colleagues' theory does not account for sexual fantasies that originate prior to the first sexual experience and perhaps even facilitate or contribute to its occurrence (and if so, how). It would also benefit from integrating other types of

sexual experience besides intercourse. A variety of factors may forge one's understanding of sex, some of which were mentioned earlier, such as pornography and the media, and others including masturbation, puberty (e.g., development of physical attributes, physiological responses to stimuli), education (e.g., biology classes around sexual reproduction, classes on sexual awareness), religion, social networks (e.g., discussions with peers, romantic partners), and the home environment (e.g., how private parents are with their sex life, parental supervision). In essence, a person's first experiences of sex can be viewed as an interaction of various systems.

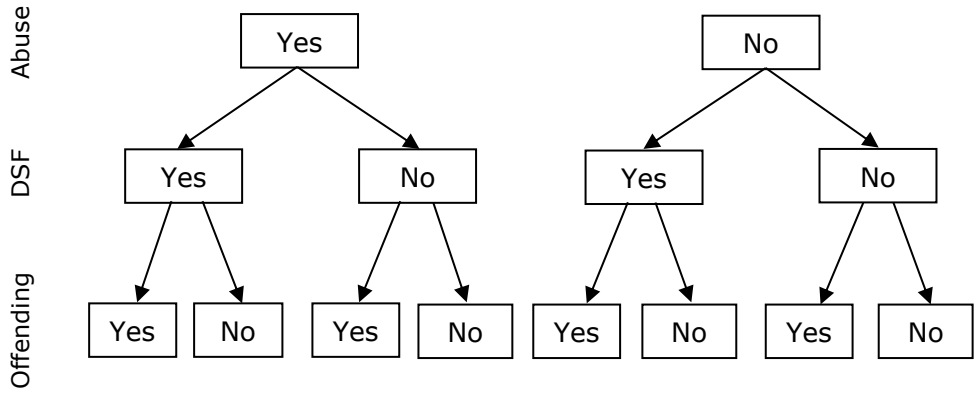


Figure 5. Relationships Between Childhood Abuse, Deviant Sexual Fantasies, and Sexual Offending.

Key. DSF = deviant sexual fantasies.
Note. It is also useful to interpret this diagram with different types of abuse, fantasies, and offences in mind. In addition, where there is no evidence of deviant sexual fantasies, alternatives might involve no fantasy, non-deviant sexual fantasy, non-sexual deviant fantasy, or a non-deviant and non-sexual fantasy.

Lastly, McGuire and colleagues explicate that the initial sexual experience may not be arousing at first but that this gradually occurs through repeated masturbation and orgasm. Though the process of conditioning make sense, it is unclear why masturbation, a

presumably enjoyable and positive activity, would be paired with the memory of a negative experience (e.g., sexual abuse; premature ejaculation; painful sex, anxiety, fear, shame, disappointment) and how someone might achieve sexual arousal and orgasm by fantasising about it. There is also no exploration of other possible processes of reinforcement or maintenance of fantasies. In addition, it is also unclear whether there is in fact a distinction between memory and fantasy, and if there is, what the transition might be from one to the other. Breaking down this process would provide insight into what aspects of a memory or event are salient to the individual: which elements are discarded, worth keeping, adapted, and added, and why. As discussed in Chapter 1, it is purported in this thesis that if a memory is not changed in any way, that it remains a memory, even if it is recalled for sexual arousal, and that fantasies include a contribution, however small, from the individual's imagination.

The relationship between childhood trauma (including physical abuse, emotional abuse, and neglect), sexual fantasies, and sexual behaviour has received significant attention in the literature, both in sex offenders, non-sexual offenders, and non-offenders. Fantasies in general are associated with coping in trauma victims. For example, revenge fantasies are described as providing a source of outlet, a mental space for rectifying imbalances, and alleviating symptoms of distress (Alibhai, 2009; Haen & Weber, 2009; Hardy & Laszloffy, 2005; Kunst, 2011; Lillie & Strelan, 2016). In line with this, though reductionist, it is purported that all sexual fantasies originate in

childhood and that their content reflects an attempt to mentally resolve traumas and conflicts (Stoller, 1979) or that they are used to compensate for sexual repression, frustration, or lack of adequate sexual outlet in real life (Deutsch, 1944).

Though this may well be the case for some individuals, as aforementioned, it cannot be claimed that all (traumatic) negative experiences lead to (deviant) fantasising, that such events cannot influence (deviant) behaviour via other routes than fantasy, that the onset of fantasy is limited to these types of contexts, and that the function of fantasy is limited to catharsis, coping, and compensation. Indeed, a significant amount of research acknowledges that sexual fantasies can also be reflective of healthy sexuality, and on the contrary, a measure of sexual satisfaction and libido (Leitenberg & Henning, 1995; Wilson & Lang, 1981).

Similarly, it is suggested that masturbation is often used as a coping mechanism in abused and neglected children. It provides a generally easy route to pleasure and relief (Regnerus & Gordon, 2015), thus allowing the child to minimise or eradicate distress (Marshall & Marshall, 2000). The success of masturbation in alleviating negative symptoms reinforces its use and may contribute to the development of a repertoire of coping strategies that involves an array of sexual behaviours (Marshall & Marshall, 2000). This is not to say that masturbation is solely a response to negative events and that it is not enjoyed as part of a healthy sexuality. Although there are hypotheses as to why fantasy and masturbation may be resorted

to in response to negative events, it remains unclear how and why the two might interact.

A factor that is often discussed in conjunction with masturbation is pornography. Although pornography is generally defined as "pictures, images, or videos/movies depicting nudity or persons in any type of sexual contact or behavior" (Johnson, 2015, p. 1), in this thesis, it is thought of as any external sensory stimulus that is deemed sexually arousing to the individual, in line with the definition of sexual fantasies proposed in Chapter 1. Nonetheless, it is appreciated that this may not match interpretations within the referenced literature.

Research on females and pornography is scarce (Attwood, 2005) and yields mixed findings. On the one hand, females are portrayed as having negative attitudes towards pornography; they are reported to associate pornography with violence and to experience negative affect in relation to this, such as embarrassment (Shaw, 1999). It is also suggested that they are exposed to pornography through males only (Shaw, 1999). On the other hand, although females are reported to masturbate and access pornography less frequently than males (e.g., Petersen & Hyde, 2010; Traeen & Nilson, 2006), they are also shown to willingly engage with and enjoy these activities.

Similarly, to sexual fantasies, pornography can serve to provoke or increase sexual arousal (Thornburg & Lin, 2002). A qualitative examination of young men's experiences of pornography by Lajeunesse and Deslauriers (2013) also suggests that it is not

always paired with masturbation initially, when it is used as a medium for education or a source of amusement. Attwood, Smith, and Barker (2018) conducted an online survey to explore pornography consumption in young males and females and identified additional functions to pornography, such as leisure, curiosity, stress relief, sensory stimuli, exploring one's sexual identity (existing or emerging desires and fantasies), accessing specific or "niche" sexual interests (p .7), exploring sexual arousal (what is arousing and what is not, including testing one's sexual orientation), accessing the "kinky" and the "forbidden" (p. 6), improving own body self-love, or compensating for dissatisfactory sexual outlet. Similarly, Lajeunesse and Deslauriers point out that men in relationships tend to continue to masturbate and access pornography but that frequency of engagement increases when their partner is less or not available for sex.

Interestingly, Lajeunesse and Deslauriers report that most young men associate pornography with masturbation, and in fact do not differentiate between the two practices, and that these tend to precede the first sexual encounter. Attwood and colleagues identified that the source, format, and nature of the first sexual image encountered varied greatly including "drawings, diagrams, books, magazines, photographs, mainstream film, adverts, video, fanfiction, hentai, dating sites, pop ups, games – and depictions – not just 'having sex' but drawing a nude, spooning, masturbation, posing naked or topless, hand jobs, oral and anal sex, and rape" (p. 2). This once more reflects the importance of not solely basing theoretical accounts of the aetiology of sexual fantasies on the person's first

physical sexual interaction with another human being, the significance of other types of initial sexual experiences, and the complexities in qualifying and quantifying these.

As with deviant sexual fantasies, the question is often posed as to whether the consumption of pornography that encapsulates deviant themes (referred to here as deviant pornography) negatively impacts on behaviour. The literature offers mixed and inconclusive findings. A review of the literature by Johnson (2015) suggests a positive relationship between deviant pornography and offending behaviour: the more deviant the pornography, the higher the frequency of consumption, and the likelier the display of sexual aggression. However, the same relationship has been observed with non-deviant pornography. A meta-analysis (Wright, Tokunaga, & Kraus, 2015) exploring pornography consumption and sexual aggression revealed a positive relationship between the two in both males and in females, and across cultures. This relationship was stronger when pornography contained violent material.

On the other hand, some research finds only minimal or negligible relationships between pornography use and sexual aggression, and some research actually suggests an inverse relationship, for example where offending behaviour (e.g., child molestation) influences access to deviant pornography (e.g., child pornography; Johnson, 2015), or a negative relationship, where increases in the consumption of deviant pornography are associated with a reduction in offending behaviour (e.g., Ferguson & Hartley, 2009). Ferguson and Hartley (2009) go as far as proposing that we

discard the hypothesis that pornography increases the likelihood of sexual aggression.

The present study attempts to bring clarity to our understanding of the relationship between sexual fantasies, sexual behaviour, experience of childhood abuse, and pornography consumption in male and female non-offenders (see Figure 6 provides an overview of the relationships of interest). It is hypothesised that individuals who have experienced abuse and pornography users will fantasise more and endorse deviant fantasy

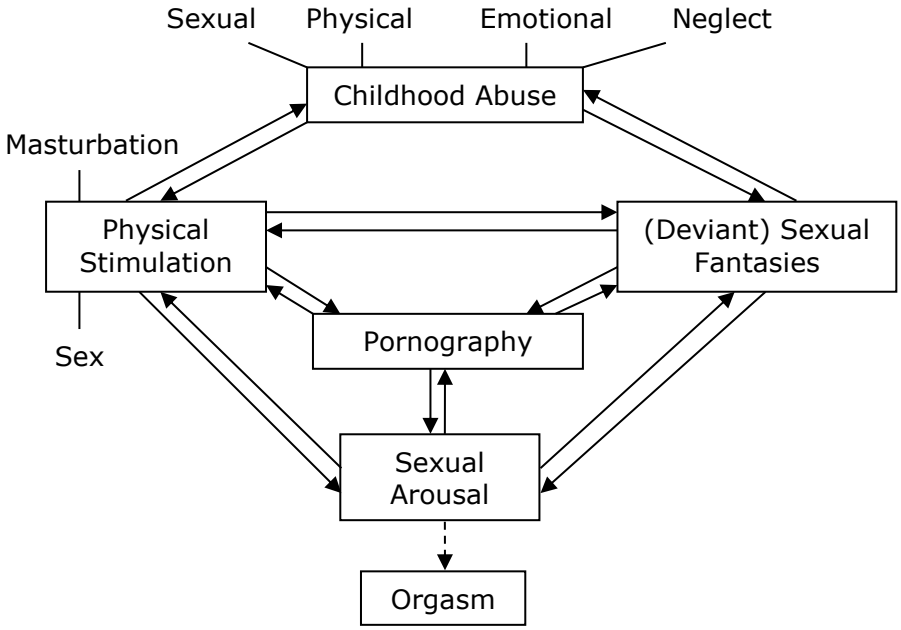


Figure 6. Relationships of Interest in the Present Study.

Note. Each arrow illustrates the potential influence of a factor on another. Some arrows highlight feedback loops. For instance, arrows between sexual fantasy and childhood abuse and physical stimulation and childhood abuse highlight the potential cathartic, coping, or compensatory values. The relationship between sexual arousal and orgasm is dotted as the latter is not always guaranteed from the former.

themes at higher rates than their counterparts. Moreover, variation within fantasy frequency and themes is predicted as a function of abuse type, though specific hypotheses in relation to this are not

proposed. It is also hypothesised that individuals who rate themselves as sexually satisfied will fantasise more. This study also explores various relationships between sexual satisfaction, masturbation, and sex with regards to childhood abuse and pornography consumption. No set hypotheses are identified. Lastly, the above hypotheses and explorations are examined with a focus on gender differences.

METHOD

Participants

An a priori power analysis using the Cochran formula indicated an appropriate sample size of 385 people to have 80% power for detecting a medium sized effect with employing the traditional .05 criterion of statistical significance. One hundred and thirty-three participants completed a survey. According to the power analysis, this sample size was small and so inferences about the wider population should be made with caution.

Participants were recruited online using social media platforms well-known to and well-used by the general population. The study link was initially advertised by the researcher after which snowball sampling was encouraged. Social media platforms allow for the individual to share information (including internet links) with their contacts, and so forth. The only inclusion criterion was for participants to be 18 or over.

Participants were made aware of the study aim and sensitive nature of the topic under investigation using an information section that preceded the study (see Appendix D for information and consent form). The full content of the study could only be accessed if

participants ticked boxes to declare their consent in taking part and to confirm they are aged 18 or over. At the end of the study, participants were presented with contact details for the primary researcher, primary researcher's supervisors, and Ethics Committee secretary, should they wish to report technological issues or distress with completing the survey and should they wish to receive contact information for their local counselling service (see Appendix E for debrief information form). To our knowledge, no participants attempted to make contact with the primary researcher, primary researcher supervisors, or Ethics Committee secretary. All responses were anonymous, and participants could take as much time as required. There was no remuneration or compensation.

The study was approved by the Research Ethics Committee of the Faculty of Medicine and Health Sciences at the University of Nottingham (Nottingham, United Kingdom).

Materials

After providing demographic information, participants were asked to respond to a series of questions pertaining to experience of childhood abuse, and current sexual experiences, including sexual fantasies (see Appendix F for study questionnaires). Answers were gathered in either multiple choice or free text format and some questions led to requests for further detail. Either questions could be skipped or the option 'prefer not to say' was available.

Childhood abuse. Participants were asked to state whether they have ever experienced physical, emotional, or sexual abuse, and neglect. Physical abuse was described as 'shove, pinch, hit, slap,

punch, kick, bite'. Emotional abuse was described as 'name-calling, insulting, complaining about you, badgering, deliberate humiliation'. Sexual abuse was described as 'inappropriate touch or kiss against your will, forced to touch or kiss someone against your will, forced to perform sexual things, forced to have sex'. Neglect was described as 'basic needs ignored, receiving little attention and care, lack of affection, lack of food, health issues ignored, not allowed to go to school, lack of supervision'.

Current sexual experiences. Participants were asked to rate their level of satisfaction with their sex life, and if applicable, how often they have sex, masturbate, and access pornography.

Sexual fantasies. The Wilson Sex Fantasy Questionnaire (thereafter, WSFQ) was used to explore sexual fantasy experiences: rates of endorsement of four fantasy themes during different contexts, and overall fantasy frequency. An overview of the tool and a critique of its psychometric properties are available in Chapter 2. In line with this, the WSFQ underwent some structural changes for the present study. Arguably, the WSFQ is somewhat dated in its terminology so some of the items were modified in a bid to make the materials more accessible to a contemporary audience (e.g., 'sex with two other people' became 'having a threesome (sex with two other people)'). Other items received greater modification with the purpose of clarifying some of the information sought from participants (e.g., 'seducing an "innocent"' became 'seducing a vulnerable person (e.g., child, disabled person)'). One item was removed as it was not associated with the same capacity to sexually arouse as the other

items ('being embarrassed by failure of sexual performance'). Though some individuals may positively experience events that are traditionally interpreted as negative, this item clearly states that negative affect is experienced (i.e., embarrassment). Lastly, the 'fantasies during intercourse and masturbation' measure was split into two separate measures as it is hypothesised that fantasies experienced alone versus in the presence of someone else, will differ in frequency and content. Acceptable to excellent internal consistency has been reported on the WSFQ's four themes as measured on the Daytime fantasy context (Baumgartner et al., 2002; Skovran et al., 2010). In the present study, acceptable to excellent alpha coefficients were achieved on all fantasy subscales and contexts (see Table 7).

Table 7. *Internal Consistency (Cronbach's Alpha) of Fantasy Scales on the Four Fantasy Contexts*.

	Daytime	Masturbation	Intercourse	Asleep
Intimate	.89	.90	.89	.91
Exploratory	.80	.79	.79	.79
Impersonal	.74	.71	.74	.71
Sadomasochism	.88	.86	.87	.86
Overall fantasy	.94	.94	.94	.94

Data analysis

Upon examination, it could not be assumed that the data for masturbation frequency, sex frequency, and pornography frequency were normally distributed as a function of categorical variables, notably gender, age, pornography consumption, and childhood abuse. This was concluded following calculations of skewness and

Table 8. *Skewness and Kurtosis of Masturbation Frequency as a Function of Gender, Age, Pornography Use, and Childhood Abuse.*

	Skewness		Kurtosis	
	Statistic	Standard Error	Statistic	Standard Error
Gender				
Male	1.36	.398	2.369	.778
Female	2.574	.369	7.96	.724
Age				
20-29	1.831	.354	2.99	.695
30-39	.351	.472	-.683	.918
40-49	-.331	1.225	.	.
50 and over	-.977	1.014	2.041	2.619
Pornography				
Yes	1.722	.277	3.49	.548
Childhood Abuse				
Physical				
No	1.251	.33	2.154	.65
Yes	1.08	.472	.511	.918
Emotional				
No	1.579	.365	2.886	.717
Yes	1.523	.403	2.391	.788
Sexual				
No	1.915	.302	5.281	.595
Yes	1.178	.616	.38	1.191
Neglect				
No	1.813	.289	3.749	.57
Yes	.424	.794	-1.048	1.587

Note. Non-pornography users: number of cells to small to compute in SPSS.

kurtosis (see Tables 8-10), from results on Shapiro-Wilk tests (p = .05), and from visual inspections of associated histograms, Normal Q-Q plots, and boxplots.

Table 9. *Skewness and Kurtosis of Sex Frequency as a Function of Gender, Age, Pornography Use, and Childhood Abuse.*

	Skewness		Kurtosis	
	Statistic	Standard Error	Statistic	Standard Error
Gender				
Male	1.317	.398	.955	.778

Female	1.971	.369	5.127	.724
Age				
20-29	1.973	.354	5.292	.695
30-39	1.059	.472	.017	.918
40-49	1.732	1.225	.	.
50 and over	.544	1.014	-2.944	2.619
Pornography				
Yes	2.582	.277	9.601	.548
Childhood Abuse				
Physical				
No	2.157	.33	6.281	.65
Yes	1.352	.472	1.05	.918
Emotional				
No	2.289	.365	6.709	.717
Yes	1.409	.403	1.347	.788
Sexual				
No	2.439	.302	8.155	.595
Yes	1.483	.616	2.089	1.191
Neglect				
No	2.516	.289	8.803	.57
Yes	1.3	.794	1.132	1.587

Note. Non-pornography users: number of cells to small to compute in SPSS.

Accordingly, the data in this study were subjected to non-parametric statistical analyses. IBM SPSS Statistics Version 24 was used throughout. Differences between and within independent variables were examined for all measures and are only reported in the main body of text when significant. Statistically non-significant results are nonetheless presented in summary tables. An alpha level of .05 was used for all statistical tests.

Table 10. *Skewness and Kurtosis of Pornography Frequency as a Function of Gender, Age, Pornography Use, and Childhood Abuse.*

	Skewness		Kurtosis	
	Statistic	Standard Error	Statistic	Standard Error
Gender				
Male	1.278	.398	2.325	.778
Female	1.77	.369	2.759	.724

Age				
20-29	2.23	.354	5.563	.695
30-39	.54	.472	-1.015	.918
40-49	1.708	1.225	.	.
50 and over	1.937	1.014	3.769	2.619
Pornography				
Yes	1.788	.277	4.006	.548
Childhood Abuse				
Physical				
No	1.251	.33	.674	.65
Yes	1.287	.472	1.476	.918
Emotional				
No	2.407	.365	7.712	.717
Yes	1.359	.717	2.43	.788
Sexual				
No	1.589	.302	3.352	.595
Yes	2.194	.616	5.375	1.191
Neglect				
No	1.929	.289	4.645	.57
Yes	.584	.794	-1.679	1.587

Note. Non-pornography users: number of cells to small to compute in SPSS.

RESULTS

Demographics

The sample (*N* = 133) was composed of 91 females and 42 males, ranging in age from 20-61, with a mean age of 31.36 years. Most were Caucasian (*N* = 108, 81.2%), from the United Kingdom (*N* = 93, 69.9%), and identified the United Kingdom as the country they affiliate with (*N* = 82, 61.6%). Most participants described themselves as being of Christian faith (*N* = 43, 32.3%) or as having no religion (*N* = 47, 35.3%). They were predominantly heterosexual (*N* = 104, 78.2%), in exclusive romantic relationships (*N* = 88, 66.2%), not married (*N* = 91, 68.4%), and with no children (*N* = 98, 73.7%). Most subjects were in full-time employment (*N* = 74, 55.6%) and educated to university level (*N* = 110, 82.7%).

It is important to consider the potential for sampling bias. As the study was initially advertised on the primary researcher's social media profile, the first respondents were her acquaintances and closely matched her characteristics. It is evident from the sample demographics that a degree of bias is present considering the sample remained largely the same. Advertising the study for longer may have reduced this by diversifying the group through repeated snowballing.

Childhood abuse

As depicted in Table 11, significantly fewer individuals have experienced childhood abuse than not across the sample. Significantly more males report experiencing physical abuse than females but there was no significant association between gender and sexual abuse, emotional abuse, and neglect. According to the Crime Survey for England and Wales (2015 to 2016; Office for National Statistics), males and females within the present sample appear to have overreported their experiences of childhood abuse but it is unclear why. For instance, 38.1% of males and 20.9% of females reported physical abuse compared to 7.1% and 6.6%, respectively, within the wider population. Furthermore, 9.5% of males and 18.7% of females reported sexual abuse compared to 2.6% and 10.5%, respectively, within the wider population. Table 11. *Childhood Abuse as a Function of Gender*.

	Absolute Frequency (Relative Frequency)			
	Overall		Males	Females
	No	Yes	Yes	Yes
Physical	98 (73.7)**	35 (26.3)	16 (38.1)*	19 (20.9)
Emotional	82 (61.7)**	51 (38.3)	18 (42.9)	33 (36.3)
Sexual	112 (84.2)**	21 (15.8)	4 (9.5)	17 (18.7)

Neglect	120 (90.2)**	13 (9.8)	3 (7.1)	10 (11)

Note. *p<.05; **p<.001. See Appendix G for Chi-Square Goodness of Fit Tests.

Current sex life

A Chi-square goodness of fit test revealed unequal variance across the sample with regards to satisfaction with sex life, $X^2(1) = 13.136$, $p < .001$. Subsequent goodness of fit tests (Bonferroni adjusted alpha levels of .0166, .05/3) suggested that significantly more individuals were satisfied or very satisfied with their sex life ($N = 61$) than dissatisfied or very dissatisfied ($N = 27$). Chi-square tests of independence revealed no significant association between sexual satisfaction and gender, $X^2(2) = 2.437$, $p = .296$, physical abuse, $X^2(2) = 2.149$, $p = .342$, and emotional abuse, $X^2(2) = .554$, $p = .758$. Fisher's Exact Tests revealed no association between sexual satisfaction and sexual abuse, $p = .706$, and neglect, $p = .743$.

With regards to sex frequency (see Table 12), females (mean rank = 73.29) have significantly more sex on a weekly basis than males (mean rank = 53.38), $H(1) = 7.884$, $p = .005$. Individuals in their twenties (mean rank = 74.62) have significantly more sex than those aged 50 and over (mean rank = 43.23), $H(3) = 8.937$, $p = .03$ (see Appendix H for all pairwise comparisons). Higher frequencies of sex were associated with greater sexual satisfaction, $H(2) = 60.124$, $p < .001$, with sexually dissatisfied and very dissatisfied individuals experiencing the least sex (mean rank = 27.09), sexually satisfied and very satisfied individuals experiencing the most sex (mean rank = 91.67), and individuals qualifying their sex life as average experiencing frequencies of sex in between the two (mean rank = 55.78; see Appendix H for all pairwise comparisons). There were no

statistical significances between childhood abuse and sex frequency, except that females who report childhood sexual abuse also report less sex.

Table 12. *Sex Frequency as a Function of Gender, Age, Sexual Satisfaction, and Childhood Abuse*.

	Mean Rank					
	Overall		Males		Females	
	No	Yes	No	Yes	No	Yes
Physical	69.68	59.49	21.96	20.75	47.34	40.92
Emotional	68.09	65.25	23.04	19.44	45.59	46.71
Sexual	68.76	57.60	20.92	27.00	48.93*	33.26
Neglect	66.57	70.96	21.46	22.00	45.72	48.25

Note. *p<.05. See Appendix H for Kruskal-Wallis Tests.

A Chi-square goodness of fit test showed that significantly more people masturbate (N = 111) than not (N = 17), $X^2(1) = 69.031$, $p < .001$. A Chi-square test of independence revealed no significant association between gender and likelihood of masturbation, $X^2(1) = 3.237$, $p = .072$, though there was a significant difference between gender and masturbation frequency, $H(1) = 24.451$, $p < .001$, with males (mean rank = 91.17) masturbating more than females (mean rank = 55.85). A Fisher-Freeman-Halton test revealed no significant association between age and likelihood of masturbation and age ($p = .062$), and Kruskal-Wallis test revealed no significant association between age and masturbation frequency (see Table 13 for masturbation frequency as a function of dependent variables), $H(3) = 6.919$, $p = .075$ (ages 20-29 mean rank = 67.46; ages 30-39 mean rank = 71.40; ages 40-49 mean rank = 35; ages 50 and over mean rank = 67.77).

Males who were physically abused in childhood and males who were emotionally abused masturbate more frequently than those who were not. No other associations between masturbation frequency, gender, and childhood abuse were detected. A Spearman's rank order correlation showed a very weak relationship between masturbation frequency and sex frequency, r_s = -.191, p = .046, nonetheless suggesting that more sex is associated with less masturbation. There was no association between masturbation frequency and sexual satisfaction, $H(2)$ = 3.057, p = .217 (satisfied / very satisfied mean rank = 60.79; average satisfied mean rank = 68.92; dissatisfied and very dissatisfied mean rank = 75.46).

Table 13. *Masturbation Frequency as a Function of Gender, Age, Sexual Satisfaction, and Childhood Abuse*.

	Mean Rank					
	Overall		Males		Females	
	No	Yes	No	Yes	No	Yes
Physical	63.67	76.33	18.44	26.47*	46.60	43.74
Emotional	65.40	69.58	17.81	26.42*	48.84	41.02
Sexual	65.38	75.64	20.59	30.12	44.03	54.59
Neglect	67.62	61.31	21.05	27.33	47.10	37.05

Note. *p<.05. See Appendix I for Kruskal-Wallis Tests.

In terms of pornography use (see Table 14), significantly more individuals access pornography than not, more males access pornography than females, and pornography users masturbate more than non-pornography users, regardless of gender. There was no association between pornography use and age (Fisher-Freeman-Holton test, p = .052), sexual satisfaction, $X^2(1)$ = 1.221, p = .543, frequency of sex, and childhood abuse.

Table 14. *Pornography Consumption as a Function of Gender, Age, Sexual Satisfaction, Childhood Abuse, Masturbation Frequency, and Sex Frequency*.

	Absolute Frequency (Relative Frequency)					
	Overall		Males		Females	
	No	Yes	No	Yes	No	Yes
Pornography	48 (36.6)	83 (63.4)*	4 (9.8)	37 (90.2)**	44 (48.9)	46 (51.1)
Phys. abuse	98 (73.7)	35 (26.3)	26 (61.9)	16 (38.1)	72 (79.1)	19 (20.9)
Emo. abuse	82 (61.7)	51 (38.3)	24 (57.1)	18 (42.9)	58 (63.7)	33 (36.3)
Sex. abuse	112 (84.2)	21 (15.8)	38 (90.5)	4 (9.5)	74 (81.3)	17 (18.7)
Neglect	120 (90.2)	13 (9.8)	39 (92.9)	3 (7.1)	81 (89)	10 (11)
	Mean Rank					
	Overall		Males		Females	
	No	Yes	No	Yes	No	Yes
Mast. freq.	40.77	80.59**	7	22.51*	33.73	56.76**
Sex. freq.	68.25	64.7	24.38	20.64	43.4	47.51

Note. *p<.05; **p<.001. See Appendix J for Chi-Square Goodness of Fit tests, Chi-Square tests of Independence, Fisher-Freeman-Halton, Kruskal-Wallis, and Fisher's Exact Tests.

A Kruskal-Wallis test revealed that males (mean rank = 53.31) use pornography significantly more on a weekly basis than females (mean rank = 24.45), $H(1) = 32.731$, $p < .001$. Pornography frequency was equally varied as a function of age, $H(3) = 4.874$, $p = .181$. There was no association between pornography frequency and sexual satisfaction, $H(2) = 2.644$, $p = .267$. A Spearman's rank order correlation showed a strong relationship between pornography frequency and masturbation frequency, $r_s = .648$, $p < .001$, suggesting that higher frequencies of masturbation are associated

with more pornography use. This relationship was also found for males r_s = .677, p < .001 and females r_s = .543, p < .001.

Those who reported physical abuse in childhood also reported accessing pornography more frequently (mean rank = 61.38) than those who did not report childhood physical abuse (mean rank = 59), $H(1)$ = 5.013, p = .025. but this effect was not found when splitting the sample by gender. There were no significant associations between pornography frequency and emotional abuse, $H(1)$ = 3.593, p = .058, sexual abuse, $H(1)$ = .170, p = .68, and neglect, $H(1)$ = .029, p = .865, for males and females. A Spearman's rank order correlation showed no relationship between pornography frequency and sex frequency overall, r_s = -.169, p = .059, including for males r_s = -.186, p = .239 and females r_s = .063, p = .569.

Sexual Fantasies

Wilcoxon signed-rank tests were conducted to explore differences in overall fantasy frequency across the four fantasy contexts. Individuals fantasised the most during masturbation (Z = -4.53, p < .001 compared to daytime fantasies, Z = -6.522, p < .001 compared to fantasies during intercourse, and Z = -6.081, p < .001 compared to dreams whilst asleep), followed by daytime fantasies (Z = -2.583, p = .01 compared to fantasies during intercourse, and Z = -3.314, p < .001 compared to dreams whilst asleep), fantasies during intercourse, and dreams whilst asleep. There was no significant difference between fantasies during intercourse and dreams whilst asleep, Z = -.365, p = .715.

Table 15 presents overall fantasy frequencies as a function of gender, age, pornography consumption, and experience of childhood abuse. Males fantasise significantly more than females during the daytime and masturbation. There was a significant difference in daytime fantasies across age, but pairwise comparisons (with Bonferroni correction) did not identify significant group differences. Individuals in their twenties fantasise significantly more during masturbation than individuals in their forties (p = .007), and more during intercourse than individuals in their thirties (p = .008). Pornography users fantasise significantly more during the daytime and masturbation than non-pornography users, though the significance for daytime fantasies was no longer observed when the data was split by gender. With regards to childhood abuse, individuals who were physically abused fantasised significantly more than individuals who were not during the daytime, masturbation, and intercourse, though it became apparent that this applies to males as these results were no longer observed for females when the data was split by gender. Splitting the data by gender also revealed that males who were physically abused have more dreams whilst asleep, that females who were emotionally abused fantasise more during masturbation, intercourse, and whilst asleep. Females who report sexual abused also fantasise more during masturbation.

Table 15. *Overall Fantasy Frequency on the Four Fantasy Contexts as a Function of Gender, Age, Pornography Consumption, and Childhood Abuse*.

		Mean Ranks			
		Daytime	Masturbation	Intercourse	Asleep
Gender					
Males		80*	81.5*	69.11	73.6
Females		61	60.31	66.03	63.96
Age					
20-29		74.21*	74.27*	76.75*	71.57
30-39		56.1	61.22	52.73	58.88
40-49		44.44	29.56	45.83	54.5
50 and over		73.55	66.27	68.59	72
Pornography Consumption					
Overall	No	52.24*	44.86**	59.76	58.01
	Yes	73.96	78.22	69.61	70.62
Males	No	11.5	6.62*	13.50	14.62
	Yes	22.03	22.55	21.81	21.69
Females	No	40.34	35.67**	42.9	42.4
	Yes	50.43	54.9	47.99	48.47
Physical abuse					
Overall	No	61.71*	62.92*	62.33*	64.13
	Yes	81.81	78.41	80.09	75.04
Males	No	17.21*	16.81*	16.04**	18.00*
	Yes	28.47	29.12	30.38	27.19
Females	No	45.21	46.54	46.17	46.43
	Yes	49.00	43.95	45.37	44.37
Emotional abuse					
Overall	No	62.63	62.66	63.38	63.23
	Yes	74.02	73.97	72.82	73.07
Males	No	19.15	17.71*	17.69*	17.71*
	Yes	24.64	26.56	25.58	26.56
Females	No	43.99	45.57	46.02	46.09
	Yes	49.53	46.76	45.97	45.83
Sexual abuse					
Overall	No	65.73	64.82	64.14*	65.92
	Yes	73.76	78.62	82.26	72.79
Males	No	20.97	21.24	20.88	21.14
	Yes	26.50	24.00	27.38	24.88
Females	No	45.18	43.41*	43.61	44.99
	Yes	49.56	57.26	56.38	50.41
Neglect					
Overall	No	66.66	66.75	67.27	66.86
	Yes	70.12	69.35	64.50	68.31
Males	No	21.65	21.69	21.79	21.19

	Yes	19.50	19.00	17.67	25.50
Females	No	45.28	45.45	45.88	46.07
	Yes	51.85	50.45	47.00	45.45

Note. *p<.05; **p<.001. See Appendix K for Kruskal-Wallis tests.

and it is worth noting this was near significant for intercourse (p = .071). Individuals who were sexually abused fantasised significantly more during intercourse than those who were not.

Tables 16 to 19 further break down fantasy frequency according to Wilson's four fantasy themes. During the daytime (see Table 16), males fantasise significantly more about exploratory and impersonal themes than females. During masturbation (see Table 17), males fantasise more about intimate, exploratory, and

Table 16. *Frequency of Daytime Fantasies According to Wilson's Fantasy Themes, as a Function of Gender, Pornography Consumption, and Childhood Abuse*.

	Mean Ranks	
	Gender	
	Males	Females
Intimate	75.55	63.05
Explorat.	83.52*	59.37
Impersonal	88.92**	56.88
Sadomaso.	66.93	67.03
	Pornography Consumption	
	Yes	No
Intimate		
Overall	71.18*	57.07
Males	21.92	12.50
Females	48.36	42.51
Explorat.		
Overall	76.34**	48.11
Males	22.01	11.62
Females	53.10*	37.56
Impersonal		
Overall	76.44**	47.95
Males	22.07	11.12

Females	51.75*	38.97
Sadomaso.		
Overall	71.63*	56.26
Males	21.74	14.12
Females	51.25*	39.49

	Childhood Abuse							
	Physical		Emotional		Sexual		Neglect	
	Yes	No	Yes	No	Yes	No	Yes	No
Intimate								
Overall	80.34	62.23	72.63	63.50	70.31	66.38	68.46	66.84
Males	26.81*	18.23	25.17	18.75	25.12	21.12	18.00	21.77
Females	51.08	44.66	47.91	44.91	47.15	45.74	50.65	45.43
Explorat.								
Overall	78.21*	62.99	74.11	62.58	75.57	65.39	72.54	66.40
Males	25.31	19.15	22.50	20.75	28.12	20.80	16.67	21.87
Females	48.84	45.25	51.36	42.95	51.85	44.66	54.55	44.94
Impersonal								
Overall	77.04	63.41	72.96	63.29	70.45	66.35	71.46	66.52
Males	27.16*	18.02	24.19	19.48	23.50	21.29	17.17	21.83
Females	44.76	46.33	49.09	44.24	50.71	44.92	55.55	44.82
Sadomaso.								
Overall	76.73	63.53	72.52	63.57	76.05	65.30	65.23	67.19
Males	26.78*	18.25	23.89	19.21	28.62	20.75	25.17	21.22
Females	48.05	45.46	48.89	44.35	50.32	45.01	41.50	46.56

Note. *p<.05; **p<.001. See Appendix L for Kruskal-Wallis tests.

Table 17. *Frequency of Masturbatory Fantasies According to Wilson's Fantasy Themes, as a Function of Gender, Pornography Consumption, and Childhood Abuse*.

	Mean Ranks	
	Gender	
	Males	Females
Intimate	78.75*	61.58
Explorat.	84.49**	58.93
Impersonal	84.83**	58.73
Sadomaso.	67.71	66.67
	Pornography Consumption	
	Yes	No
Intimate		
Overall	74.67*	51.01

Males	22.30*	9
Females	51.80*	38.91
Explorat.		
Overall	80.82**	40.38
Males	22.58*	6.38
Females	57.41**	33.05
Impersonal		
Overall	79.33**	42.96
Males	22.20*	9.88
Females	55.87**	34.66
Sadomaso.		
Overall	73.84*	52.45
Males	21.93	12.38
Females	53.57*	37.07

	Childhood Abuse							
	Physical		Emotional		Sexual		Neglect	
	Yes	No	Yes	No	Yes	No	Yes	No
Intimate								
Overall	75.60	63.93	68.96	65.78	73.62	65.76	66.04	67.10
Males	27.97*	17.52	26.86*	17.48	22.75	21.37	21.33	21.51
Females	42.79	46.85	42.09	48.22	53.26	44.33	46.95	45.88
Explorat.								
Overall	75.56	63.94	76.33*	61.20	77.31	65.07	74.38	66.20
Males	25.66	18.94	24.86	18.98	23.00	21.34	17.00	21.85
Females	44.58	46.38	50.52	43.43	56.47	43.59	54.80	44.91
Impersonal								
Overall	77.40	63.29	76.74*	60.95	79.38	64.68	70.19	66.65
Males	27.47*	17.83	26.75*	17.56	20.25	21.63	13.50	22.12
Females	44.21	46.47	48.58	44.53	59.59*	42.88	53.15	45.12
Sadomaso.								
Overall	75.96	63.80	73.67	62.85	79.31	64.69	64.73	67.25
Males	27.81*	17.62	25.72*	18.33	26.75	20.95	24.17	21.29
Females	44.53	46.39	47.42	45.19	54.12	44.14	41.15	46.60

Note. *p<.05; **p<.001. See Appendix M for Kruskal-Wallis tests.

During the daytime and masturbation, pornography users fantasised significantly more about each of the four themes than non-pornography users. However, splitting and analysing the data by gender revealed that significant results could be attributed to female pornography users (except for the intimate theme where significance

was lost once the sample was split). Nonetheless, during masturbation, pornography users fantasise more on all four themes, regardless of gender. During intercourse and whilst asleep, female pornography users fantasise more exploratory and impersonal themes.

Table 18. *Frequency of Fantasies During Intercourse According to Wilson's Fantasy Themes, as a Function of Gender, Pornography Consumption, and Childhood Abuse*.

	Mean Ranks							
	Gender							
	Males				Females			
Intimate	68.61				66.26			
Exploratory	74.00				63.77			
Impersonal	78.36*				61.76			
Sadomaso.	60.00				70.23			
	Pornography Consumption							
	Yes				No			
Intimate								
Overall	64.70				66.75			
Males	21.70				14.50			
Females	44.82				46.22			
Exploratory								
Overall	72.86*				54.15			
Males	21.50				16.38			
Females	51.30*				39.43			
Impersonal								
Overall	73.34*				53.31			
Males	21.68				14.75			
Females	50.54*				40.23			
Sadomaso.								
Overall	68.45				61.77			
Males	21.49				16.50			
Females	49.17				41.66			
	Childhood Abuse							
	Physical		Emotional		Sexual		Neglect	
	Yes	No	Yes	No	Yes	No	Yes	No
Intimate								

Overall	76.61	63.57	69.53	65.4	75.81	65.35	60.3	67.7
Males	28.53*	17.17	26.22	3	26.50	20.97	8	2
Females	44.21	46.47	*	17.9	51.56	44.72	14.6	22.0
Explorat.			43.24	6			7	3
Overall	76.80	63.50		47.5	80.05	64.55	44.8	46.1
Males	28.88*	16.96	74.16	7	28.50	20.76	5	4
Females	43.61	46.63	24.81		54.38	44.07		
Impersona			49.55	62.5			71.0	66.5
l	79.76*	62.44		5	82.48	64.10	4	6
Overall	27.62*	17.73	73.98	19.0	*	20.99	16.1	21.9
Males	48.37	45.38	24.22	2	26.38	43.01	7	1
Females			49.45	43.9	59.03		53.3	45.1
Sadomaso.	80.44*	62.20		8	*	63.90	0	0
Overall	29.66*	16.48	75.38			20.20		
Males	*	45.23	*	62.6	83.55	44.32	67.4	66.9
Females	48.87		27.22	6	33.88		6	5
			*	19.4	53.29		12.1	22.2
			48.17	6			7	2
				44.0			53.9	45.0
				3			0	2
				61.7			66.0	67.1
				9			4	0
				17.2			28.1	20.9
				1			7	9
				44.7			39.8	46.7
				7			0	7

Note. *p<.05; **p<.001. See Appendix N for Kruskal-Wallis tests.

During the daytime and masturbation, males who report physical abuse in childhood fantasise significantly more about intimate, impersonal, and sadomasochistic themes than those who were not abused. During intercourse, they fantasise more on all four fantasy themes, and whilst asleep, they dream more impersonal themes than others.

During masturbation, males who report emotional abuse in childhood fantasise more intimate, impersonal, and sadomasochistic

themes. Overall, those who report emotional abuse fantasise exploratory themes more so than who did not, though this significance was lost when the sample was split by gender. During intercourse, males who report emotional abuse in childhood fantasise more intimate and sadomasochistic themes.

With regards to sexual abuse, females engage with more impersonal fantasy themes during masturbation and intercourse than those who do not report childhood sexual abuse. Males who reported childhood sexual abuse also reported more sadomasochistic fantasies during intercourse than those who did not report sexual abuse.

Table 19. *Frequency of Dreams Whilst Asleep According to Wilson's Fantasy Themes, as a Function of Gender, Pornography Consumption, and Childhood Abuse*.

	Mean Ranks	
	Gender	
	Males	Females
Intimate	69.90	65.66
Exploratory	76.40*	62.66
Impersonal	76.65*	61.16
Sadomaso.	67.15	66.93
	Pornography Consumption	
	Yes	No
Intimate		
Overall	67.92	62.69
Males	21.68	14.75
Females	46.08	44.90
Exploratory		
Overall	72.28*	51.68
Males	21.72	14.38
Females	52.60*	38.08
Impersonal		
Overall	73.81*	52.49
Males	21.51	16.25
Females	51.76*	38.95

Sadomaso.								
Overall			69.53				59.90	
Males			21.70				14.50	
Females			48.40				42.47	
	Childhood Abuse							
	Physical		Emotional		Sexual		Neglect	
	Yes	No	Yes	No	Yes	No	Yes	No
Intimate								
Overall	73.81	64.57	70.26	64.97	66.38	67.12	67.12	66.99
Males	26.12	18.65	25.72	18.33	22.50	21.39	25.50	21.19
Females	44.84	46.31	44.09	47.09	45.00	46.23	43.85	46.27
Explorat.								
Overall	72.67	64.97	73.34	63.05	74.83	65.53	69.38	66.74
Males	25.12	19.27	24.83	19.00	26.25	21.00	21.67	21.49
Females	44.47	46.40	48.02	44.85	51.85	44.66	48.55	45.69
Impersonal								
Overall	77.34	63.31	74.02	62.63	75.10	65.48	69.08	66.78
Males	25.66	18.94	24.72	19.08	18.25	21.84	21.67	21.49
Females	49.79	45.00	48.94	44.33	56.18	43.66	48.80	45.65
Sadomaso.								
Overall	69.91	65.96	71.91	63.95	72.31	66.00	58.38	67.93
Males	24.78	19.48	24.83	19.00	24.50	21.18	28.17	20.99
Females	43.53	46.65	47.09	45.38	48.88	45.34	33.60	47.53

Note. *p<.05; **p<.001. See Appendix O for Kruskal-Wallis tests.

DISCUSSION

The present study aimed to explore relationships between sexual fantasies, sexual behaviour, childhood abuse and pornography consumption. These will now be discussed with a focus on gender differences and with a view to relating findings to the sex offender literature. Though some hypotheses were empirically-generated, some were more exploratory in nature.

Individuals in this sample were generally satisfied or very satisfied with their sex life. Though no gender differences were observed in terms of sexual satisfaction, females reported having more sex than males, and more frequent sex was associated with

greater sexual satisfaction. Furthermore, more frequent sex was associated with less frequent masturbation. As females reported more sex than males, it is perhaps not surprising that they also reported less masturbation than them. This gender difference in masturbation frequency is congruent with the wider literature (e.g., Danish sample, Hald, 2006; American sample, Leitenberg, Detzer, & Srebnik, 1993).

One hypothesis for higher rates of masturbation in males is that this activity serves to compensate for lower frequencies of sex (Regnerus, Price, & Gordon, 2017). Nonetheless, as there were no gender differences in sexual satisfaction, it may be the case that males are satisfied with less frequent sex than females and/or that they enjoy masturbation (and associated pleasure) more often than females. There may also be a quality or function to masturbation that is more frequently sought by males than females, and even perhaps otherwise not satisfied or met with sex. It has also been proposed that females masturbate less because "women have been socialized more than men to associate sex with romance and relationships and emotional intimacy. To be interested in sex solely for physical gratification is supposedly more taboo for women than men" (Leitenberg et al., 1993, p. 96). Another explanation is that biological factors, such as hormones and anatomy (e.g., accidental friction) contribute to higher rates of masturbation in males (Leitenberg et al., 1993).

It is worth considering that the phrase *sexual satisfaction* was not explained in this study and that participants may have rated their satisfaction with sexual activity overall (masturbation, sex,

pornography consumption, sexual fantasies) as opposed to satisfaction with quality and quantity of sex alone. Another potential problem relates to the fact that masturbation and intercourse are not always distinguishable (e.g., masturbation as part of intercourse), and as such, part of the data may be ambiguous.

In line with the literature, males were likelier to access pornography than females and also reported consuming this more frequently (e.g., Carroll, Busby, Willoughby, & Brown, 2017). Similarly, to gender differences in masturbation, this could reflect compensation for lower frequencies of sex (though as previously mentioned, males and females report equal sexual satisfaction), a greater male interest in pornography, or, considering males masturbate more frequently than females, this might illustrate that pornography is used as an aid to masturbation (or that access to pornography leads to masturbation). Indeed, irrespective of gender, pornography users reported higher rates of masturbation than non-users, and overall, masturbation frequency correlated highly with frequency of pornography consumption.

It is worth exploring the function of pornography during masturbation, besides its ability to influence sexual arousal, and besides the various potential purposes reported by Smith and her colleagues (2018) or by Lajeunesse and Deslauriers (2013). For example, pornography may compensate for being less imaginative, being a greater cognitive miser, or having a less effective working memory. If this is the case, one might speculate that pornography users fantasise less than non-pornography users, presumably

because fantasising is cognitively taxing and because pornography is accessed in lieu of fantasy. In the present study, pornography users fantasised more during masturbation than non-pornography users. Although this may present as counterevidence, it may be that pornography accessed during masturbation also promotes fantasising, perhaps by providing content material and by relieving cognitive demands. This being said, pornography users also reported fantasising more outside of sexual activity (daytime), which on the contrary may demonstrate greater cognitive abilities, unless they are simply recalling past events, including what pornography they have previously accessed, in which case, this would reflect a process of memory recall as opposed to fantasising. Alternatively, increased frequencies of sexual fantasising, pornography consumption, and masturbation, might be indicative of greater interest in sex or sexual preoccupation.

Within the sample, emotional abuse was experienced the most (38.8%) followed by physical abuse (26.3%), sexual abuse (15.8%), and neglect (9.8%). The only gender difference was observed for physical abuse, with 38.1% of males experiencing this compared to 20.9% of females. Associations between abuse, sex frequency, and masturbation frequency were limited to physically abused males, emotionally abused males, and to sexually abused females. There were no associations between childhood abuse and pornography use or between childhood abuse and pornography frequency. Although overall, physically abused individuals accessed more pornography

than those who were not, splitting the data by gender revealed no further variance.

Males who reported physical abuse and males who reported emotional abuse also reported higher frequencies of masturbation than males who did not report physical or emotional abuse. Females who reported sexual abuse also reported less sex than females who did not report sexual abuse. One interpretation of this is that gender differences also occur in the way trauma and distress are dealt with, though the validity of comparisons is affected by the qualitative difference of the abuse discussed.

Nonetheless, it is speculated that males respond to trauma and distress in a more active and private manner, seeking to replace physical and emotional pain with physical (and mental) pleasure. On the other hand, females may not feel a need to self-soothe, rather opting for more passive or avoidant strategies (e.g., minimising sexual interactions to prevent future harm).

A limitation of this study stems from the difficulty knowing whether all abused individuals did in fact report this within the survey. Reasons for withholding this information might involve an avoidance of negative affect in relation to past trauma such as shame or low mood, or difficulties appraising past experiences as abusive. A second limitation relates to the end of study debrief. According to earlier hypotheses, if males internalise distress and females avoid confronting it, then advising participants to seek support from the primary researcher should they feel distressed is unlikely helpful.

Regarding sexual fantasies, overall, the sample fantasised the most during masturbation, followed by daytime fantasies, and finally fantasies during intercourse and dreams whilst asleep (no significant difference between the latter two). Similar trends were established in relation to the four fantasy themes. For intimate and impersonal fantasies, the frequency hierarchy was the same as the overall fantasy frequency hierarchy. Exploratory fantasies were experienced the most during masturbation, with equal variance between the other three contexts. For sadomasochistic fantasies, there was no significant difference between masturbatory fantasies and fantasises engaged with during intercourse, and between fantasises during intercourse and daytime fantasies. Sadomasochistic fantasies during the day were significantly more frequent than dreams whilst asleep.

These findings support the benefit of splitting the WSFQ measure 'fantasies during masturbation and intercourse', considering the significant differences in the qualitative and quantitative experiences of fantasies between the two. A single measure does not allow for between and within group comparisons, and may conceal the impact of potential covariates, such as pornography. Indeed, pornography frequency has been associated with higher frequencies of masturbation, but not sex. Having two separate measures to assess masturbatory fantasies and fantasies during intercourse may promote a better understanding of fantasies endorsed during pornography use.

An examination of overall fantasy frequency within males and females revealed two different patterns of hierarchy. For males, this

matched the overall pattern for the sample, but for females, masturbatory fantasies were experienced the most, with equal variance in fantasy frequency across the remaining contexts. Firstly, the overall and gender patterns suggest that most people fantasise across all four contexts. Secondly, all three patterns suggest that people fantasise the most during masturbation. As discussed in Chapter 2, it is not always clear what is being measured or observed when frequency rates are reported, apart from how often an event occurs.

One interpretation is that people simply prefer to fantasise during masturbation, though this would require further elaboration. A second interpretation is that the function(s) of fantasy (e.g., to provoke or enhance sexual arousal) is most useful in the context of masturbation. A third interpretation is that people engage with masturbatory fantasies the most by default. Masturbation is the one context out of the four that offers the ability to freely engage with sexual fantasies and associated arousal. Indeed, it is debatable whether people can influence the quality and quantity of their dreams whilst they are unconscious, and access to sex (and therefore the prevalence of fantasies during sex) is far more restricted than access to masturbation as it depends on the availability of a willing partner. Daytime fantasies can be engaged with as and when the individual chooses to, though external influences may interfere with this (e.g., being in a public space, sexual frustration, difficulty controlling physiological response to arousal, embarrassment or shame). Some individuals may even avoid daytime fantasies to avoid sexual

frustration, whilst others may engage with them more to benefit from delayed gratification (i.e., the idea that delaying orgasm increases its intensity).

Arguably, a large number of daytime fantasies eventually transition into masturbatory fantasies, presumably once sexual arousal reaches a certain (personal) threshold that indicates to the individual that orgasm is desired, and thus, so is physical stimulation (unless orgasm has or can be reached without). From this perspective, distinguishing between different contexts and types of fantasies is not an easy task and this should be borne in mind whilst interpreting the data of this study. For instance, the pattern of fantasy frequency across contexts for males suggests that they fantasise the most during masturbation, followed by the daytime. In fact, a proportion of masturbatory fantasies likely originated as daytime fantasies. This is plausible considering sexual fantasies are often used to induce sexual arousal in the first place. The same could be speculated of masturbation, that it is sometimes used as a way of offsetting arousal and that both techniques are resorted to as instigators to sexual arousal as they have been tried and tested (e.g., masturbation usually leads to a satisfying outcome).

If individuals engage with sexual fantasies outside of sexual activity (i.e., daytime fantasies, and potentially dreams), it would be useful to explore whether the function of those fantasies is qualitatively different to the function of fantasies that are paired with sexual activity. If this function is not related to sexual arousal, then according to Chapter 1, these might not be referred to as *sexual*

fantasies. If some fantasies are sexually arousing outside of sexual activity, then it is worth exploring the function of that arousal (e.g., delayed gratification). Alternatively, higher frequencies of daytime fantasies in males may be linked to a higher preoccupation with sex than females, whether this is an interest in sex or a consequence of having less sex (despite males and females reporting similar rates of sexual satisfaction).

With regards to fantasy themes, firstly it is important to consider the changes made to some of the WSFQ's items (e.g., 'having sex with someone much younger than yourself' became 'having sex with someone underage (a minor)'). These amendments aimed to minimise ambiguity around the meaning of items, thus increasing the validity of each item and enabling more accurate data collection and inferences. In addition, items were modified in a way that suited the category from which they were derived (e.g., Wilson (2010) describes impersonal and sadomasochistic as deviant, and he classifies 'sex with someone much younger' as an impersonal fantasy). Furthermore, each modified fantasy theme achieved good to excellent internal reliability on each of the four fantasy contexts.

Males engaged with significantly more exploratory and impersonal themes than females during the day, masturbation, and whilst asleep within dreams. They also engaged with more impersonal themes during intercourse and more intimate themes during masturbation. For exploratory and impersonal themes, this is in keeping with the literature exploring gender differences in sexual fantasy themes (e.g., Wilson & Lang, 1981). Even though this is not

always a popular hypothesis (e.g., Barker, 2014), one potential explanation for this is drawn from evolutionary theory, the idea is that males seek multiple partners so they can pass on of their genes to offspring (Wilson, 1997). In contrast, females tend to seek intimacy with a single partner to secure protection for themselves and their offspring (Wilson, 1997). Interestingly, males experienced more intimate themes during masturbation. One hypothesis is that fantasising about intimate themes during masturbation compensates for less frequent sex. However, this would not explain why males do not fantasise significantly more intimate themes during the day. Also, if there is a male desire for intimacy, the higher rates of impersonal fantasies during intercourse are not supportive of this; indeed, why would one detach (potentially) from an experience that is meeting your needs?

There were no significant differences in the fantasy themes of male pornography users and non-users during the day, intercourse, and within dreams. However, male pornography users fantasised significantly more than non-users on each of the fantasy themes during masturbation. In contrast, female pornography-users fantasised significantly more than their non-user counterparts during the day (not for intimate themes) and masturbation. They also fantasised more exploratory and impersonal themes during intercourse and within their dreams.

These findings suggest that pornography significantly increases fantasy rates during masturbation, regardless of fantasy theme. This relationship seems limited to masturbation for males, whereas for

females, this effect is maintained in other contexts and for different themes. This suggests a qualitatively different relationship between pornography and fantasy in males and females (e.g., information-processing, interpretation of pornographic materials). On a separate note, it is curious that pornography facilitates fantasy as one might expect conflict between the two, for instance in terms of working memory space (i.e., engaging with pornography and fantasy at the same time). As hypothesised earlier, it may be that pornography facilitates fantasy by contributing some detail to it (scene, protagonists, actions, sensory stimulation, etc), allowing the individual to focus attention on other cognitive processes (memory retrieval, imagination) and to connect with affective and physiological routes.

In terms of childhood trauma, males who reported physical abuse fantasised significantly more across all four contexts than males who did not report physical abuse. They also fantasised more on the four fantasy themes during the day, masturbation (except exploratory fantasies), and intercourse, and dreamt significantly more impersonal fantasies. Males who reported emotional abuse fantasised significantly more intimate fantasies during masturbation and significantly more intimate and sadomasochistic fantasies during intercourse. There is a difference in the quality and quantity of the fantasies experienced by physically abused males versus emotionally abused males. For the former, there is something about fantasy frequency whereas for the latter there is something about fantasy theme.

With regards to higher rates of fantasy for males who report physical abuse, one hypothesis proposes that fantasising is a means of escaping distress (e.g., distraction) and processing trauma (e.g., appraising the event as harmful, imagining resolution, regaining control and power) and that this way of surviving develops in childhood. Masturbation has also been identified as a tool for coping in abused children. The combination of coping strategies, or the pairing of fantasy with masturbation, may result in the sexualisation of the themes endorsed. This would support McGuire and colleagues' (1965) theory relating initial sexual experiences with the onset of deviant sexual fantasies. If this is indeed the case, then a relationship between childhood fantasies and adult fantasies (and behaviour) may exist, and the content adult fantasies may provide insight into childhood coping strategies. However, this hypothesis suggests that fantasies do not evolve over time, which is unlikely. Furthermore, it is unclear how the child transitions from negatively appraising abuse to associating it with pleasure. Assuming this shift occurs, it may be that the repeated combination of fantasy and masturbation conditions the new appraisal or that younger minds prefer physical rewards over mental or emotional rewards. As such, this shift may be less likely as a function of age.

Regarding fantasy themes, fantasising about deviant themes during intercourse may serve as a way of achieving retribution for the harm that has been received. Imagining harm whilst engaging in physical sexual activity with another human may provide the feeling that harm has been caused. Paired with sexual pleasure and relief,

this feeling may be attributed positive valence and be encoded by the individual as a positive experience, one that the individual may eventually consider acting out.

For emotionally abused males, intimate and sadomasochistic fantasies are experienced the most during intercourse. A combination of these themes may reflect an interpretation of intimacy as inclusive of sadomasochistic practices (which include elements of emotional abuse), and association that has been learned from past experiences. Interestingly, intimate fantasies alone are engaged with the most during masturbation. This may reflect a desire for intimacy that is potentially more of a conscious yearning whilst tending alone to one's sexual needs.

Emotionally abused individuals fantasised more about exploratory and impersonal themes during masturbation than those who were not emotionally abused, and they fantasised more about sadomasochistic fantasies during intercourse than those who have not experienced emotional abused in childhood. For emotionally abused and sexually abused individuals, engaging with deviant sexual fantasies may serve a similar function as it does for physically abused males.

Females who reported sexual abuse fantasised significantly more during masturbation, and it is worth noting that this was almost the case for intercourse as well (p = .071). During both contexts, they also endorsed higher rates of impersonal fantasies than females who did not experience sexual abuse. Higher fantasy rates and the endorsement of impersonal fantasies during sexual activity might be

reflective of difficulties becoming sexually aroused (fantasy promotes arousal), anxiety around intimacy (with others or alone) or perhaps a fear of reliving previous trauma (fantasy as distraction). This is in line with the finding that sexually abused females engage with sex significantly less than females who did not report this. In addition, males who reported sexual abuse were observed to endorse higher rates of sadomasochistic fantasies during intercourse.

The present paper aimed to shed some light on the relationships between sexual fantasies, sexual behaviour, pornography consumption, and experience of childhood abuse. Interesting links have developed between masturbation, pornography consumption, and sexual fantasy. It would be valuable for future research to establish further relationships between pornography and fantasy, specifically in terms of frequency and theme, to explore the role of masturbation as a potential mediator, and to establish connections to actual (sexual) behaviour. Another area for future research regards the relationship between different types of abuse, sexual fantasy, and sexual behaviour. Deviant sexual fantasies seem to have a functional role during masturbation and intercourse. Gaining insight into this role may further our understanding of the relationship between deviant sexual fantasies and (sexual) offending.

CHAPTER 5

ACADEMIC CASE STUDY

The Assessment and Treatment of a Male Adolescent with a Diagnosis of High Functioning Autism Who Experiences Paranoid Thinking and Violent Revenge Fantasies

ABSTRACT

This case study presents the assessment and treatment of a community adolescent male with a diagnosis of high functioning autism who experiences paranoid thinking and violent revenge fantasies. Over a four-month period, a joint cognitive-behavioural formulation of the young man's experiences provided insight into the function of violent revenge fantasies, the relationship between fantasy, cognitive, affective, and physiological routes, and the relationship between fantasy and doing. This served as the primary form of intervention, complimented by work on risk management, and the use of strengths-based, person-centred, and systemic approaches. Notable improvements were observed and self-reported across sessions and by third parties, in particular, an increased understanding of emotional regulation and thus an increased ability to successfully implement coping skills that did not involve fantasy. Violent revenge fantasies were nonetheless maintained and associated with an intent to implement these in reality. As such, further psychological intervention was recommended to target the source of distress and internal imbalances, to explore the use and risk of maladaptive coping mechanisms (in this case, fantasy, self-harm, other criminal and antisocial behaviour), and to explore the risk of aggression and violence to others. This case illustrates the usefulness of a joint case formulation as psychological intervention and illustrates the usefulness of the General Aggression Model in formulating the function of violent revenge fantasies and their relationship to violence and aggression. In addition, it is proposed

that theoretical parallels can be drawn between the study of violent revenge fantasy and other types of fantasy, such as deviant sexual fantasies.

CLIENT OVERVIEW

Mr Z is a 16-year-old male with a diagnosis of high functioning autism (thereafter, HFA) who experiences symptoms of schizophrenia, notably auditory hallucinations and paranoid thinking. He was referred to a forensic child and adolescent community mental health team due to self-disclosures of violent revenge fantasies and intent to physically harm others.

Although Mr Z was seen regularly by a community psychiatrist and prescribed antipsychotic medication for his symptoms of schizophrenia, it was felt that psychological input was required as the medication was less effective in managing paranoid thinking which was deemed to positively correlate with violent revenge fantasies and risk of violence and aggression, unlike auditory hallucinations which appeared medically well-managed and not associated with violent revenge fantasies or risk.

ETHICAL CONSIDERATIONS

This case study has been anonymised to protect the identity and privacy of the young man. As such, he will be known as Mr Z. Mr Z and his mother have consented to this case study being used for learning purposes and understand that it may be submitted for publication. An anonymised version of the consent form is available in the Appendix (see Appendix P).

In obtaining consent, several factors were taken into account. Due to the client's diagnosis of high functioning autism, and experience of symptoms of schizophrenia (paranoid thinking, auditory hallucinations), considerations were made towards the client's ability

to process, retain, and understand information, towards his mental state at the time of making the decision, and towards the way in which information was presented to him (e.g., format, clarity of information, use of professional jargon), in line with the Mental Capacity Act (2005; Department of Health).

Due to the client's young age of 16, an appropriate adult was present. His mother, whom he reports a good relationship with, supported him with his decision-making.

Lastly, the young man reported that he did not feel coerced into giving consent, that he felt well enough to make an important decision in that moment, and that he felt he was given sufficient time and information to make this specific decision.

DEFINITION OF KEY TERMINOLOGY

As with most psychological concepts, various definitions and nuances of definitions have been offered to describe the terms *aggression* and *violence*. Here, *aggression* is understood as a behaviour proposed to harm an individual, where the individual seeks to evade that harm (DeWall, Anderson, & Bushman, 2011), including threats to physically harm and other verbal aggression (Loeber & Hay, 1997). *Violence* is understood as a subcategory of aggression where the harm is extreme enough to require medical attention or to cause death (Warburton & Anderson, 2015). These definitions do not include reflections about intent (e.g., mitigating circumstances, accidents).

Similarly, *violent fantasies* have been used interchangeably with *violent thoughts* and *violent ideation* (Palermo & Bogaerts, 2015), and *aggressive scripts* (Gilbert & Daffern, 2017). Arguably, all

four concepts are reflective of distinct psychological processes, despite obvious overlaps. The same is perhaps true of *revenge fantasies*, which may over time have been used to describe other concepts such as *revenge scripts* or fleeting thoughts of revenge. Here, the concept of *fantasy* is understood as an expression of the imagination, however short or elaborate, that is not boundaried by reality, fears of embarrassment or rejection, or by societal and legal restrictions (Leitenberg & Henning, 1995; from the literature on sexual fantasies). Arguably, if an individual simply recalls an event without adapting it in some way by use of imagination, this should be referred to as a memory and/or script rehearsal, depending on the content. It is acknowledged that fantasies and scripts are distinct, and it is proposed that fantasies can at times incorporate scripts and other cognitive, affective, and physiological elements within them.

In this case study, we refer to violent revenge fantasies, where *revenge* is defined as "retaliation in response to a perceived injustice committed against a person (or a group with whom that person feels identified)" (Haen & Weber, 2009, p. 84). The fantasies are further characterised as violent (as opposed to aggressive) due to the content of the fantasy that is to severely harm or kill others. Here, the primary theme of the fantasy is revenge and violence is the means by which revenge is to be executed.

It is important to note that the literature on sexual fantasies has been referenced as it is hypothesised that sexual fantasies and violent revenge fantasies are conceptually the same. For example, it might be argued that sexual fantasies and violent revenge fantasies

are subtypes of fantasy, where sex and violent revenge are the themes encapsulated within those fantasies. However, it is also hypothesised that a thematic categorisation might not be so simple due to significant overlaps. For instance, one might argue that a sexual fantasy that encapsulates a script of rape, is akin to a violent revenge fantasy if it is resorted to as a means of perpetrating violence against women, motivated by a need for retribution that stems from perceived experiences of injustice at their hands. Similarly, a fantasy involving a murder script might be accompanied by sexual arousal for some individuals, and thus deemed to be a sexual fantasy. As such, it was felt that a case study exploring violent revenge fantasies, though not sexually arousing to the young man experiencing them, would contribute to bettering our understanding of fantasies in general.

THEORETICAL AND EMPIRICAL BACKGROUND

From initial assessment it transpired that the risk of violence and aggression stemmed from a complex interaction of physiological, affective, and cognitive factors. It was felt that the General Aggression Model (thereafter, GAM; Anderson & Bushman, 2002; Anderson & Dill, 2000) generated the most useful account of the young man's experiences. GAM is a comprehensive framework for understanding violence and aggression that incorporates key aspects of previous theories, offers an explanation of how different factors interact with one another (e.g., biology, personality, affect, cognition, arousal, social), and considers their impact on decision-making and behaviour in both the short- and long-term (see Figure 7; see Allen,

Anderson, & Bushman, 2017). This section presents a brief overview of GAM and of the literature on revenge fantasies. The literature on revenge fantasies was examined with some caution and consideration for the underlying concepts being discussed.

General Aggression Model

According to GAM, behaviour is the result of an interaction between the person (and their characteristics) and the situation (and its characteristics), known as *inputs*. Input variables that facilitate aggression are known as risk factors, whereas those that decrease the likelihood of aggression are known as protective factors. Risk factors might include narcissism, high trait anger, normative acceptance of aggression, and moral justification of violence (person-related risk factors), or frustration, intoxication, violent media, and pain (situation-related risk factors). The more risk factors are present, the likelier the aggressive or violent outcome.

The person-situation interaction influences the person's current internal state via cognitive, arousal, and affective processes or *routes*, which in turn influences appraisal and decision processes, and ultimately, behaviour (known as *outcomes*). For instance, an individual with a generally hostile disposition (person factor) may be likelier than others to feel hostile in certain situations (affective route); the presence of a weapon (situation factor) may trigger angry thoughts (cognitive route); and exercise (situation factor)

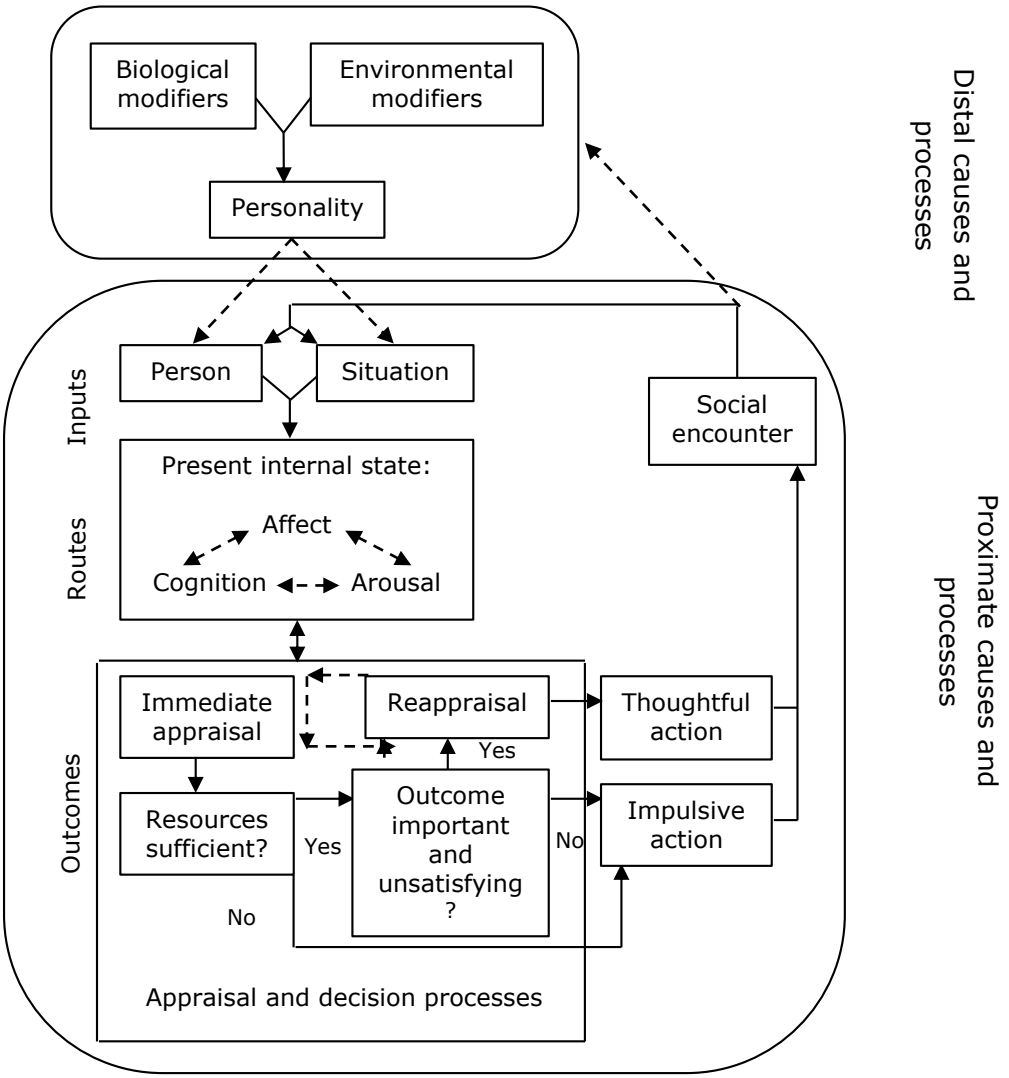


Figure 7. General Aggression Model.

Note. Adapted from Allen, Anderson, & Bushman (2017).

might have an exciting effect on the individual (arousal route). The routes can be independently affected by risk factors and can affect each other in any given order.

In their current internal state, the individual decides how to behave in a specific situation or social encounter. The outcomes of the social encounter will immediately impact on inputs, current internal state, and so forth. In the first instance, an immediate appraisal of the situation is made automatically, without using

significant cognitive resources, and influenced by one's current internal state. Following the appraisal, a response to the situation is selected. If the person has sufficient cognitive resources, they can make a conscious effort to evaluate the potential outcome of their behaviour and decide whether they should action this or not. If they decide against it, a second appraisal takes place, allowing for the selection of more thought-through behaviour. If the person has limited time or cognitive resources, the behaviour will be actioned, leading to more impulsive behaviour. This is not to say that impulsive behaviour will be aggressive, and that thoughtful behaviour will be non-aggressive; this is dependent on the person and their characteristics.

Inputs, routes and outcomes, pertaining to single events, are known as proximate factors. Lessons learnt from these episodes can influence future decisions and behaviour via a feedback loop, where new information can change the individual's knowledge structures (e.g., beliefs, attitudes, scripts) impacting on how they perceive the world and others, and interpret information. In this sense, knowledge structures contribute to shaping one's personality. The person's biological makeup (e.g., hormones, mental health) and any persistent environmental factors (e.g., cultural norms, peer group, family) also contribute to shaping personality. These three factors, known as distal processes, influence how the person will respond in the aforementioned person-situation interaction.

Revenge and revenge fantasies

It is generally agreed that a desire for revenge originates from the experience of trauma, where harm has been caused to the self by others (Haen & Weber, 2009). It is perhaps not surprising that most of the literature scoped explored revenge fantasies in relation to trauma, such as childhood sexual abuse and bereavement. Although in this case study, such trauma was not present, it was clear that the young man had experienced events in which he perceived himself to have been on the receiving end of great injustice and that he identified as a victim, thus fuelling a need for revenge in the present day.

Revenge fantasies are better understood with a consideration for the aetiology of revenge itself; as such, these will be discussed in turn. The need for revenge stems from the impact of trauma on the person cognitively and affectively (with associated impact on arousal), affecting the way they view themselves, relationships, and the world around them, and how they interpret their past and predict their future (Haen & Weber, 2009).

The desire for revenge is underlined by four cognitions: 1) perceptions of severe harm; 2) attribution of responsibility to the perpetrator; 3) condemnation of the violent act; and 4) a desire to retaliate (Orth, 2004). It is also purported that for an individual to view themselves as a victim, they require a degree of self-worth and that without this, they may not perceive the harm as severe and may even attribute blame to themselves or feel they are deserving of harm (Haen & Weber, 2009). Such beliefs may be further reinforced and

confirmed through repeated trauma. In these cases, retaliation is unlikely sought and self-harm or self-punishment may even occur (Haen & Weber, 2009). Alternatively, the repeated experience of trauma can lead to the development of a malignant belief system where people's actions and intentions are generally processed as malicious, provoking an almost automatic aggressive or violent response in the perceiver during interactions, even when harm was not received, and retaliation is not justified (Stien & Kendall, 2004). Here, one might make connections with the development of several mental health symptoms such as persecutory hallucinations, delusions, paranoid thinking and anxiety.

From a different perspective, revenge can be a way of restoring one's view of the world as a just and organised place where "bad things only happen to bad people" (Haen & Weber, 2009). Revenge may also allow one to make peace with society; it informs others of the harm that has been received and gives them an opportunity to respond to it in the present time when they have previously failed to (Thomas, 2004).

Revenge can also be used as a way of rectifying an emotional imbalance, an attempt at dealing with feelings of anger that have not found an appropriate outlet (Hardy & Laszloffy, 2005), a way of dealing with feelings of shame for having been publicly exposed as inadequate (van Noort, 2003), a feeling claimed to be even harder to deal with in boys (Pollack, 1998), or a way of minimising hopelessness and powerlessness by regaining control and power over relationships and situations, thus providing a sense of agency for the individual

(Haen & Weber, 2009; Kunst, 2011). Feelings of powerlessness emerge because at the time of the trauma, the victim was not in a position to retaliate or fend for themselves (Haen & Weber, 2009). In the case of repeated trauma, the victim can become chronically powerless, leading to recurring feelings of justice dissatisfaction which in turn can generate a recurring need for revenge and use of revenge fantasies (Lillie & Strelan, 2016).

It is suggested that when there is no source of outlet for revenge, that revenge fantasies can be useful and even cathartic, providing a mental space for rectifying imbalances and alleviating symptoms in lieu of actual vengeance, and for making sense of past experiences (Alibhai, 2009; Haen & Weber, 2009; Hardy & Laszloffy, 2005; Kunst, 2011; Lillie & Strelan, 2016). Thus, revenge fantasies may be viewed as an adaptive coping mechanism that reduces the risk of actual revenge. On the other hand, it has been proposed that revenge fantasies only provide temporary satisfaction as they never truly rectify an imbalance or change its source. It is suggested their rehearsal can even increase the likelihood of revenge, sometimes in the form of actual aggression and violence (Kunst, 2011). Revenge is associated with the same short-term rewards (Haen & Weber, 2009), a potential for criminalisation, and in some cases, displaced revenge, where the original perpetrator is not the recipient (Bloom, 2001). As such, revenge fantasies, and revenge itself, can be viewed as maladaptive ways of dealing with cognitive and emotional turmoil, and of attempting to mend relationships and of protecting oneself in the present and in the future.

CONSIDERATIONS FOR THERAPY

Several factors were hypothesised to have a potential impact on therapy, especially with regards to the development of a therapeutic alliance, level of engagement, and processing of information.

Demographics

The therapist considered the age dynamic between herself and Mr Z, as some young people struggle to open up to adults or figures of authority, perhaps out of fear or intimidation, whilst some young people feel obliged to cooperate or to provide answers that are deemed satisfactory to the questioning adult.

Mental health

The therapist reflected on the potential impact of HFA and paranoid thinking on the therapeutic process. With regards to HFA, factors that might interfere with engagement include rigidity of thinking and difficulties perspective-taking; these can make it difficult to challenge the individual's belief system and to help them grasp how their behaviour can affect themselves and others. With regards to paranoid thinking, factors that might interfere with engagement once again include difficulties perspective-taking and a tendency to interpret information as negative or malicious and may further include difficulties trusting the therapist and their intentions, as well as the purpose of therapy.

Therapeutic strategies

The therapist aimed to overcome potential barriers by acknowledging the young man's experiences, by making intentions

for therapy clear, by creating a sense of partnership and common purpose, and by establishing a non-judgmental and safe space for exploring thoughts and feelings, including any concerns about therapy whether from the young man or the therapist herself.

ASSESSMENT, FORMULATION, AND INTERVENTION

This community forensic mental health team receives numerous referrals and as such, client turnover is usually swift with a limited amount of time available per client. In this case, a total of ten appointments (including the young person) were carried out over a four-month period before the therapist left the Service and handed over the case. The assessment, formulation, and intervention were not implemented in clearly distinguishable phases; rather the processes overlapped, informed and enriched one another, and were regularly revisited during and outside of sessions. Furthermore, in this case, the compilation of a joint formulation was itself an intervention. The Assessment section is initially discussed, after which the formulation and intervention are discussed under the same section. Table 20 presents an overview of appointments, making reference to subsequent sections of the report.

Table 20. *Overview of Appointments.*

Appointment number and duration	**Appointment purpose and attendees**	**Appointment content**
1 - 1h	Initial meeting: YP, M, RP	• Discussion over reason for referral, areas of need, and potential benefit of psychological input. • Agreement that YP's mental state would be examined during psychology sessions and any changes reported back to RP (see Assessment section).
2 - 1h	Session 1, initial	• Discussion around confidentiality: as YP over 16, there is no obligation to

	assessment: YP	divulge information to relatives or third parties unless a risk has been identified to the self and/or others. YP agreed RP would be informed of changes in mental state and that M and father could be informed of session content, progress, and risk. • Interview: brief psychosocial history (see Assessment section), areas of need as identified by YP, and aims for psychology sessions.
3 - 1h	Session 2: YP	• Mental state examination: no report of psychotic experiences or paranoid thinking. Fluctuations in mood from baseline to low without experience of happiness or elation. • Discussion around revenge fantasies: some fantasies concerning specific individuals in relation to past negative experiences, and some concerning random members of the public. Focus on the latter type by drawing a timeline from initial event to potential action whilst exploring associated thoughts, emotions, and physiological symptoms (see Formulation and Intervention section).
4 - 1h	Session 3: YP	• Mental state examination and review of current situation. YP is struggling at school, avoids eating with peers and sometimes avoids school altogether due to anxiety. YP reports no friends at school. YP reports hearing voices again but the content is not malicious or distressing. YP reports M has informed RP of this. YP does not report feeling paranoid in relation to others but reports "a little urge to hurt people". • Focus on revenge fantasies in relation to past negative experiences by drawing a timeline from initial event to potential action whilst exploring associated thoughts, emotions, and physiological symptoms. YP reported being bullied due to a speech impediment and because "people thought [he] was weird because of [his] autism". YP reports always feeling unsafe and vulnerable to imminent harm. Discussion around the potential self-serving functions of fantasy and

		how fantasy might not be the most helpful way of keeping safe (see Formulation and Intervention section).
5 - 1h	Session 4: YP	• Mental state examination and review of current situation. No experience of hearing voices. Some paranoid thinking whilst on holiday but after discussion with M, YP realised he was feeling paranoid because he could not understand the foreign language and assumed people were negatively talking about him. • Recap of previous sessions and identification of alternative healthy and prosocial coping mechanisms (see Formulation and Intervention section). • Exercise to complete outside of sessions: try to notice the fantasies and use the coping skills identified instead. Try to remember if this worked or not.
6 - 1h	Session 5: YP	• Mental state examination and review of current situation. YP reports progress in all areas of life. YP reports no experience of paranoid thinking and no voices, however, reports a strong desire for revenge. YP expressed feeling low most of the time and to sometimes self-harming by banging his head with force against the bedroom door or by punching himself in the face. YP reports that M is aware and has discussed this with RP (patient notes confirm this). YP has also sought reassurance with regards to behaviours he displays associated with HFA (e.g., "little screams" when happy). He does not experience distress in relation to this but may be preoccupied by how others may respond to this (negative past experiences about this as aforementioned). • Focus on recapping coping skills and identifying protective factors (see Assessment section; see Formulation and Intervention section).
7 - 1h	Session 6: YP	• Mental state examination and review of current situation. No change. • Discussion around low mood and relationship to revenge fantasy (see

		Formulation and Intervention section). • YP completed the RCADS to assess anxiety and depression (see Assessment section). • Discussion about upcoming end of sessions and termination of therapeutic relationship.
8 - 30min	Session 7: YP	• Brief recap of work completed over sessions. • Completion of risk management plan (see Intervention section). • YP received a poster illustrating his coping skills with a diagram and pictures. YP has independently decided to place this on his bedroom door. This may be significant considering this is one location of self-harm.
9 - 30min	Session 8: YP and M	• Followed on from Session 7. • Discussed nature of work and progress, shared some formulations, coping skills, and risk management plans. • Discussed ways that M can support YP. • YP praised for his hard work and honesty and wished well for the future.
10 - 30min	End meeting: YP, M, TP (RP unavailable)	• Followed on from Session 8. • Discussed Session 8 with TP. TP will handover to RP. • YP divulged that he will kill a peer at school. M confirms YP informed him of this, resulting in him missing school. YP encouraged to name the peer but refused as this would allow us to interfere with his plan. • Recommendation made to continue sessions with TCP due to therapist leaving. • YP encouraged to continue discussing intentions and plans with M and praised for using his skills by mentioning this in the first place and deciding himself not to go to school. • Recommendation to maintain channels of communication open with the school. • TP recommendation to increase dose of antipsychotic medication.
11 - 1h	Handover: TP and TCP	• Discussed work completed with YP, including formulations and recommendations for future work (see Recommendations section).

	• Discussed what works / does not work with YP in sessions. • Recommendation to liaise with RP and school as soon as possible to identify and implement risk management strategies, in partnership with YP and M.

Key. YP - young person; M - mother; RP - referring psychiatrist; TP - team psychiatrist; TCP - team clinical psychologist.

ASSESSMENT

This section presents 1) psychosocial information, collated from interview and expanded on from access to electronic patient records logged by the referring psychiatrist; 2) the Revised Child Anxiety and Depression Scale (thereafter, RCADS), used to assess the young man's mood; 3) the assessment of risk of harm to the self and others over sessions, including mental state examinations, used to explore the experience of mental health symptoms and their potential impact on behaviour.

Psychosocial history

As aforementioned, time spent with each client within the Service is limited, and as such, a brief assessment preceded the intervention period to ensure maximum opportunity of minimising distress and harm to the self and/or others. However, a more extensive assessment, for instance by gathering further psychosocial information, could have proved useful in formulating the young man’s presenting problems and ways of tackling these in therapy, for instance allowing for a better understanding of the client’s belief system (e.g., views of the self, others, and the world), thinking and interactional styles, ability to relate to others, and strengths and

difficulties, even though these were discussed during the process of joint formulation.

Family

Mr Z lives with his parents and younger brother. He describes getting on well with relatives and seems to have a particularly positive relationship with his mother in that he trusts and values her opinions more so than he does other people's. He also describes enjoying spending time playing with his brother, though equally appreciates time spent alone in his bedroom watching films, playing videogames, or listening to the radio. The nature of these activities was mixed in theme (e.g., fantasy, violence, mellow, comedy), age-appropriate, and of adequate frequency (i.e., technology did not provide the sole source of entertainment and was not accessed excessively). It was clear that Mr Z understood the boundaries but reality and media well.

Friendships

Mr Z does not generally enjoy socialising and experiences anxiety during social situations and outside of social situations by thinking about them. He does however identify two long-term close male friends of the same age whom he does not experience anxiety around and whom he can socialise and enjoy activities with (e.g., play videogames, watch films). Mr Z also has a girlfriend of the same age whom he enjoys spending time with. He describes his friends and girlfriend as accepting of his autism as they understand that he can sometimes "be a bit weird" and are non-judgemental in relation to behaviours he occasionally displays, such as making high pitch vocals when happy. Despite some difficulties interacting with others, Mr Z

presents with an ability to develop and maintain significant long-term relationships that provide a source of support and communion.

School

Mr Z attends a mainstream school and achieves average marks. He reports being bored in class and very anxious in social situations with peers, especially when activities are unstructured (i.e., there is no clear aim or method) and have an element of unpredictability (e.g., conversations). He has skipped lunch to avoid conversing with peers. Mr Z has recently moved schools for dealing cannabis. His previous schools were also mainstream.

Mental health

Mr Z is diagnosed with high functioning autism. He reports occasionally experiencing auditory hallucinations and frequently experiencing paranoid thinking, causing him to view others and their intentions towards him in a negative and malicious way. Mr Z is prescribed antipsychotic medication which he states alleviates symptoms. He also reports frequently feeling anxious and low in mood.

Forensic history

Last Summer, Mr Z and a group of peers instigated a physical fight against a group of boys the same age who he alleges attacked them a few months prior; this was their way of retaliating. An off-duty police officer observed the situation and interfered, putting a stop to the fight. Mr Z reports not being charged with an offence. Unfortunately, further information about the incident was not collated during the assessment. Liaising with the police would have been

useful in gaining a better understanding of the context and severity of the incident, as well as Mr Z's level of contribution (e.g., instigating the fight, level of harm delivered). It would have also been useful to explore the first incident during which he alleges he was a victim, in more depth.

Mr Z reports shoplifting a watch in recent months. He describes independently entering a shop, seeing a watch that he liked, and placing this in his pocket. Mr Z states that he has not been arrested for this and does not present as regretful.

More recently, Mr Z was caught dealing cannabis on school property, leading to him moving establishments. He describes this as a solo activity that made him feel in control and powerful. He did not provide detail regarding the procedures involved in drug dealing, for instance in terms of how he sourced and distributed the cannabis, and what came of the financial gains. It would have been helpful to explore his level of agency within the drug dealing to obtain further insight into his ability to make sense of the world and interact with it (e.g., did he set up his own drug dealing affair or was he merely a pawn in someone else's?).

Again, a more detailed assessment would have permitted for a greater understanding of Mr Z's beliefs towards offending, authority, and violence, for instance whether he feels entitled or justified behaving in criminal and/or antisocial manners.

The Revised Child Anxiety and Depression Scale

The RCADS (Chorpita, Moffitt, & Gray, 2005) is a 47-item self-report questionnaire that looks at the experience of anxiety and

depression in young people on six subscales: Social Phobia (thereafter, SP), Panic Disorder (thereafter, PD), Major Depression Disorder (thereafter, MDD), Separation Anxiety Disorder (thereafter, SAD), Generalised Anxiety Disorder (thereafter, GAD), and Obsessive-Compulsive Disorder (thereafter, OCD; see Appendix Q for a classification of items according to disorder). Each item is rated on a 4-point Likert scale from 0 (never) to 3 (always). For each subscale, numerical values obtained for each item of the scale are added up to generate an overall raw score. From the six overall subscale scores, a total anxiety score (sum of the five anxiety subscales) and a total anxiety and depression score (sum of all six subscales) are calculated. Normative data allows for t-scores to be derived from the raw scores. T-scores between 65 and 69 are considered clinically borderline and t-scores of 70 and over are considered above the clinical threshold. The RCADS has been shown to have good reliability (Chorpita et al., 2005), good test-retest reliability (Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000), good concurrent validity (Chorpita et al., 2005), and good discriminant validity (Chorpita et al., 2005).

Mr Z did not appear to struggle with reading or writing and seemed to understand all the questions, taking his time to answer each one. He assured the therapist that the assessment did not distress him, whether by completing the task or by its content. Not so surprisingly, Mr Z scored borderline on the GAD subscale with 7% of un-referred children his age, and above threshold on the SAD subscale with 2% of un-referred children his age (see Table 21 for scores on all scales). It is interesting that Mr Z has not scored

Table 21. *Raw Scores, T-scores, and Clinical Interpretation on all Subscales of the RCADS*.

Subscale	**Raw score**	**T-score**	**Clinical interpretation**
Social phobia	3	32	
Panic disorder	4	51	
Major depression disorder	12	61	
Separation anxiety disorder	8	**72**	Above threshold for diagnosis
Generalised anxiety disorder	12	**67**	Borderline
Obsessive-compulsive disorder	6	55	
Total anxiety scale	33	53	
Total anxiety and depression scale	45	55	

Note. T-scores 65-69 = borderline diagnosis; t-scores 70+ = above threshold for diagnosis.

higher on other scales and in fact that his lowest score was for SP, which, based on his account of how he feels in social situations, should have been much higher. A high SP score would also have been in line with his high score on the SAD subscale. It is also surprising that Mr Z did not score higher on the MDD subscale, albeit this being his third highest score and close to a borderline interpretation. A higher score may have been expected considering self-reports of frequent low mood.

In this case, several diagnostic overlaps are apparent, between subscales of the RCADS, psychosis, and HFA. For instance, anxiety and depression can be symptoms of psychosis and autism (Ghaziuddin, Ghaziuddin, & Greden, 2002; Howlin, 1997; Matson & Nebel-Schwalm, 2007), and negative symptoms of psychosis (e.g., little facial expression, monotone speech, lack of interest in other people, social withdrawal) are often experienced in autism. This case illustrates the usefulness of targeting symptoms in therapy rather than classify and label experiences.

Assessment of risk to the self and others

Risk to the self was assessed at the beginning of each session during a mental state examination. This helped monitor the young man's mental wellbeing (e.g., mood, self-esteem, outlook on life), relationship to self-harm and suicide (e.g., ideation, intent, plans, actual self-harm), and his experience of mental health symptoms and any potential distress associated with these. Mr Z has never reported suicidal ideation but has reported occasional self-harm as described in Table 20.

Risk to others was assessed at each session by asking the young man about thoughts and intent to harm or kill (e.g., specific plans and targets), experience of paranoid thinking, hypothesised to increase the likelihood of revenge fantasies, and experience of revenge fantasies (e.g., recency, frequency, nature, specific plans and targets), hypothesised to increase the likelihood of violent behaviour. The ongoing assessment of risk was deemed of importance considering the client is a free agent in the community. Regular contact was maintained with the client's personal and professional circles. Any concerns relating to a decline in mental state and an increase in risk of harm to the self and/or others, would be communicated to relevant parties so that risk management strategies could be implemented in partnership with them, and with the young person at the core. The young man was seen once a fortnight, which seemed frequent enough to monitor risk. In between sessions, the therapist held a telephone conversation with his mother. Phone calls were originally made to book appointments but organically became

source of reassurance for the young man's mother, as well as a way of monitoring mental state, behaviour, and progress, and a means of communicating concerns. Mr Z was aware of these phone calls and consented to them taking place. Transparency contributed to the development of trust within the therapeutic alliance.

The therapist also considered the potential risk to herself, for instance in the case of displaced revenge, whether explicit (e.g., hurtful comments, aggressive outbursts) or symbolic (e.g., being late at sessions or not turning up; Haen & Weber, 2009). In addition, sessions took place within a healthcare community setting where local and national policies and procedures could be resorted to in the event of an incident.

FORMULATION AND INTERVENTION

Before and during therapy, several treatment targets were identified as follows:

- Increase awareness of own and others' thoughts, emotions, physiological feelings and behaviour, including relationship between these.
- Increase understanding of potential impact of behaviour on the self and others.
- Increase understanding of the function of violent revenge fantasies at cognitive, affective and physiological levels and establish their relationship to mental health and behaviour.
- Identify more helpful and prosocial ways of fulfilling the function of fantasy / identification of adequate coping skills.

- Identify and implement internal and external risk management strategies.

Initially, a formulation of the risk of violence to others was developed using the 4Ps model to organise information and to help determine appropriate treatment targets. This was reviewed across sessions. Subsequently, a cognitive behavioural formulation was developed in partnership with the young man and constituted one aspect of intervention. Some aspects of formulation adopted a psychodynamic approach when the relationship between past experiences and current internal state and behaviour were discussed. The second aspect of intervention pertained to risk management. Less explicit forms of intervention are also discussed. The process of therapy was influenced by the theory and research earlier described, in a top-down fashion. Importantly, systemic and person-centred approaches were used so the case was also interpreted free from general assumptions.

4Ps formulation

Weerasekara's (1996) 4Ps formulation allows for an understanding of the predisposing, precipitating, and perpetuating factors hypothesised to account for the presenting problem, and encourages the identification of protective factors. Predisposing factors are long-term factors that affect the presenting problem, and arguably, are akin to GAM's distal processes. Precipitating factors are those more recent factors that help trigger the presenting problem; these may relate to GAM's proximal processes, affecting the internal state and decision-making. Perpetuating factors help maintain the

presenting problem and might relate to GAM's feedback loop and distal processes. Protective factors help keep the individual safe and prevent the presenting problem from occurring. These might be reflective of both distal and proximal processes. For each factor it is possible to identify both individual and systemic contributions. Table 22 presents the 4Ps formulation for Mr Z, integrating aspects of GAM.

Cognitive-behavioural formulation/intervention

The cognitive-behavioural formulation adopted the format of a sequential functional analysis. This allowed for a visual representation of events where thoughts, emotions, physiological feelings and behaviours were explored as a function of time (before, during, and after fantasy). Timelines were drawn out on paper by the therapist, guided by the client and joint reflection, illustrating internal and external triggers, content, and outcomes to violent revenge fantasy. Four different timelines, or pathways, were identified.

In the first pathway, certain situations involving members of the public lead to Mr Z engaging in paranoid thinking about their intentions towards him, which activates negative self-schemas, and has a subsequent negative impact on affective and physiological routes. Different routes may then interact with each other and reinforce the negative internal state, which activates violent revenge fantasies (illustrated by the red arrows in Figure 8). These fantasies alleviate distress by reversing negative thoughts, emotions, and physiological feelings. This is achieved through the content of the

Table 22. *The 4Ps Formulation for Mr Z*, *with Elements of GAM*.

	Individual Factors	**Systemic Factors**
Predisposing Factors *(Distal processes)*	HFA Symptoms of schizophrenia Symptoms of anxiety and depression	Bullied at school due to speech impediment and symptoms of HFA Previous trauma
Precipitating Factors *(Proximal processes)*	Paranoid thinking Feeling vulnerable and victimised Need for retribution Feeling powerless or lacking control Feeling inadequate Violent revenge fantasies	Seeing others as vulnerable or victimised Need to defend others Anxiety-provoking situations Presence of individual(s) deserving of punishment
	⟷ *person-situation interaction*	
Perpetuating Factors *(Feedback loop and distal processes)*	Paranoid thinking Feelings of injustice that remain unresolved Violent revenge fantasies Negative views of the self and others Rumination Recall of negative events	Repeated experience of negative events
Protective Factors *(Proximal and distal processes)*	Developing insight into paranoid thinking and how this affects decision-making and behaviour Willingness to accept help and advice Ongoing identification and successful implementation of coping skills	Relatives: particularly relationship of trust with mother Friends: confidants, supportive, understanding of autism, source of communion and fun Ongoing identification and successful implementation of coping skills

Note. Features of GAM are presented in italic.

fantasy, whereby violent revenge serves to restore justice over wrongdoings and to regain power and control over perceived threats. The positive impact of fantasies on individual routes can in turn create positive interactions between routes (illustrated by the green arrows in Figure 8). This suffices to relieve distress, thus reducing or even eradicating the need to act upon the fantasy in reality, despite a reported desire to do so. Mr Z reports engaging

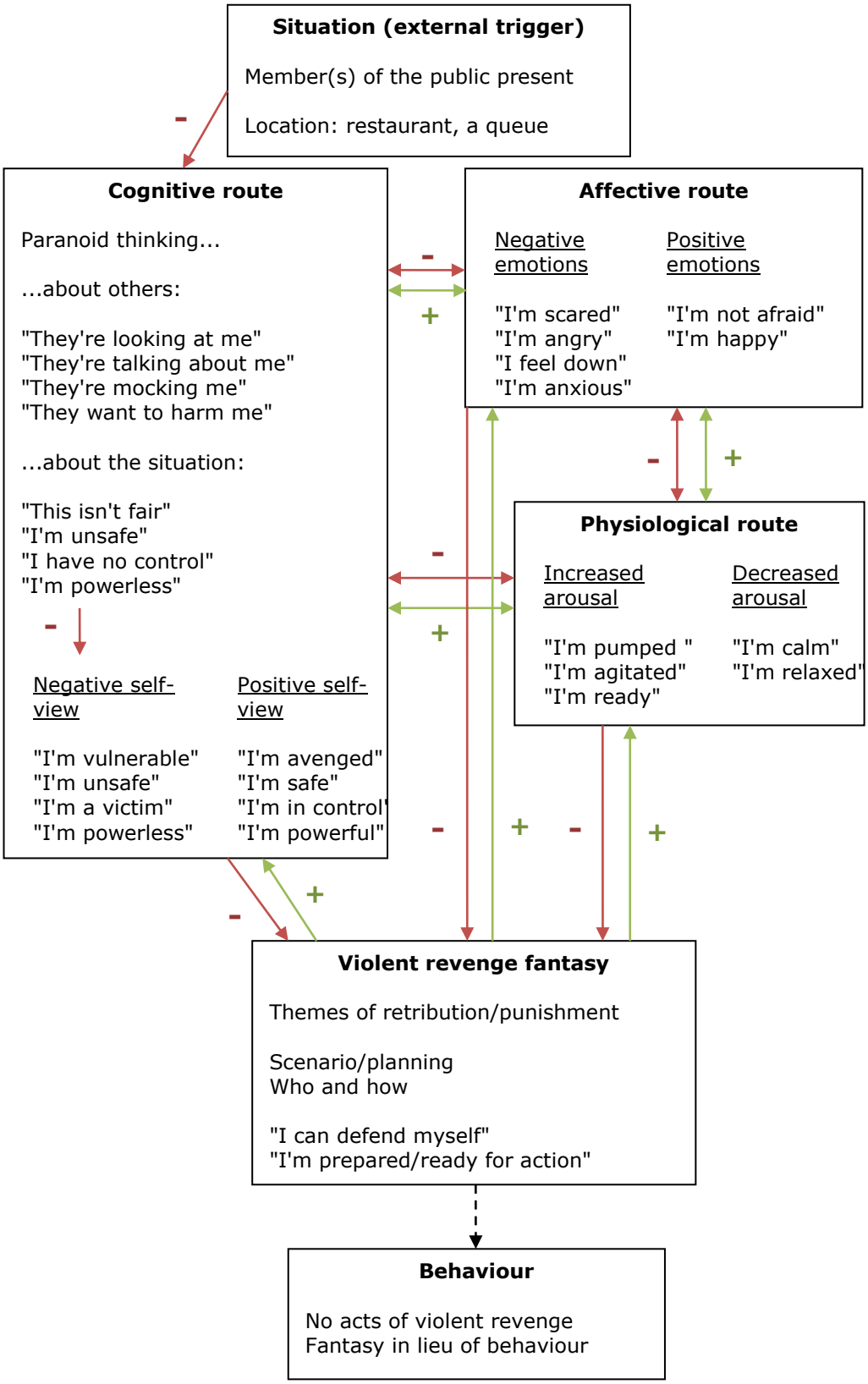


Figure 8. Pathway 1 of Violent Revenge Fantasy.

Key. Red arrows = negative impact; green arrows = positive impact.

with the fantasy for long enough that "the moment [to act] has passed".

Pathway 1 fits well within GAM, particularly illustrating the impact of the person-situation interaction on internal state. In terms of decision-making, cognitive resources are immediately allocated to fantasising about hypothetical behaviour rather than the selection of actual behaviour. Preoccupation with fantasy interferes with reaching the point of social encounter (i.e., violent revenge). Nonetheless, the positive outcome of the hypothetical encounter might be fed back to distal processes, influencing future person-situation interactions and internal states, reinforcing the usefulness of violent revenge fantasies in dealing with distress, and perpetuating the use of an unhelpful coping mechanism.

Pathway 2 is also reactive in nature, activated in response to external perceived negative experiences, whether this is an immediate or delayed reaction (Pathways 2a and 2b, respectively). In Pathway 2a, a perceived negative external event negatively impacts on the cognitive route, which in turn negatively impacts on the other routes, generating negative interactions between the routes, and the activation of fantasy. Although affective and physiological routes may initially be activated instead, it seems, from Mr Z's accounts of his experiences, that the cognitive route plays a key role in triggering this sequence of events. In Pathway 2b, the external event is internalised, recalled at a later date or ruminated on, leading to a delayed activation of the routes. Events stored in memory via Pathway 2a may later be recalled through ruminative processes via Pathway 2b.

Exposure to external stimuli at a later time may also activate Pathway 2b if these are relevant to the initial experience (see Figure 9 for Pathways 2a and 2b). It is likely all events are eventually processed via Pathway 2b as Mr Z associates the use of fantasy with only short-term satisfaction. Thus, the repeated recall of perceived negative events through rumination and the repeated experience of a negative internal state call for the repeated use of violent revenge fantasies in relieving distress. Indeed, Mr Z often spoke of "holding grudges" and not being able to let go of these until "justice has been served". Despite the short-term cathartic effect of fantasy, the frequent experience of a negative internal state may lead to chronic powerlessness, feelings of inadequacy and shame, and a recurring need for retribution, which Mr Z achieves through fantasy. He appears stuck in a never-ending cycle where fantasy is a maladaptive way of coping with distress, with no positive long-term outcome for him.

Interestingly, Mr Z appears to have used other maladaptive coping skills to deal with distress. Firstly, he reports dealing drugs, which were associated with feelings of power, control, and respect. He has also occasionally self-harmed, which, through discussion with Mr Z, seems to be a form of self-punishment for having been inadequate in past altercations (i.e., he has failed through lack of retaliation). Alternatively, this may be a case of displaced revenge, where harm is physically targeted at the self but mentally targeted at the perpetrator.

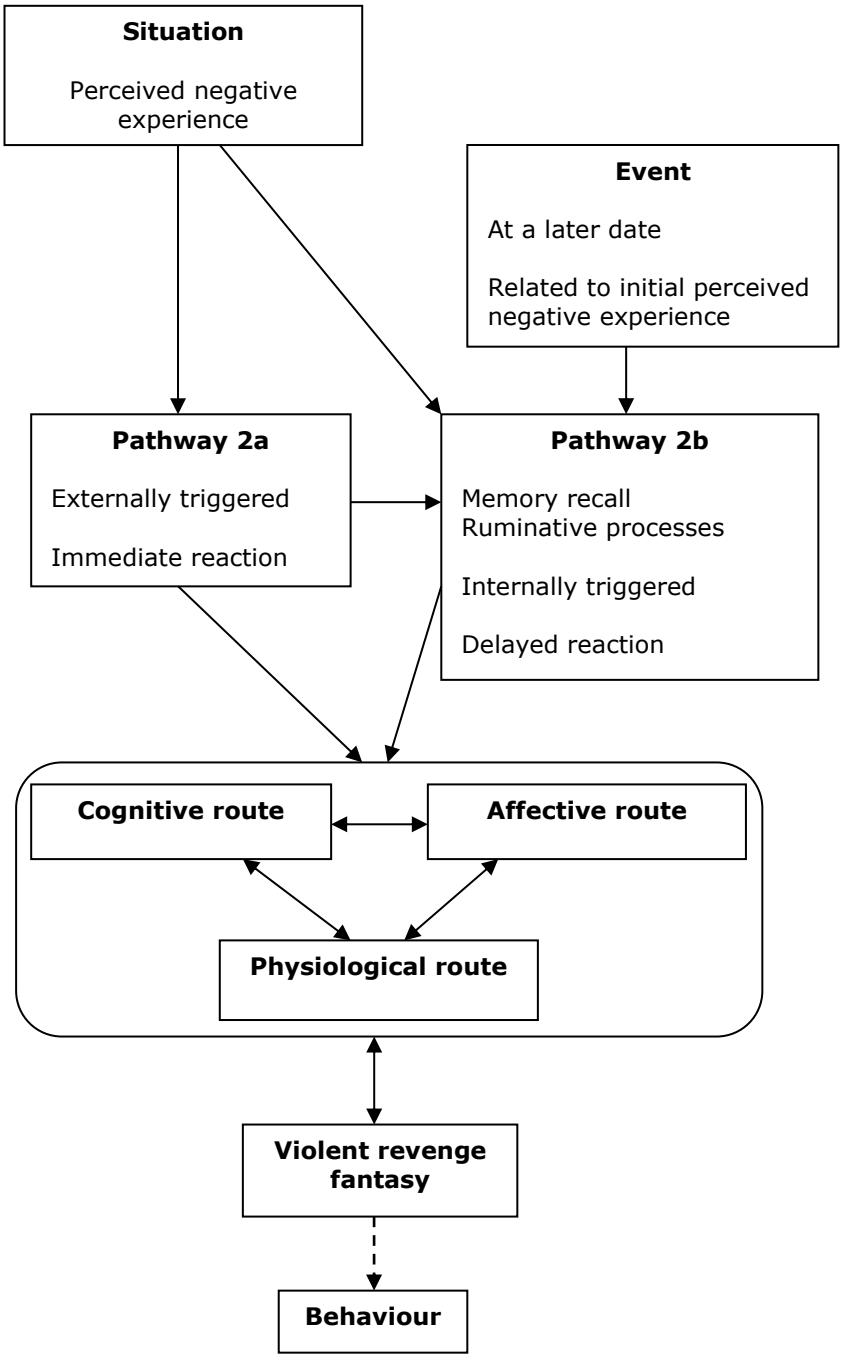


Figure 9. Pathways 2a and 2b of Violent Revenge Fantasy.

Note. The same positive and negative interactions as Pathway 1 apply.

Pathway 3 is proactive in nature whereby violent revenge fantasies are activated as a way of dealing with internally generated distress that is not necessarily initiated by the cognitive route (see Figure 10). The distress stems from: a) fears around potential future

altercations and associated fears of inadequacy, which would lead to shame; b) fears around potential future victimisation and harm; and c) fears around potential future situations, generally social interactions, where knowledge of protocols is unknown, generating feelings of inadequacy and shame. In the first case, fantasies are used to rehearse various hypothetical scenarios, whereby he is on the receiving end of harm, and for which responses, deemed acceptable by him, are generated. This reinstates a positive internal state by allowing him to once again feel powerful, in control, adequate, prepared, and protected. Interestingly, in the second case, violent revenge fantasies are also resorted to as a way of reinstating a positive internal state, despite the fantasy content being thematically incongruent with the source of anxiety.

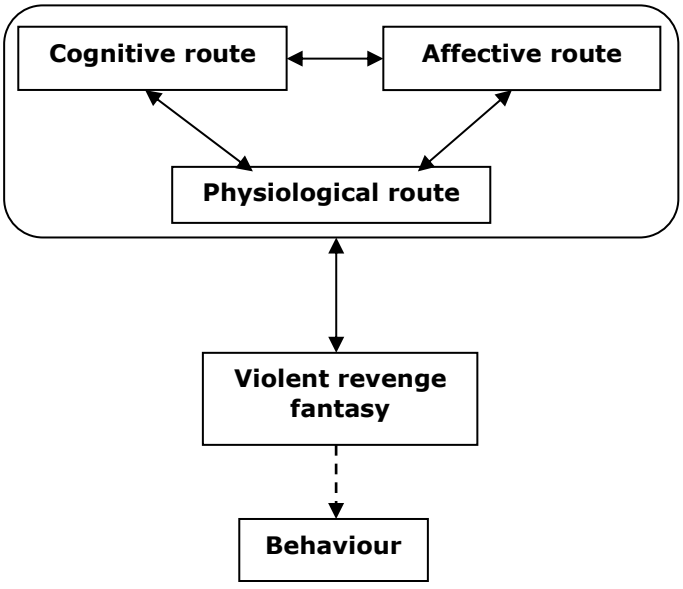


Figure 10. Pathway 3 of Violent Revenge Fantasy.

Note. The same positive and negative interactions as Pathway 1 apply.

Risk management

The second part of the intervention consisted of minimising the risk of actual violence as Mr Z had self-reported an intent to act upon his fantasies in reality, and it was hypothesised upon referral that this may indeed occur. Thus, it was hoped that by reducing the need for fantasy as a maladaptive coping mechanism, this relationship would no longer be of concern.

Throughout the formulation process, Mr Z was supported to view violent revenge fantasies as maladaptive, and to contemplate healthy and prosocial alternatives. The identification of alternatives was deemed crucial as simply removing violent revenge fantasies from his portfolio of coping strategies (if even possible), may create a direct route between a negative internal state and behaviour (i.e., violent revenge, self-harm, other antisocial or criminal behaviour). Coping skills were identified to intervene at cognitive, affective, and physiological levels, in order to minimise negative interactions between all routes that contribute towards the development of a negative internal state (see Table 23). A poster of the coping skills was compiled and given to Mr Z.

Following their identification, Mr Z was asked to 'test out' and practice his coping skills, then report back on their effectiveness in sessions (effective skills are asterisked in Table 23). In the short amount of time available, Mr Z identified that he can rely on his mother and friends to provide a second opinion when he is struggling to interpret or appraise a situation. It was also useful to test and practice skills in theory during sessions, using scenarios.

Table 23. *Individual and Systemic Coping Skills, and their Function*.

Individual	**Systemic**
Watching TV and movies, especially comedies "I don't think about problems" "I feel relaxed" "I feel happy"	*Parents "I can talk to them about anything" "I trust what Mum says"
Watching and playing football "I feel entertained" "I know the rules" "I don't feel anxious"	Brother "I can share my interest in football with him"
Playing on the console "I feel entertained" "I don't feel pressured by others"	*Friends "I like doing things with them" "I can be myself around them" "I trust what they say"
Interest in motorbikes and cars "It keeps me busy" "It's something fun to think about"	Girlfriend "I like spending time with her" "She understands my quirks"
Riding the moped "I feel free" "I feel independent"	
Listening to music "It makes me happy" "It makes me feel relaxed"	

Note. Coping skills identified as successful in practice are asterisked.

Mr Z did not appear to struggle with this exercise, perhaps due to the amount of time he spends fantasising about hypothetical situations. The feasibility of the coping skills was explored in different scenarios, allowing for the development of contingency plans, should the strategy fail or need adapting to suit the situation at hand. For instance, one scenario explored a situation in which Mr Z is alone in the community and is experiencing paranoid thoughts about a member of the public. In the absence of his mother or friends, Mr Z was able to generate a solution in which he would ring his mother to

help him make sense of his experience rather than engage in a violent revenge fantasy about the individual.

Scenario work also focused on identifying how Mr Z would cope in situations where harm is received, whether verbal or physical (e.g., swearing, threatening, punch). It was important to use a realistic approach in discussions and to acknowledge the fact that negative experiences can happen and that sometimes people do have a malicious intent. Feelings associated with this were validated (e.g., "that wouldn't be fair", "that wouldn't be nice") and potential responses reflected on (e.g., politely request to stop, walk away, call the police), but Mr Z struggled to accept the use of prosocial interventions.

Another aspect of risk management explored the conditions under which it would be acceptable (to Mr Z) to act upon fantasies. The three pathways formulated focus on the *person* in the person-situation interaction and so, it was vital to examine the *situation*. Figure 11 depicts hypothesised conditions for the realisation of violent revenge fantasies. Mr Z's interpretation of the situation and his judgements of the perpetrator(s) are somewhat basic yet crucial in his decision-making.

This exercise was useful in assessing the risk of realising violent revenge fantasies. Historically, he has been involved in one incident of actual physical harm to others but a) physical harm was carried out in unison with a group of peers and it is unclear whether the group instigated the incident or retaliated, and what Mr Z's role was if the

group did instigate; and b) it is difficult to make assumptions about future behaviour based on an isolated incident.

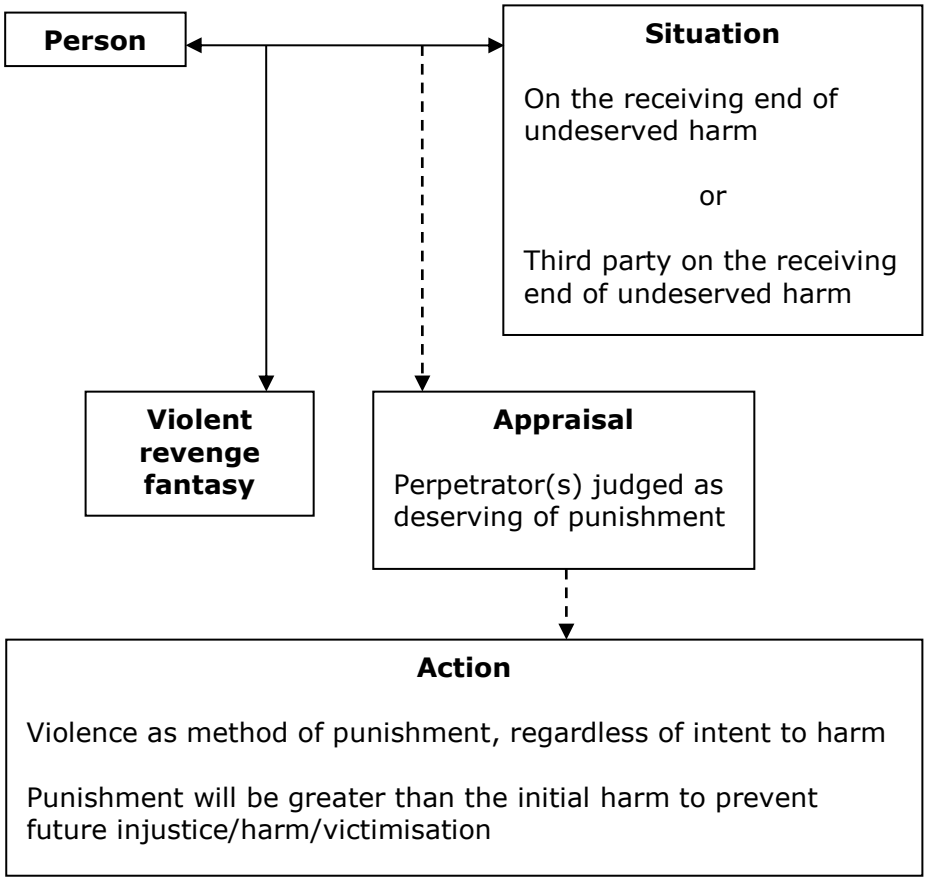


Figure 11. Conditions for the Realisation of Violent Revenge Fantasy.

Mr Z states he has on many occasions encountered situations that fulfil the conditions for violent revenge in reality, yet he has opted for fantasy in lieu of actual behaviour. It may be that the reasons he fantasises also prevent him from acting them out, including fear of inadequacy, failure, or shame. The incongruency between his verbal intent to act and his actual behaviour may be reflective of such feelings, where verbal threats to harm serve to present oneself as powerful, adequate, and fearless. Such claims may represent yet another maladaptive coping skill. Similarly, when discussing potential outcomes of violent revenge on himself and others (e.g.,

imprisonment or hospitalisation, and severe harm or death, respectively), Mr Z stated "I don't care" and presented himself as an individual who could not be deterred. Again, this is incongruent with actual behaviour and may represent further attempts at generating a persona that is powerful, adequate, and fearless.

On the other hand, from a risk assessment viewpoint, the lack of victim empathy, lack of deterring factors, self-reported intent to severely harm or kill, and the potential planning of harm through fantasy, all contribute towards a perception that he is likely to display violent behaviour in the future.

EVALUATION AND DISCUSSION

Effectiveness of therapy was measured by exploring the young man's level of engagement in sessions, use of coping skills (self-reported and parental observations), the use of violent revenge fantasy, intent to harm others and the actual harming of others, self-harm, and other antisocial or criminal behaviour.

Generally, Mr Z has engaged well in sessions, despite the number of potential treatment-interfering factors earlier identified. He has consistently participated and volunteered information and has seemingly provided honest accounts of his experiences.

In terms of coping skills, Mr Z was able to identify these with minimal support, has shown an ability to adapt strategies in scenarios where straightforward implementation may be difficult, and has successfully applied some of these in practice. Mr Z's mother reports an example: whilst abroad, her son became paranoid regarding members of the public. He consulted with her for a second opinion

and trusted this when she explained that people were not talking about him but were speaking a foreign language. Mr Z later explained to the therapist that he had found this useful and had not resorted to fantasising about violent revenge. His mother also reports observing her son giving his younger brother advice on coping skills he could use when distressed. This seems promising and may reflect an internalisation of skills and a genuine belief that these skills can be effective in crisis. Similarly, Mr Z told the therapist that he would place the poster of his coping skills on his bedroom door so as to be visually accessible to him. This demonstrates a desire to succeed in using his coping skills, but also has symbolic meaning as Mr Z has previously explained that he self-harms by head-butting the bedroom door. This hopefully indicates a further willingness to change the way he copes with distress.

With regards to violent revenge fantasies, Mr Z no longer reports fantasies associated with Pathway 1. It can be difficult to evaluate the effectiveness of psychological interventions for individuals who are also being medically treated. The decrease in the activation of Pathway 1 could be attributed to the successful implementation of coping strategies or could be attributed to the effectiveness of antipsychotic medication, considering the pathway originates from paranoid thinking about the public. It may well be that a combination of the two has achieved this result. On the other hand, Mr Z continues to experience fantasies via the other two pathways. This is not surprising considering how deeply entrenched his beliefs about himself and others are and his high levels of low mood and

anxiety with associated physiological feelings. It was not expected that Mr Z would no longer experience fantasies after four months or eight sessions alone.

Concerning intent to harm others, Mr Z continues to claim he will one day act upon his fantasies. As discussed earlier, it is difficult to ascertain whether this is reflective of a genuine intent to act or whether his claims have an alternative function. His violence-supportive views have been apparent in his discourse (e.g., "It's OK to kill someone if..."), which are also reflective of facilitative psychological processes (e.g., rationalisation, justification). Interestingly, or worryingly, in the last session, Mr Z disclosed plans to kill a peer at school. Firstly, he may in fact have plans to kill his peer. Secondly, and in line with earlier speculations, it was hypothesised that this was his last attempt at producing an impact or of forging his persona of a fearless and dangerous individual. Thirdly, Mr Z may be reacting to the end of therapy. He seemed to have developed a positive relationship with the therapist and may have struggled to appropriately communicate his feelings about her leaving, which is also congruent with his high score on the SAD subscale of the RCADS. This may even be reflective of displaced revenge. Fourthly, Mr Z may have developed a positive relationship with therapy itself. In fact, he may have grown fond of having a safe space for discussing past experiences of injustice, a space where he felt heard, valued, and empowered. This may have been an attempt at securing additional sessions with the therapist's colleague.

Unfortunately, there was insufficient time to explore these hypotheses.

Discussions about intent aside, there were no reports of actual violence, antisocial, or criminal behaviour over the therapy period. There were, however, occasional episodes of self-harm.

RECOMMENDATIONS

Mr Z's case was handed over to a fellow psychologist within the team. Further work was recommended, particularly in relation to the causes of his negative internal state, as it was hypothesised that he would continue to use violent revenge fantasies to cope with distress via Pathways 2 and 3, without a more detailed understanding of his experiences at cognitive, affective, and physiological levels. It was clear that he still struggles with distorted views of himself and others and that these views cause him great pain. As long as he sees himself as a victim, he will continue to strive for retribution.

Mr Z also suffers with low mood and high anxiety, so it may be useful for his mother to complete the parent version of the RCADS to gain a better understanding of his symptoms. Referrals to additional health teams may be useful, as well as discussions with the referring psychiatrist. Mental state examinations at the beginning of sessions proved effective in 'checking in' with Mr Z. Other symptoms of mental health decline could also be monitored, such as fluctuations in weight, presentation, attendance to personal hygiene, food and fluid intake, sleep hygiene, and levels of motivation. In line with this, it is advisable to monitor self-harm behaviours and to explore their function with the young man. These may be associated with low mood and anxiety or

may be associated with displaced revenge or self-punishment. Generally, further work is required to identify sustainable coping strategies that can eventually replace fantasy, self-harm, and any other antisocial or criminal behaviours.

The ongoing assessment of risk of harm to others is crucial. Though such an assessment is not straightforward, indications of increased risk may involve more frequent fantasising, changes to the content of fantasy, a rejection of identified coping skills, increased levels of self-harm, or displays of antisocial and criminal behaviours. The latter two have been used as maladaptive coping mechanisms so their increased use may be reflective of increased distress. It is advised to maintain contact with Mr Z's mother and to increase contact with the school so that Mr Z and his peers can remain safe, and to avoid social isolation and disruption to his education. Risk management strategies should be identified and implemented in partnership with Mr Z, to empower him, and avoid him dismissing them.

In sessions, a cognitive-behavioural approach proved effective, as well as the joint formulation of problem behaviours. The visual representation of information was also useful. It is hypothesised that this allowed cognitive resources to be allocated to discussion and reflection rather than allocated to working memory (remembering complex concepts and processes). Sketching out the pathways on paper also created a space (not a barrier) between the client and therapist, minimising the need for conventional social exchanges (e.g., maintaining eye contact during conversation) and minimising

the client-therapist power dynamic as attention from both was directed towards the task at hand, thus reducing anxiety.

CHAPTER 6

GENERAL DISCUSSION

Deviant sexual fantasies have received much attention in the literature, being theoretically and empirically linked to sexual offending and sexual recidivism, and with serious implications for the assessment and treatment of sex offenders. However, a vast amount of research identifies that non-offender populations also endorse deviant sexual fantasies. For this reason, the relationship between deviant sexual fantasies and sexual offending remains unclear, though hypotheses have been proposed to explain why certain individuals with deviant sexual fantasies go on to offend, while others do not. The present thesis attempts to further our understanding of this relationship, as well as the onset, development, maintenance, and selection of sexual fantasies, and arguably, fantasises in general.

The first chapter, the General Introduction, aimed to present some key conceptual and definitional issues with the phrase *deviant sexual fantasies*. In subsequent chapters of the thesis, it is apparent that this is relevant to different branches of psychology and other disciplines. Chapter 2 highlights the interchangeable use of *sexual fantasies* and *sexual interests*, *sexual preferences*, *sexual arousal* (Akerman & Beech, 2011), *sexual thoughts* (Leitenberg & Henning, 1995), *dreams* (Wilson, 1978), and *memories* in Chapter 4 (McGuire et al., 1965). Chapter 5 points out the lack of clarity between *violent fantasies*, *violent thoughts*, *violent ideation* (Palermo & Bogaerts, 2015), and *aggressive scripts* (Gilbert & Daffern, 2017). These likely illustrate but a few issues related to the terminology employed within

the literature, and thus issues with attempting to draw valid and reliable inferences about different concepts and the relationships between them.

Following a review of deviant sexual fantasies as described by Maniglio (2011) and by the ICD-10 and the DSM-5, a new and hopefully clearer definition was proposed in Chapter 1 that focuses on a) the subjective nature of sexual arousal; b) sexual arousal as crucial in defining a fantasy as *sexual*; c) an element of imagination as vital in defining a thought process as *fantasy*; and d) *deviance* in sexual fantasies as defined by content that is non-sexual yet sexually arousing, or by content (sexual or non-sexual) that is sexually arousing yet contains harmful behaviour that may cause physical and/or psychological pain (see Figure 12 for a replication of

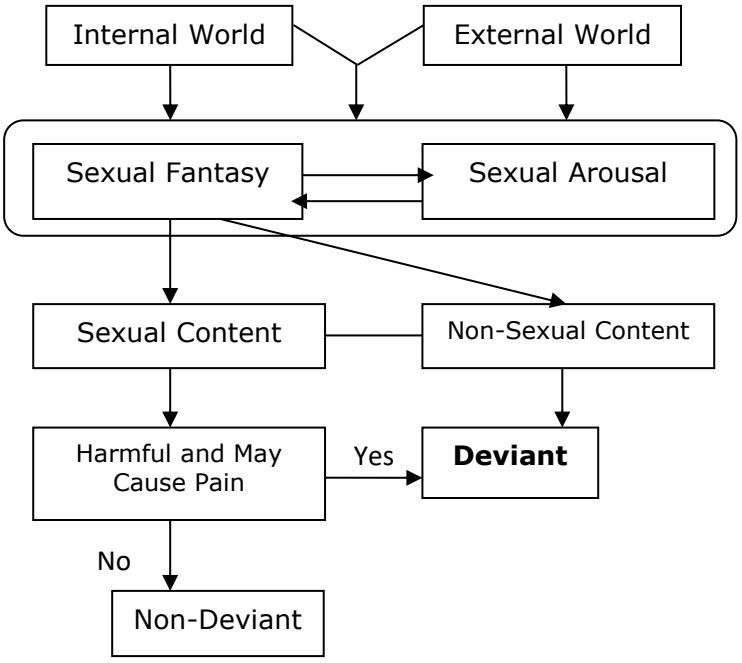


Figure 12. Replication of Figure 1: Schematic Definition of Deviant Sexual Fantasies.

Figure 1: Schematic Definition of Deviant Sexual Fantasies). Though deviant sexual fantasies may be experienced at lower rates than non-deviant fantasies, statistical difference is not utilised to distinguish between them.

Though this thesis primarily explores sexual fantasies, it dedicates Chapter 5 to violent revenge fantasies. It is argued that fantasies cannot be readily categorised according to the content they encapsulate (e.g., a fantasy about having sex is a sexual fantasy whereas a fantasy about murdering a perpetrator of wrongdoing is a revenge fantasy) and that instead it might be more fruitful to categorise and study fantasies according to the function(s) they serve. For instance, two men may fantasise about raping a woman; for the first man, this fantasy is sexually arousing, but for the second man, this fantasy evokes a sense of justice being served. Of course, a third man may well combine these experiences. As will be illustrated shortly, Chapter 5 also points out the usefulness of drawing upon theoretical frameworks from other areas of research; in this case, a consideration of the General Aggression Model (Allen et al., 2017), was helpful in constructing an understanding of violent revenge fantasies from onset to retrieval, and then of sexual fantasies in the present chapter.

Chapter 3, the Systematic Review, compared the sexual fantasy experiences of various male samples were compared (i.e., forensic, non-forensic, clinical, non-clinical) in terms of frequency and theme (intimate, exploratory, impersonal, and sadomasochism) as measured by the Wilson Sex Fantasy Questionnaire (WSFQ, Wilson,

1978). Across samples, a pattern of fantasy frequency was almost consistently observed, with intimate fantasies being endorsed the most, followed by exploratory fantasies, then impersonal fantasies, and finally, sadomasochistic fantasies. This observation led to hypothesising about the underlying meaning of fantasy frequency, aside from this equating to how often an event occurs. For instance, frequency might be reflective of preference; presumably if an entity (e.g., sexual fantasy) effectively and consistently produces a desired outcome (e.g., sexual arousal), then it should be chosen over other options designed to produce the same outcome (e.g., other sexual fantasies, pornography). If this is the case, then it is unclear why individuals endorse fantasies from each of the themes investigated in the WSFQ, and it is unclear why they endorse different fantasies within a theme, or why they engage with more than one means of producing or enhancing sexual arousal (as later discussed, Chapter 4, the Empirical Study, suggests that people fantasise and use pornography simultaneously). In other words, it is unclear why people might not simply engage with the same sexual fantasy across the lifespan.

It is hypothesised that over time, people develop a repertoire of sexual fantasies and that fantasy selection is dependent on the context in which the individual finds him or herself, thus allowing for several fantasy preferences. In this thesis, context is defined as the interaction between the individual's internal and external worlds. Figure 13 attempts to illustrate the onset and development of sexual fantasies, and thus of the sexual fantasy repertoire, by

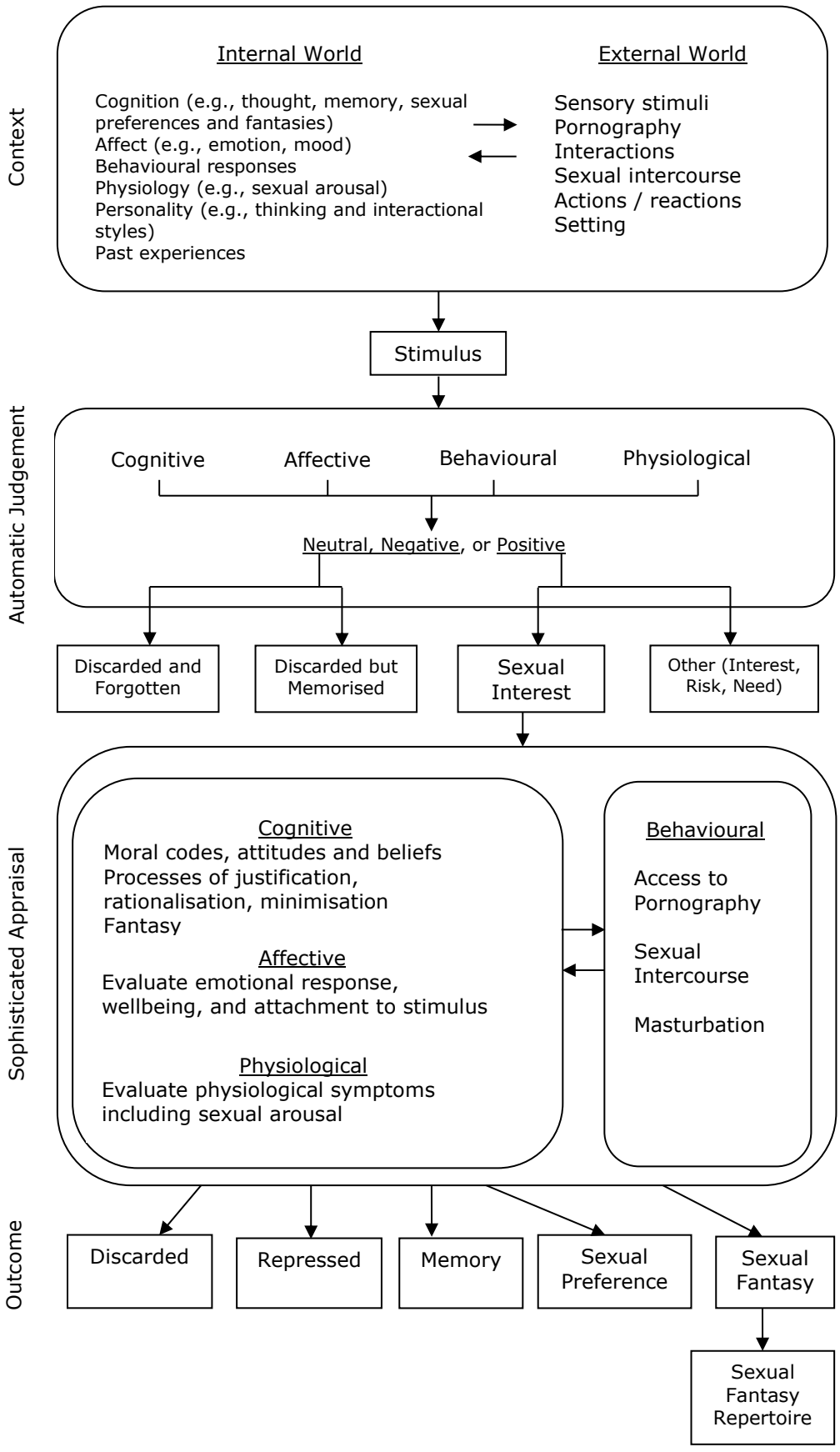


Figure 13. Onset and Development of Sexual Cognitive Constructs.

hypothesising relationships between thought, memory, sexual interest, sexual preference, sexual fantasy, and sexual arousal, as well as the relationship between internal and external worlds. Figure 14 goes on to explore the maintenance of sexual fantasies within the repertoire.

It is suggested that all sexual cognitive constructs, and arguably all human experiences, stem from the interaction of internal and external factors. Whilst conscious, people are in a permanent state of processing stimuli, whether this is automatic, requires little attention, or is carried out in a more thought-through fashion. Stimuli can be either simple or complex, from a single component derived from a context to representing the entirety of that context. It is argued that initially, all stimuli are automatically processed and implicitly reacted to (cognitively, affectively, physiologically, and behaviourally) and evaluated (e.g., for risk, need, and appeal, including sexual appeal). A lot of the time, responses will go unnoticed (e.g., neutral reactions to the stimulus will be discarded and forgotten about or stored in memory). Other times, salient responses to stimuli (e.g., positive or negative reactions) will bring forward this association to the individual's consciousness. If the association is unappealing (e.g., negative reactions), then the stimulus is discarded and forgotten about or stored in memory, but if it is appealing (e.g., positive reactions), then the stimulus is deemed worthy of further consideration. A sexual interest emerges if the appeal has led to contemplating a relationship between stimulus and sexual arousal.

It is hypothesised that the individual will resort to various more sophisticated internal and external processes and resources, or a combination of the two, to evaluate whether the stimulus is and/or should be associated with sexual arousal. In terms of cognitive processes and resources, this might include evaluating whether this partnership is congruent with one's sense of self, their view of other people, and view of the world. In the case of dissonance between the individual's norms and what arousal to the stimulus represents, processes of justification, rationalisation, and/or minimisation may serve to permit the endorsement of the stimulus as a sexually arousing entity. The individual may also resort to fantasising about the stimulus to explore its ability to sexually arouse. At this stage, the fantasy would not be categorised as *sexual* as it is not used specifically to produce or enhance sexual arousal.

In terms of affective appraisal, the individual will likely evaluate the impact of the stimulus as it is, but also in association with sexual arousal, if this occurs. For instance, they might assess whether this association improves or negatively impacts upon their emotional wellbeing. Similarly, the individual might consider how the stimulus impacts upon them physiologically, including whether sexual arousal has been experienced. Lastly, it is hypothesised that the process of appraisal can be assisted by engaging with pornography (e.g., material that is congruent with the stimulus) or sexual activity (e.g., intercourse and/or masturbation). This might involve simultaneous fantasising about the stimulus, or the use or acting out of the stimulus (e.g., if the stimulus is an object or event, respectively).

If no further reactions of interest are provoked, the stimulus is likely discarded and forgotten about or stored in memory. If sexual arousal is present but negatively appraised (e.g., arousal to the stimulus is deemed immoral, provokes guilt, and anxiety), then it is hypothesised that the individual will repress this; in other words, they will choose to ignore their arousal to the stimulus so as to maintain the internal status quo. If this is not repressed but nonetheless negatively appraised, the individual may choose not to act upon the stimulus-arousal relationship in a way that affects other people or makes them aware of it, opting instead for the privacy of sexual fantasy (and perhaps masturbation and/or pornography) where there are no external consequences to endorsement. Of course, sexual fantasies may also result from positive appraisals. In addition, appraisals may lead to the onset of sexual preferences, repressed sexual preferences (arousing but negatively appraised), or secret sexual preferences (arousing, negatively appraised, but held in mind nonetheless). Lastly, it is argued that all processes and stimuli are logged in memory, including appraisals.

Figure 14 suggests that sexual fantasies are stored in a repertoire and that with each use, they undergo further appraisal of their effectiveness at fulfilling their function (i.e., to produce or enhance sexual arousal), which likely involves an appraisal of sexual preferences (i.e., if the individual no longer associates sexual arousal with a stimulus in fantasy, they may reconsider whether they find the stimulus arousing in reality). Appraisals will either confirm or disconfirm the relationship between fantasy and sexual arousal and

thus whether the fantasy still has a place in the repertoire. This process may also be paired with masturbation, sex, and/or access to pornography.

Some hypotheses are proposed to explain why a fantasy may cease to provoke or enhance sexual arousal. For example, appraisal

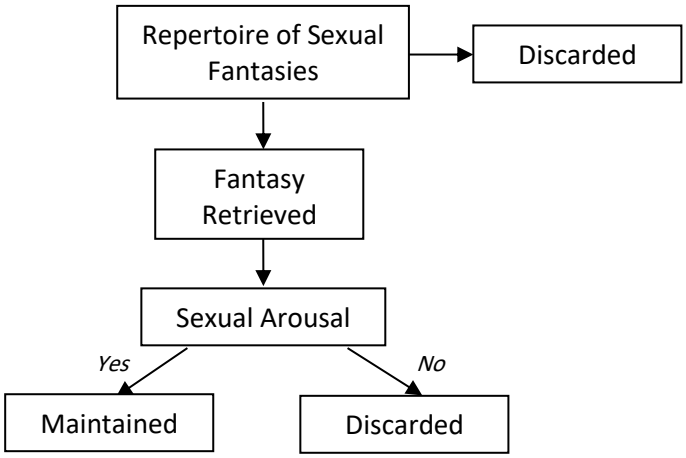


Figure 14. Maintenance of Sexual Fantasies.

of fantasy content may change over time (e.g., become neutral, negative, or increasingly negative) which may relate to changes within the individual's internal and external worlds (e.g., attitudes and beliefs may evolve). Exposure to new and more appealing stimuli may lead to new and more appealing sexual fantasies that replace older ones. Exposure may result from unplanned encounters or from planned encounters that may stem from boredom, curiosity, excitement seeking (e.g., previous fantasies have lost some of their power to arouse through processes of habituation; human need to seek something better). Some fantasies may simply go extinct without prior appraisal, perhaps because the context in which they are usually retrieved has not reoccurred.

This leads to a consideration of the ways in which sexual fantasies are selected for retrieval. As suggested earlier, fantasies within the repertoire may provide equal satisfaction only this is dependent upon the context within which the individual finds themselves. For example, sexual fantasy experiences might be different whether the individual is alone or in the presence of another person (e.g., masturbation versus sexual intercourse). This may be the case for several reasons. For instance, the presence of another person may trigger negative appraisal of the fantasy-arousal relationship (e.g., guilt or shame) and inhibit the individual, despite the possibility of fantasising privately. On the other hand, the presence of another may act as a disinhibitor, perhaps even more so if fantasies are shared between sexual partners. Importantly, sexual partners may impact on the onset and development of sexual fantasies in one another.

In line with the above, Chapter 2, the Psychometric Critique, recommended for the Wilson Sex Fantasy Questionnaire to examine fantasies during masturbation and fantasies during intercourse as two separate measures, rather than combined. For this reason, Chapter 4 explored the sexual fantasy experiences of males and females within the general population using an adapted version of the WSFQ (i.e., split measure). Doing so indeed revealed qualitatively and quantitatively different fantasy experiences for both males and females during masturbation compared to intercourse. Similarly, it was apparent in Chapter 5 that different contexts can trigger fantasising, for instance whether this is internally or externally

generated, or from a combination of the two, following an appraisal of the context.

Other internal and external factors might impact upon fantasy selection. In terms of internal factors additional to those explicitly suggested in Figure 13, availability of time and cognitive resources might impact upon the level of complexity of the fantasy selected (e.g., if the individual has little time or is struggling to concentrate, then they may select a less elaborate or taxing fantasy). According to this hypothesis, one might expect that pornography is generally used in lieu of fantasy, providing sexually arousing material consisting of sensory information, actors, actions, and settings. On the other hand, Chapter 4 found positive relationships between fantasy frequency and masturbation frequency, and between masturbation frequency and pornography frequency. These results also suggest a positive relationship between fantasy frequency and pornography frequency, which is consistent with the finding that male pornography users fantasise more during masturbation than their counterparts and that female pornography users fantasise more than their counterparts during all contexts. If this is the case, an avenue for future research involves an exploration of the fantasy-pornography interaction. If individuals do not use pornography as a substitute for fantasy, they may use it as an aid. In line with Extended Mind Theory (Clark & Chalmers, 1998), pornography may function as an extension of one's mind, holding information for the person and allowing them to allocate attention to other cognitions, and to the affective (e.g., mood), physiological (e.g., arousal), and behavioural (e.g., use of sex toys)

demands of their sexual experience. Another potential factor is the order with which fantasy and arousal are triggered. More specifically, selection may depend on whether this occurs before or after sexual arousal has been experienced. It is hypothesised that sexual arousal can act as a disinhibitor by rendering appraisal of fantasies laxer, thus facilitating access to fantasies that usually receive a more negative appraisal (perhaps deviant sexual fantasies).

It is worth considering that the aforementioned conceptual and definitional issues, and difficulties with inconsistent use of terminology within the literature are also applicable to the general population and that participants did not exclusively report on their sexual fantasies, confusing these with sexual thoughts, interests, preferences, processes of appraisal, or access to pornography. This was also a criticism of the WSFQ in Chapter 2, where some items were deemed to be measuring pornography use or affective response to sexual behaviour, for example, rather than sexual fantasies per se. Chapter 4 attempted to remedy this by rephrasing items considered to lack validity. Similarly, the WSFQ measures sexual fantasy experiences in the context of dreaming. It is argued that dreams are not the same concept as sexual fantasies and if Wilson did intend on measuring dreams as opposed to sexual fantasies, this needs to be explicit within the questionnaire manual.

In Chapter 4, participants did provide responses on this measure, potentially illustrating a lack of understanding of the concept of fantasy from academics and laypersons alike (though participants may have felt compelled to provide a response). Similarly, people

reported daytime fantasies. If the function of sexual fantasies is to produce or enhance sexual arousal, then it is curious that people fantasise about sexually arousing content outside of sexual activity. As suggested in Chapter 4, daytime sexual fantasies during the daytime may serve to benefit from delayed gratification when the individual is not in a position to meet their sexual needs immediately. Alternatively, daytime fantasies transition into masturbatory ones (and perhaps fantasies during intercourse) when the individual reaches a point of sexual arousal they wish to relieve with physical stimulation.

Lastly, this chapter considers the relationship between fantasy and behaviour, which is attributed importance by professionals within the Criminal Justice System or health and social services. This generally relates to the purported association between deviant sexual fantasies and sexual offending. As supported by Chapter 3 and 4, it is apparent that members of the general public also endorse various fantasy themes, including deviant ones, and that thematic congruence between one's fantasy content and behaviour does not suffice to explain this relationship if it exists, though this thesis does not dismiss the fact that this may well be the case for some individuals. For example, non-deviant fantasies might lead to sexual offending, where the individual is seeking intimacy with a woman but is unable to achieve this prosocially so resorts to rape, in line with Good Lives Model principles (Ward & Stewart, 2003).

A second theory, the overreliance hypothesis (Stein, 2007), suggests that sex offenders fantasise about deviant sexual fantasies

more so than the general population, hence these are more readily accessible and likely to be triggered, then acted out. However, according to Chapter 3, child molesters fantasised about deviant fantasies at equal or even lesser rates than the general population. This being said, this finding is limited by the WSFQ's poor external validity, as pointed out in Chapter 2; the tool does not explicitly measure paedophilia and so unlikely captures the fantasy experiences of child molesters. On the other hand, one might argue that respondents rate questionnaire items (e.g., "kissing passionately") with their preferred sexual partner in mind (e.g., child). From this perspective, the WSFQ might accurately measure the sexual fantasies of child molesters, all of which would further be categorised as deviant (if they have rated each fantasy with a child in mind). Generally, there appears to be an assumption that questionnaire items (within and beyond the WSFQ) involve consenting adults unless specified otherwise (e.g., involves a child or animal). Without knowledge of whom or what respondents have in mind whilst rating fantasises, it is difficult to thematically categorise these (e.g., non-deviant versus deviant) according to a standard as proposed in Chapter 1, whilst simultaneously considering the subjective nature of sexual experiences (e.g., an individual may categorise having sex with a child as an act of intimacy).

One of the aims of Chapter 4 was to explore the relationships between fantasy experience (frequency and theme) and sexual behaviour, notably, pornography consumption, masturbation, and sexual intercourse. As previously mentioned, there appears to be a

positive relationship between fantasy, masturbation, and pornography consumption. However, overall, Chapter 4 suggests various relationships between masturbation, sexual intercourse, sexual satisfaction, pornography access, and sexual fantasy, and for all, direction of causality is unspecified. Arguably, it may be more fruitful to explore these relationships on an individual basis, including the relationship between fantasy and behaviour, considering the uniqueness of sexual experiences. Nonetheless, hypotheses can be proposed to inform our understanding of subjective experiences.

It seems sensible to suggest that a prerequisite to acting out a fantasy involves the presence of an underlying intent to do so. It might also make sense to suggest that fantasy deviance (e.g., rape) positively correlates with negative appraisal of acting this out (e.g., imprisonment), and that this negative appraisal will interfere with intent. This is not to say that the individual does not desire to realise the fantasy. Essentially, it is proposed that fantasies undergo two types of appraisals, one that involves their initial association with sexual arousal and another that involves their realisation. Arguably, for those members of the general population who endorse deviant sexual fantasies, there may be a more significant discrepancy between both types of appraisal than for sex offenders (e.g., impaired ability to make rational choices; Cornish & Clarke, 1987).

In terms of factors that might interfere with either appraisal, sexual arousal has been previously suggested as a potential disinhibitor. Similarly, pornography may serve to normalise certain experiences by providing evidence that these are shared with others

and thus acceptable. Furthermore, the individual may consider the feasibility of realising the fantasy, as well as their own dispositional abilities (e.g., physical attributes, confidence, willingness to create opportunity).

Another hypothesis is that some individuals simply do not find a fantasy sexually arousing in reality; there is a lack of congruence in sexual arousal. In its overview of the WSFQ, Chapter 2 presents two additional measures that explore whether someone would like to do a fantasy in reality and whether they have done the fantasy in reality. It is curious that academics, including within this thesis, have not made use of these considering the hypothesis that deviant sexual fantasies lead to sexual offending.

From a different perspective, the endorsement of fantasies may sometimes interfere with intent to perform them in reality. For instance, in Chapter 5, it was evident that the young man used violent revenge fantasies as a means of coping with his negative internal state. When he felt a desire to physically retaliate, he would fantasise about this instead. Despite him stating that this helped him plan future behaviour, it became apparent that the satisfaction and cathartic quality of fantasising lowered his risk of violent retaliation against perceived wrongdoers.

The present thesis attempted to explore sexual fantasies, and sometimes deviant sexual fantasies more specifically, some of their correlates, and some of the underlying psychological processes involved in their onset, development, maintenance, and selection, as well as their relationship to behaviour and sexual offending. This task

is rendered more difficult by the subjective and dynamic nature of sexual experiences. It is hoped that some interesting avenues for future research have been highlighted throughout. Academics and clinicians are invited to more thoroughly consider the relationship between fantasy and behaviour, and the weight they attribute to this relationship in their decision-making concerning risk assessment and treatment, as well as admissions and discharges, and incarcerations and releases. Lastly, it is hoped that a consistent approach to the use of terminology can be adopted with a view to promoting clarity, as well as valid and reliable findings within the literature.

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APPENDICES

Appendix A. Wilson Sex Fantasy Questionnaire.

Please indicate how often you fantasise about the themes below at various times, how often you actually do them, and how often you would 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

Name: Age: yrs Sex: M/F Date:

	Daytime fantasies	Fantasies during intercourse or masturbation	Dreams while asleep	Have done in reality	Would like to do in reality
1. Making love outside in a romantic setting (e.g. field of flowers, beach at night).					
2. Having intercourse with a loved partner.					
3. Intercourse with someone you know but have not had sex with.					
4. Intercourse with an anonymous stranger.					
5. Sex with two other people.					
6. Participating in an orgy.					
7. Being forced to do something.					
8. Forcing someone to do something.					
9. Homosexual activity.					
10. Receiving oral sex.					
11. Giving oral sex.					
12. Watching others have sex.					
13. Sex with an animal.					
14. Whipping or spanking someone.					
15. Being whipped or spanked.					
16. Taking someone's clothes off.					
17. Having your clothes taken off.					
18. Making love elsewhere than bedroom. (e.g. kitchen, bathroom).					
19. Being excited by material or clothing. (e.g. rubber, leather, underwear).					
20. Hurting a partner.					
21. Being hurt by a partner.					
22. Mate-swapping.					
23. Being aroused by watching someone urinate.					
24. Being tied up.					

25. Tying someone up.					
26. Having incestuous sexual relations.					
27. Exposing yourself provocatively.					
28. Transvestism (wearing clothes of the opposite sex).					
29. Being promiscuous.					
30. Having sex with someone much younger than yourself.					
31. Having sex with someone much older than yourself.					
32. Being much sought after by the opposite sex.					
33. Being seduced as an "innocent".					
34. Seducing an "innocent".					
35. Being embarrassed by failure of sexual performance.					
36. Having sex with someone of different race.					
37. Using objects for stimulation (e.g. vibrators, candles).					
38. Being masturbated to orgasm by a partner.					
39. Looking at obscene pictures or films.					
40. Kissing passionately.					
Please give the number of the single theme from the above list you find most exciting:					
(a) In fantasy:					
(b) In reality:					
Do you have a favourite fantasy that we have omitted? (describe briefly)					

Appendix B. Quality Assessment Worksheet.

Quality Assessment Worksheet

Author(s), date, title:

A) SELECTION BIAS

(Q1) Are the individuals selected to participate in the study likely to be representative of the target population? (e.g., how were subjects recruited)

1. Very likely (random selection within the target population)
2. Somewhat likely (selected by the researcher)
3. Not likely (self-referral)
4. Can't tell

(Q2) What percentage of selected individuals agreed to participate?

1. 80 - 100% agreement
2. 60 – 79% agreement
3. less than 60% agreement
4. Not applicable
5. Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: Q1 is 1 **and** Q2 is1. Moderate: Q1 is 1 or 2 **and** Q2 is 2 or 4. Weak: Q1 is 3 or 4 **and** Q2 is 3 or 5; **OR** Q1 is 1 or 2 **and** Q2 is 3 or 5	1	2	3

B) STUDY DESIGN

(Q1) What was the study design?

1. Randomised controlled trial
2. (Non-randomised) controlled trial
3. Pre-post study without control group
4. Case-control
5. Cross-sectional

(Q2) If Q1 is 1, 2, or 3, is there pre-intervention data available?

1. Yes
2. No
3. Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: Q1 is 1-3, Q2 is 1 Moderate: Q1 is 1-3 **and** Q2 is 2; **OR** Q1 is 4 Weak: Q1 is 5	1	2	3

C) DATA COLLECTION METHODS

We are interested in papers using the Wilson Sex Fantasy Questionnaire. This tool has achieved good validity and reliability.

(Q1) Was internal consistency (reliability) established in the current study?

1. Yes
2. No
3. Can't tell

(Q2) Were participants given adequate time and private space to provide data relating to sexual fantasies? (study duration, location, presence of others, including researcher(s))

1. Yes
2. No
3. Can't tell

(Q3) If not, were the reasons given against this reasonable? (e.g., subject couldn't read or write; subject has a condition that interferes with cognitive abilities)

1. Yes
2. No
3. Can't tell

(Q4) Was performance affected in any other way? (e.g., honesty in responses compromised if data is shared with practitioners involved in the assessment and treatment of subjects; sharing information with parole board)

1. Yes
2. No
3. Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: Q1-3 is 1, Q4 is 2 Moderate: Q1 is 1, Q2-4 is 3 Weak: Q1-3 is 2, Q4 is 1	1	2	3

D) CONFOUNDERS

(Q1) Were any groups compared?

1. Yes
2. No groups compared
3. Can't tell

The following are examples of confounders:

Race
Sex
Marital status/family
Age
SES (income or class)
Education
Health status
Criminal history, including offence type
Previous sex offender or fantasy management treatment

(Q2) If yes, how well were the groups matched in terms of dependent variables?

1. Very well (no significant differences in confounding variables between groups)
2. Somewhat well (one significant difference in confounding variables between groups)
3. Not well (more than one significant difference in confounding variables between groups)
4. Can't tell (differences in confounding variables not reported)

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: Q2 is 1 Moderate: Q2 is 2 or 4 Weak: Q2 is 3	1	2	3

E) STATISTICAL ANALYSES

Q1) Was descriptive data provided for the results of the WSFQ?

1. Yes – means and standard deviations
2. Yes – frequencies/proportions
3. No

Q2) Were correlates of the WSFQ provided?

1. Yes – study variables and (potential) confounding variables/demographics
2. Yes – study variables only
3. Yes - (potential) confounding variables/demographics only
4. No

Q3) Were group differences in the WSFQ analysed using an appropriate statistical technique?

1. Yes
2. No
3. Not applicable (no groups)

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: Q1 is 1, Q2 is 1, Q3 is 1 or 3 Moderate: Q1 is 1 or 2, Q2 is 2, 3 or 4, Q3 is 1 or 3 Weak: Q1 is 3, Q2 is 4, Q3 is 2	1	2	3

F) SAMPLE SIZE

1. Large
2. Medium
3. Small

RATE THIS SECTION	STRONG	MODERATE	WEAK
Strong: response 1	1	2	3

Moderate: response 2 Weak: response 3			

GLOBAL RATING
COMPONENT RATINGS

Please transcribe the information from the boxes on pages 1-4 onto this page.

A	**SELECTION BIAS**	**STRONG**	**MODERATE**	**WEAK**	**Not Applicable**
		1	2	3	
B	**STUDY DESIGN**	**STRONG**	**MODERATE**	**WEAK**	
		1	2	3	
C	**DATA COLLECTION**	**STRONG**	**MODERATE**	**WEAK**	
		1	2	3	
D	**CONFOUNDERS**	**STRONG**	**MODERATE**	**WEAK**	
		1	2	3	
E	**STATISTICAL ANALYSES**	**STRONG**	**MODERATE**	**WEAK**	
		1	2	3	
F	**SAMPLE SIZE**	**STRONG**	**MODERATE**	**WEAK**	
		1	2	3	

GLOBAL RATING FOR THIS PAPER (circle one):

1 STRONG (no WEAK ratings)
2 MODERATE (one WEAK rating)
3 WEAK (two or more WEAK ratings)

With both reviewers discussing the ratings:

Is there a discrepancy between the two reviewers with respect to the component (A-E) ratings?

No / Yes

If yes, indicate the reason for the discrepancy

1 Oversight
2 Differences in interpretation of criteria
3 Differences in interpretation of study

Final decision of both reviewers (circle one):

1 STRONG
2 MODERATE
3 WEAK

Appendix C. Data Extraction Worksheet.

Data Extraction

1. <u>Author, Date, Title</u>:

2. <u>Target population(s)</u>:

List as much demographic information as is available (e.g., gender, age, SES, criminal background, setting (e.g., community, prison, hospital), including country), including sample size.

Group a:

Group b:

Group c:

3. <u>WSFQ:</u>

a) Scales used (consider Wilson's four fantasy themes and the three contexts (daytime, during masturbation and intercourse, whilst asleep), as well as fantasies would like to do, and fantasies have done):

b) Descriptive data

- Intimate:

- Impersonal:

- Sadomasochism:

- Exploratory:

- Overall fantasy scale:

c) Group comparisons (e.g., trends)

d) Findings in relation to other study variables (e.g., correlations)

Appendix D. Participant Information Sheet and Consent Form.

<u>Information Sheet</u>

This study seeks to gain a better understanding of the nature of sexual fantasies by developing a baseline derived from people's experiences, reflected in their responses to different questionnaires. It also aims to explore the relationship between fantasy and reality. If you agree to take part in this study, you will be asked to answer a series of questions about your previous and current sex lives. You will then be asked to answer questions about your experience of sexual fantasies. Please bear in mind the sensitive and sexually explicit nature of this study before deciding whether to take part or not.

Who can take part in this study?

Anyone aged 18 or over.

How long is the online survey?

You may take as long as you wish to complete the survey, but the study should take approximately 30 minutes.

Do I have to take part?

Participation in the research is entirely voluntary. If you agree you will be required to check and agree to a consent form at the beginning of the online survey. You are also free to withdraw from the study during the online survey without giving a reason. . Your data will only be uploaded once you have clicked 'submit'. If you submit a completed questionnaire, you may withdraw within two weeks of submission . If you wish to withdraw, please contact the lead researcher who will be able to remove your data using your receipt number. For this reason, it is important you save your receipt number which will be available to you after submission.

Confidentiality

All information that you provide during the course of this research will be dealt with and reported anonymously and will be kept on a password protected database and is strictly confidential. Your participation will be treated in confidence to comply with the UK Data Protection Laws. Your identification will only be in the form of a number. In the event that the results of the study are published, your identity will remain anonymous and confidential. Members of the research team may look at the information that you have provided to check that the study is being carried out correctly. These members will have a duty of confidentiality to you as a research participant. Only members of the research team will have access to your personal responses (by number) and study data, although some of the anonymous data may also be shared with Cymeon Research for the purpose of developing their tool, as explained below. The data will be archived and kept for 7 years after the study has been published in accordance with University of Nottingham research data management policy.

How will the results be used?

The results of the study will contribute towards a doctorate thesis in Forensic Psychology. It is possible that the anonymous results will be published in psychological

journals and presented at conferences. Some of the anonymised data will be shared with Cymeon Research, a company marketing psychological questionnaires and assessment tools for PC, internet or intranet use, and which can be used in different contexts such as business, therapy, schools, or within the community. As owners of the Wilson Sex Fantasy Questionnaire Cymeon Research will use this data to expand their norms and continue to test the validity of this tool.

Weblink to Cymeon Research: http://www.cymeon.com/home
(as available on 05.01.16)

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the Faculty of Medicine and Health Sciences Ethics Committee (FMHS ref: M10112015).

Consent Form

1. Your participation in this study is entirely voluntary.
2. You may withdraw from the study at any time without giving a reason.
3. If you withdraw from the study, any information you have submitted before your withdrawal may be used in the overall analyses.
4. Your information will remain strictly anonymous and confidential.
5. Should the results of this study be published, your information will not be individualised and will remain strictly anonymous and confidential.
6. Members of the research team may oversee the study and have access to the data, whether individual or as a dataset.
7. Some of the anonymised data may be shared with Cymeon Research for the purpose of developing the Wilson Sex Fantasy Questionnaire.

By ticking this box you are stating you have read and understood the above consent form and are consenting to taking part in this study.

I consent □

The Sexual Fantasies Questionnaire incorporates Wilson's Sex Fantasy Questionnaire, owned by Cymeon Research, and should under no circumstances be copied. Please tick the box to state you have understood this.

I understand and declare that I will not, under any circumstance, copy the Sex Fantasy Questionnaire □

Appendix E. Participant Debrief Information Form.

Debrief

Your responses to this survey have been submitted.

If you need a formal record of your submission, please use the following details:

Completion receipt

Receipt number: 1-1-1
Submission time: 2015-10-20 23:23:54 BST
Print Download PDF Email

Thank you for your participation in this survey. Your participation is very much appreciated. If you have any queries or concerns about the research process or method, if you have experienced problems completing the online study, or if you have experienced distress and would like to be informed of your nearest counselling service, please contact the primary researcher. If you have any queries or concerns about the primary researcher, please contact one of the project supervisors. If this achieves no satisfactory outcome, you should then contact the Ethics Committee Secretary.

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Appendix F. Study Questionnaires.

Demographics

Gender:

○ Male ○ Female ○ Prefer not to say ○ Other

If you selected Other, please specify:

Age:

Ethnicity:

Country of origin:

Country or culture you affiliate or connect with:

Religion:

Sexual preference:

○ I prefer males ○ I prefer females ○ I am bisexual

Marital status:

○ Single ○ Married ○ Civil partnership ○ Divorced ○ Widowed

Relationship status:

○ Single ○ Dating ○ Open relationship (polygamous) ◉ Exclusive relationship (monogamous)

Do you have children?

○ No ○ Yes

Employment status:

☐ Student ☐ Part-time employment ☐ Full-time employment

☐ Unemployed and seeking employment ☐ Unemployed and not seeking employment

☐ On special leave ☐ Home maker (stay at home)

Please state how many years of formal education you have received:
Please state the name of your highest qualification:

Childhood Abuse

Have you ever experienced the following as a child? (tick all that apply)

☐ Physical abuse (shove, pinch, hit, slap, punch, kick, bite)

☐ Sexual abuse (inappropriate touch or kiss against your will, forced to touch or kiss someone against your will, forced to perform sexual things, forced to have sex)

☐ Emotional abuse (name-calling, insulting, complaining about you, badgering, deliberate humiliation)

☐ Neglect (basic needs ignored, receiving little attention and care, lack of affection, lack of food, health issues ignored, not allowed to go to school, lack of supervision

Current Sex Life

How do you feel about your sex life?

○ Very satisfied ○ Satisfied ○ Average ○ Could be better

○ Dissatisfied ○ Very dissatisfied

How often do you have sex? (please specify a number, then per day / per week / per month / per year)

Do you masturbate?

○ Yes ○ No ○ Prefer not to say

How often do you masturbate? (please specify a number, then per day / per week / per month / per year)

Do you use pornography?

○ No ○ Yes ○ Prefer not to say

How often do you use pornography? (please specify a number, then per day / per week / per month / per year)

Sexual Fantasies Questionnaire

Please rate the following fantasies where:
0= Never 1 = Seldom 2 = Sometimes 3 = Occasionally 4 = Often 5 = Regularly
Please refer back to the key as often as you need. If a fantasy does not apply to you, please select 'never' and move on to the next item.

	Daytime Fantasies	Fantasies During Masturbation	Fantasies During Intercourse	Dreams While Asleep
Making love outdoors in a romantic setting (e.g., field of flowers, beach at night)				
Having intercourse with a loved partner				
Intercourse with someone you know but have not had sex with				
Intercourse with an anonymous stranger				
Having a threesome (sex with two other people)				
Participation in an orgy				
Being forced to do something				
Forcing someone to do something				

Sex with someone of your own gender				
Receiving oral sex				
Giving oral sex				
Watching others have sex				
Sex with an animal				
Whipping or spanking someone				
Being whipped or spanked				
Taking someone's clothes off				
Having your clothes taken off				
Making love elsewhere than bedroom (e.g., kitchen, bathroom)				
Being excited by material or clothing (e.g., rubber, leather, underwear)				
Hurting partner (e.g., scratching, biting)				
Bring hurt by a partner (e.g., scratching, biting)				
Mate-swapping				
Watching someone urinate				
Being tied up				
Tying someone up				
Having incestuous sexual relations				
Exposing yourself provocatively				
Transvestism (wearing clothes of the opposite sex)				
Being promiscuous				
Having sex with someone underage (a minor)				
Having sex with someone much older than yourself				
Being much sought after by the opposite sex				
Pretending to be vulnerable				
Seducing a vulnerable (e.g., child, disabled person)				
Having sex with someone of a different race				

Stimulating yourself using objects (e.g., vibrators, candles)				
Being masturbated to orgasm by a partner				
Looking at pornographic pictures				
Kissing passionately				

Appendix G. Chi-Square Goodness of Fit Tests for Table 9.

Chi-Square Goodness of Fit Test		
	Overall	Gender
Physical abuse	$X^2(1) = 29.842$, $p < .001$	$X^2(1) = 4.393$, $p = .036$ Phi = -.182; Cramer's V = .182
Emotional abuse	$X^2(1) = 7.226$, $p < .001$	$X^2(1) = .528$, $p = .467$
Sexual abuse	$X^2(1) = 62.263$, $p < .001$	$X^2(1) = 1.812$, $p = .178$
Neglect	$X^2(1) = 86.083$, $p < .001$	$X^2(1) = .482$, $p = .488$

Appendix H. Pairwise Comparisons for Sex Frequency as a Function of Age, Pairwise Comparisons for Sex Frequency as a Function of Sexual Satisfaction, and Kruskal-Wallis Tests for Table 12.

	Kruskal-Wallis Test
Age	
Across all ages	$H(3) = 8.937$, $p = .03$
20-29 (a)	*(a) versus (b), $p = .276$; (a) versus (c), $p = 1$; (a) versus (d), $p = .061$
30-39 (b)	*(b) versus (c), $p = 1$; (b) versus (d), $p = 1$
40-49 (c)	*(c) versus (d), $p = 1$
50 and over (d)	
Sexual Satisfaction	
Across all satisfaction levels	$H(2) = 60.124$, $p < .001$
Satisfied/Very satis. (e)	*(e) versus (f), $p < .001$; (e) versus (g), $p < .001$
Average (f)	*(f) versus (g), $p = .006$
Dissatisfied/V. dissatis. (g)	
Physical abuse	
Overall	$H(1) = 1.857$, $p = .173$
Males	$H(1) = .104$, $p = .747$
Females	$H(1) = .903$, $p = .342$
Emotional abuse	
Overall	$H(1) = .174$, $p = .676$
Males	$H(1) = .952$, $p = .329$
Females	$H(1) = .038$, $p = .845$
Sexual abuse	
Overall	$H(1) = 1.527$, $p = .217$
Males	$H(1) = .957$, $p = .328$
Females	$H(1) = 4.945$, $p = .026$
Neglect	
Overall	$H(1) = .157$, $p = .692$
Males	$H(1) = .006$, $p = .939$
Females	$H(1) = .083$, $p = .773$

* Pairwise comparisons with Bonferroni correction (alpha level adjusted by SPSS).

Appendix I. Kruskal-Wallis Tests for Table 13.

	Kruskal-Wallis Test
Gender	$H(1) = 24.451$, $p < .001$
Age	$H(3) = 6.919$, $p = .075$
Sexual Satisfaction	$H(2) = 3.057$, $p = .217$
Physical abuse	
Overall	$H(1) = 2.819$, $p = .093$
Males	$H(1) = 4.363$, $p = .037$
Females	$H(1) = .18$, $p = .672$
Emotional abuse	
Overall	$H(1) = .375$, $p = .54$
Males	$H(1) = 5.206$, $p = .023$
Females	$H(1) = 1.88$, $p = .17$
Sexual abuse	
Overall	$H(1) = 1.27$, $p = .26$
Males	$H(1) = 2.249$, $p = .134$
Females	$H(1) = 2.254$, $p = .133$
Neglect	
Overall	$H(1) = .318$, $p = .573$
Males	$H(1) = .752$, $p = .386$
Females	$H(1) = 1.315$, $p = .251$

Appendix J. Chi-Square Goodness of Fit Tests, Chi-Square Tests of Independence, Fisher-Freeman-Halton, Kruskal-Wallis, and Fisher's Exact Tests for Table 14.

	Statistical Test
Pornography use	*$X^2(1) = 9.351$, $p = .002$
Gender	**$X^2(1) = 18.581$, $p < .001$
	Phi coefficient = -.377; Cramer's V = .377
Age	***$p = .052$
Sexual satisfaction	**$X^2(1) = 1.221$, $p = .543$
Physical abuse	
Overall	**$X^2(1) = 2.456$, $p = .117$
Males	***** $p = 1$
Females	**$X^2(1) = .444$, $p = .505$
Emotional abuse	
Overall	**$X^2(1) = 3.038$, $p = .081$
Males	***** $p = .618$
Females	**$X^2(1) = 1.88$, $p = .17$
Sexual abuse	
Overall	**$X^2(1) = .118$, $p = .731$
Males	*****$p = .348$
Females	**$X^2(1) = 1.55$, $p = .213$
Neglect	
Overall	*****$p = 1$
Males	*****$p = 1$
Females	*****$p = 1$
	Mean Rank
Masturbation frequency	
Overall	****$H(1) = 33.885$, $p < .001$
Males	****$H(1) = 6.238$, $p = .013$
Females	****$H(1) = 17.834$, $p < .001$
Sex frequency	
Overall	****$H(1) = .274$, $p = .601$
Males	****$H(1) = .376$, $p = .54$
Females	****$H(1) = .568$, $p = .451$

* Chi-square goodness of fit test. ** Chi-square test of independence. *** Fisher-Freeman-Halton. ****Kruskal-Wallis. ***** Fisher's Exact Test.

Appendix K. Kruskal-Wallis Tests for Table 15.

	Kruskal-Wallis
Gender	
Daytime	$H(1) = 6.993$, $p = .008$
Masturbation	$H(1) = 8.717$, $p = .003$
Intercourse	$H(1) = .185$, $p = .667$
Asleep	$H(1) = 1.801$, $p = .18$
Age	
Daytime	$H(3) = 9.295$, $p = .026$
Masturbation	$H(3) = 12.154$, $p = .007$
Intercourse	$H(3) = 13.186$, $p = .004$
Asleep	$H(3) = 3.996$, $p = .262$
Pornography Consumption	
Daytime	
Overall	$H(1) = 9.965$, $p = .002$
Males	$H(1) = 2.791$, $p = .095$
Females	$H(1) = 3.364$, $p = .067$
Masturbation	
Overall	$H(1) = 23.55$, $p < .001$
Males	$H(1) = 6.386$, $p = .012$
Females	$H(1) = 12.273$, $p < .001$
Intercourse	
Overall	$H(1) = 2.064$, $p = .151$
Males	$H(1) = 1.764$, $p = .184$
Females	$H(1) = .859$, $p = .354$
Asleep	
Overall	$H(1) = 13.361$, $p = .067$
Males	$H(1) = 1.257$, $p = .262$
Females	$H(1) = 1.217$, $p = .27$
	Physical Abuse
Daytime	
Overall	$H(1) = 7.027$, $p = .008$
Males	$H(1) = 8.349$, $p = .004$
Females	$H(1) = .31$, $p = .577$
Masturbation	
Overall	$H(1) = 4.180$, $p = .041$
Males	$H(1) = 9.99$, $p = .002$
Females	$H(1) = .146$, $p = .702$
Intercourse	
Overall	$H(1) = 5.525$, $p = .019$
Males	$H(1) = 13.778$, $p < .001$

Females	$H(1) = .014$, $p = .906$
Asleep	
Overall	$H(1) = 2.072$, $p = .15$
Males	$H(1) = 5.564$, $p = .018$
Females	$H(1) = .092$, $p = .762$
Emotional Abuse	
Daytime	
Overall	$H(1) = 2.748$, $p = .097$
Males	$H(1) = 2.064$, $p = .151$
Females	$H(1) = .927$, $p = .336$
Masturbation	
Overall	$H(1) = 2.715$, $p = .099$
Males	$H(1) = 5.352$, $p = .021$
Females	$H(1) = .043$, $p = .836$
Intercourse	
Overall	$H(1) = 1.906$, $p = .167$
Males	$H(1) = 5.509$, $p = .019$
Females	$H(1) = 0$, $p = .993$
Asleep	
Overall	$H(1) = 2.055$, $p = .152$
Males	$H(1) = 5.358$, $p = .021$
Females	$H(1) = .002$, $p = .964$
Sexual Abuse	
Daytime	
Overall	$H(1) = .769$, $p = .381$
Males	$H(1) = .735$, $p = .391$
Females	$H(1) = .38$, $p = .537$
Masturbation	
Overall	$H(1) = 2.274$, $p = .132$
Males	$H(1) = .184$, $p = .668$
Females	$H(1) = 3.828$, $p = .05$
Intercourse	
Overall	$H(1) = 3.946$, $p = .047$
Males	$H(1) = 1.033$, $p = .31$
Females	$H(1) = 3.249$, $p = .071$
Asleep	
Overall	$H(1) = .563$, $p = .453$
Males	$H(1) = .335$, $p = .563$
Females	$H(1) = .585$, $p = .445$
Neglect	
Daytime	
Overall	$H(1) = .094$, $p = .759$

Males	$H(1) = .086$, $p = .769$
Females	$H(1) = .552$, $p = .457$
Masturbation	
Overall	$H(1) = .054$, $p = .817$
Males	$H(1) = .134$, $p = .714$
Females	$H(1) = .321$, $p = .571$
Intercourse	
Overall	$H(1) = .061$, $p = .805$
Males	$H(1) = .321$, $p = .571$
Females	$H(1) = .016$, $p = .899$
Asleep	
Overall	$H(1) = .017$, $p = .897$
Males	$H(1) = .344$, $p = .558$
Females	$H(1) = .005$, $p = .944$

Appendix L. Kruskal-Wallis Tests for Table 16.

	Kruskal-Wallis
Gender	
Intimate	$H(1) = 3.028$, $p = .082$
Explorat.	$H(1) = 11.61$, $p = .001$
Impersonal	$H(1) = 20.764$, $p < .001$
Sadomaso.	$H(1) = .000$, $p = .988$
Pornography Consumption	
Intimate	
Overall	$H(1) = 4.23$, $p = .04$
Males	$H(1) = 2.238$, $p = .135$
Females	$H(1) = 1.133$, $p = .287$
Explorat.	
Overall	$H(1) = 17.256$, $p < .001$
Males	$H(1) = 2.733$, $p = .098$
Females	$H(1) = 8.332$, $p = .004$
Impersonal	
Overall	$H(1) = 17.902$, $p < .001$
Males	$H(1) = 3.037$, $p = .081$
Females	$H(1) = 5.848$, $p = .016$
Sadomaso.	
Overall	$H(1) = 5.42$, $p = .02$
Males	$H(1) = 1.623$, $p = .203$
Females	$H(1) = 4.91$, $p = .027$
	Physical Abuse
Intimate	
Overall	$H(1) = 5.71$, $p = .17$
Males	$H(1) = 4.859$, $p = .027$
Females	$H(1) = .893$, $p = .345$
Explorat.	
Overall	$H(1) = 4.138$, $p = .042$
Males	$H(1) = 2.516$, $p = .113$
Females	$H(1) = .292$, $p = .589$
Impersonal	
Overall	$H(1) = 3.374$, $p = .066$
Males	$H(1) = 5.55$, $p = .018$
Females	$H(1) = .057$, $p = .811$
Sadomaso.	
Overall	$H(1) = 3.307$, $p = .069$
Males	$H(1) = 5.374$, $p = .02$
Females	$H(1) = .157p = .692$

	Emotional Abuse
Intimate	
Overall	$H(1) = 1.769$, $p = .184$
Males	$H(1) = 2.821$, $p = .093$
Females	$H(1) = .272$, $p = .602$
Explorat.	
Overall	$H(1) = 2.895$, $p = .089$
Males	$H(1) = .211$, $p = .646$
Females	$H(1) = 2.241$, $p = .134$
Impersonal	
Overall	$H(1) = 2.07$, $p = .15$
Males	$H(1) = 1.535$, $p = .215$
Females	$H(1) = .768$, $p = .381$
Sadomaso.	
Overall	$H(1) = 1.854$, $p = .173$
Males	$H(1) = 1.34$, $p = .247$
Females	$H(1) = .672$, $p = .412$
	Sexual Abuse
Intimate	
Overall	$H(1) = .184$, $p = .668$
Males	$H(1) = .387$, $p = .534$
Females	$H(1) = .04$, $p = .842$
Explorat.	
Overall	$H(1) = 1.269$, $p = .26$
Males	$H(1) = 1.3$, $p = .254$
Females	$H(1) = 1.077$, $p = .299$
Impersonal	
Overall	$H(1) = .209$, $p = .647$
Males	$H(1) = .119$, $p = .73$
Females	$H(1) = .719$, $p = .397$
Sadomaso.	
Overall	$H(1) = 1.502$, $p = .22$
Males	$H(1) = 1.673$, $p = .196$
Females	$H(1) = .605$, $p = .437$
	Neglect
Intimate	
Overall	$H(1) = .021$, $p = .885$
Males	$H(1) = .264$, $p = .608$
Females	$H(1) = .35$, $p = .554$
Explorat.	
Overall	$H(1) = .306$, $p = .58$
Males	$H(1) = .505$, $p = .477$

Females	$H(1) = 1.236$, $p = .266$
Impersonal	
Overall	$H(1) = .202$, $p = .653$
Males	$H(1) = .407$, $p = .523$
Females	$H(1) = 1.591$, $p = .207$
Sadomaso.	
Overall	$H(1) = .033$, $p = .855$
Males	$H(1) = .324$, $p = .569$
Females	$H(1) = .352$, $p = .553$

* Pairwise comparisons with Bonferroni correction (alpha adjusted by SPSS).

Appendix M. Kruskal-Wallis Tests for Table 17.

	Kruskal-Wallis
Gender	
Intimate	$H(1) = 5.74$, $p = .017$
Explorat.	$H(1) = 12.935$, $p < .001$
Impersonal	$H(1) = 13.71$, $p < .001$
Sadomaso.	$H(1) = .023$, $p = .88$
Pornography Consumption	
Intimate	
Overall	$H(1) = 11.876$, $p = .001$
Males	$H(1) = 4.461$, $p = .035$
Females	$H(1) = 5.553$, $p = .018$
Explorat.	
Overall	$H(1) = 35.299$, $p < .001$
Males	$H(1) = 6.626$, $p = .01$
Females	$H(1) = 20.516$, $p < .001$
Impersonal	
Overall	$H(1) = 28.777$, $p < .001$
Males	$H(1) = 3.843$, $p = .05$
Females	$H(1) = 15.783$, $p < .001$
Sadomaso.	
Overall	$H(1) = 10.309$, $p = .001$
Males	$H(1) = 2.512$, $p = .113$
Females	$H(1) = 9.49$, $p = .002$
	Physical Abuse
Intimate	
Overall	$H(1) = 2.379$, $p = .123$
Males	$H(1) = 7.207$, $p = .007$
Females	$H(1) = .359$, $p = .549$
Explorat.	
Overall	$H(1) = 2.396$, $p = .122$
Males	$H(1) = 2.977$, $p = .084$
Females	$H(1) = .073$, $p = .787$
Impersonal	
Overall	$H(1) = 3.57$, $p = .59$
Males	$H(1) = 6.156$, $p = .013$
Females	$H(1) = .117$, $p = .732$
Sadomaso.	
Overall	$H(1) = 2.752$, $p = .097$
Males	$H(1) = 7.546$, $p = .006$
Females	$H(1) = .079$, $p = .778$
	Emotional Abuse
Intimate	

Overall	$H(1) = .215$, $p = .643$
Males	$H(1) = 6.033$, $p = .014$
Females	$H(1) = 1.149$, $p = .284$
Explorat.	
Overall	$H(1) = 4.965$, $p = .026$
Males	$H(1) = 2.373$, $p = .123$
Females	$H(1) = 1.584$, $p = .208$
Impersonal	
Overall	$H(1) = 5.447$, $p = .02$
Males	$H(1) = 5.805$, $p = .016$
Females	$H(1) = .523$, $p = .469$
Sadomaso.	
Overall	$H(1) = 2.655$, $p = .103$
Males	$H(1) = 4.114$, $p = .043$
Females	$H(1) = .16$, $p = .689$
	Sexual Abuse
Intimate	
Overall	$H(1) = .74$, $p = .39$
Males	$H(1) = .046$, $p = .83$
Females	$H(1) = 1.602$, $p = .206$
Explorat.	
Overall	$H(1) = 1.826$, $p = .177$
Males	$H(1) = .066$, $p = .797$
Females	$H(1) = 3.439$, $p = .064$
Impersonal	
Overall	$H(1) = 2.656$, $p = .103$
Males	$H(1) = .046$, $p = .83$
Females	$H(1) = 5.88$, $p = .015$
Sadomaso.	
Overall	$H(1) = 2.729$, $p = .099$
Males	$H(1) = .893$, $p = .345$
Females	$H(1) = 2.096$, $p = .148$
	Neglect
Intimate	
Overall	$H(1) = .009$, $p = .924$
Males	$H(1) = .001$, $p = .98$
Females	$H(1) = .015$, $p = .903$
Explorat.	
Overall	$H(1) = .541$, $p = .462$
Males	$H(1) = .436$, $p = .509$
Females	$H(1) = 1.306$, $p = .253$
Impersonal	

Overall	$H(1) = .102$, $p = .749$
Males	$H(1) = 1.382$, $p = .24$
Females	$H(1) = .875$, $p = .35$
Sadomaso.	
Overall	$H(1) = .054$, $p = .817$
Males	$H(1) = .168$, $p = .682$
Females	$H(1) = .402$, $p = .526$

Appendix N. Kruskal-Wallis Tests for Table 18.

	Kruskal-Wallis
Gender	
Intimate	$H(1) = .108$, $p = .742$
Exploratory	$H(1) = 2.284$, $p = .131$
Impersonal	$H(1) = 5.912$, $p = .015$
Sadomaso.	$H(1) = 2.308$, $p = .129$
Pornography Consumption	
Intimate	
Overall	$H(1) = .09$, $p = .764$
Males	$H(1) = 1.325$, $p = .25$
Females	$H(1) = .065$, $p = .798$
Exploratory	
Overall	$H(1) = 8.284$, $p = .004$
Males	$H(1) = .697$, $p = .404$
Females	$H(1) = 5.432$, $p = .02$
Impersonal	
Overall	$H(1) = 9.332$, $p = .002$
Males	$H(1) = 1.262$, $p = .261$
Females	$H(1) = 4.018$, $p = .045$
Sadomaso.	
Overall	$H(1) = 1.065$, $p = .302$
Males	$H(1) = .783$, $p = .376$
Females	$H(1) = 2.042$, $p = .153$
	Physical Abuse
Intimate	
Overall	$H(1) = 2.996$, $p = .083$
Males	$H(1) = 8.652$, $p = .003$
Females	$H(1) = .112$, $p = .738$
Explorat.	
Overall	$H(1) = 3.465$, $p = .063$
Males	$H(1) = 9.916$, $p = .002$
Females	$H(1) = .232$, $p = .63$
Impersonal	
Overall	$H(1) = 5.772$, $p = .016$
Males	$H(1) = 6.777$, $p = .009$
Females	$H(1) = .222$, $p = .637$
Sadomaso.	
Overall	$H(1) = 6.588$, $p = .01$
Males	$H(1) = 29.66$, $p < .001$
Females	$H(1) = .312$, $p = .576$
	Emotional Abuse
Intimate	

Overall	$H(1) = .361$, $p = .548$
Males	$H(1) = 4.756$, $p = .029$
Females	$H(1) = .571$, $p = .45$
Explorat.	
Overall	$H(1) = 3.218$, $p = .073$
Males	$H(1) = 2.428$, $p = .119$
Females	$H(1) = 1.096$, $p = .295$
Impersonal	
Overall	$H(1) = 3.009$, $p = .083$
Males	$H(1) = 1.631$, $p = .202$
Females	$H(1) = 1.02$, $p = .536$
Sadomaso.	
Overall	$H(1) = 4.461$, $p = .035$
Males	$H(1) = 8.689$, $p = .003$
Females	$H(1) = .384$, $p = .536$
	Sexual Abuse
Intimate	
Overall	$H(1) = 1.321$, $p = .25$
Males	$H(1) = .748$, $p = .387$
Females	$H(1) = .937$, $p = .333$
Explorat.	
Overall	$H(1) = 3.224$, $p = .073$
Males	$H(1) = 1.528$, $p = .216$
Females	$H(1) = 2.475$, $p = .116$
Impersonal	
Overall	$H(1) = 4.46$, $p = .035$
Males	$H(1) = .734$, $p = .391$
Females	$H(1) = 5.856$, $p = .016$
Sadomaso.	
Overall	$H(1) = 5.24$, $p = .022$
Males	$H(1) = 5.703$, $p = .017$
Females	$H(1) = 1.756$, $p = .185$
	Neglect
Intimate	
Overall	$H(1) = .43$, $p = .512$
Males	$H(1) = 1.022$, $p = .312$
Females	$H(1) = .022$, $p = .883$
Explorat.	
Overall	$H(1) = .178$, $p = .673$
Males	$H(1) = .648$, $p = .421$
Females	$H(1) = 1.009$, $p = .315$
Impersonal	

Overall	$H(1) = .002$, $p = .962$
Males	$H(1) = 1.967$, $p = .161$
Females	$H(1) = 1.157$, $p = .282$
Sadomaso.	
Overall	$H(1) = .01$, $p = .919$
Males	$H(1) = 1.21$, $p = .271$
Females	$H(1) = .682$, $p = .409$

Appendix O. Kruskal-Wallis Tests for Table 19.

	Kruskal Wallis
Gender	
Intimate	$H(1) = .35$, $p = .554$
Exploratory	$H(1) = 3.845$, $p = .05$
Impersonal	$H(1) = 7.142$, $p = .008$
Sadomaso.	$H(1) = .001$, $p = .973$
Pornography Consumption	
Intimate	
Overall	$H(1) = .579$, $p = .447$
Males	$H(1) = 1.21$, $p = .271$
Females	$H(1) = .046$, $p = .83$
Exploratory	
Overall	$H(1) = 11.3$, $p = .001$
Males	$H(1) = 1.387$, $p = .239$
Females	$H(1) = 7.398$, $p = .007$
Impersonal	
Overall	$H(1) = 10.347$, $p = .001$
Males	$H(1) = .716$, $p = .397$
Females	$H(1) = 6.04$, $p = .014$
Sadomaso.	
Overall	$H(1) = 2.249$, $p = 134$
Males	$H(1) = 1.482$, $p = .223$
Females	$H(1) = 1.342$, $p = .247$
	Physical Abuse
Intimate	
Overall	$H(1) = 1.49$, $p = .222$
Males	$H(1) = 3.688$, $p = .055$
Females	$H(1) = .046$, $p = .83$
Explorat.	
Overall	$H(1) = 1.082$, $p = .298$
Males	$H(1) = 2.318$, $p = .128$
Females	$H(1) = .086$, $p = .77$
Impersonal	
Overall	$H(1) = 3.692$, $p = .055$
Males	$H(1) = 3.064$, $p = .08$
Females	$H(1) = .551$, $p = .458$
Sadomaso.	
Overall	$H(1) = .312$, $p = .576$
Males	$H(1) = 2.121$, $p = .145$
Females	$H(1) = .242$, $p = .623$
	Emotional Abuse
Intimate	

Overall	$H(1) = .596$, $p = .44$
Males	$H(1) = 3.746$, $p = .053$
Females	$H(1) = .272$, $p = .602$
Explorat.	
Overall	$H(1) = 2.357$, $p = .125$
Males	$H(1) = 2.389$, $p = .122$
Females	$H(1) = .322$, $p = .57$
Impersonal	
Overall	$H(1) = 2.961$, $p = .085$
Males	$H(1) = 2.244$, $p = .134$
Females	$H(1) = .714$, $p = .398$
Sadomaso.	
Overall	$H(1) = 1.543$, $p = .214$
Males	$H(1) = 2.668$, $p = .102$
Females	$H(1) = .102$, $p = .75$
	Sexual Abuse
Intimate	
Overall	$H(1) = .006$, $p = .936$
Males	$H(1) = .029$, $p = .864$
Females	$H(1) = .03$, $p = .862$
Explorat.	
Overall	$H(1) = 1.084$, $p = .298$
Males	$H(1) = .681$, $p = .409$
Females	$H(1) = 1.097$, $p = .295$
Impersonal	
Overall	$H(1) = 1.187$, $p = .276$
Males	$H(1) = .32$, $p = .571$
Females	$H(1) = 3.457$, $p = .063$
Sadomaso.	
Overall	$H(1) = .544$, $p = .461$
Males	$H(1) = .303$, $p = .582$
Females	$H(1) = .286$, $p = .593$
	Neglect
Intimate	
Overall	$H(1) = 0$, $p = .991$
Males	$H(1) = .345$, $p = .557$
Females	$H(1) = .075$, $p = .785$
Explorat.	
Overall	$H(1) = .058$, $p = .81$
Males	$H(1) = .001$, $p = .98$
Females	$H(1) = .112$, $p = .738$
Impersonal	

Overall	$H(1) = .045$, $p = .832$
Males	$H(1) = .001$, $p = .98$
Females	$H(1) = .141$, $p = .708$
Sadomaso.	
Overall	$H(1) = .827$, $p = .363$
Males	$H(1) = 1.094$, $p = .296$
Females	$H(1) = 2.847$, $p = .092$

Appendix P. Case Study Consent Form.

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CONSENT FORM

Consent to personal information being anonymised, kept safe and confidential, and shared with authorised individuals at the University of Nottingham and other regulatory authorities where relevant.

Name of Researcher: Nathalie Colin (Trainee Forensic Psychologist)

Name of Participant: [redacted] (prefers [redacted], accompanied by [redacted] (Mum)

Staff Present: Dr [redacted] (Consultant Clinical Psychologist)

Hi [redacted]

I would be very grateful if you and your Mum could take some time to read through this consent form with [redacted] and sign it. You can both sign the same form. Please could you also sign a consent form for [redacted] so that he may keep this for [redacted] (if he needs it), and could you please sign one for me so that I may send this to the University of Nottingham?

Thank you so much for your time. I hope you are doing well.

All the best,

Nathalie

		Please initial box to say you have understood and agree
1.	Nathalie is a university student who was on placement with [redacted] under the supervision of Dr [redacted]	[redacted]
2.	Nathalie has done psychology work with me. We talked about the thoughts I was having and ways that I could live with these.	[redacted]
3.	It has been explained to me that Nathalie would like to write a report on the work we did together. I am OK for her to do that.	[redacted]
4.	The report is for Nathalie's studies so her teachers (university supervisors) will look at it and also the people who mark her work (regulatory authorities, where relevant). My information won't be shared with people who are not authorised (who are not allowed) to look at my information. Sometimes, teachers and other university people need a little bit more information so they might ask to see extra things that people have written about me on CareNotes. If they do, they will have to ask me first and get my consent.	[redacted]
5.	It has been explained to me that the report about me might be published. This means the work we did together will be in books for people to look and maybe they can get ideas on how to help others like me.	[redacted]
6.	I understand that the university will have Nathalie's report and that it will be stored safely.	[redacted]

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[redacted] NHS

7. I understand that Nathalie's report and any information about me will be anonymised. This means people won't be able to know who I am and that my identity will be protected. For example, there will be no information about my name, date of birth, or where I live. [redacted]

8. I would like to discuss this with someone else before I make a decision: [redacted]

YES / (NO)

9. I would like to speak to: .....

10. I confirm that [redacted] has explained the above information to me and that I understand it. [redacted]

11. I feel well enough to make an important decision. [redacted]

12. I have been given enough time to think about this. [redacted]

13. I have been given enough information. [redacted]

14. I do not feel forced to say yes. [redacted]

15. I will be given a copy of this consent form. [redacted]

Please print your name:

[redacted]	25/11/16	[redacted]
Name of Participant	Date	Signature
[redacted]	25/11/16	[redacted]
Name of Parent	Date	Signature
[redacted]	25/11/16	[redacted]
Name of Staff Present	Date	Signature

3 copies: 1 for [redacted] and Mum, 1 for [redacted] and 1 for Nathalie (University of Nottingham).

Appendix Q. Classification of Items on the Revised Child Anxiety and Depression Scale, According to Disorder.

Disorder	**Related Items**
Social Phobia	• I worry when I think I have done poorly at something. • I feel scared when I have to take a test. • I feel worried when I think someone is angry with me. • I worry that I will do badly at my school work. • I worry I might look foolish. • I worry about making mistakes. • I worry what other people think of me. • I feel afraid if I have to talk in front of my class. • I feel afraid that I will make a fool of myself in front of people.
Panic Disorder	• When I have a problem, I get a funny feeling in my stomach. • I suddenly feel as if I can't breathe when there is no reason for this. • When I have a problem, my heart beats really fast. • I suddenly start to tremble or shake when there is no reason for this. • When I have a problem, I feel shaky. • All of a sudden I feel really scared for no reason at all. • I suddenly become dizzy or faint when there is no reason for this. • My heart suddenly starts to beat too quickly for no reason. • I worry that I will suddenly get a scared feeling when there is nothing to be afraid of.
Major Depression Disorder	• I feel sad or empty. • Nothing is much fun anymore. • I have trouble sleeping. • I have problems with my appetite. • I have no energy for things. • I am tired a lot. • I cannot think clearly. • I feel worthless. • I feel like I don't want to move. • I feel restless.
Separation Anxiety Disorder	• I would feel afraid of being on my own at home. • I worry about being away from my parent. • I feel scared if I have to sleep on my own. • I have trouble going to school in the mornings because I feel nervous or afraid. • I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds). • I worry when I go to bed at night. • I would feel scared if I had to stay away from home overnight.
Generalised Anxiety Disorder	• I worry about things. • I worry that something awful will happen to someone in my family. • I worry that bad things will happen to me. • I worry that something bad will happen to me. • I worry about what is going to happen. • I think about death.
Obsessive-Compulsive Disorder	• I am bothered by bad or silly thoughts or pictures in my mind. • I have to keep checking that I have done things right (like the switch is off, or the door is locked).

	• I can’t seem to get bad or silly thoughts out of my head. • I have to think of special thoughts (like numbers or words) to stop bad things from happening. • I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order). • I have to do some things in just the right way to stop bad things from happening.