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LSBU

Displacing Problems: A Constructivist
Grounded Theory of Problematic
Pornography Use

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Declaration

I enrolled on this part-time PhD programme at LSBU in January 2016. Although I intended to complete the programme within the six years, it has taken much longer. I had extensions due to the difficulties surrounding the Covid19 lockdown and undertaking a four-year doctoral level qualification in counselling psychology alongside this PhD. Unfortunately, as with any prolonged period of time, I had several personal issues that impacted my ability to study, namely bereavement, and health concerns.

Due to the extended duration of my studies, I have had to balance my other work commitments accordingly. I have supervised two related student projects, which were subsequently published, on the subject of this PhD:

- Chasioti, D., & Binnie, J. (2021). Exploring the etiological pathways of problematic pornography use in NoFap/PornFree rebooting communities: a critical narrative analysis of internet forum data. *Archives of Sexual Behavior*, 50(5), 2227-2243.
- Thomas, H., & Binnie, J. (2023). The paradox of pornography–sexuality and problematic pornography use. *Culture, Health & Sexuality*, 1-16.

I also took the opportunity to work on two subject related studies with a researcher from UCLA:

- Prause, N., & Binnie, J. (2022). Reboot/NoFap participants erectile concerns predicted by anxiety and not mediated/moderated by pornography viewing. *Journal of Psychosexual Health*, 4(4), 252-254.
- Prause, N., & Binnie, J. (2023). Iatrogenic effects of Reboot/NoFap on public health: A preregistered survey study. *Sexualities*, 0(0) 1-33.

The above papers were published after the analysis of data contained within this PhD, thus retaining the originality of this PhD.

The findings of the literature review have been published, and also presented at conferences:

- Binnie, J., & Reavey, P. (2020). Development and implications of pornography use: A narrative review. *Sexual and Relationship Therapy*, 35(2), 178-194.
- Binnie, J., & Reavey, P. (2020). Problematic pornography use: narrative review and a preliminary model. *Sexual and Relationship Therapy*, 35(2), 137-161.
- Binnie, J (2019, January 29). Developing a psychological model of problematic pornography use [Poster presentation]. ATSAC (the Association for the Treatment of Sexual Addiction and Compulsivity) Annual Conference.
- Binnie, J (2018, November 30). Addiction to pornography: what do we know. [Invited workshop]. Royal College of General Practitioners. Managing Drug & Alcohol Problems in Primary Care Conference.

The thesis has been amended and submitted to a peer-reviewed journal:

- Binnie, J., Albery, I., & Reavey, P. (in review). Displacing Problems: A Constructivist Grounded Theory of Problematic Pornography Use. *Archives of Sexual Behavior*.

Given several papers have been published based on this thesis, the Turnitin summary may indicate a higher score than would normally be expected. The Turnitin receipt is included in Appendix 1.

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Abstract

Introduction: Research indicates that pornography is not inherently harmful for the individual, however, many users consider their use to be problematic. The majority of research concerning problematic pornography use (PPU), often referred to as pornography addiction, discusses nomenclature rather than having an applied focus. Given the lack of theoretical development in this area, a constructivist grounded theory was undertaken with the aim of creating an understanding of the development and maintenance of PPU.

Methods: Participants were required to have self-reported PPU and were recruited from online sources. Two main sources of data collection were used: journals of last pornography use, and semi structured interviews. 258 journals of pornography use, and 21 semi-structured interviews were completed.

Results: Five interlinked categories were constructed from the data. All participants were seen by the author and constructed as having underlying distinct problems prior to their self-reported PPU; histories of loneliness and isolation, trauma and mental health, they were struggling with their sexual orientation, or sexual dysfunction. Their pornography use had changed function over time, from enjoyment to habitual and instrumental use, mostly being used as a form of emotional regulation. The participants pornography use impacted upon their functioning, their ability to work, study, and socialise. The participant's discovery and identification of 'having PPU' was constructed as occurring by proxy, through an external means - the commonest source was online forums; when participants reached out for information, they were met with an addiction narrative and consequently saw themselves as addicted to pornography. Once this narrative was internalised it appeared to displace the distinct problems as a causative framework. The participants now saw their main problem as pornography addiction, rather than related to other pre-existing distinct problems. This process of displacement was conceptualised as the core category in this grounded theory in that it led participants to committing to a mission, attempting to conquer their addiction. Once they had embarked upon their mission, the underlying distinct problems became secondary to the participants, and often seen as resulting from their pornography use.

Discussion: The constructivist grounded theory was situated alongside current theory and research. Some aspects of the grounded theory were judged as having similarities to existing theories, but when taken as a whole it was proposed that the grounded theory is original, having clear implications for future research and clinical practice.

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Chapter 1: Introduction

1.1 Context

This chapter begins by exploring the background to the study. Three important questions are considered: who is the researcher? why was this subject matter chosen? what was the significance of the study? An outline of the thesis structure is subsequently presented.

Although more detail is given in section 3.2, it seems pertinent at this initial stage to introduce myself. I qualified as a mental health nurse in 2002, as a cognitive behavioural psychotherapist in 2006, and as a counselling psychologist in 2024. Over the years I have accrued several thousand hours of psychotherapy practice. I lectured in psychology from 2014 to 2024. As a lecturer I was encouraged to undertake a PhD. I was initially unsure of what to study. I was aware that several colleagues were researching addiction, and this was also a subject I had been teaching. Therefore, ideas concerning addiction flourished. I also wanted my study to be related to my professional practice. I reflected on my professional experience of working alongside people with an addiction related issue. I soon thought about certain clients who had been referred for their 'pornography addiction'. I remember at the time searching online for information on therapeutic approaches for these issues. However, little was found. These memories seeded an idea, why not investigate 'pornography addiction', with the aim of developing a greater psychological understanding of the issue. I wanted to create the resource I had been looking for previously and was unable to find. I decided my research could possibly help practitioners when psychologically formulating their client's concerns about being addicted to pornography. I also considered widening the concept of pornography addiction, to encompass behavioural addictions per se. Both psychological formulation and behavioural addiction are now introduced to help describe the foundations of this thesis; both concepts are explored in greater depth as the thesis develops.

An important component within the process of psychological therapy is the role of case formulation (Persons, 2012; Eells, 2022); the method of theorising and discussing the development and maintenance of client issues (Division of Clinical Psychology [DCP], 2011). Psychological formulation is well established and widely accepted within clinical psychology and psychotherapy. It is a core competency of clinical psychologists (DCP, 2011) and a key skill for other mental health professions (Royal College of Psychiatry, 2017). The problems, the characteristics, and elements of the histories that clients present with often share similarities (Hayes & Hofman, 2021) and the clinician can choose to apply psychiatric diagnoses if required to, and/or if it will benefit the client or the process of therapy. Though there are argued to be multiple issues with the medical or disease model of mental health (see Johnstone et al., 2018), the system of grouping shared aspects of presenting problems and client characteristics is the foundation of evidence-based practice. The concept of evidence-based practice

originates from evidence-based medicine (Sackett et al. 1997). In turn, evidence-based medicine is based upon the principles of Cochrane (1971) studies in epidemiology. Psychological models of formal psychiatric disorders (for example, obsessive-compulsive disorder) and what can be viewed as transdiagnostic disorders (for example, low self-esteem) are developed through various research methodologies, theoretical considerations, and evidence drawn through clinical practice (practice-based evidence). These models can influence the process of developing individualised formulations, and the associated treatment protocols can be incorporated into practice. Despite the proliferation of psychological models of mental health, there are still many client issues that have little established psychological understandings that can be applied to the process of formulation or to guide interventions. One such area is what can be termed the behavioural addictions.

Behavioural addictions (Marks, 1990) refer to non-chemical addictions; although there is an ever-increasing multitude of classifications (Billieux et al., 2015), there is some consensus that the main behavioural addictions focus on gambling, sex, the internet/gaming, shopping, and food (Karim & Chaudhri, 2012). Given the lack of applied research into behavioural addictions and the absence of practical psychological models, the psychological therapist is unable to benefit from evidence-based practice. What is needed is a greater psychological understanding of what it is like to experience “behavioural addictions”. This can be achieved idiographically through being with the client and hearing their story, however this does not incorporate the benefits of an evidence-based approach. Ideally such an understanding would be applied to behavioural addictions per se. However, as many of the concepts surrounding addiction are relatively disputed (for example, Lewis, 2015 critiques the ‘disease model’ and proposes how addiction can be seen as a form of pleasure seeking and relief from distress) and because so many different problems are subsumed under the umbrella term of “behavioural addictions”, it is better to take a more nuanced approach and focus on a particular presentation. This project focuses on problematic pornography use (PPU), often referred to as pornography addiction. PPU can be defined as “any use of pornography that leads to significant negative interpersonal, intrapersonal, or extrapersonal consequences for the user” (Sniewski et al., 2018. p.1). Research on the subject of compulsive, problematic, or addictive pornography has increased exponentially in recent years (Grubbs et al., 2020). It has been reported that practitioners regularly see clients with concerns about their pornography use (Short et al., 2016); indeed, this has been my own experience. Of all the behavioural addictions, issues relating to pornography have been the most encountered in clinic. Thus, there is some practical familiarity with the subject matter, and an awareness of the lack of applied research in this area that can influence clinical practice.

A qualitative approach, constructivist grounded theory (see section 3.6), is taken with the aim of constructing an understanding of the development and maintenance of PPU. The overall research question is:

How do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?

The specific aim is in keeping with a formulation-based approach (see section 3.7.3), thus keeping this study applied and of potential use for practitioners in the field.

1.2 Significance of the study

Through two main sources of data generation, journals of pornography use¹, and semi-structured interviews with participants self-reporting PPU, a comprehensive theory was constructed. The theory is considered unique when compared to other theories of addiction. The originality consists of reformulating the concept of PPU into an alternative explanation of distress and dysfunction. Through a process of externalisation and displacement, participants were seen as making their perceived addiction to pornography the main focus for intervention. By following a conventional approach to addiction, their underlying issues were left unattended.

The grounded theory highlights the importance of taking a formulation-based approach, and not assuming that a traditional addiction framework is applicable to the issue of PPU. It is suggested that the phrase 'pornography addiction' may be unhelpful. The theory prioritises the underlying issues, classed as the 'distinct problems' in this theory, as one of main factors for intervention. Pragmatic considerations concerning one's use of pornography, and relationship to pornography, are also seen as important areas to explore within the therapeutic context.

As a new theory to the research literature on the subject of PPU, there are opportunities for further research. The theory as it stands cannot be generalised: Practitioners may well find it a useful aid to therapeutic work, but more research needs to be conducted. Several avenues are explored in the conclusion of this thesis (Chapter 8).

1.3 Thesis structure

This thesis is presented as eight chapters. Chapter 2 contains the literature review on the subject of PPU. As a grounded theory methodology is utilised, there is a careful consideration of what type of literature to include in the review. The focus tends to be on research rather than existing general theories of addiction or theories highly related to PPU. This is to ensure that the constructivist grounded theory in this thesis is original and not unduly influenced by pre-existing knowledge. The literature review is synthesised in the form of a preliminary model of PPU, highlighting the gaps in knowledge. This provides a rationale and a focus for this study.

¹ Throughout this thesis pornography is described as 'used' to highlight the active behaviour involved, rather than the word 'watched' which indicates a passive behaviour.

Chapter 3 is dedicated to the methodology underpinning the study and the ontological and epistemological assumptions guiding the research process. Justification for a constructivist grounded theory approach is given.

Chapter 4 outlines the methods used in the collection and analysis of data.

Chapters 5 to 7 focus upon the findings of this study. Each chapter focuses upon the categories created in this grounded theory. Data, including verbatim accounts, are presented to help with the understanding of the theory. There is a rich description and analysis of the research findings. Chapter 7 concludes with a summary of the entire constructivist grounded theory of PPU.

Chapter 8 situates each category of the grounded theory in relation to pre-existing theory and research. There is an assessment of whether the grounded theory maintains its position as a new perspective on the development and maintenance of PPU, or whether elements of existing theory or research can be incorporated. Chapter 8 ends with a conclusion to the thesis. The strengths and limitations of the study are discussed, as are clinical implications and potential directions for further research.

Chapter 2: Literature review

2.1 Literature review approach

Within grounded theory research the emphasis and positioning of the literature review has been disputed, and according to Charmaz (2014) it is misunderstood. It is seen by classic grounded theorists such as Glaser and Strauss (1967) as influencing the development of theory and should not be undertaken until after the analysis of data and theory generation. There are concerns that the theory produced will be 'received theory', seen through the lens of existing theory and research. Charmaz (2014) suggests that classic grounded theorists assume that researchers are a 'tabula rasa', stating: "arguments for delaying the literature review often assume that researchers remain uncritical of what they read and are easily persuaded by it" (p.307). Charmaz (2006) proposes that reviewing the literature can be undertaken in a way that does not influence the analytical process with pre-existing concepts, rather it can provide a general foundation when starting a research project. Within constructivist grounded theory conducting a literature review before data analysis contributes to the credibility of the research, defending the researcher's position, and giving a greater rationale (Charmaz, 2014). Reviewing existing research helps identify gaps in the knowledge of a subject, creating a cogent rationale for further study.

For the above reasons this study contains a full scoping review of the research literature pertaining to PPU. A scoping review identifies the breadth, rather than the quality of existing evidence (Armstrong et al. 2011). Pre-existing theories providing an explanatory account of PPU are only given a cursory inclusion within this chapter. Theories relating to addiction per se have not been analysed in-depth, and will be accounted for in Chapter eight. There is an inductive approach to the literature review given the nascent research on the subject. The aim is to situate this study and to give a greater rationale for investigation.

2.2 Pornography

Before the concept of PPU is fully explored it is essential to focus upon pornography. If an analogy to substance misuse can be made, then it is imperative to understand the substance itself before focusing on the misuse. Focusing on pornography in this way allows a possible distinction to be made between using pornography and using pornography problematically.

To understand any phenomenon the origins must be explored. This section therefore begins with an overview of the history of pornography. How much is currently used, who uses it, and why people use it pornography is then put forward. The potential effects of pornography on the individual and on

society are then discussed. The main aim of this section is to investigate pornography use, to examine any benefits or harms.

2.2.1 Pornography literature review strategy

To achieve the aims of this first part of the chapter a scoping review of the research literature was undertaken. Search terms including but not limited to 'pornography', 'prevalence', 'effects' were inputted into Google Scholar, Embase and Psychinfo where a vast amount of literature was produced – 20,000 on Google Scholar alone. In many ways, the aims of this section were too wide for a systematic review. A decision was therefore made to focus more on heterosexual pornography use rather than offering a comprehensive account surrounding issues of gay pornography.

2.2.2 The history of pornography

Until the time of the European Reformation (1517AD–1648AD) depictions of a sexual or erotic nature were commonplace within art; in paintings, carvings, sculptures, and sketches across the world in nearly all civilizations (Byrne & Kelley, 1984). The functions of these artworks were varied, ranging from possibly religious (Venus of Willendorf) to erotic (Warren Cup), but in many cases it is impossible to tell. From a European perspective, through the Renaissance (1450AD–1650AD) and into the Reformation, the expense and limited audience of the works meant that ownership and interest usually remained within the upper classes. The arrival of the printing press and cheap reproduction of images allowed for easier distribution and access by those with less financial means. Concerned about the morality of the masses, the authorities decreed that the production of erotic material should cease (Byrne & Kelley, 1984). The creators of erotica were therefore morally guilty and to be punished, the consumers or victims were seen as weak, and the erotic materials themselves were destroyed.

The Victorians were known to be admirers of ancient Rome. Excavated areas of Pompeii during the Victorian era found several frescos and objects depicting sex and bestiality. The Greek word *pornographos*, meaning illustration of prostitution, was resurrected to describe what was found (Byrne & Kelley, 1984). These findings challenged Victorian sensibilities and were locked away only to be seen by the select few, largely upper-class white men. The establishment's control of erotica was tested by developments in technology. Production of erotic materials often moved from the arts to early photographs of male and female nudes for non-artistic functions, titillation being the most common (Byrne & Kelley, 1984). This change of function best describes the differences between erotica and pornography, with pornography rarely claiming any artistic quality (*Miller v. California*, 1973). More modern definitions of pornography echo the idea of function, for example, Peter and

Valkenburg (2011) suggest that pornography can be defined as professionally or consumer produced images or videos that are intended to sexually arouse the viewer.

It was in the nineteenth century that visual pornography started to be consumed by the general public. The distribution of erotic photocard was rife in Victorian times. This new form of media consumption by the working classes reinforced ideas of “women’s ‘natural’ sexuality, children’s undifferentiated and uninhibited sexuality, and the availability of ‘colonial’ pleasures” (Sigel, 2000, p. 878); ideas already held by the ruling elite. As a result, the Vagrancy Act 1824/1838 outlawed the displaying of indecent prints. This was followed by the Obscene Publications Act 1857, the world’s first law that made the sale of obscene material an offence, with the associated power to destroy the offending material. However, there was no definition of obscene within the act and individual decisions had to be made in the courts based on the Hicklin test; offending segments could be taken out of context and lead to the whole work being banned. The private possession of erotic or pornographic material was not made an offence.

Erotic film production began almost as soon as the invention of the motion picture in 1895. The nature of the films began with erotica but quickly moved into what could be defined as pornography. In stark contrast to the heteronormativity of modern pornography, these early pornographic works contained not only sexual acts between men and women but also acts between men, often within the same film. The production and distribution of these films remained a secretive affair and were often only shown in brothels or members only clubs. The distribution and viewing of hardcore pornographic films progressed with the portability of reel-to-reel projectors and were shown at male only gatherings, stag parties, hence the term stag movies. The distinction between hardcore and softcore became greater. Hardcore pornography tends to depict sexual acts such as vaginal, anal, or oral intercourse, cunnilingus, ejaculation; whilst softcore is less sexually graphic, not actually depicting the sexual acts (Sapolsky & Zillman, 1981).

With the rise of liberalism and free speech during the early twentieth century it became possible once again to produce and distribute erotic or softcore material. Often works such as “Lady Chatterley’s Lover” would still be censored in various countries, in the UK for example, under the Obscene Publications Act 1959, which was then strengthened by the Obscene Publications Act 1964.

The British Board of Film Classification (BBFC), founded in 1912, approves and rates films for general release. Even with the approval of the BBFC, local authorities can still prevent cinemas showing films they do not morally approve of. Pornographic films remained underground and were only available to the public in sex clubs emerging in certain locations, such as Soho, London (a well-known location for illicit sexual activity) in the 1960s (Byrne & Kelley, 1984). Softcore pornography continued to flourish however, particularly in magazine format, and magazines such as Playboy and Hustler became international best sellers. Restrictions in the US were not as strict as the UK and pornographic films were allowed limited release, the first being Andy Warhol’s “Blue Movie” in 1969 and the 1972

release of “Deep Throat” which caused a great deal of media attention due to the depiction of penetrative sexual intercourse (Byrne & Kelley, 1984). Legislation in the US courts were restricted by poor attempts at defining pornography; the most famous being the United States Supreme Court Justice, Potter Stewart who stated during *Jacobellis v. Ohio* (1964) “I know it when I see it” (“Concurring Opinion of Mr. Justice Stewart,” para. 1). The period between 1969 and the early 1980s was known as the ‘Golden Age’ of pornography in the US. Obscenity legislation in 1973 attempted to curtail the rise of pornography but producers bypassed obscenity laws by emulating mainstream storylines, thus preparing an artistic merit defence against potential litigation (Alilunas, 2016).

Advances in technology would again revitalise the pornography industry. The rise of home video and VHS in the late 1970s bypassed the censors and dramatically increased the availability of hardcore pornography. By the early 1980s most hardcore pornography was produced exclusively for home release. This effectively changed the consumer’s behaviour; from going to movie theatres to viewing pornography at home, with unlimited access.

With the invention of the internet and the later widespread public access to the World Wide Web in the late 1990s, the accessibility of pornography increased exponentially. Consumers could freely view as many of the millions of images and films that were available, high-definition recording drastically improved the quality of the images and video files, and advances in streaming permitted a more anonymous service. The arrival of smartphones in 2007 allowed consumers to have greater, more flexible access to internet pornography.

Whilst there has been what may be termed as niche pornography, for example anal/vaginal fisting or gang bangs, since VHS, the rise of the internet pornography has meant that the availability of all types and variations of pornography has reached as far as anyone with access to the internet. Therefore, anyone is able to view pornography with potentially violent, or illegal content. In the UK, after the murder of Jane Longhurst in 2003 by a man who had pornography of an extreme nature in his possession, calls for websites hosting extreme pornography to be shut down began (McGlynn & Bows, 2019). This culminated in Section 63 of the Criminal Justice and Immigration Act 2008; whereby the viewing of extreme pornography (acts threatening life, acts which may lead to serious injury to a person’s anus, breasts or genitals, sexual acts with either a real (real enough to a reasonable person) or simulated corpse or animal) became an offence with the maximum penalty of three years for possession. The 2008 legislation was amended by the Criminal Justice and Courts Act 2015 to include rape pornography. Although there have been convictions under the act, several test cases in court have resulted in the defendant being found not guilty by a jury; as the jury did not find the acts extreme. In addition, Lord Wallace debating the act in the UK house of lords, proposed there to be a lack of sense in allowing consensual participation in films set against a criminalisation of viewing them.

From antiquity to present day, there have been depictions of sexual activity in all types of media within almost all cultures. The development of these depictions and the establishment’s reactions to them

have been narrated. It has been suggested so far in this chapter that these negative reactions have been from a religious, moral, and social perspective. A narrative has been created indicating the possibility of a class battle for the ownership of pornography, with the assumption that the more educated or powerful can view pornography without harm but the working classes are vulnerable and must be protected from it; the common idea that it is okay for me but not for others, I can handle it, others cannot; the so called 'third person' effect (Davidson, 1983; Gunther, 1995; Lo & Paddon, 2000). However, with advances in technology it is no longer possible to protect people from pornography; the internet has lifted the lid of Pandora's box.

At this juncture one has to ask whether pornography is harmful? Before this question can be addressed, we first have to ask several other questions: How prevalent is pornography? Who views pornography? Why do people use it? What are the potential effects of pornography? These questions will now be explored in more depth.

2.2.3 Prevalence of pornography

A conservative estimate of the revenue of the pornography industry is 15 billion USD (Naughton, 2018), with revenues from subscriptions, advertising, and also malicious techniques to deceive web site visitors (Wondracek et al. 2010). The world's largest supplier of internet pornography is Pornhub with 125 million visits per day and 100 billion video views a year (Pornhub, 2023). There are many other pornography sites so the total numbers will be considerably higher. Lewczuk et al. (2019) estimated the number of online pornography users increased by 310% between 2004 and 2016. Studies have estimated that the lifetime prevalence of pornography use is around 92–98% in men and 50–91% in women (Ballester-Arnal et al., 2021). This decreases to 70% for men, and 33% for women in the last year; 47% for men, and 16% for women in the last month, and 33% for men, and 8% for women in the last week (Grubbs, Kraus, et al., 2019).

Despite the diverse varieties of pornography available on the internet, from standard hardcore material to 'bizarre' and sometimes illegal content, 80% of sexual tastes tend to centre on 20 different desires: Teen (18+), gay, oral, anal etc. (Ogas & Gaddam, 2012). In terms of gender differences, men tend to visit sites with blatant sexual content whereas women tend to visit sites with at least a hint of romance or narrative (Ogas & Gaddam, 2012). These older findings are supported with the latest data from Pornhub; the top three searches by all viewers were 'hentai', 'milf', and 'lesbian'. Women (36% of visitors) viewed certain categories more than men: 'scissoring' - 196% more, 'pussy licking' – 105%, 'romantic' - 59% (Pornhub, 2023). Women were also 34% more interested in 'rough sex' than men.

The average age of visitors to Pornhub is 37 years old (Pornhub, 2023); although sites are supposed to be restricted to adult viewers, there are few controls. 64% of young people (16-21 years old) in a recent survey said they had seen pornography online (UK Children's Commissioner, 2023). Of these

the average age of first seeing pornography was 13 years old. This is supported in previous academic studies. Pizzol et al. (2016) found that 78% of their sample of high school students had consumed internet pornography, with 8% doing so daily. This is echoed by Wright et al. (2020) suggesting 68% of US adolescents had been exposed to pornography.

Despite the above statistics on internet pornography, one is reminded that pornography existed before the internet. It has been suggested that the biggest change in prevalence rates occurred in 1973 after the introduction of the video recorder (Buzzell, 2005). Whilst there is a greater amount and range of pornography available, the commonly accepted idea of increasing rates of viewing has been challenged by Ley et al. (2014). Nevertheless, with increases in technology, the quality of images and videos has improved - especially with High Definition, and the accessibility has changed. Whereas before a computer was needed to access pornography, nowadays the internet is available freely and anonymously on mobile devices: 93% of pornography is accessed via a smartphone (Pornhub, 2023). This 'development' has changed who can access pornography. As discussed above, those under 18 years old can now easily access hardcore pornography; it is a normative experience (Sabina et al., 2008); with associated concerns about early access leading to the normalising of sexual behaviours found within pornography (Tsitsika et al., 2009; Braun-Courville & Rojas, 2009; Lo & Wei, 2005). Anecdotally, we can compare what was commonly available to teenagers thirty years ago, for example the magazine 'Razzle', to what many teenagers have access to now, for example the scatological/coprophagic online video 'Two Girls, One Cup'. Cooper (1998) was one of the first researchers studying internet pornography, he neatly summarises the inherent qualities of internet pornography as the 'Triple A Engine'; Accessibility, Affordability and Anonymity. However, these factors have been found to facilitate pornography use rather than turbocharging it as originally proposed by Cooper and his associates (Byers et al., 2004).

2.2.4 Who views pornography?

Research has long suggested that the strongest predictor of pornography use is gender, with males far more likely to use it than females (Fisher & Byrne, 1978; Regnerus, 2007; Rissel et al., 2017; Ballester-Arnal et al., 2021). There are different patterns of pornography use between genders, with women often viewing pornography with a partner (Mansson, 2000) whilst men doing so alone (Seidman, 2004). Other factors that are strong predictors of pornography use include high sexual desire (Kontula, 2009), a high number of sexual partners, and early sexual intimacy (Poulsen et al., 2013). Strong predictors of non-use of pornography include having strong ties to religion (Stack et al., 2004; Sherkat & Ellison, 1997; Poulsen et al., 2013) and being in a romantic relationship (Buzzell, 2005). There is also research to suggest that Black men are more likely than white men to view pornography and that religion does not act as a predictor for non-use amongst Black men (Perry & Schleifer, 2017); reasons for this focus upon how Black men tend not to connect their religious beliefs

to their sexual behaviours in the same way that White men do (Steinman & Zimmerman, 2004). Viewing pornography is common among men who have sex with men (MSM); 99% of participants in one study (Stein et al., 2012); and 98.5% in another (Rosser et al., 2013). Pornography use is more frequent among MSM than among those that define themselves as heterosexual (Duggan & McCreary, 2004; Kendall, 2004; Thomas, 2000). Reasons for this increased use of pornography within the MSM community have been speculated to reflect the behaviours of a marginalised group of people seeking a safe and anonymous space to explore their sexual needs, especially as part of the coming-out process and identity formation (Ley et al., 2014). Pornography has been suggested as a tool used by LGBTQ adolescents for sex education (Bradford et al. 2019), to assess if they are ready to engage in sexual activity (Arrington-Sanders et al. 2015). Pornography may also reflect a unique part of Gay culture, or the increased use may just be due to fact that MSM are men and thus view more pornography than women (Ley et al., 2014).

2.2.5 Why people use pornography

Pornography is most often a recreational activity (Grubbs, Wright, et al., 2019). The main reason why people watch pornography is that it produces sexual arousal and excitement and nearly always involves masturbation (Reid et al. 2012); with 83% of men and 55% of women reporting masturbating when viewing pornography (Boies, 2002). Successful masturbation results in orgasm. During orgasm the parts of the brain responsible for processing emotions diminish and people often report experiencing what can be described as a brief trance like state; the famous French euphemism '*la petite mort*' (the little death) still holds true (Georgiadis et al. 2006). There is then the release of pleasurable hormones such as norepinephrine, dopamine, and serotonin (Stahl, 2001; Levin, 2014). These hormones are associated with reward systems in the brain and as such, orgasm will be desired, and masturbation positively reinforced, i.e., more likely to occur again. However, negative reinforcement is also involved, and therefore warrants further discussion.

Emotional regulation is a multitude of processes activated with the intention to control the experience and expression of emotions (Gross, 2007). Artificial substances such as illegal drugs, behaviours such as exercise, or purposeful biological processes such as the orgasm can be used to downregulate the effects of negative emotions. These negative emotions have been found to predict the use of online pornography (Wéry et al., 2018). Research has indicated a relationship between mood regulation and using pornography, with Laier and Brand (2017) proposing that men use pornography to cope with their negative emotions. Viewing pornography and masturbating also serves as a form of distraction or avoidance from difficult emotions; although distraction is less powerful than other strategies there is still evidence of its effectiveness in reducing negative emotions (Kalisch et al., 2006). When this distracting behaviour is successful in reducing or removing the aversive experience, i.e. the negative emotion, then according to operant conditioning, it is more likely to be repeated

(Skinner, 1938), therefore being negatively reinforced. In relation to pornography use, Bóthe, Tóth-Király, et al. (2020) demonstrated how it can be used to distract attention away from emotional stressors.

Within the literature there are several other functions of pornography presented; for example, exploring sexuality (Attwood, 2005) and education (Cooper et al., 2004); Hesse & Pedersen (2017) found that frequent pornography use contributes to a more accurate knowledge of sexual anatomy, physiology, and behaviour. Pornography has also been used clinically within sex therapy (Neidigh & Kinder, 1987). However, after sexual excitement, arousal, masturbation and orgasm, the most reported use of pornography is within relationships (Grubbs & Kraus, 2021).

Although men tend to view pornography more frequently than women, and more so on their own whilst masturbating, half of men and women report sometimes viewing pornography with their partner (Maddox et al., 2009). The main reason for this is that watching pornography can be sexually arousing for both partners and can be a precursor to sexual intercourse (Lawrence & Herold, 1988; Lopez & George, 1995). Additionally, watching pornography with a partner is endorsed by many sex/relationship therapists (for example: Manning, 2006), as watching pornography together brings closeness whereas watching alone may put up a wall between partners (Manning, 2006). However, the research on the impact of pornography on relationships is more varied. Individuals who view pornography on their own report lower relationship quality than those who never watch pornography or only watch with a partner (Maddox et al., 2009). There are no known studies that demonstrate any positive effect of watching pornography alone on relationship functioning, or on men's views of their partners (Maddox et al., 2009). In fact, the opposite has been suggested: Men rated their female partners as less attractive after watching pornography, whereas pornography did not have this effect on women (Kenrick et al., 2003). Additionally, prolonged exposure to pornography is related to increased ideas about the positivity of non-monogamous relationships and doubts about the value of marriage (Zillmann, 1989). It is apparent that there are differences between women and men based on who it is that uses pornography in the relationship; it has been suggested that male pornography use is negatively associated with sexual quality within relationships for both partners, but female use is positively associated (Poulsen et al., 2013). These findings are supported by a meta-analysis by Wright et al., (2017) who found that pornography has an overall negative effect on men's relational and sexual satisfaction.

Based on Blumer's 1969 Symbolic Interaction Theory, Poulsen et al. (2013), theorised that the relationship between pornography use and relationship/sexual quality varies depending on the meaning people attach to the use of pornography. It makes sense that if individuals believe pornography use is a form of sexual expression, broadening their understanding of sexuality (Warner, 2000), or that it creates an erotic climate (Daneback et al., 2009) and leads to sexual experimentation and can enhance the relationship, then they are more likely to use pornography. Conversely, if individuals believe that pornography use is a form of infidelity in the relationship (Schneider, 2002),

or that pornography is deviant and objectifies women (Schneider, 2000a), then it is less likely they will have a positive experience. Research suggests that internet pornography is significantly correlated with emotional infidelity (Whitty, 2003); both men and women often see pornography as an act of betrayal (Bridges et al., 2003). Upon discovering their partner's use of pornography, women may question whether their partner still desires them sexually or is still committed to the relationship (Bergner & Bridges, 2002). Given these attitudes towards pornography use within relationships, it is not surprising that the majority of male participants in one study reported their female partners did not know about their pornography use (Daneback et al., 2009).

2.2.6 Potential effects of pornography

The role of pornography within relationships has already been discussed, and for some pornography use can be a positive experience (Hald & Malamuth, 2008), whilst for others pornography can play a role in reducing the quality of intimate relationships, especially for men (Wright et al., 2017). Other potential effects of pornography will now be considered.

Within the media, and also within some non-academic literature, there is the perception that pornography leads to direct violence against women. However, meta-analyses have suggested that there is either no evidence of pornography use being associated with sexual aggression (Fergusson & Hartley, 2022), or that further research needs to be undertaken due to the heterogeneity of studies (Mestre-Bach et al. 2024). International studies comparing the availability of pornography over time and recorded sex crimes all suggest that as the availability of pornography increases, the incidence of sex crimes reduces (Landripet et al., 2006; Diamond, 1999). D'Amato (2006) through examining 25 years of crime data and pornography consumption in the US concluded that rape has declined by 85% at the same time as pornography becoming freely available, speculating that pornography actually reduces sexual violence. A possible mechanism for this is explained through pornography acting as a positive displacement activity of sexual aggression (D'Amato, 2006). This mechanism is expanded by Diamond (2009) who suggests that in all countries where this has been studied, internet pornography facilitates a more socially tolerable and private form of masturbation and consensual relations, whereas before the lustful inclinations took the form of sexual offences such as public exposure or sexual assault. In summary, research indicates that there is little support for pornography interacting with dispositional tendencies to facilitate sexual aggression (Hatch, 2020; Kohut & Fisher, 2023; Kohut et al., 2021).

The idea that pornography leads to sexual violence seems to be discredited. This makes sense as crimes such as rape are considered an act of aggression rather than a sexual act (Russell, 1980). Also, the assumption that pornography leads to sexual crimes presupposes that men lack any agency and cannot be held accountable for their actions, that they have overwhelming urges that are triggered by pornography (Hunter & Law, 1987).

Although pornography does not evidently lead to direct physical crimes against women, there are many who suggest that pornography contributes to the degradation of women (for example: Brownmiller, 1975; Morgan, 1980; Dworkin, 1981; Mackinnon & Dworkin, 1988). This takes the form of not only harm to the women who perform in pornographic material, but also to women in general, in that they are denied, through the existence of pornography, their own sexuality and that they have to experience men who are acculturated by pornography. From a radical feminist perspective, the idea of women who perform in pornographic media being victims makes intuitive sense and is akin to the myth of the 'Happy Hooker' (Matthews, 2015). According to this perspective, there has to be an element of economic coercion or exploitation to justify the career 'choice'. However, this position is challenged by pro-porn feminists who advocate sexual expression and freedom (for example: Strossen, 2000). Sex-positive feminists argue that there is nothing inherently degrading in pornography (McElroy, 1996), it can reflect a woman's right to define their own sexuality, challenging gender stereotypes (Schorn, 2012). As to the impact on femininity itself or the impact on society as a whole, there needs to be further exploration of whether pornography influences attitudes.

Padget et al. (1989) studied the attitudes towards women of users of an adult movie theatre and compared them with a sample of college students. They found that the patrons had more favourable attitudes. This finding is supported by Reiss (1986) who found participants who had seen a pornographic movie in the last year had more gender equal attitudes than those that had not. Recent studies suggest similar findings; Jackson et al. (2019) compared the attitudes and beliefs of attendees at an adult entertainment expo to a representative sample of men and concluded that the attendees were no more sexist or misogynistic, and held more progressive beliefs for certain factors. The causal relationship between exposure to pornography and misogynist attitudes has not been demonstrated in the research literature (Baron, 1974; Linz et al., 1988; Barak et al., 1999; Davies, 1997; Kohut et al., 2016). It is proposed that negative attitudes towards women are not generated by pornography but are already deeply ingrained within society (Davies, 1997). Increased exposure to pornography may actually lead to higher measures of gender equality (Baron, 1974).

However, although the majority of pornography made for the heterosexual male consumer does not contain direct violence to women (Carol, 2007) there is much that I class as aggressive, misogynist, or depicts scenes which are degrading to the actors involved. For this type of pornography, the research does suggest an association with potential aggression (Demarè et al., 1993; Donnerstein & Linz, 1998; Malamuth et al., 2000). Given that non-violent pornography does not have this association then it can be said that any change in attitudes or potential direct harms arise from the violent images rather than the sexual ones (Donnerstein & Linz, 1986; Ybarra et al. 2011). Or there may be 'third variable' effects to account for the association: For example, Baer et al. (2015) found that male sex drive supplanted pornography use in the prediction of sexual aggression. The use of violent and degrading pornography is worrying though, especially as research suggests that users of non-violent and degrading pornography can move onto more extreme forms due to becoming desensitised to the

content of frequently viewed material (Linz et al., 1987; Bridges, 2010). It has also been suggested that heavier users of pornography rate degrading pornography as more arousing than those that consume pornography less frequently (Anton et al., 2010). This desensitisation or habituation also occurs for the extreme material, with users seeking ever-more arousing stimuli (Grundner, 2000). In line with social learning theory (Bandura, 1977) there is a theoretical risk that people who view violent and degrading pornography will imitate the behaviour, and/or the images will lead to attitudinal change. Even if the images are not violent or blatantly degrading, there are several common practices within virtually all professionally made hardcore pornography made for the heterosexual male market that can be seen as offensive towards women and an act of degradation; for example, cum shots deliberately in the face, ass to mouth etc.

Another aspect that involves observational learning is the normalisation of pornography related behaviours. Although I do not consider this inherently problematic, adolescents who regularly use pornography have been found to replicate the sexual activities found within the pornography (Rasul et al., 2022). Behaviours such as removal of pubic hair (BBC News, 2017), cosmetic genital surgery, acceptance of anal sex within heterosexual youth (Marston & Lewis, 2014), reduction of condom use in MSM (Stein et al., 2012). In addition, viewing pornography can change people's attitudes towards their own body, with many MSM for example feeling inadequate as a result (Duggan & McCreary, 2004; Morrison et al., 2007) and men generally internalising the mesomorphic ideal (Tylka, 2015).

It has also been proposed that the emotional intensity of pornography has changed over the years and that this has also influenced the experience of using it. Sugarman (2021) suggests that older forms of pornography, such as Playboy, required an elaborate fantasy narrative to be created by the typically adolescent male, the pornography being a prop during masturbation. However, more recent pornography no longer requires an internal fantasy, the pornography provides the script and controls the intensity of emotions, leading to a mental passivity, a passivity that could be forwarded into real sexual encounters.

Regarding less frequently researched factors associated with pornography use there is the reasonably straight forward idea that viewing pornography is related to unemployment; 28% of internet users download or view pornography at work (IT Facts, 2004). Also, research suggests there is also evidence that pornography use is associated with extramarital sex and paying for sex (Stack et al., 2004).

2.2.7 Is pornography harmful?

With the move to the internet, pornography has become more accessible, anonymous, increased in visual quality, and has become more focused upon hardcore content. Men are still the main consumers of pornography, but female use is rising; due to the proliferation of the smartphone there are few restrictions on young people accessing pornography. Sexual arousal and masturbation are

the main reasons for pornography viewing, but there are also other reasons including emotional regulation and to enhance sex within relationships. The causal link between pornography and violence and attitudinal change is discredited; however, for common sub-types of pornography there are concerns about actual risks to women and creating misogynist attitudes within society. Taking into consideration all that has been presented, it can be suggested that standard hardcore pornography on the whole does not appear to be directly harmful. However, of concern is the impact of degrading and violent pornography on people's attitudes and behaviours. With the increased usage and normalisation of pornography in younger people, there is a lack of research that directly investigates the longer-term impact of growing up with pornography. The potential or future societal harms of pornography remain unknown.

Research suggests that pornography is not harmful for the individual; however, like any substance or behaviour when taken to excess problems may arise. From the research literature and clinical experience, it is clear that for some individuals their relationship with pornography can be problematic. The next section will focus on this central and important aspect.

2.3 Problematic pornography use

PPU is introduced with a focus on classification, epidemiology, how it is experienced, causes and associated factors, measurement, and treatment.

2.3.1 PPU literature review strategy

A narrative review of the research literature was undertaken. Whilst a non-systematic approach was adopted, the search terms were comprehensive and reference lists were scrutinised. The terms 'porn*', 'internet porn*', 'sex*', 'cybersex' were combined with 'addict*', 'compul*', 'problem*' using the Embase and Psycinfo databases; the same terms were expanded (without truncation) and inputted into Google Scholar. An inclusive approach was used, and all relevant peer reviewed articles were reviewed, although not all are presented in this chapter. Reasons for excluding studies were that many did not contain any data or that the remit was too wide, not focusing on pornography. Despite potential omissions, the narrative approach highlighted the main research findings, themes, and debates surrounding PPU. As stated earlier, theories of addiction have not been included in any depth in this section to avoid overly influencing the construction of this grounded theory (see section 2.1). Of note however, the authors own positioning needs to be acknowledged. In essence by being a psychotherapist working with individuals experiencing addiction related problems, and a university lecturer in a psychology department specialising in addiction, a familiarity with the subject inevitably exists. These reflexive issues are given greater prominence in section 3.2.

2.3.2 Defining PPU

As stated earlier, the evidence suggests pornography is not inherently problematic, though it can clearly become problematic for certain people (Cooper et al., 2000; Twohig et al., 2009; Ross et al., 2012) and has significant consequences for the individuals involved (Twohig & Crosby, 2010). Although provided in section 1.1, the definition of PPU to be considered within this thesis is as follows: “any use of pornography that leads to significant negative interpersonal, intrapersonal, or extrapersonal consequences for the user” (Sniewski et al., 2018. p.1). PPU does not result from how much pornography people use (Burke and MillerMacPhee, 2021); using a lot of pornography is not always problematic (Bóthe, Tóth-Király, et al., 2020). Many people reporting PPU are perhaps using the same amount of pornography as those who do not consider their use of pornography problematic (Pizzol et al., 2016). It therefore seems appropriate to focus upon functioning or the impact that using pornography has on people’s lives rather than frequency of use. Most studies found through the search tended to focus on how to classify PPU; this therefore seems a sensible place to begin.

2.3.3 Classification

Classifying PPU can be challenging as it is often considered a behavioural addiction (Marks, 1990). When seen as an addiction (pornography or porn addiction) it is frequently subsumed under sex addiction (Orzack & Ross, 2000; Rosenberg et al., 2014), or internet addiction (Block, 2008; Brand et al., 2016). It can also be classed as an impulse control disorder/sexual impulsivity/sexual compulsivity/compulsive sexual behaviour disorder (Grant & Potenza, 2007; Mick & Hollander, 2006; Cooper et al., 1999; Kraus et al., 2018); it has also been linked theoretically with obsessive compulsive disorder (OCD) (Black, 1998). However, this link with OCD is problematic as the obsessive element of OCD is often ego-dystonic or incongruous and the compulsive element within OCD is maintained solely through negative reinforcement, whereas PPU is linked with desire thinking and has a strong element of positive reinforcement. Classifying PPU as an addiction and classifying PPU within impulsivity/compulsivity will now be explored.

2.3.3.1 Addiction

West and Brown (2013) provide the following definition of ‘addiction’: “a repeated powerful motivation to engage in a rewarding behaviour, acquired as a result of engaging in that behaviour, that has significant potential for unintended harm” p.15. The public perception of addiction is that it usually pertains to addictive substances (Thege et al. 2015), however the above definition by West and Brown (2013) also encompasses addictive behaviours. Subsuming PPU within either sexual addiction or

within internet addiction is conceptually weak. Both contain behaviours not commonly found in PPU, for example visiting sex workers or excessive social media usage. In addition, neither are recognised by the DSM V; the only behavioural addiction that it includes is gambling disorder. The concept of sex addiction stems from the 'addiction movement' associated with Alcoholics Anonymous (Irvine, 1990). Sex and Love Addicts Anonymous branched out into pornography in the 1990s (Burke & Haltom, 2020), influenced by the work by Carnes (1991). The concept of sex addiction, and subsequently pornography addiction, became entrenched with the notion of the disease model, that addiction has biological causes. To investigate if the concept of addiction applies to PPU, key aspects common to more established addictive behaviours, will now be examined.

Craving:

Sexual images create stronger motivation than other pleasant images, and have several physiological indicators (Vrana et al., 1988; Weinberg & Hajcak, 2010). Examples of these indicators include increased blood flow in areas of the brain associated with reward (Kühn & Gallinat, 2011), and increases in dopamine (Bocher et al., 2001; Georgiadis et al., 2006). This suggests that viewing pornography is a desired behaviour and similar to the initial process of substance addictions (Robinson & Berridge, 1993; Blum et al., 2000). However, these neural patterns are also found in those that enjoy extreme sports (Fjell et al., 2007) and occur in any enjoyed activity (Salamone & Correa, 2013), they are both expected and non-pathological (Ley et al., 2014). The transition and long-term neural changes from pleasure seeking to relieving craving common in most addictive disorders has not been found to date for PPU (Ley et al., 2014). Some differences in changes in brain activity associated with the terms wanting and liking have been found within PPU participants (Gola et al. 2017) with inferences made that this correlates to an addiction model; however, this has been disputed within the literature (for example Prause, 2017; Prause et al, 2017). Therefore, it can be put forward that there may be psychological 'craving' rather than biological correlates. In relation to this Kraus and Rosenberg (2014) developed a questionnaire assessing craving within PPU. They defined craving for pornography as "a transient urge that changes over time, or as a stable inclination to use" (p.452). However, whether to use the word 'craving' in relation to PPU is contentious, as a weak craving is an oxymoron, craving is more than a brief desire to use (Wilson & Sayette, 2015). George and Koob (2013) define craving in the context of addictive substances as an intense, stressful state triggered by an association with the substance, an unstoppable force leading to drug use (George & Koob, 2013).

Withdrawal:

Some studies have found that participants recall withdrawal like symptoms when abstinent from using pornography (Dwulit & Rzymiski, 2019). However, withdrawal symptoms in this study included having erotic dreams, being irritable and distracted; also, participants were university students, not self-reporting PPU. Similar reported experiences were suggested by Lewczuk et al. (2022) using a questionnaire design with the general population. More frequent sexual thoughts and being irritable, cannot be compared to the withdrawal symptoms experienced within drug and alcohol dependence: anxiety, dysphoria, pain, irritability, sleep disturbance (Koob & Powell, 2020).

Tolerance and increased use:

The frequency of viewing or use is often one of the defining features of PPU within the academic research (Duffy et al., 2016). The variation in frequency varies wildly between studies as do definitions of excessive use. In their respective studies Twohig et al. (2009) equate excessive or high use as 10 times in three months, whereas Pyle and Bridges, (2012) stated daily use. A critique of defining a behaviour as excessive in this context comes from Humphreys' (2018) critique of Gola et al.'s (2017) study in which they defined excessive masturbation as 5.7 times a week. Humphreys (2018) put forward that this level of masturbation is hardly excessive given that the average age was 31; suggesting that rather than the participants tormenting themselves about being abnormal they should be reassured that their frequency of masturbation is the same as the one in six US men in their age group.

Therefore, it can be put forward that there is no direct evidence of tolerance in regard to amount used; there have not been the required longitudinal studies to demonstrate increasing use over time. Studies have reported that perceived addiction to pornography is related more to morality and an interpretation of its harm rather than the amount used (Grubbs, Wilt, et al., 2018). It remains unknown whether the process of PPU involves tolerance and an increasing time using. If the amount of pornography may not increase over time, the form or content may well change. As discussed in previous papers, research suggests that users of non-violent and degrading pornography can move onto more extreme forms due to becoming desensitised to the content of frequency viewed material (Linz et al., 1987; Bridges, 2010). This tolerance effect regarding the content of the pornography consumed is supported by Doidge's (2007) theory of neuroplasticity and the related release of dopamine associated with engaging in new experiences.

Repeated attempts to quit/control use:

Within the literature on PPU that centres on the concept of addiction there are descriptions of individuals reporting difficulties when trying to control their use of pornography (for example the case study by Wéry et al. [2019] of a 37-year-old man receiving psychotherapy for his self-perceived

pornography addiction). If a parallel to addiction is to be made then pornography itself should be difficult to inhibit (Ley et al., 2014). However, a relationship between self-regulation of sexual arousal and hypersexual problems has not been identified (Winters et al., 2009). One study has suggested that levels of sexual desire rather than hypersexual problems predict regulation of sexual responses to pornography (Moholy et al., 2015). Although hypersexual patients report problems with executive functioning (Reid et al., 2010) they do not actually demonstrate them when tested with neuropsychological tools (Reid, Garos, et al., 2011). It has been put forward that those reporting more problems with pornography have better control over their sexual response when tested experimentally (Moholy et al., 2015; Winters et al., 2009). Ley et al. (2014) reported that other factors may account for the reported problems in regulating pornography use. One factor described in the literature is personal religious values being in conflict with the use of pornography. This is supported by Twohig et al. (2009) who found that religious conflict was the main reason given for PPU. Also, individuals that seek treatment for PPU are more likely to be religious followers, holding strong religious beliefs (Winters et al., 2010; Ross et al., 2012); and those that identify as religious report higher levels of perceived addiction to pornography when compared with atheists or agnostics (Bradley et al., 2016).

Difficulty to control the use of pornography therefore seems to be experienced by users rather than demonstrated. In terms of repeated attempts to quit, Kraus et al. (2016) found within their sample of men interested in seeking help for PPU that 6.4% reported previously seeking treatment. When help seekers have been investigated it has been suggested that it is the negative symptoms associated with pornography use rather than the frequency of use that accounts for the help seeking (Gola et al., 2016); however, for females, frequency may be related to seeking help alongside negative symptoms, personal beliefs, and social norms (Lewczuk et al., 2017). In sum, for some, quitting or being abstinent from pornography is difficult, especially if this is their only sexual outlet.

Physical/psychological problems related to use:

The term 'PIED' (Pornography Induced Erectile Dysfunction) is frequently discussed and reported on self-help sites and within self-help books (for example Wilson, 2014). There are also several studies that correlate internet pornography use with erectile dysfunction and other sexual dysfunction such as delayed orgasm (Park et al., 2016; Bőthe Tóth-Király, Griffiths, et al., 2021a). Qualitative studies of pornography users and their partners also report sexual dysfunctions associated with PPU (Cavaglione, 2009; Cavaglione & Rashty, 2010). Although these studies contain rich data and will be addressed later in this review, claims of causation cannot be supported. In fact, no empirical studies directly linking erectile function and PPU have ever been found (Ley et al., 2014) and erectile problems are not caused by viewing more pornography (Landripet & Štulhofer, 2015; Prause & Pfaus, 2015; Sutton et al., 2015). Despite high levels of erectile dysfunction (ED) in young men found in two studies (Capogrosso et al., (2013), who found 26% in those under 40; Mialon et al. (2012) - 30% age 18-25)

the main predictors were found to be smoking and illegal drug use, depression, and poor physical health - neither study speculated about pornography use. A study by Grubbs and Gola (2019) that used a cross-sectional and longitudinal design found that there was no evidence that pornography use alone was associated with ED. They did find however, that self-reported problematic pornography use was associated with ED but without causation, thus suggesting other factors such as mood, anxiety, or stress to be contributing factors in the development of erectile problems.

The study by Grubbs and Gola (2019) leaves a research/practice gap. PIED is so frequently reported both online and in clinic there must be more to examine regarding this experience. Ley et al. (2014) suggest that it is not the pornography that directly effects users in this way. They propose that as pornography use is nearly always accompanied by masturbation, it is the refractory period and the associated conditioning that occurs in frequent pornography use that explains any reported sexual performance issues.

Within the academic literature PPU is often shown to occur alongside or comorbid with other psychological disorders and problems; in a study by Kraus, Potenza, et al. (2015) 94% of the sample met the criteria for at least one psychiatric disorder, and 57% met the criteria for two or more. In addition, those that self-report with PPU are more likely to have current or past contact with mental health services, have suicidal ideation (Cooper et al., 2001), more drug and alcohol problems (Svedin et al., 2011) and have symptoms of attention deficit hyperactivity disorder (Bóthe et al., 2019). Camilleri et al. (2021) suggest, through their cross-sectional study, a significant relationship between PPU and mental health difficulties; Guidry et al. (2020) found that PPU is associated with greater psychological distress.

However, the actual links between psychological distress and pornography use are not clear (Grubbs, Stauner, et al., 2015). There are some studies that have examined the relationship, each finding mediating factors. Levin et al. (2012) found that frequent use of pornography was associated with depression, anxiety, and stress, and that experiential avoidance acted as the mediating factor amongst participants with 'clinical' levels of PPU. The relationship between pornography use and distress has been found to be mediated by loneliness by Kim et al. (2009); and by relational conflict by Gwinn et al. (2013). Grubbs, Stauner, et al. (2015) found that the relationship between frequency and distress was mediated by perceived addiction, i.e., psychological distress associated with pornography use might not occur from using pornography itself but might result from the attitudes individuals hold about using pornography. Other judgements related to pornography use have also predicted distress, in particular if a moral transgression has occurred (Grubbs, Wilt, et al., 2018). This highlights the role of social shame and guilt attached to using pornography; Grubbs, Exline, et al. (2015) found that distress related to viewing pornography was strongly related to conservative values and being religious. Grubbs, Perry, et al. (2019) propose two pathways to PPU, one being behavioural dysregulation or using excessive amounts of pornography and masturbating which leads to reduced functioning and distress; the other, and more novel, is that of moral incongruence, that people, often

religious, will disapprove of their pornography use and it is this judgement that leads to the distress. Of note, the connection between pornography use and depressive symptoms has been suggested to arise through this mechanism (Perry, 2018a).

It is therefore suggested that for the individual user their psychological problems are indirectly linked to PPU, the causation is due to related issues and consequences: avoidance of feelings, loneliness, relational conflict, perceived addiction, a moral transgression, and religiosity. However, all these studies use a cross-sectional questionnaire design, meaning that the causal factors were limited by the choice of questionnaires administered. Relationships between the variables were found, but 'why' these relationships exist remains unclear.

Impact on functioning:

Several studies (e.g. Park et al., 2016) state that excessive or problematic pornography use has a negative impact on functioning, i.e., within the user's relationships, work domain, and effecting legal or financial issues. However, the studies that they refer to, for example Schneider, (2000a), focus on the general aspect of cybersex and thus include a range of behaviours not usually found when PPU is the primary concern. It has been reported that PPU may be distinct and different from other sexual activity related issues (Duffy et al., 2016); one example of this is that PPU differs from what is termed sex addiction in that the latter involves direct human contact, whereas for PPU this may be too anxiety provoking as compared to the accessible, anonymous, affordable experience offered through online pornography (Short et al., 2016).

From a thorough investigation of the academic literature that focuses specifically on PPU there are some studies that do give support that there is a link with functioning. Cavaglioni (2009) in his analysis of an internet forum for people with PPU found several narratives that indicated a relationship between PPU and problems regarding productivity, and within relationships; many users reported that they were feeling isolated as a result of PPU. Although these findings have to be taken with caution due to the methodology, this does support the idea that PPU is linked directly to problems associated with functioning. Levin et al. (2012) in their sample of college males found that frequency of viewing pornography predicted several outcome variables including social functioning, with increased viewing leading to more problems. However, the effect sizes were only modest, the sample size relatively small, and the population was 'non-clinical' i.e. not treatment seeking. Twohig et al. (2009) found in their sample of male college students considered to have PPU, one of the strongest negative effects was on behavioural outcomes; damage to relationships, and problems at work or college. Interestingly the negative outcomes did not increase with increased use of pornography but were mediated by attempts to control thoughts and urges associated with pornography. This goes against the straightforward idea that PPU directly impacts functioning due to the time spent using pornography,

i.e. users have less time to devote to other aspects of their lives. Rather, functioning is reduced due to a cognitive and affective component.

Can an addiction model be used?

In summary, it is unclear whether the experience of PPU has a direct impact on functioning; causes increased psychological problems; is difficult to control; or leads to tolerance and increased use. Concepts such as craving, and withdrawal do not seem to occur. Although PPU shares some similarities with an addiction model, there are important aspects of PPU that do not. Once elements such as craving, and withdrawal are taken out of the equation then we are left with a set of behaviours that are liked/pleasurable, difficult to stop and once taken to excess may lead to problems in functioning and increased distress. If we use a falsification approach (Popper, 1963), as Prause et al. (2017) does, in that every major criterion of a model should hold true otherwise the entire model falls apart, then the addiction model of PPU must ultimately be rejected.

The concept of pornography addiction, rather than simply PPU, is often subsumed by the term hypersexual disorder (often called sex addiction). The DSM 5 rejected the term hypersexual disorder; one of the developers has been quoted to say: "To include this as an addiction would require published scientific research that does not exist at this time" (Charles O'Brien, as cited in Ley et al., 2014). Similarly, several organisations have rejected the addiction model or concept of sex and/or pornography addiction: The American Association of Sexuality Educators, Counselors and Therapists; The Association for the Treatment of Sexual Abusers; The Center for Positive Sexuality; The Alternative Sexualities Health Research Alliance; and The National Coalition for Sexual Freedom.

Furthermore, as the addiction model is situated within the same frame of reference as the disease or medical model there are connotations in terms of perceived self-control and intervention (Agich, 1983). In a therapeutic context these aspects may limit what can be done, individuals maybe resistant to exploring more internal mechanisms for their difficulties. Applying interventions primarily designed for substance-based addictions to PPU is likely to be unsuccessful and may even harm the clients involved; key psychological processes maybe overlooked in favour of an abstinence-based approach (Billieux et al., 2015). Another potential issue with PPU being treated as an addiction is the addiction private treatment centres and the practice of staff often being in recovery themselves; research has shown that practitioners in recovery over diagnose addiction related disorders (Culbreth, 2000). The private addiction industry is a large, lucrative business that will benefit (in terms of US medical insurance) from the inclusion of PPU as an addiction; once the addiction label is applied then the users will therefore be required to pay for treatment (Ley et al., 2014).

Another aspect of classifying PPU as an addiction is the role of morality and sociocultural function. Seeing the use of pornography as addiction is a morally constructed viewpoint that aims to maintain

the current sexual order and protect society from supposed harm (Clarkson & Kopaczewski, 2013); and implies that experts are required to treat those that transgress (Duffy et al., 2016). The label addiction supports moral judgements about pornography and the suppression of sexual expression. Conflict with an individual's sexual preferences and imposed social norms does not equate to pathology (Moser, 2013); such ideas have been applied in the past regarding sexuality, with past diagnoses of homosexuality, for example (Humphreys, 2018). What is normal or pathological is a social construction dependant on current theories, place, and time (Foucault, 1978; Keane, 2004).

2.3.3.2 Impulsivity/compulsivity

Impulsivity can be defined as “a predisposition toward rapid, unplanned reactions to internal or external stimuli without regard for the negative consequences” (Moeller, Barrat, Dougherty, Schmitz & Swann, 2001. p. 1784). In pornography use this translates as becoming aware of a sexual cue and beginning to use pornography without thinking about the consequences, such as demands on one's time (Ley et al., 2014). Whereas compulsivity is defined by the American Psychiatric Association as “the performance of repetitive behaviours with the goal of reducing or preventing anxiety or distress, not to provide pleasure or gratification” (APA, 2013). Although pornography use can be repetitive, the function of the behaviour is more contentious. Whilst pornography use has been theoretically linked with emotional regulation or reducing anxiety and distress, experimentally the opposite has been found, with those reporting PPU having less baseline negative affect than controls (Prause et al., 2013). It has also been suggested that over time any goal-directed behaviour may become habitual and controlled via a stimulus-response association (Fineberg et al., 2010; Everitt & Robbins, 2005). This further negates the role of compulsivity in PPU and challenges the classification of PPU as a compulsive sexual behaviour, often operationalised as hyper-sexual disorder (for example Potenza et al., 2017). Hyper-sexual disorder was rejected by the DSM 5, however the latest version of the International Classification of Diseases – ICD 11 has included compulsive sexual behaviour disorder but under the category of impulse control disorders (WHO, 2018). Impulse control disorders are defined as “the repeated failure to resist an impulse, drive, or urge to perform an act that is rewarding to the person (at least in the short-term), despite longer term harm either to the individual or others” (Grant et al., 2014. p. 125). The DSM-IV-TR elaborates on this definition by adding that the behaviour is preceded by a rise in tension when resisting the behaviour and followed by relief of tension (APA, 2000).

The role of both impulsivity and compulsivity in PPU has been challenged by Bőthe Tóth-Király, Potenza, et al. (2018), who found only weak associations between the three concepts in their large (N=13,778) community sample. This finding contradicts several previous studies and commentaries. They suggest that other factors, such as personality or other individual difference factors, may be worthy of further research. However, it has to be noted that Bőthe Tóth-Király, Potenza, et al. (2018)

relied upon self-report questionnaires rather than taking a more rigorous experimental methodology. Although not impulsivity per se, Castro-Calvo (2021) did demonstrate a link between decision making impairments and PPU (prioritising short-term small gains, over long-term large gains), thus supporting the idea of individual differences rather than psychiatric diagnosis.

2.3.3.3 How best to classify PPU

The reasons for not classifying PPU as a form of addiction or as a compulsive sexual disorder have been outlined. To classify PPU as an impulse control disorder makes more theoretical sense, especially if the longer-term habitual nature of PPU is considered, i.e., the pleasure and gratification element decreases over time and the user is left with a repetitive behaviour that is stimulus controlled and relieves an urge to use. However, classifying any set of behaviours or emotions as a disorder implies that there is a cut off between 'normal' use and disordered use and that a professional is required to assess this distinction before a diagnosis is given. Classifying PPU as a disorder redefines pornography use as a medical problem (Voros, 2009) and has several implications previously reported already.

Despite the 'explosion' of publications focused on behavioural addictions since the 1990s (Voros, 2009) there is still little consensus regarding how to classify PPU. Some authors such as Schneider (2000b) believe that the terms can be used interchangeably, whereas others report that it matters a great deal as evidence-based interventions are developed through the process of making predictions generated by models (Prause, 2017). With this in mind it is suggested that PPU is taken away from the medical domain and classified simply as PPU.

2.3.4 Epidemiology

Authors such as Carnes (1991) put forward that up to 6% of the population of the US are addicted to sex; this is similar to the 3% to 6% put forward by Kuzma and Black (2008) concerning compulsive sexual behaviour; however, these extreme estimates are based upon clinical speculation. Skegg et al. (2010) propose an empirical estimate of 0.8% of men and 0.6% of women reporting problematic sexual behaviours. In terms of PPU specifically, Ley et al. (2014) calculate the prevalence to be 0.58% and 0.43% of men and women respectively.

Survey studies based in the US and in Sweden indicate that between 2% and 17% of pornography users meet established criteria for compulsive and/or problematic pornography use (Albright, 2008; Ross et al., 2012). In a sample of 1,102 members of a general Facebook group who had used pornography in the last six months, 3.6% were identified as having problematic use (Bóthe, Tóth-Király, Zsila, et al., 2018); in a larger representative sample of 9963 men and 10131 women, 4% and

1% respectively, self-reported as addicted to pornography (Rissel et al., 2017). However, as discussed, how PPU is defined varies and as such, specific findings must be treated with caution. In addition, several studies rely on the concept of '*perceived* addiction' or '*self-reported* PPU'. Both these terms can be seen as a form of self-diagnosis. Many people may believe they are addicted to pornography, however it is unclear the extent to which these beliefs represent other experiences of addiction, whether one person's idea of dysregulation for example, is more or less than another's idea of being out of control (Grubbs, Grant, et al., 2018).

2.3.5 The experience of PPU

There are several PPU case reports contained within studies (for example Cooper et al., 1999) but these seem to be an amalgamation of different clients and do not contain enough personalised information to be classed as a case study (Yin, 2009); in addition, many do not focus on PPU specifically and include other behaviours associated with the term sex addiction. These case reports do give a descriptive overview of some of the issues that people can present with but seem to be more concerned with supporting the addiction model of PPU, adding little to what has been presented already within this review. An exception to this is a case study by Smaniotto et al. (2022) who present a client in therapy with self-reported pornography addiction. The paper offers several different, and at times competing narratives, with the intention of explaining the client's difficulties. Although the words formulation or conceptualisation are not mentioned, there was a clear move away from an addiction framework to a more psychological understanding. The researchers presented how the self-reported pornography addict's distress was related to their moral incongruence concerning their use of pornography.

Seventeen qualitative studies were found within the peer reviewed academic literature that analysed the experience of PPU or pornography addiction. Eight used semi-structured interviews, three open ended questionnaires, and six analysed secondary data from online sources.

Hanseder and Dantas (2023) interviewed 13 men with PPU. Despite declaring their work, a phenomenological study using thematic analysis, the findings read like a list of facts that had been stated by the participants: Themes of 'reported impact', with sub-themes of 'physical health', 'financial impact'. Similarly, Blinka et al. (2022) took the same approach, but with more participants, 23. Findings included, amongst others, how long the participants used pornography for, whether they fulfilled the criteria for behavioural addiction, and what negative consequences they experienced. The authors concluded that the addiction model is a helpful concept for those suffering from PPU.

Wordecha et al. (2018) interviewed nine treatment seeking men with PPU. The participants were also asked to keep a journal of pornography use for 10 days. The findings included how the majority of participants used pornography in a binge pattern, mostly to regulate feelings of low mood and stress.

The range of pornography use experiences were varied within the sample. The focus on binge use is noteworthy, however the definition of a binge – either two masturbations a day or using pornography for an hour or more in one single session – despite being based on previous studies, seems intuitively low.

Burke and Haltom (2020) interviewed 35 religious' participants with PPU. The term 'redemptive masculinity' was used to describe their main findings. This term denotes how participants upheld religious and scientific values to explain how men are created by God to be hard wired to suffer from pornography addiction, and how abstinence is seen as a masculine feat.

Fraumeni-McBride (2023) interviewed seven women with PPU. Their qualitative analysis indicated that all participants wanted to stop using pornography but could not do so despite repeated attempts and much effort. This created distress and a felt sense of stigma. They also described general pornography usage and patterns, signs of pornography being used as a coping strategy, and conflict with religious values.

Thomas and Binnie (2023) interviewed three sexual minority men with self-perceived PPU. Using interpretive phenomenological analysis, the themes created highlighted the participants complex relationship with their sexuality as an important aspect of their PPU. There were moral conflicts between expressing their sexuality through pornography, and religious/social narratives that created a sense of 'wrongness'. In addition, all participants were seen as using pornography to manage negative emotions.

Hall and Larkin (2020) interviewed 19 self-identified recovering sex and pornography addicts after they had completed therapy at a sex addiction clinic. The authors, who also ran the clinic, reported that the participants referenced several therapeutic factors, and considered the group interventions more meaningful than the individual sessions. The paper itself lacks several qualities that one would expect to find in a qualitative research report, such as an introduction, a section on data analysis, detail on demographics. Although, potentially of interest the paper remains more of an evaluation rather than research.

Zitzman and Butler (2009) interviewed 14 women who were attending couples therapy for their partner's pornography use. The interviews were analysed qualitatively, but the analytical framework was not specified. Themes centre on attachment and the idea of a fault line developing into a rift and then estrangement. These themes relate to the discovery of pornography use and perceived infidelity; a sense of disconnection within the relationship; and finally, the end of the relationship due to feeling emotionally unsafe.

Palazzolo and Bettman (2020) used a survey asking open ended questions of 53 participants with PPU. Through the use of a thematic analysis, several findings were stated. The three themes focused on effects on mental health, effects on relationships, and the experience of dependency. The themes

read as a list of reported facts, for example, anxiety and depression, lack of intimacy, difficulty stopping use. Ince et al. (2023) also took a surface level approach to their research. They surveyed 67 participants with self-reported PPU and undertook a qualitative analysis. Similar, symptom-based findings were presented as facts, for example a theme of 'post-pornography complaints' had the sub-themes 'anhedonia', 'social anxiety'.

Taking an addiction perspective on PPU, King (2003) focused on the experiences of female partners of clergy that use pornography. 40 participants completed a survey, with some open-ended questions. Although there was no analysis of the data there were some interesting quotes and summaries that focus on self-blaming attitudes, shame, and isolation.

Cavaglioni (2009) undertook a narrative and interpretative analysis of 2000 messages from an Italian self-help forum for PPU. Although there are methodological issues raised with the quality of data, such as the inability to check the authenticity, there are several interesting findings. There is the idea of isolated users and due to the isolation, there is escalation in their pornography consumption. One group of users were described as shy, introverted, lacking self-esteem. They often used pornography instead of other activities such as studying, reporting developing a tolerance for the type of pornography used, with a search for ever more extreme content. Another group is defined as having a double life; these tended to be older users, some with partners and children. This group reports that their 'normal' life gets eroded with increasing pornography consumption. All groups tend to be disgusted with their behaviours and often use scatological language to describe themselves. This labelling of the self morphs into demonization if the users are particularly religious, and if not religious then a disease metaphor is used, that they are mentally unwell. The majority of users report a decrease in functioning and isolation from the outside world and missing out on life. Many users report difficulties in sexual relationships caused by their frequent masturbation. Whereas for some the pornography is not just for masturbation but they also become fixated with collecting and organising their downloaded pornography collection.

Fernandez et al. (2021) and Chasioti and Binnie (2021) also analysed the data from self-help or reboot forums (see section 4.4. for more information on reboot forums and online communities). The former analysed 104 journals created by male forum members to explore the experience of abstinence. Using thematic analysis, they considered how participants saw abstinence as the solution to PPU, however impossible abstinence seemed. The participants placed importance on having the right support to gain control of their addiction. The authors saw this as potential evidence for the utility of an abstinence approach to PPU. Conversely, Chasioti and Binnie (2021), through narratively analysing 100 posts from 40 forum members, suggested that abstinence was a major factor in maintaining distress. Their research focused upon the aetiological factors involved in PPU. They recommended moving away from a biomedical understanding of addiction to one that sees PPU as a complex web of mutually informing causal connections, including vulnerability, a hypersexualised culture, gender expectations, and self-stigmatization. The participants were interpreted as seeing themselves as

weak and preyed upon by pornography, being abstinent was empowering as it fostered hope, hope that they would regain or gain masculinity.

Zou et al. (2023) recruited participants to interview from a Chinese reboot forum. Using critical discourse analysis, they saw a series of seemingly contradictory ideologies. Although attempting to free themselves from the Chinese states control of sexual desire by finding their own way, the participants also endeavoured to be noble, adhering to anti-capitalistic communist party views and abstain from masturbation. It is interesting to see the overlap, and differences, between a Chinese and Western narrative concerning reboot. In particular the puritanical stance that rebooters adopt.

From the same self-help forum as Cavaglione (2009), Cavaglione and Rashty (2010) focused on the narratives of female partners posting on the forum. One thousand one hundred and thirty messages were analysed and themes of trauma, betrayal, being in limbo, loss (of the partner and of sex life), an idealised past relationship with partner, and inadequacy feeding their own low self-esteem.

Bergner and Bridges (2002) collected 100 written accounts made by the partners of men who were heavy users of pornography. The reports were gathered from various online forums for sex and pornography addiction. Generalised themes were presented that focused on a typical presentation. Findings suggested that due to the partners pornography use, women perceived themselves, their partner, and their relationship in a negative way. Discovery of the PPU seems to have been a traumatic betrayal, with the female partners feeling rejected or used sexually. The female partners took one of two positions regarding their partners that they were either addicted/had a mental health problem and therefore not as responsible, or that they were bad and selfish and ultimately making a choice by putting the pornography before their relationship.

The lived experiences of PPU do support elements that have been put forward already in this review and give a richer account of the distress of being a problematic user. Given the methodology used several of the studies focused on samples not studied before, giving a voice to participants often excluded from larger questionnaire based quantitative studies. However, it has to be noted that that several studies were of a poor quality in terms of their design and/or methods. Many of the studies aims were to prove or disprove the concept of addiction rather than exploring the lived experience of PPU. Although several of the better studies had interesting and novel findings, none were explanatory.

2.3.6 Causes/associated factors

Several factors associated with PPU have already been explored within this review. Other important factors to consider will now be put forward, and there will also be a review of possible causational or predisposing factors.

High sex drive is one aspect not addressed so far and is supported by several researchers. Sexual arousal and desire have been found to account for more variance than concepts such as hypersexuality for the sexual behaviours investigated (Walton et al., 2016); and more than gender (Wehrum et al., 2013). Prause (2017) puts forward that not enough studies account for sexual desire or high sex drive and if this factor were to be put within the models, then the effects due to sexual behaviours or pornography consumption would disappear. This idea is supported by Winters et al. (2010) who highlight the role of sexual desire within problematic sexual behaviours in a sample of self-identified sex addicts.

Higher levels of stress and general negative emotions have been suggested as predictors of PPU in longitudinal studies (Rousseau et al., 2021), and in retrospective accounts (Antons et al., 2023), leading to stress being seen as predisposing factor for the development of PPU. Loneliness has been associated with pornography use (Yoder et al., 2005). It has also been put forward that participants who view pornography are more likely to experience loneliness, and that being lonely was a predictor of pornography use, a bidirectional role (Butler et al., 2018). In regard to problematic use, Bőthe, Tóth-Király, Zsila, et al. (2018) found that problematic users had greater levels of loneliness compared to non-problematic users.

In terms of predisposing factors, it has been suggested that having a history of traumatic experiences and/or poor attachments to caregivers is influential in developing PPU. Although there are links between child sexual abuse and pornography use later in life (Leroux et al. 2020), There is little data to support any links to PPU. The only study found in this review was by Bedoya et al. (2023), who used MTurk to recruit 182 participants, administered a measure of PPU, and a one item measure on whether participants had been sexually abused. They found that participants who reported they had been abused scored higher on the measure of PPU. Trauma is a frequently occurring idea within much of the general addiction related literature, when PPU is seen as an addiction, this causal link is inferred. However, once the referencing trail is followed from the articles claiming the links, there is little supporting data, only opinion. Apart from the survey study above, the only other research that suggests a link between trauma, attachment and pornography was by Ybaraa and Mitchell (2005) – another survey-based study, researched with adolescents, and focuses on pornography use generally rather than PPU. Of note the online forum-based research by Cavaglioni (2009) highlighted that in their sample 302 online users with PPU there were no histories of traumatic events, and co-morbid substance misuse was rare. Another explanation as to why the link between childhood trauma and PPU persists, is that PPU is frequently classified as compulsive sexual behaviour. There is much more research focusing on the role of trauma within compulsive sexual behaviour (Antons et al. 2023), and there are also theoretical mechanisms to help explain the association, for example traumatic re-enactment (Freud, 1920; van der Kolk, 1989; Miller, 1994).

2.3.7 Measuring PPU

Several scales have been produced to measure PPU; 95% of studies that investigate PPU have used researcher generated questionnaires (Kor et al., 2014). There is blurring between subject matters; often attempts are made to measure PPU specifically using a measure that encapsulates a wider set of behaviours, for example the Internet Sex Screening Test (Delmonico & Miller, 2003). Existing measures are often adapted to focus on PPU, for example the Short Internet Addiction Test adapted to Online Sexual Activities (Wéry et al., 2016). There are measures that attempt to assess pornography use generally, and also those that focus purely on PPU. However, each tends to focus on certain aspects, such as overall use/consumption, cravings, or designed to ascertain whether an individual meets a proposed 'diagnosis'. The main measures detailed within the academic literature that are focused on PPU will now be presented.

The Cyber Pornography Use Inventory (Grubbs et al., 2010) is a 31-item scale with a focus on addictive patterns, guilt, and online sexual behaviour within religious populations. Although, the title indicates a measure of pornography there are also several questions that relate to cybersex more generally. The Cyber Pornography Use Inventory 9 (Grubbs, Volk, et al., 2015) is a revised, shorter version. Several questions, including those concerning non-pornography related behaviours are removed. The remaining questions, although relevant are so focused on an addiction model that several are not supported through research, e.g. "I feel depressed after viewing pornography".

The Compulsive Pornography Consumption (Noor et al., 2014) is a five-item scale that focuses on the concept of lack of control, and also general thoughts about pornography viewing. The scale was derived from a sample of MSM and as such can be therefore classed as non-representative.

The Pornography Craving Questionnaire (Kraus & Rosenberg, 2014) is a 12-item scale that focuses on the concept of craving and questions assess desire thinking. Although, useful for research purposes its narrow scope reduces its clinical utility, and also fails to cover enough aspects of PPU.

The Problematic Pornography Consumption Scale (Bóthe, Tóth-Király, Zsila, et al., 2018) is an 18-item scale that follows Griffith's addiction components model (Griffiths, 2005); detailing three groups of pornography users: non-problematic; low-risk; and at-risk. Despite strong psychometric properties there are weaknesses; a relatively low sample size based in one religious European country (Hungary), the inclusion of factors that are not supported within the academic literature; tolerance (in term of amount consumed), and withdrawal.

The Problematic Pornography Use Scale (Kor et al., 2014) is a 12-item scale containing four factors: distress and functional problems; excessive use; control difficulties; use for emotional regulation. Although an addiction framework is implied, the questionnaire does not contain the word addiction. The questionnaire is comprehensive and can be used to both assess severity and treatment outcomes. In addition, the scale has excellent psychometric properties (Kor et al., 2014).

Overall, despite several published questionnaires related to pornography use, and some that focus on PPU, it can be put forward that most can be discounted due to methodological or ideological constraints. The only questionnaire that seems to have enough merit for clinical use is the Problematic Pornography Use Scale.

2.3.8 Interventions

Intervention studies that focus on PPU are well described within recent systematic reviews (Sniewski et al., 2018; Antons et al., 2022; Roza et al., 2023). The quality of the reviews is mixed, two were relatively comprehensive but did not explore the grey literature or detail excluded studies. Of note is a review by Antons et al. (2023) which focussed on compulsive sexual behaviour, in addition to PPU. This review also contained studies that had no set design, only opinions; therefore, less prominence is given here to the findings of Antons et al. (2023). This section of the literature review also contains studies missed by all three reviews but does not include non-peer reviewed studies.

Cuppone et al. (2021) investigated the effects of high-frequency, repetitive transcranial magnetic stimulation (rTMS) in the treatment of behavioural addictions. For the participant with PPU, rTMS was found to decrease addictive behaviours and improve executive control.

Naltrexone, a competitive antagonist, has been studied in three case studies (Bostwick & Bucci, 2008; Capurso, 2017; Kraus, Meshberg-Cohen, et al., 2015) with mixed results; decline in 'addictive symptoms', sexual urges and pornography viewing, improvement in functioning, but also anhedonia (inability to feel pleasure). Nalmefene, an opioid antagonist, was studied by Yazdi et al. (2020) using case study methodology. Initially successful in reducing cravings and the use of pornography, upon discontinuation the effects stopped. Once recommenced improvements were noted. Paroxetine, a selective serotonin reuptake inhibitor (SSRI), was studied in a case series with three participants (Gola & Potenza, 2016); initially successful in reducing pornography and anxiety, but ultimately resulted in new unwanted sexual behaviours. Paroxetine and Naltrexone were investigated using a Randomised Control Trial (RCT) method by Lew-Starowicz et al. (2022). Both medications were seen as superior to placebo in terms of cessation of addictive behaviours, but not on outcome measures of self-reported pornography addiction.

Pharmacological interventions for PPU are seen as promising by Sniewski et al. (2018) but more far more evidence is required. Indeed, for two of the case studies real improvement was indicated, especially given the quite severe level of PPU the participants were experiencing. However, some of the effects of the medications administered occurred perhaps through other mechanisms, for example as a mood enhancer rather than specifically targeting PPU (Roza et al., 2023).

In terms of psychological therapies, Cognitive Behavioural Therapy (CBT) was investigated in several studies. Ortega et al. (2020) published a case report of a 19-year-old man receiving 13 sessions of

CBT for his PPU with good outcomes. A pluralistic group integrating CBT and motivational interviewing was detailed in a case study with 35 participants (Orzack et al, 2006); with reported increases in quality of life, decrease in depressive symptoms, but no reduction in pornography use. Young (2007) investigated the use of CBT within an addiction clinic for people with internet addiction. Of the 114 participants, 34 were identified as having a primary problem relating to pornography. Behavioural and cognitive interventions were offered over 12 sessions, with a six month follow up. Improvement across all goals were seen by the third session, effective 'symptom' management by the eighth, and improvements maintained at six month follow up.

An online psychoeducational and recovery program based on CBT was investigated by Hardy et al. (2010), with improvements made in pre and post measurement of a range of different aspects. An internet delivered behaviour change programme was investigated by Rodda and Luoto (2023) with 25 participants. Only 14 completed the intervention, those that did had significant reductions in maladaptive behaviours associated with PPU, frequency of pornography use, but not duration. The above two studies based on a CBT approach show promise, but both lack a rigorous methodology, i.e., no control group. Bóthe, Baumgartner, et al. (2021), remedied this limitation by performing a RCT with 264 participants reporting PPU. An online self-help intervention based on CBT was found to significantly improve PPU variables, and related outcome measures; but not time spent using pornography. However, the CBT group had only 11% of participants finish the intervention compared with the active control (55%).

Mindfulness based interventions were investigated by Sniewski et al. (2022). Using a quasi-experimental study, it was found that two out of 12 participants reduced their pornography use, however, seven had significant reductions in PPU related outcome measures. Holas et al. (2020) also studied the effects of mindfulness and found the reverse, the 13 participants significantly reduced their time spent using pornography, but there were no significant reductions in PPU outcome measures.

Acceptance and Commitment Therapy (ACT) was investigated by Twohig and Crosby (2010) using multiple baselines across participants design, thus creating a control; by Levin et al. (2017) using a quasi-experimental design; by Crosby and Twohig (2016) using RCT methodology. The first study demonstrated encouraging results in eight, hour and a half sessions; five out of six participants had notable reductions in pornography use by the end of treatment, four at follow up; all participants reported improvements in measures of quality of life and decreases in measures of OCD and scrupulosity. The RCT offered the 26 participants a 12 session, one hour, treatment based on the earlier study in a waitlist control condition. Results indicated that pornography viewing significantly reduced, with modest gains at follow up; there was no impact on measures of functioning suggesting that quality of life may take longer to develop after pornography viewing has decreased. Levin et al. (2017) assessed the applicability of a self-help version of ACT with 19 participants, despite significant improvements, continuation was poor, and for those that did 'complete' several only read half the

book. All three studies show promising results, but they suffer from a lack of diversity within the samples, all were white men with a strong religious affiliation; the small sample size is a further limitation.

There have also been several other case studies/series for other (non-CBT) psychotherapies: Wéry et al. (2019) described a successful case study of three years of integrative therapy (CBT and psychodynamic); Shorrock (2012) four years of integrative group and individual therapy; Psychodynamic (Adlerian) counselling has been described in a case study (Fall & Howard, 2015) but outcomes are unclear; systemic/structural therapy was used in another case study (Ford et al., 2012) with a decrease in pornography use and improved marital satisfaction; Zitzman and Butler (2005) investigated the role of couples counselling, with six couples, with the intervention found to be effective in several relationship based domains.

Todorovic et al. (2023) investigated the effectiveness of brief interventions in a non-clinical sample of 711 participants. One of five 20-minute interventions (mostly inspirational speeches/clips: meaning of life, willpower, awe of life, mindfulness, and a control group) was shown after being cued by viewing pornography. The results were mixed, with the 'meaning of life' intervention (a brief text about authenticity and living according to one's values, and a video clip of Steve Jobs discussing values) successfully reducing cravings for pornography.

Finally, three case studies reporting the combination of drug therapies with CBT report good outcomes (measures of PPU, frequency of use, reductions in anxiety and depression) (Sharma et al., 2022; Kraus et al., 2015; Şenormanci et al., 2014).

In summary, there is some limited evidence of the effectiveness of face-to-face interventions for PPU; online interventions seem to have unacceptable levels of drop out and overall engagement. The role of case studies needs clarification. As with many published case studies, the outcomes described above in nearly all case studies were favourable – 'failed' cases studies are rarely published (Krivzov et al., 2021). Effectiveness cannot be inferred from case studies; however, much can still be learnt. Case studies provide an opportunity to demonstrate creativity and can be inclusive of presentations and populations often missed from other methodologies (Yin, 2009). To demonstrate effectiveness RCT methodology is considered the most appropriate to use (Westen & Morrison, 2001). The most effective medical approaches for PPU seem to be based on Paroxetine/Naltrexone. The most promising psychological approaches concern ACT. ACT focuses on behavioural change and the process of cognition that maintain difficulties. An ACT approach will encourage a sense of acceptance and present moment focus, both of which make intuitive sense given the mechanisms which seem to maintain PPU elicited from this review.

2.4 Towards a preliminary model of PPU

There are various models of PPU in the academic literature. As discussed earlier in this chapter, these explanatory theories relating to PPU are only given a brief inclusion, they will be discussed in relation to the results of this study in Chapter 8. One such theory by Grubbs, Perry, et al. (2019), has already been described and focuses on either excessive use or moral incongruence. Two other models are often cited, both of which focus on behavioural dysregulation. The Interaction of Person-Affect-Cognition-Execution (I-PACE) model (Brand et al., 2016) is a theoretical framework for the development and maintenance of the addictive use of internet applications; namely gaming, gambling, pornography, shopping, or communication. Whilst the model can be seen as comprehensive and makes intuitive sense, there are not many unique factors that distinguish it from a general model of addiction or even a generic model of mental health. The 'Sexhavior Cycle' (Walton et al., 2017) describes a cycle of sexual urges leading to a sexual behaviour, and then processes of sexual satiation; however, they add the element that some people with 'hypersexuality' will experience what they define as 'cognitive abeyance'. These individuals with a high sex drive when in a state of sexual arousal will fail to engage in logical cognitive processing thus engaging in behaviour that might be incongruent with their morality, be otherwise risky, or they may regret later. Although the term cognitive abeyance sounds new, the relationship between sexual arousal and decision-making has already been studied (Peters et al., 2006). All three models have merit but do not seem to fully encapsulate the processes that would help explain both the development and maintenance of PPU; they are either too specific or generic.

Figure 1. demonstrates a diagrammatical display of the main research findings rather than a coherent model or theory. It is suggested that there are several mechanisms that effect PPU, key mediating factors between pornography use and distress/functioning, and there are significant consequences or outcomes associated with PPU.

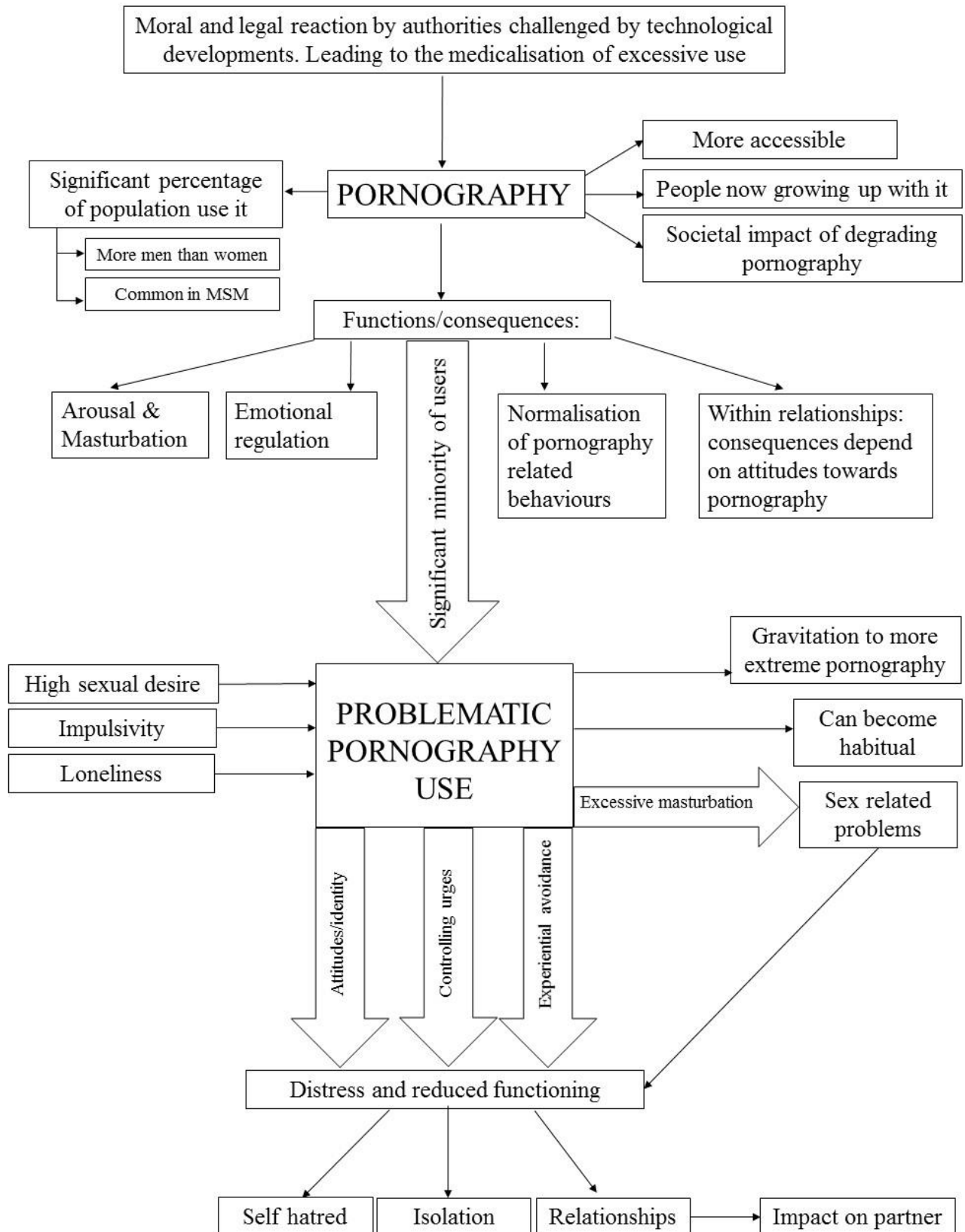


Figure 1. Diagrammatical representation of key themes from the literature review

2.5 Rationale

The previous sections and the above diagram highlight not only what we know so far about PPU but also what we do not know. There are indications from the research literature as to the experience of PPU, but these lack any real explanatory depth. As to the development and maintenance of PPU, again there are indications of developmental factors but no real clarity, and maintenance factors are only alluded to.

The lack of a comprehensive model can hinder professionals in their work with clients. A psychological model of a problem or disorder allows for a wider conceptualisation or formulation of the clients' difficulties and can give an evidence-based direction for the therapeutic work. Often models contain information or nuances that can be missed from simply being with the client. The creation of a model does not however mean that it will fit all clients or that thorough assessments and individualised formulations become redundant. A model drawn through research can be integrated, to the benefit of both the client and the professional.

Although the preliminary model (figure 1) is potentially useful, it is suggested that far more research is required. However, we can base some initial recommendations based upon it. Practitioners could discuss aspects of the model with their clients. Of note would be the clients' first exposure to pornography and the historical pattern of use. This would allow an exploration of how normalised their attitudes and behaviours concerning pornography are. It may be that clients hold particularly negative attitudes to pornography per se and as suggested in the research, it is these attitudes that relate to the distress associated with pornography use within relationships, or indeed where there is conflict with their faith or belief system. Why clients use pornography is a vital aspect to explore; practitioners could focus on whether positive or negative reinforcement is maintaining their use. Individual factors leading to problematic use could also be discussed, as suggested in the model these may centre on high sexual desire, impulsivity and/or loneliness; these will have different interventions or strategies associated with them. A greater awareness in clients of the outcomes associated with PPU may be enough alone to reduce them, for example that it is masturbation that leads to sex related problems or being aware and pulling back from the gravitation towards more extreme material. From a psychological perspective having a focus on the mediating factors involved in the levels of distress experienced and the reduced functioning associated with PPU can lead to intervention. This suggests exploring identities, the role of experiential avoidance and intolerance; perhaps using meta-cognitive or acceptance and commitment approaches is one way forward rather than on 'symptom' or distress management. These therapies have the best evidence base for PPU (see section 2.3.8) and target the maintaining processes involved.

As shown, much can be taken from the pre-existing research focused upon PPU. However, there are disagreements within the literature as to the best way to help people suffering from PPU, despite systematic reviews of interventions. Often an addiction related intervention is suggested, overall, this

seems to be the dominant narrative within clinical services. The psychological research based upon the above has not yet really influenced routine clinical care. Perhaps it is easier to give people a quasi-diagnosis and then implement existing interventions taken from the addiction field. Perhaps this also suggests that the existing psychological research is not currently considered acceptable by practitioners, that it is not comprehensive enough. This last statement makes sense; if we return to the preliminary model and the suggested initial recommendations then in essence, we are asking practitioners to explore people's attitudes to pornography and their identities, and to look for reinforcement patterns and provide psychoeducation. However, these recommendations are not coherent, either theoretically or practically, there is no explanatory power, there is so much missing in terms of really understanding the development and maintenance of PPU. In addition, the research so far concerning PPU is not accessible to the sufferers. It remains within academia, what is 'out there in the real world' is again dominated by the addiction framework. Before seeking professional help, people with PPU will often already identify themselves as a 'porn addict'. This term is commonly given as the reason for seeking help. Having a more easily digestible understanding, once communicated effectively, will hopefully change attitudes before seeking help. It may even allow sufferers to help themselves without the services of practitioners.

With all that has been said there is a need within the research and therapeutic community to have a more accepted model of PPU. As things currently stand even defining PPU is contentious. Any model created could be central to the development of evidence-based practice focused on PPU. Having a more accepted model may lead to case studies, case series, and the beginnings of a recommended treatment approach. This treatment approach can then be tested with multiple baselines across participants design studies, and then with a randomised control trial. Once a level of evidence is created then self-help books and treatment advice for therapists can be published. This is the aim of the current study. It is hoped that constructing a theory or model will act as the beginning of a journey, with the destination being more help for those suffering with PPU.

2.6 Research question

Despite reviewing the literature that focuses on pornography and on PPU, and developing a preliminary model synthesising research findings, the question *'how do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?* cannot be answered satisfactorily. As stated earlier without this answer practitioners are unable to coherently apply the research findings to their clinical work with clients experiencing PPU. In addition, by answering this question a new theory will be created, which can lead to additional research being conducted (see section 2.5).

Chapter 3: Methodology

3.1 Introduction

The last chapter ended with a summary of research findings and concluded that it is not currently possible to adequately answer the question: *how do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?* Before this subject can be investigated further, how the question is to be answered must be addressed, both in terms of philosophical approach and method. This chapter aims to inform the reader of this project's methodological framework; the understandings that are drawn upon in attempting to answer the research question. In this chapter the rationale for a qualitative methodology, and adopting constructivist grounded theory (Charmaz, 2006) as the methodological framework is set out. In the next chapter (Chapter 4) the emphasis turns to the methods employed in answering the question.

Before the philosophical approach is presented, it is vital, and at this point of the project very pertinent, to introduce the author. This will help elucidate the decisions made in choosing the direction of this study.

3.2 Reflexivity

A central tenet of a constructivist and arguably any qualitative approach is reflexivity. This can be defined as "the researcher's ability to be able to self-consciously refer to him or herself in relation to the production of knowledge about research topics" (Roulston, 2010, p.116). How researchers position themselves influences all aspects of the research process (Creswell & Poth, 2018). As a constructivist grounded theory methodology was utilised, issues of reflexivity, or the effect of the researcher, are more nuanced. In classic grounded theory (see section 3.6) the role of the researcher is reduced. It is often put forward that the researcher should not engage in a literature review prior to analysis, that the data should not be seen through the lens of earlier research otherwise the end result would be 'received theory' (Glaser & Strauss, 1967; Glaser, 1978). It has been put forward that this tradition within classic grounded theory is naïve, that it views the researcher as a tabula rasa (Bulmer, 1979; Dey, 1999; Layder, 1998) and that it is impractical given the demands of either being a student, or the grant application process (Charmaz, 2006). It is better to adopt a perspective of theoretical agnosticism, that researchers should subject prior research to rigorous critical analysis rather than ignoring it (Henwood & Pidgeon, 2003). Charmaz (2006) recommends that a thorough, yet focused literature review strengthens the argument and sets the stage for what happens throughout the research process. For these reasons the scoping literature review within this project occurred before data collection. In addition, as a theory of PPU was the aim of this project, pre-existing theories of

addiction were not extensively explored before the construction of the grounded theory so to avoid undue influence.

As outlined in section 1:1, in this project the researcher is a registered mental health nurse, a cognitive behavioural psychotherapist, an accredited supervisor, was a full-time senior lecturer, and now a counselling psychologist with several years professional experience, and approximately 15,000 hours of psychotherapy practice.

I see cognitive behavioural therapy (CBT) as a wide umbrella, containing several different ideologies and approaches. CBT is often seen as a directive, problem focused model of psychotherapy that emphasises the link between thoughts, feelings, and behaviours (Beck, 1976). I trained predominately in behavioural therapy, which also included a comprehensive training in Beckian cognitive therapy. Due to opportunities to develop my therapeutic work, I later became more interested in third wave CBT and the process of thinking rather than the content itself. Given the complexity of client problems I have worked with, whilst in training and beyond, I have never really adopted a manualised approach. Although I am aware of these and have supervised others in the use of them, I have always worked with person centred, individualised formulations, and have developed 'interventions' on these; often focusing on transdiagnostic ways of working. I see the T of CBT as the important aspect and have written articles related to this, (e.g., Binnie and Spada, 2018). This paper critiqued manualised Beckian cognitive therapy and advocated a greater focus on the therapeutic relationship and formulation. Within the last few years, I have been incorporating existential ideas into my CBT practice, focusing on meaning, values, and overall being more humanistic in my approach (see Binnie, 2022). As existential psychotherapy is a flexible approach (Deurzen, 2007), it can fit ideologically with some third wave CBT theories (Claessens, 2010). I have found that clients respond well to this hybrid or integrative way of working.

The sheer volume of client stories heard, and psychological formulations undertaken, means that any new data received in this project cannot escape from being influenced by a cognitive behavioural perspective. Therefore, it must be acknowledged that a completely open mind could not be taken towards the analysis of the data. However, seeing data through a particular philosophical lens is not unusual (Charmaz, 2006) and if the analysis is transparent and explicit in the influencing theories then the research process is still in keeping with constructivist grounded theory. In fact, having prior knowledge and skills in models of psychotherapy is essential if the research question is to be adequately answered, due to the focus on the *development* and *maintenance* of problems, as these facets are central to psychological formulation.

In terms of the subject matter, pornography, I have watched it. Until undertaking this project I did not really think deeply about pornography, and not at all about my personal use. It has served a purpose, an aid whilst masturbating. I would not say I have ever had problems or issues associated with it personally, but I have found some content against my beliefs. I find some of the common themes in

pornography marketed for the heterosexual male to be sexist, racist, and homophobic. As said, I am not naïve regarding pornography, but I have never been a heavy user and therefore through conducting this research my knowledge and understanding has increased.

3.3 Consideration of research paradigm

Guba and Lincoln (1994) propose that the basic philosophical assumptions concerning research paradigms can be understood from the answers given to three central questions: The ontological question, “what is the nature of reality, and what can be known about it?” (p.108) The epistemological question, what is the nature of the relationship between the knower and what can be known? The methodological question, how can the inquirer go about finding out whatever they believe can be known?

The decision to take a constructivist grounded theory methodology was based around two key issues. The first being the perceived methodological limitations within existing research literature on the subject of PPU. The majority of research on PPU has taken a questionnaire design, surveying participants with self-identified PPU using a battery of validated self-report questionnaires (for example: Levin et al., 2012; Kim et al., 2009). These studies adhere to a positivist paradigm, perceiving knowledge as objective, that reality can be studied, captured, and understood (Denzin & Lincoln, 2000). Although these studies do suggest some concepts that participants identify with, such as depression, anxiety, stress, and loneliness, the experience of self-reported PPU is not adequately presented. Quantitative studies such as these cannot describe and understand the social processes inherent in people’s experiences (Denzin & Lincoln, 2000).

Another key issue in deciding which methodology to use are my own beliefs concerning ontology and epistemology. As a practising psychotherapist I am interested in people’s subjective accounts of their experiences; how and what they think, their feelings, what they do and why. In keeping with Lincoln et al. (2018) I personally reject a realist approach, the notion that objects exist and act independently of human activity. As I see it, there is no singular reality, but a multitude of realities constructed by the human mind, according to how individuals experience their reality at any given time and space. For me to adopt an approach that seeks ‘the truth’ would be disingenuous.

Given the above key issues against adopting positivist epistemology, a different paradigm was required. In contrast to realism, a relativist ontology emphasises subjectivity. How people experience a concept such as PPU is therefore seen within this study as subjective. The phenomenon (PPU) is experienced differently by individuals in terms of the meanings they bring to it (Denzin & Lincoln, 1998). Although relativism has been criticised as having an ‘anything goes’ solipsistic doctrine by detractors (e.g. Held, 1998), this does not need to be the case (Raskin, 2001). Bernstein (1993)

defines relativism as understanding concepts such as truth, reality, right or wrong, as being relative to a specific paradigm, theoretical framework, or cultural context.

3.4 Consideration of possible qualitative methodologies

To understand how adults experience their self-reported PPU, a qualitative methodology was utilised. In addition to being complementary to the research question, there is scant good quality previous research concerning PPU that uses a qualitative approach. Qualitative research focuses on looking for answers to questions that ask how individuals experience and give meaning to particular events and phenomena (Denzin & Lincoln, 2007). Qualitative approaches have diverse epistemological foundations; however, they all converge in the context of how meaning making takes place (Creswell, 2013; Willig, 2013).

To explore how adults experience their self-reported PPU a phenomenological approach could be applicable. Phenomenology is deemed to be located within the interpretive paradigm (Guba & Lincoln, 1994), often portrayed as an inductive, descriptive approach (Benner, 1994) that prioritises subjectivity (Schwandt, 1994). There are two prominent strands of phenomenology: descriptive, and hermeneutic. Descriptive phenomenology developed by Husserl (1900/1970) studies consciousness in its raw form, taking first-hand subjective experience as its starting point rather than the objective world of nature. Husserl developed the method of epoché or phenomenological reduction, an attempt to get to the essence of an experience by setting aside (bracketing) one's judgements. I personally struggle with this aspect of descriptive phenomenology. Bracketing involves approaching each experience anew to get to an 'essence', thus implying that phenomena can be universal, that there are truths. In addition, everyone has assumptions that are taken into all experiences, it is impossible to suspend them completely (Langdrige, 2004), interpretations will always be guided by existing understandings (Hyaggman-Laitila, 1999). I therefore see bracketing as overly idealistic. Hermeneutic phenomenology developed by Heidegger (1927/1962), a student of Husserl, believed that it is not possible to separate experiences from the context in which they occur, thus questioning the concept of bracketing. It is therefore considered by some as a form of constructivism (Annells, 1996), as the researcher's perspective is acknowledged in the analysis of the phenomenon. By taking a hermeneutic phenomenological approach to this study a rich description of the experience of PPU would likely be obtained. However, it was the intention of this study to give an explanatory account of the experience of PPU, focusing on the development and maintenance of the participant's problems. Therefore, a constructivist approach was taken forward rather than either form of phenomenology, as the constructivist paradigm, in conjunction with the method of grounded theory, aims to give the explanatory account I was seeking.

3.5 Constructivism

Constructivism has somewhat ironically been described as “a ‘fuzzy set’ with indistinct boundaries, whose members manifest considerable diversity and even occasional contradiction” (Neimeyer, 1993; p. 224). With this in mind, defining constructivism is difficult. What follows can be seen as different accounts of how constructivism has been understood by key researchers and thinkers. This will be in turn followed by how constructivism is conceptualised within this project.

Lincoln and Guba (2013) suggest that constructivism is based upon the idea that reality is relative to the individual and their context. This relativism is the ontological position that most forms of constructivism adopt. Within the human sciences entities are not real, they do not pre-exist human existence, they are constructed by individuals and society (Lincoln & Guba, 2013). There can be multiple constructions of entities, some being shared across communities and cultures; all constructions can be altered, or reinterpreted (Guba & Lincoln, 1994), and as such constructions can be said to have plasticity (Schwandt, 1994).

If constructivism is based upon relativism, then a subjectivist epistemology must be assumed (Lincoln & Guba, 2013). This is because ontologically, the relationship between what is to be known and the knower is dependent on the person and the context, it is subjective and based upon the knower’s characteristics and experience. The knower interprets or constructs knowledge, it is not discovered; it is literally created via the investigation (Guba & Lincoln, 1994). A constructivist approach to inquiry involves understanding the constructions that people hold and then making sense or reconstructing these whilst being aware of the pre-existing constructions that belong to the inquirer (Guba & Lincoln, 1994).

As stated above, constructions are often shared, occurring across groups and cultures. Therefore, constructions cannot be accounted for through individual processes alone, they must be derived from somewhere. To avoid solipsism, this derivation must logically occur outside the individual, thus implying a social element. Berger and Luckman (1966) developed the concept of social constructionism to explain this process. Social constructionism moves the construction of knowledge away from the individual and promotes the role of discourse and social meaning. Whereas constructivism focuses more on what is going on in people’s heads, a cognitive concept, social constructionism focuses on what occurs between people, a social concept. Gergen (1985) highlights the cultural and historical dimensions of social constructionism: “the terms by which the world is understood are social artifacts, products of historically situated interchanges among people” (Gergen, 1985, p. 267). Social constructionism is therefore a position that suggests social facets, experiences and their associated meanings are fluid and originate in social interaction (Bryman, 2012). Social constructionism is rarely interested in the relationship between cognitive processes and knowledge (Young & Collin, 2004), as social constructionists believe it is human interactions and culture that influence our thinking and how we feel (Crotty, 1998). Schwandt (2007) and others suggest that there

are two main versions of social constructionism: strong or weak. The former claims that all knowledge is socially constructed and that ontologically nothing is 'real': "There are no independently identifiable, real-world referents to which the language of social description is cemented" (Gergen 1986, p.143), this means that language is the only reality that one can know. The weak version of social constructionism has a different ontological position, in that it does not deny a material reality, but that this reality is constructed through language and changed in the process (Edwards et al., 1995). Social constructionist psychology adds another element to this dichotomy. Cromby and Nightingale (1999) propose that social constructionism has too much focus on the role of language in determining the world and the person, they consider that notions such as embodiment and personal histories influence social situations and the individual. Cromby and Nightingale (1999) also put forward that social constructions are themselves dependant to material constraints such as poverty or inequality for example. This move towards the individual is central to constructivism.

A more socially informed version of constructivism is social constructivism, theories focusing on the individual's experience of reality, that result from social processes. Charmaz (2014) believed that researchers aligned with social constructionism saw their analysis as something representing a reality rather than arising from the researcher themselves. She put forward that researchers are not a tabula rasa (Charmaz, 2008a), they have prior knowledge, and this influences the research process. To highlight this distinction Charmaz used the term social constructivism. Primarily a sociologist, Charmaz understandably focused more on social processes than with the individual: "Data do not provide a window on reality. Rather, the 'discovered' reality arises from the interactive process and its temporal, cultural, and structural contexts" (Charmaz, 2000, p. 524). Charmaz's (2008a) version of constructivism does not assume a strict real world, but a world that can be interpreted in multiple ways. Charmaz puts forward that people can construct their worlds, but the constructions are influenced by social factors.

Charmaz's thinking on constructivism seems to have inconsistencies. These may be explained by her extensive writing in this area spanning decades. Charmaz (2008a) stated that she referred to her approach as constructivist to differentiate it from objectivist forms of grounded theory. However, she continues to say that her approach has its fundamental epistemological roots in sociological social constructionism; but then advocates for meaning making through individual cognitive processes, which sounds more constructivist. Therefore, widening this discussion has merit. According to social constructivists, such as Bruner (1990) and Vygotsky (1978), it is social relationships that influence the individual's constructions; both before and after the meaning making process. Learning, the process of meaning making, develops from individuals' interactions and relationships to their social group, society, and culture more generally; the interpsychological (between people) process occurs first before the intrapsychological (within people) process (Vygotsky, 1978).

Social constructivism focuses upon the collective generation of meaning created by social processes and language; however, the meaning making within the individual can also be the main focus.

Whereas social constructivists acknowledge that meaning making results from relationships with a real world, radical constructivism puts forward that knowledge is a process that occurs within the individual and that we cannot ever know the real world. First devised by von Glasersfeld (1974), radical constructivism at times sounds like ontological idealism, that there is no real world, but this approach is more concerned with epistemology than ontology. As far as reality is questioned it is more a question of scepticism than of actually denying the world itself or the ontic (Heidegger, 1927/1962). Von Glasersfeld proposes that to know something exists or is real is based on pre-existing notions or constructs such as space and time (von Glasersfeld, 1991). In terms of an epistemological perspective, radical constructivism involves a process based upon cognitive Piagetian theories, and the results or claims about knowledge are seen as functional, as in what works rather than what is true. Given its more extreme foundations it is not surprising that radical constructivism has received criticism, for instance the inability of the theory to fully explain how individuals may share constructions and the role of culture (Ellerton & Clements, 1992).

A more balanced form of constructivism, one almost located between social constructivism and radical constructivism is relational constructivism (Neimeyer, 2000). Whilst still based upon cognitive psychology, relational constructivism involves meaning making as an interpretative, linguistic process resulting from being with other people, an interpersonal, contextual, and temporal perspective. The narratives that are formed from being with others lead to identity, and the consequences of identity formation, how people view themselves, their self-concept can lead to psychological problems (Botella & Herrero, 2000). These identities involve both a cognitive component; experiences do not carry meaning themselves it is the interpretation and reinterpretations that do, and a social one; people see themselves as they are seen by others (Neimeyer et al., 2006). This mix leads to one's self-concept or identity being based upon internalising relations with others; a polyphonic chorus of voices (McNamee, 2004), rather than being a totally private process. By using language, psychotherapy can help transform identities that are produced by these cognitive and social mechanisms (Botella & Herrero, 2000).

As has been presented, there are multiple interpretations of meaning making. The main issue involves whether meaning is individually or socially derived, or both simultaneously; this is, of course, a continuum rather than a dichotomy. At one end of the spectrum lies radical constructivism and at the other strong social constructionism. If these can truly be seen as a continuum, then the following may help illustrate this idea:

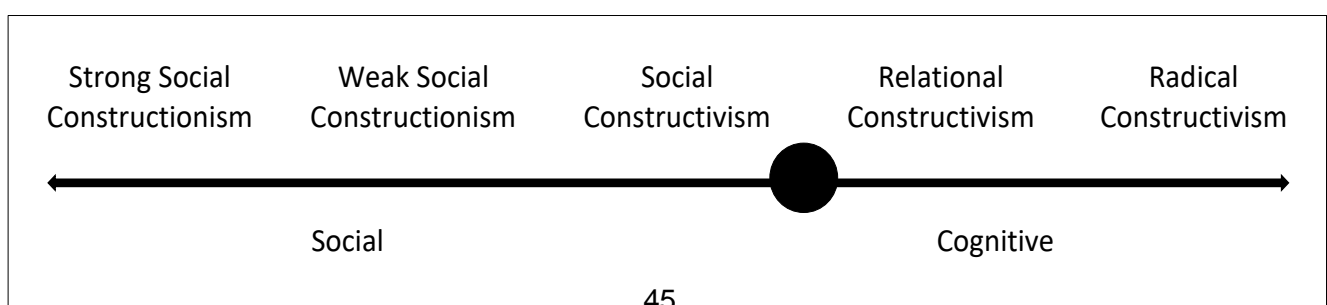


Figure 2. Continuum of constructionism and constructivism.

On figure 2, one will notice the black circle on the above diagram. Given what has been discussed this is where this project's epistemological and ontological perspective will be based. Reasons for this include the more balanced approach of relational constructivism, as compared to either end of the continuum. Having a relativist ontology can mean in relation to, not 'anything goes'. This is in keeping with Charmaz (2008a), whose method of constructivist grounded theory will be followed; Charmaz does recognise a real world but with multiple interpretations. Charmaz's perspective also encompasses social constructivism, hence the move over to the left on the diagram.

Another reason for a relational/social constructivist approach is it has more of a psychotherapeutic stance, and being a psychotherapist, I am drawn towards this. Several academic practitioners have worked from a relational constructivist model, as it provides a framework to practice from, distinct from psychoanalysis and behaviourism. Early cognitive therapists, including Beck and Ellis originally classed themselves as constructivists (Mahoney, 1995). However, it was Kelly (1955), Mahoney (1979), Neimeyer (1993), and Guidano (1991) who developed the different forms of constructivist psychotherapy. Whether constructivist psychotherapy can currently be defined as a type of cognitive therapy is debatable, but it is clear that in the beginnings of the movement Mahoney identified as a cognitive therapist, it has been said that it was Mahoney who first used the phrase 'cognitive therapy' (Ruggiero et al., 2021). Although cognitive therapy later became rationalist, adopting a realist ontology, with the work of Beck (1976) in particular, its beginnings were heavily influenced by constructivist thinking. This move to realism by Beck could be seen as a decision to 'latch onto' psychiatric diagnosis (Binnie, 2023), to develop an evidence base for his version of cognitive therapy. Although both types of cognitive therapy: rational – viewing cognition as a direct, accessible appraisal of reality; and constructivist – cognition as a hermeneutical activity based upon both conscious and tacit knowledge, are based upon a structuralist perspective with the inclusion of self-schemata (Ruggiero et al., 2018), they are different ontologically. It can be suggested that rational cognitive therapy has a more realist ontology whereas, as discussed, constructivist approaches take a relativist turn. Constructivist psychotherapy highlights the role of personal meanings, and focuses on tacit knowledge (Mahoney, 1995) or knowledge outside of awareness. Constructivist therapists often focus upon how people create constructs in order to understand the world in which they live. The utility of the constructions is the focus rather than reality testing or attempting to find truth, because as has been discussed, reality is unknowable. Constructivist psychotherapists focus upon assumptions clients make about themselves which are developed from childhood. These assumptions guide future knowledge creation and their ability to solve problems encountered in life, and the related emotional valence (Neimeyer, 1993). By understanding the person's world and reconstructing life stories, the therapist can enable the client to have greater flexibility and therefore be in the world more effectively.

Constructivist psychotherapy shares many similarities with narrative therapy (White & Epston, 1990), however narrative therapy takes a more social constructionist approach whilst constructivist psychotherapy focuses more on internal identities (Botella & Herrero, 2000). Constructivist psychotherapy has become less well known as compared to standard Beckian cognitive therapy, due to constructivists not accepting the manualisation of treatment protocols that are required for randomised control trials, therefore other forms of cognitive therapy won the race to be titled evidence based (Clark et al., 1999). However, one form of constructivist psychotherapy, personal construct psychotherapy (Kelly, 1955), is amenable to being manualised, with subsequent meta-analyses demonstrating medium effect sizes when compared to wait list, and comparative outcomes to CBT (Procter & Winter, 2020).

3.6 Grounded theory approach

This section presents grounded theory as a methodology. In the subsequent chapter, the methods of grounded theory are detailed. This distinction is made as grounded theory can be seen as having an overarching methodology, and narrower techniques (Bakker, 2019).

Grounded theory is a systematic method of qualitative research with the primary aim of generating new theory to explain phenomenon (Strauss & Corbin, 1990). Grounded theory originated within the Chicago School of sociology and is therefore influenced by the pragmatist philosophy of Herbert Mead and symbolic interactionism (Blumer, 1969). Pragmatism moves away from epistemological debates and promotes the idea that rather than concerning oneself with what is real, one should focus on the consequences of ideas (Morgan, 2020). Pragmatism therefore views research as a means to problem solve, to be action orientated, rather than describing or mirroring reality. Charmaz (2009) describes her approach to grounded theory as having pragmatist roots with a relativist epistemology. Symbolic interactionism suggests that reality is a socially produced construct, resulting from the interpretation of action (Charmaz, 1990). The influence of symbolic interactionism on grounded theory research is best seen when social processes are illuminated and meaning is ascribed to human interaction (Chamberlain-Salaun et al., 2013). Although Charmaz predominately utilises symbolic interactionism, in part as she was a sociologist, this is not to be a focus for this project. This is to keep a focus upon relational constructivism and the emphasis on the individual and cognitive constructivism, more psychological than sociological. The exclusion of symbolic interactionism is not against Charmaz's constructivist grounded theory as she states: "I see symbolic interaction and grounded theory methodology as going together but not the only package at all" (Charmaz & Keller, 2016, p. 18), therefore taking a more relational constructivist perspective and using Charmaz's methods are in keeping with her version of grounded theory.

The constructivist approach was chosen over other forms of grounded theory, for example Glaser and Strauss (1967), or Strauss and Corbin (1998), as constructivism is more in keeping with the author's epistemological perspective. The traditional classical or Glaserian version of grounded theory, still upheld by Glaser, is philosophically rooted in the post-positivism paradigm, utilises symbolic interactionism, and seeks to develop theories of truth that emerge inductively from the data; Glaser's use of induction has been said to be naïve as it ignores the role of the researcher in theory development (Layder, 1998). Whilst the more structured or Straussian approach, although very similar, advocates the use of a specific coding system called axial coding, and a conditional matrix to introduce constructs such as gender, class, ethnicity, and power. These additions add a deductive element in order to encompass process and as such move the ontological perspective away from Glaser's realism; but have also been said to interrupt the development of theory, and that the procedures can get in the way (Melia, 1996). Both the Glaserian and Straussian approaches are objective and downplay the role and influence of the researcher, they believe that theory is discovered independently of the researcher. Charmaz (2006; 2014) rightly in my view, puts forward that theories are not discovered or emerge directly from the data; they are ultimately constructed by the researcher. Charmaz (2006; 2014) assumes a relativist ontology, highlights the role of reflexivity, acknowledges the multiple standpoints of both participants and researchers, and situates any research within its context, i.e., historical, social.

3.7 Grounded theory methods

As can be seen, grounded theory contains philosophically opposing ideologies; however, the methods of grounded theory are remarkably similar. Grounded theory can be seen as a family of methods (Bryant & Charmaz, 2007), and the researcher is able to choose which methods to use as long as the rationale for doing so is explicit (Bryant & Charmaz, 2007). With this in mind, the following methods were incorporated into this project. A note is needed at this stage as grounded theory often uses a multitude of different words to describe the analytical process (Birks & Mills, 2015), therefore highlighting the need to clarify the approach used in this project. Examples of the methods used, for example initial coding are presented in the subsequent chapter.

3.7.1 Coding and Constant Comparison

Coding of data and the process of constant comparison are central aspects of all grounded theory data analysis (Charmaz, 2006). Essentially, coding is a translation of raw data into new forms that can be analysed (Dey, 1999). Grounded theory coding requires asking analytical questions of the gathered data and consists of two phases in the first instance: initial and focused coding (Charmaz, 2006).

Initial coding is the first stage of grounded theory data analysis, labels are assigned to segments of the data to infer meaning and action. Initial codes are the building blocks of the overall grounded theory. Initial coding involves studying fragments of data, words, lines, segments, or direct *In vivo* lines of data (Charmaz, 2006). Charmaz (2006) recommends coding line-by-line, especially in the early stages of data collection, but also suggests segment-by-segment is also appropriate, depending on the type of data collected. Codes should be theoretically open, without imposing pre-conceived notions. They should be action orientated, rather than descriptive. Glaser (1978) suggests coding with *gerunds* (the noun form of a verb that ends in -ing) helps bring out action-oriented processes. Action-oriented processes are important in developing a pragmatic, useful theory. Grounded theorists 'dig into' the data to interpret the participant's tacit meanings, what is implied through their words (Charmaz, 2006); in this way all codes are constructed by the researcher (Charmaz, 2006).

Focused coding involves selecting the most useful, frequent, or significant initial codes to synthesise and organise the data (Charmaz, 2006). More conceptual themes within the initial coding are thus identified. While initial coding breaks the data into pieces, focused coding reconnects it (Birks & Mills, 2015).

Theoretical coding follows from focused coding and aims to conceptualise how focused codes relate to each other (Charmaz, 2006) and to develop *categories*. Theoretical coding makes the analysis more coherent and understandable. Coding in this way pays attention to context, temporality, and sequence, thus "weaving the fractured story back together" (Glaser, 1978, p.72), creating a narrative or story from the focused coding. Processing of codes in this way highlights what become tentative categories, and after more analysis, the *core category*, the category which is most vital to the overall theory. Categories often subsume several codes and move the analysis from description of action to something more conceptual (Charmaz, 2000). Categories explain processes or ideas in data (Charmaz, 2006), forming the grounded theory, and addressing the research question.

Grounded theory uses 'constant comparative methods' (Glaser & Strauss, 1967) throughout the stages of coding. This means comparing data with data, codes with codes, both within each participant account and between participants. Using the constant comparative method directs subsequent data collection (see theoretical sampling). Constant comparison involves going back to the data repeatedly, comparing, contrasting, and amending codes, constituting an iterative process.

The above is a description of the coding framework utilised in this project. The actual coding process is outlined in section 4.7.

3.7.2 Theoretical Sampling and saturation

In the early stages of a grounded theory study, sampling is purposeful and there is an initial targeted strategy to collect data based upon the research question. As grounded theory uses simultaneous

data collection and analysis in an iterative process, theoretical sampling allows new directions to be undertaken. Early data analysis informs subsequent data collection, allowing the researcher to follow leads in the data and to enhance tentative categories.

Theoretical sampling is not using sampling to reflect population distributions, or to find negative cases. Theoretical sampling is not about representing a population or attempting to increase the generalisability of the findings (Charmaz, 2006). Sampling for different demographics, or a negative case, can occur, but it is only considered theoretical sampling if it is in relation to the emerging, tentative, constructed category. In essence, theoretical sampling means seeking more data to develop and refine tentative categories (Charmaz, 2006). Rather than seeing sampling as occurring before data collection, grounded theorists conduct theoretical sampling once tentative categories have been constructed, to fill out the properties of their categories (Charmaz, 2008b).

Once tentative categories have been constructed, more data can be collected to check and refine the categories (Charmaz, 2008b); this turns the reasoning from inductive to deductive. It can also involve an abductive method (Peirce, 1931/1958), whereby hypothetical accounts that occur spontaneously, a hunch, are tested in the field. If an idea is generated through the data analysis, theoretical sampling enables the researcher to collect more data to see if their abductive logic is onto to something important.

Theoretical sampling can involve adding new participants, observing a phenomenon in a new setting, or asking previous participants new questions (Charmaz, 2006). It can mean checking with participants about the developing categories, offering an interpretation during the interview and having a dialogue about it (Charmaz, 2006). Theoretical sampling can also be seen later in data collection when interview questions change and are steered in the direction of illuminating an aspect of an emerging category (Conlon et al., 2020).

Theoretical sampling is important in achieving theoretical saturation. Within grounded theory saturation occurs when gathering more data casts no more light on the properties of a category, fresh data no longer triggers new theoretical insights (Charmaz, 2008b). Therefore, grounded theory does not start with a set sample size, but continues until theoretical completeness (Charmaz, 2014).

The above is a description of theoretical sampling. How exactly it was utilised in this project is outlined in the subsequent chapter.

3.7.3 Memo writing

Memos are akin to field notes. Memoing occurs throughout the research process and its use is to help both guide and illuminate the analysis with the researcher's thoughts, opinions, and reflections. Charmaz (2008b) suggests that memo writing is about capturing the researcher's ideas as they

happen. The memos assist in theory development, and can be used throughout the research process, but particularly during data collection and analysis (Willig, 2008). Memos help with the development of category formation, exploring ideas and probing the data (Charmaz, 2008b). Theoretical sampling, as outlined above, results from memo-writing and is strategic (Charmaz, 2006).

Willig (2008) puts forward that memos can be long or short, using words or diagrams. In this project memos were used throughout the research project, from initial ideas about the subject matter, to the research methods themselves, how recruitment was developing for example – examples of memos are presented throughout Chapter 4 in the methods section, particularly in the section entitled ‘analytical procedure’.

Memos were both spontaneous and planned. They were used whenever thoughts arose about the data and the process of the research (memos are presented in the past tense throughout this project), but also in a structured way. This structured approach is now elaborated. As a cognitive behavioural psychotherapist, my practice and understanding of client difficulties is informed by the cognitive behavioural formulation approach. As such the data from this project was, in part, seen through this lens. The concept of psychological formulation opened this project as a rationale for the investigation, it now warrants further exploration as it informed the systematic way in which I approached writing memos relating to interview participants.

The majority of academic research and clinical parlance pertaining to psychological or case formulation, originates from the cognitive behavioural tradition (Johnstone & Dallos, 2014). The word formulation was first used by behavioural psychologists at the Maudsley Hospital in the 1950s (Bruch & Bond, 1998), and then by cognitive therapists, such as Beck (1976), from the 1970s. Other models such as systemic have used words akin to formulation, such as ‘working hypothesis’ since the 1970s, and a formulation approach can be inferred from the writing of Freud (Bateman & Holmes, 1995). A general overview of psychological formulation is given by Hallam (2013); it can be seen as a descriptive summary of a persons’ main problem or problems in relation to its components such as situations or triggers. How the components relate to one another must be informed by a theoretical perspective, for example, how a person’s beliefs influence their behaviour. There also needs to be an explanation of how the problem has developed over time and how it is being maintained. The main clinical function of a psychological formulation is the development of a treatment plan or how the problem can be resolved. The process of formulating should be collaborative and an ongoing sense making exercise between therapist and client (Harper & Moss, 2003). In short, formulations should represent a shared narrative constructed by client and therapist rather than discovered by the therapist alone (Harper & Spellman, 2006). Formulations offer a plausible account that offers usefulness rather than truth (Butler, 1998). The formulation process can be ongoing, or can be an event (Ingram, 2006), for example as part of an assessment report. Formulations vary in terms of length and detail depending on the context, for example a training report to demonstrate a trainee’s

knowledge and skill will be a lot longer than those used in routine clinical practice which may involve only a diagram or a brief summary (BPS, 2011).

As this project is using the grounded theory method there needs to more justification as to the focus upon psychological formulation. Willig (2013) explains that grounded theory often takes a social approach, but it can also be more psychological. She continues to suggest how researchers can focus upon the internal world of participants, how thoughts, feelings, beliefs, and memories, rather than social aspects, can be prioritised. Charmaz (1995) also alludes to this by differentiating between taking a 'from the outside in' approach, i.e., a focus on the social, or a 'from the inside out' approach, i.e., more psychological. Knowledge from the 'inside' would be more interpretative as it analyses the point of view of the participants and how they construct their experiences. A theory derived from this approach might look like a cognitive behavioural formulation, by explaining the dynamics between thoughts, feelings, and behaviours (Willig 2013). Willig (2013) goes on to explain how both approaches (inside-out and outside-in) can be synthesised to incorporate the social and the psychological. Charmaz (1995) claims that grounded theory is suitable for exploring and analysing individual processes, interpersonal processes, and larger social processes. This makes the inclusion of a formulation-based approach highly applicable to the method of constructivist grounded theory and is directly linked to the research question. Further detail on how the formulation-based approach was utilised in this project can be found in the section analytical procedure (section 4.7).

3.8 Summary

If we return to the research question: *'how do adults experience their self-reported problematic pornography use and how can sense be made of the development and maintenance of their problems?'* It is proposed that utilising a constructivist grounded methodology in conjunction with a formulation perspective can successfully answer this question.

As stated in Chapter 1, the overall applied aim of this project is to create a model that assists practitioners in the field, in addition to furthering academic knowledge of the subject. Throughout this project the words theory and model have been used interchangeably. West and Brown (2013) put forward that although there are differences between these terms, they have more similarities than differences. They suggest that a model is "a representation of a system, an object or characteristic set of events. It need not explain anything...whereas a theory aims to explain and predict the existence or operation of entities that have not been observed" (West & Brown, 2013. p.24). So, although the overarching method of this study is grounded theory and the aim is to create a psychological model, these concepts are not mutually exclusive. The word 'model' is used as this is the word often used in clinical practice; in many ways existing models of psychotherapy or of specific

problems do actually aim to explain or predict unobserved aspects and thus could well be described as theories rather than models.

With the methodology clarified, we now turn to the methods of answering the question, how it was approached.

Chapter 4: Methods

4.1 Introduction

This chapter details the methods employed in this project in order to answer the research question. In accordance with the grounded theory approach a flexible, emergent approach was taken (Charmaz, 2006). This chapter is presented sequentially, however as an iterative process was used, there are some elements that are out of synch.

4.3 Ethics

The British Psychological Society code of human research ethics (BPS, 2014) was adhered to throughout the project's timeline. Please see Appendix 2 for a detailed examination.

London South Bank University ethics procedures were followed, including completion of a risk assessment. Approval was granted by the School of Applied Sciences ethics committee on 30/05/2018 (reference SAS1814 – see Appendix 6). An amended application was approved on 26/03/19 (reference SAS1814a – see Appendix 7) to allow recruitment via posters around the university campus.

4.4 Recruitment and sampling

The recruitment process involved purposive sampling with snowballing and as the study developed, theoretical sampling. Theoretical sampling is central to grounded theory and involves the researcher seeking additional participants, and/or amending data collection to illuminate existing categories and in turn the emerging theory (Bryant & Charmaz, 2007).

The inclusion criteria were participants had to self-report PPU, be over eighteen years of age, and be English language speakers. There were no exclusion criteria in terms of gender, sexuality, disability, ethnicity, or religion as these did not pertain to the research question. The only exclusion criteria used was if extreme (as defined by UK legislation, see page 8) or illegal pornography was being used.

Several online forums and social media sites specific to PPU and pornography addiction were approached, and once permission granted from the site moderator (if required) a recruitment message was posted (Appendix 8). Users were free to forward the messages onto wherever and whoever they felt appropriate, this was actively encouraged. Sites approached were: NoFap² Reddit, forum, Facebook and Twitter, Reboot Nation Forum, Facebook and Twitter, Your Brain on Porn (YBOP)

² FAP is a description of the sound made by individuals with a penis when masturbating

Facebook site, Paula Hall website forum, Your Brain Rebalanced forum and Facebook, Pornfree Reddit. All users of these online sites are assumed to be looking for help and support with PPU. Many of the sites offer an addiction narrative and support the idea of re-booting or going 'cold turkey', i.e., refraining from using pornography and masturbation for a set amount of time. Others take a less addiction saturated approach and advise simply to reduce pornography consumption. Most sites allowed access to their forums or re-tweeted; the study was mostly seen positively, with YBOP posting a blog about the study. NoFap was the exception; permission was not granted to post on their forum, which was disappointing given they are by far the largest online community on this subject matter with 477,000 members (Hartmann, 2021). Organisations that focused on pornography addiction or sex addiction treatment, were also contacted via social media and directly through email. Several responded and promoted the study, these included SAA, ATSAC, SMMGP, Addiction Recovery Support Group.

Early in the recruitment phase, and during focused coding and building a tentative category concerning identity, it was apparent that the sample needed to be more diverse in terms of how participants conceptualised their difficulties. In line with theoretical sampling to vary the sample, several pornography sites were approached. The main pornography sites are run by an organisation called MindGeek, unfortunately they declined to post the study. However, a popular website 'The PornGuy' created a blog about the study; a few 'cam girls' re-tweeted the study, and several pornography-based Reddit sites allowed access to post. Instagram was used and tags to the words 'pornography', 'porn addiction' were used. Academic Twitter was also approached with many researchers re-tweeting the study. Survey sharing sites were utilised such as Psychology Research On the Net and Survey Circle. Counselling and psychotherapy organisations were contacted such as the BABCP and the Counselling Tutor Facebook site. Recruitment posters were also displayed around the LSBU campus and posts were made in the contacts area of Craigslist. During analysis to create a wider sample, specific Reddit sites were approached, for example sites that were created to appeal to women with PPU and those that focused on minority ethnic groups. Wider Reddit sites were also used, in particular ones focusing on sexualities. Prior to widening the sampling strategy, a conversation with the department's ethics lead took place, and apart from displaying posters all other avenues were deemed to be covered by the approved ethics application – an updated ethics application was made and approved to cover displaying of posters. The memo below (Figure 3) describes the thinking behind widening recruitment channels in keeping with theoretical sampling, as does the memo (Figure 21) in section 4.7.4.

Widening recruitment channels.

As participants completed data I could see from where they had been recruited. I noticed that nearly all were arriving through sites/groups that promoted the theme of addiction to pornography. As the first few interviews were conducted and their data analysed, I began to see how all clearly labelled themselves as 'an addict'. For example, participant 3 stated "I was a raging addict", participant's 5 said "I am definitely an addict". Several were heavily invested in their 'treatment' programmes, with participant 2 going to a support group for sex and love addicts for example. As I coded the interview data more and more codes related to how the participants described their problems and how they saw themselves within an addiction framework. The focused code 'identity' was created and this later fed into a sub section of the category 'committing to the mission'.

However, I was cognisant of investigating the concept of problematic pornography use rather than pornography addiction. As I had been recruiting from addiction related sites it was not a surprise that the word addiction would be frequently used. I wanted to hear from other voices, other ways of describing problems with pornography. I wanted to see how the coding would be impacted when these other voices were heard. The recruitment from other sources was successful. When this new data was analysed, and explored in junction with existing coding, I found that although not using the phrase 'I'm an addict', the new participants still used words and phrases commonly seen as belonging to the concept of addiction, words such as 'recovery', 'relapse', and 'being powerless'. This new data received from widening recruitment channels really helped elucidate the developing focused coding.

Figure 3. Memo concerning widening recruitment channels.

Recruitment started in August 2018. Initially the response was low but by widening the recruitment channels, participants soon responded and the first participant to volunteer for interview made a connection in October 2018. The demographics of the wider sample and of the interview sample was reviewed regularly. Recruitment channels were dependant on the review's findings. For example, if the review highlighted that more participants with a non-addiction narrative were required then recruitment would focus on posters around campus or via Craigslist. Or if the review found a lack of participants that identified themselves as non-heterosexuals, then recruitment would focus on Reddit sexualities sites. This flexible recruitment strategy follows the theoretical sampling method and was an option as the recruitment period lasted until September 2020.

4.5 Procedure and data generation

A link was posted with a recruitment message (Appendix 8). The link directed participants to Qualtrics. The landing page was the brief or information sheet (Appendix 3). The information sheet provided an overview of the study and the inclusion criteria. A section of text concerning extreme and illegal pornography was then highlighted. The process of the study and the risks and benefits were presented. Confidentiality was described, and a sentence on IP addresses not being collected was emboldened as not to deter tech savvy potential participants. Finally, contact details of the researcher and organisations for those feeling distressed were included.

Participants were then taken to a standard consent page (Appendix 4). Those that did not consent were taken to an end of survey page. Participants that consented were then given a unique participant number in case they wanted to complete additional journals or contact the researcher (the unique number system did not work as the page generated a new random number each time it was accessed; this was an error by the author on the advice of the psychology technician). Although this system did not work, workarounds were found that allowed the researcher to track the participants data; for example, asking the participants when they completed the study.

Participants were then asked to confirm that they considered themselves to have PPU. Those that did not consider this to be the case were taken to the end of survey page. Participants confirming that they considered themselves to have PPU were then taken to pages requesting demographics details:

Age (those that were under eighteen were taken to the end of survey page); gender; sexuality; employment status; ethnicity; relationship status; living circumstances; highest level of education; religiosity; country; how they heard about the study.

These specific demographics were included to contextualise the data and followed from the study by Kraus et al. (2017). After giving demographic details participants were taken to the Pornography History Questionnaire (Appendix 9). This questionnaire was received from the researcher Shane Kraus and has been used in several of his studies (Rosenberg & Kraus, 2014; Kraus et al. 2016; Kraus et a., 2017). The questionnaire defines pornography as follows: “as any kind of material designed to cause or enhance sexual arousal or sexual excitement in the viewer. Such materials show clear and explicit sexual acts such as vaginal intercourse, anal intercourse, oral sex, masturbation, group sex, bondage, sadomasochism, etc. The most common way people watch porn is by streaming videos via the Internet, watch DVDs, look at magazines, or read erotic books”. The questionnaire aims to collect information on participants’ current pornography use, for example frequency, duration, masturbation. The questionnaire then poses more historical questions concerning help seeking and attempts to cut back/quit. Again, this was included to give context to the subsequent data collected.

Following the Pornography History Questionnaire, the Problematic Pornography Use Scale was presented to participants (Appendix 10). The Problematic Pornography Use Scale (PPUS; Kor et al., 2014) is a 12-item scale containing four factors: distress and functional problems (Cronbach's $\alpha = .91$) excessive use (Cronbach's $\alpha = .86$), control difficulties (Cronbach's $\alpha = .75$), use for emotional regulation (Cronbach's $\alpha = .93$). Respondents are asked to rate each item on a 6-point scale, ranging from 0 (never true) to 5 (almost always true). The minimum score is 0 indicating no evidence for self-reported PPU, the maximum score is 60 indicating the highest score possible. Normative data ranges from a mean of 5.54 (SD = 8.58) to 5.73 (SD = 8.71). The PPUS has excellent psychometric properties (Kor et al., 2014), and has been reported to have a good ability to detect pornography users at risk of PPU (Zarate et al., 2023). The PPUS was included rather than other measures of PPU/pornography addiction after careful consideration, as outlined in section 2.3.7. Having an 'objective' measure of the severity of PPU was considered useful to this project. Although not in keeping with the constructivist paradigm, it firstly allowed a comparison to be made to other demographics, and it was predicted that the scores of the measure could be discussed with participants if deemed to be useful; overall this was a pragmatic decision.

Participants were then asked to complete a journal of pornography use. The purpose of the journal was to allow for functional analysis of the problematic behaviour. In line with standard cognitive behavioural approaches participants were asked to give brief details about their last pornography use: time, duration, location, type of pornography used, masturbation present, orgasm achieved. Using several free text boxes participants were then asked to record their thoughts, feelings, and behaviours before, during, and after using pornography. Functional analysis is an idiographic model of formulating clinical problems, particularly the maintenance of the problem, a central aspect of the research question. Functional analysis aims to understand the function of a behaviour (Persons, 2008), the purpose a behaviour performs. A problem behaviour, in this case pornography use, is understood in terms of its antecedents, and consequences. Including an online only method of collecting data was also related to my initial assumption that potential participants may feel awkward talking to a researcher about their pornography use, they may feel a sense of shame.

In the debrief that followed (Appendix 5), participants were given the purpose of the study, reminded about confidentiality and how to withdraw data. Another link to the journal section of the survey was then presented to allow participants to complete additional journals of use if they so wished without having to access the brief and consent sections, the demographic questionnaire, the pornography history questionnaire, and the measure of PPU. Participants were allowed to complete additional journals to allow for a fuller temporal perspective in keeping with the tenets of functional analysis, for example, to see if a behaviour changes within a different context – functional contextualism. A paragraph on the de-brief was included inviting participants to participate in a semi-structured interview before giving contact details of the researcher and contacts of support (Samaritans and Befrienders) in case of the need for emotional support after completing the survey.

The paragraph on the debrief concerning invitation to a semi-structured interview instructed participants to email the researcher. When emails were received by the researcher, preliminary email exchanges were had, and where possible interviews were arranged. Interviews were offered in person or via video calls. Once an interview was arranged the participant would be sent an information sheet (Appendix 11) and consent form (Appendix 12). At the beginning of the interviews all participants were guided through the consent form and verbal consent was confirmed. Interviews were then recorded, with the participants again confirming consent so that their consent was on record. Recordings were taken using an Olympus voice recorder.

The interviews were semi-structured in that an interview guide was used (Appendix 13). Conlon et al. (2015) suggest that unstructured interviews are used in grounded theory when there is little known about the subject matter, however they also suggest that semi-structured interviews are appropriate when the inquiry is already situated. This was the case with this study, I was already familiar with the subject of PPU, from my clinical work and from conducting the scoping review. In general, interviews involve the gathering of data through verbal interactions between individuals (Cohen et al., 2000). It is this interaction that is of so much relevance to constructivist grounded theory (Robson, 2011) as knowledge is seen as socially constructed between the interviewer and participant (Charmaz, 2014). When using semi-structured interviews, the researcher has pre-planned topics and/or questions to discuss, however the interview itself is flexible and largely participant led. An interview schedule is a written document of questions to be asked, formed around various topics (Cohen et al., 2000). The semi-structured interview schedule began with an introduction to the study and then to the interview itself: length, content, voluntary nature of questions. Confidentiality and legal restrictions were then discussed. A preamble to make the participant feel more comfortable and at ease was then performed; questions concerning who they were, what they did for example. The main section of the interview guide followed a standard cognitive behavioural assessment (Grant et al., 2008). Firstly, an overview of the issue with PPU, consequences of using pornography including distress and impact on functioning. A recent example of using pornography was requested and a functional analysis performed. Aspects drawn from the literature were incorporated into the guide at this point. Questions on how participants classify their problems, their beliefs and attitudes concerning pornography, and how pornography may or may not impact upon their identity. Continuing a cognitive behavioural assessment format, participants were asked questions about their personal history, sexual history, physical health, and mental health history, including drugs and alcohol. Towards the end of the interview participants were asked about their history of pornography and its development over time. A summary of what has been discussed was then presented to the participant, including my own thoughts about how their problems with pornography were developed and what was maintaining them, akin to a preliminary psychological formulation. The participants could then further discuss, critique, or add to the formulation with the interviewer, a form of member checking and in keeping with theoretical sampling. The participant was then asked if they had any questions for the interviewer.

Finally, the participant was thanked for their time and the options for further support if needed were highlighted.

The interview guide was constructed in this manner to ensure that the interviews kept their focus on the research question. Cognitive behavioural assessments are designed to lead to a formulation, and in turn the formulation aims to highlight how problems develop, and what maintains them. Although the guide was quite structured the interviews were conducted in a fairly relaxed manner and often the content of discussion 'jumped around' the guide. This was expected and although several interviews were indeed conducted 'off plan', for example starting with a historical account of pornography use, all subject matter in the guide was included during all interviews. As interviews progressed, and as data was coded and analysed, additional questions were asked, and new areas of exploration were undertaken. This was in keeping with the grounded theory method to reflect the theoretical sampling approach.

As noted, interviews were conducted face to face, in person, or via an online platform such as Zoom, Teams, or Skype. The decision to have online interviews was a pragmatic one. Firstly, it was assumed given the sensitive nature of the content being discussed that participants would be more likely to volunteer if online. Secondly recruitment was not restricted to the UK, so an online option opened recruitment globally. Thirdly, as data collection progressed Covid-19 restrictions meant physical interviews were no longer an option. Video interviews have been found to be of high quality (Jenner & Myers, 2019), offering a unique method of collecting data on sensitive topics (Davies et al., 2020). However, Oliffe et al. (2021) suggest that video interviews erode the ability to pick upon on subtle nuances such as body language, and in addition video interviews require reliable technology (Saarijärvi, & Bratt, 2021) – however, given the subject of this project, pornography, it could be assumed that the majority of potential participants would have good enough IT equipment and knowledge. Overall, once balancing up the positives and negatives, research suggests that face to face interviews are only marginally more effective than video interviews (Krouwel et al., 2019).

After the interviews all participants were sent a debrief (Appendix 14). All interviews were recorded by a secure portable recorder. All interviews were transcribed and the qualitative data analysis computer software package NVivo was used to store and organise the data.

The transcription of the interviews involved the process of translating the spoken word into written words (Gibbs, 2007). This translation implies that the transcripts were not an objective record of the interview, as they were a decontextualised account of the communication (Davidson, 2009). By only focusing on the spoken word several other aspects of communication were excluded, such as facial expression for example. When conducting the interviews wherever possible, notes were taken when I had the felt sense that the participant's body language was particularly noteworthy, this happened only occasionally, and these were put into the transcriptions. The researcher's transcription should accord with their methodology, however there is little explicit guidance with the constructivist grounded

theory literature (Oliver et al., 2005). Grounded theory transcripts tend to be 'denaturalised', with paralinguistic features removed (Oliver et al., 2005). Charmaz's (2014) transcripts focus more on the content and meaning of language rather than the mechanics of language. Therefore, when transcribing the interviews, utterances, typical pauses, and fillers such as 'like' were not recorded. An example of transcribed data can be seen in the example of coding (figure 14) in section 4.7.2. All interviews were transcribed as soon as was practically possible after each interview occurred, to create the most accurate version possible.

NVivo was used in this project despite some claims from some qualitative researchers that such programmes impose a rigid framework upon the analytical process (Seale, 2005), and can be burdensome and time consuming (Glaser, 2005). However, the use of computer software to assist in the coding process is a common process for grounded theorists (Bringer et al., 2004). NVivo in particular has been found to be a helpful tool in organising and managing a large amount of interview data (Birk & Mills, 2015). The use of NVivo in this study was restricted to using the 'node' function to code the interview transcripts and to collate codes into focused codes, and eventually categories. Other more complex functions of NVivo were not required.

4.6 Overview of participants

Two hundred and fifty-eight participants completed all aspects of the survey, and 22 participants were interviewed. One participant later requested that their data was removed, thus leaving 21 interviews in total. Figure 4 shows how the number of participants for both the journals and interviews were obtained.

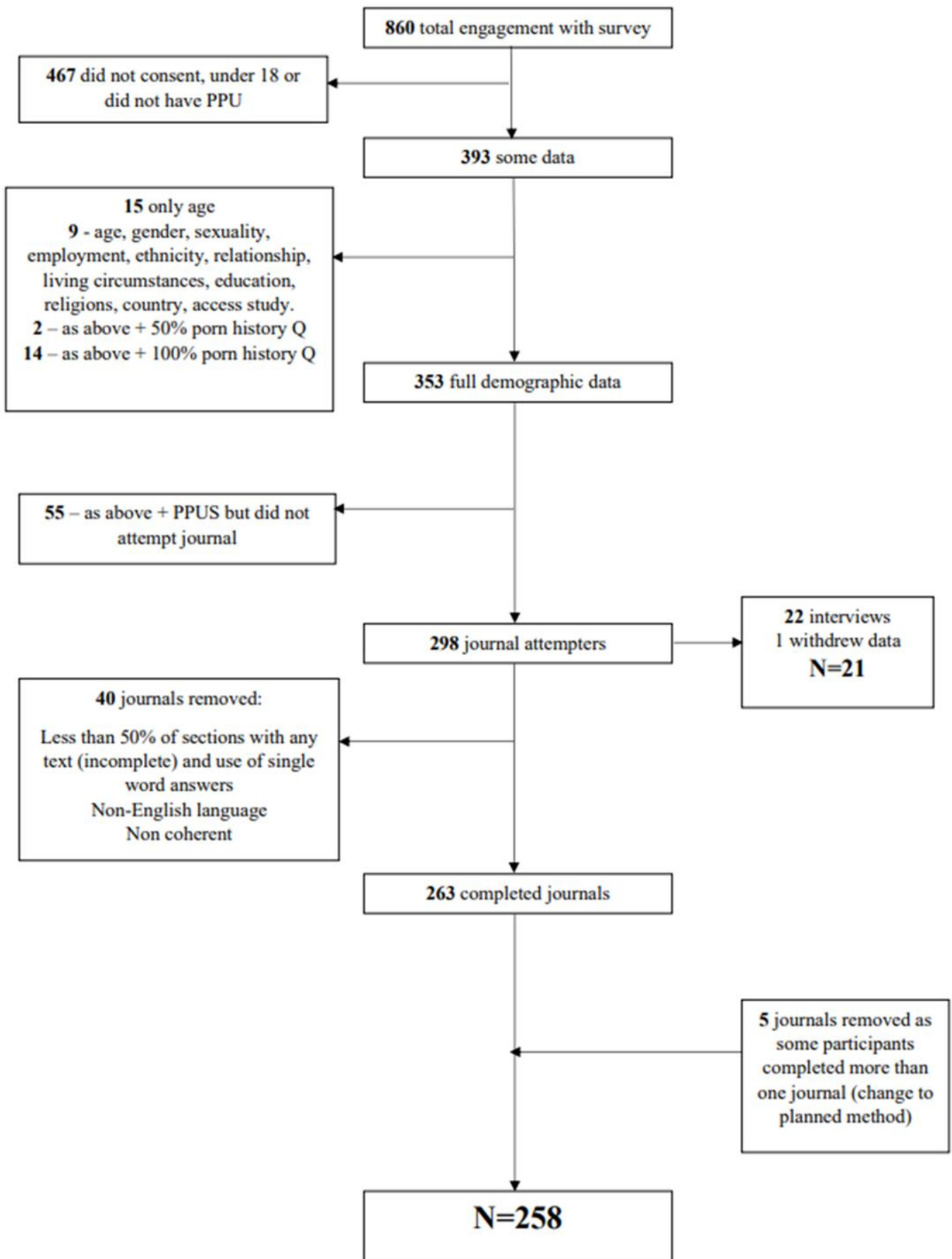
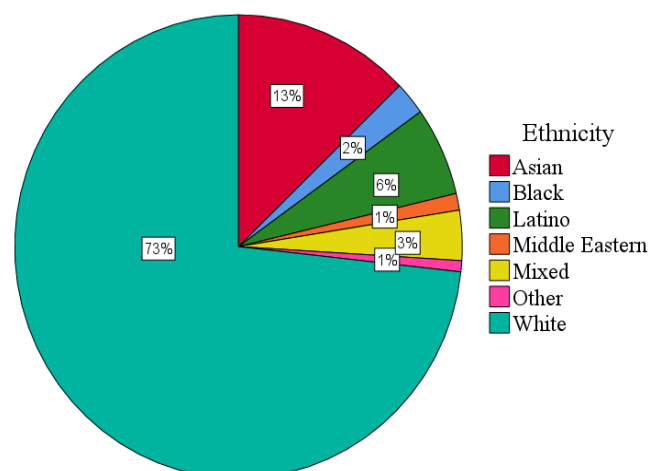
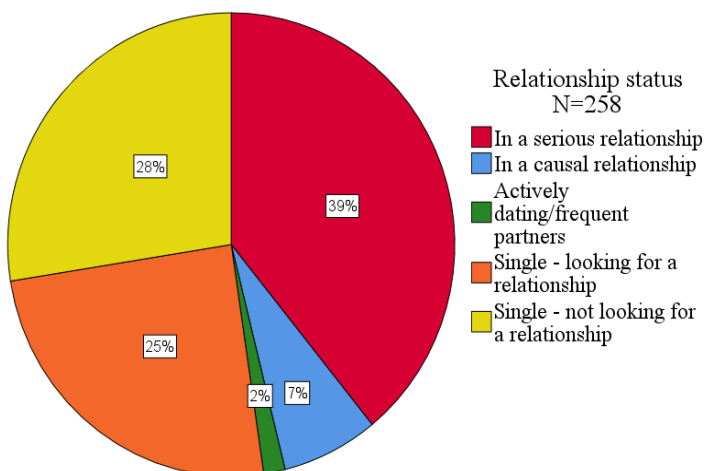
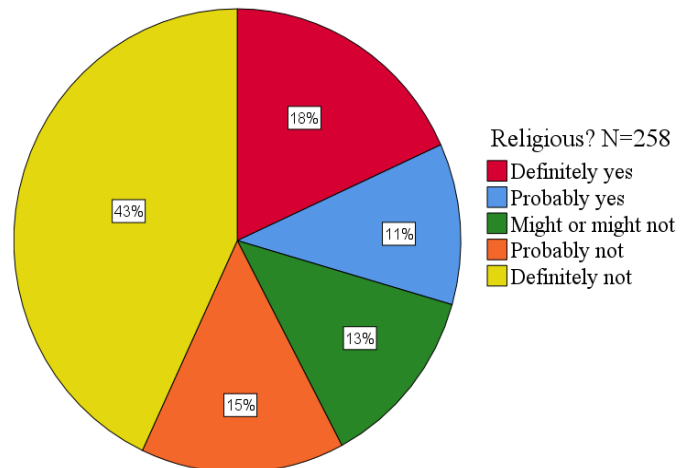
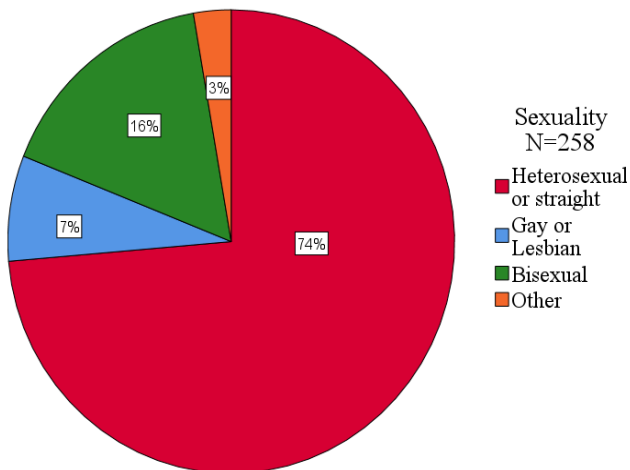
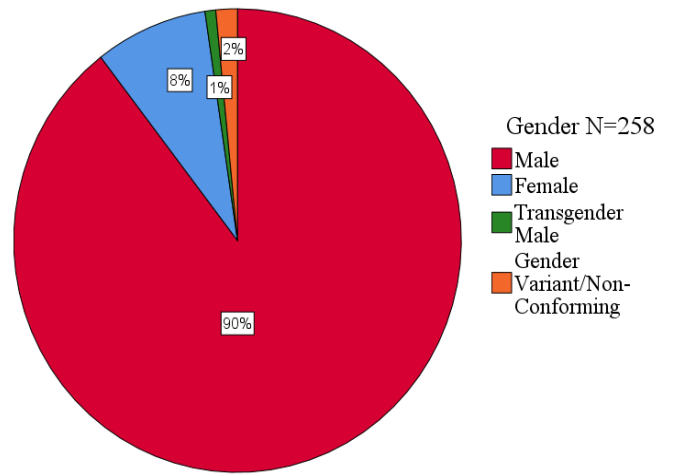
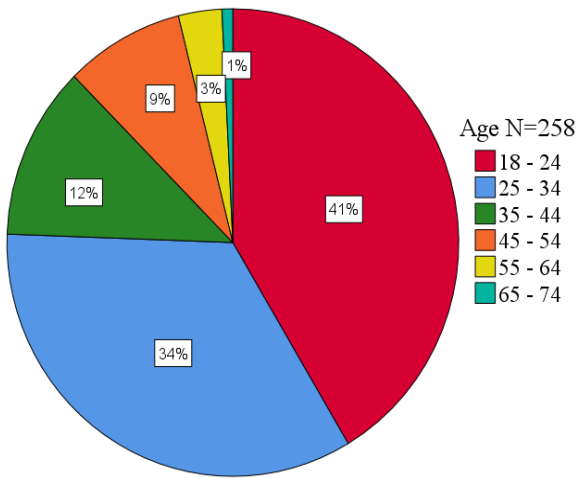


Figure 4. Flow diagram demonstrating calculation of N.

Demographics and pornography usage of sample N=258

The demographics of the 258 participants are now presented diagrammatically:



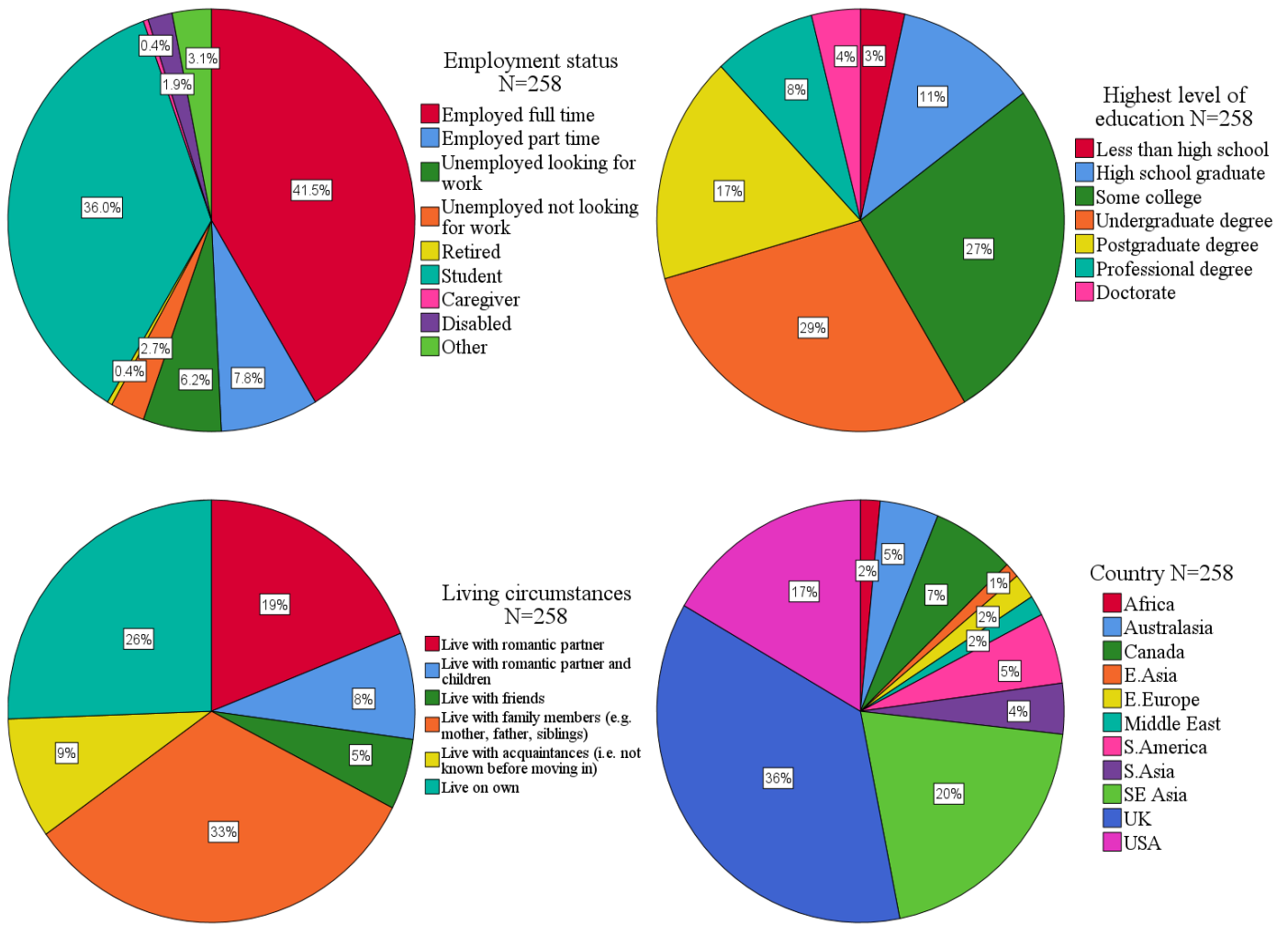


Figure 5. Participant demographics

The participants use of pornography is now presented diagrammatically:

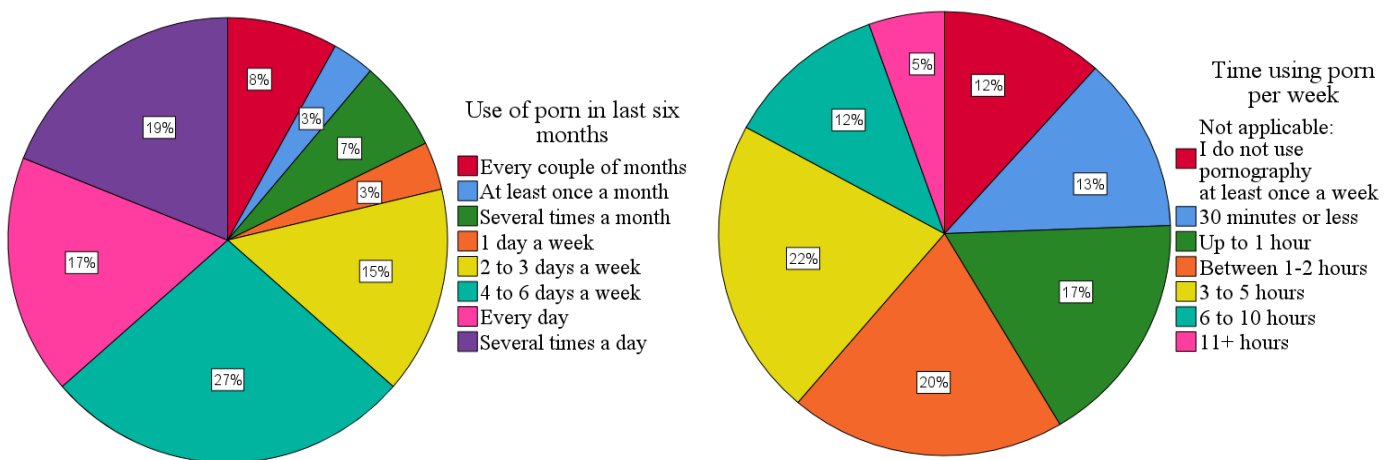


Figure 6. Pornography use in last six months and time spent weekly

All participants (N=258) reported watching pornography online. Eleven also accessed pornography through DVDs, 13 through magazines, 17 through erotic books, four adult movie theatres, and five at

sex clubs. All participants (N=258) watched pornography alone. Seventeen also watched with a partner, eight with friends, and 20 watched pornography via an online webcam. Seventy-one percent of participants masturbated to orgasm whenever they watched pornography, 7% three quarters of the time, 21% half the time, 11% a quarter, and 3% reported not masturbating.

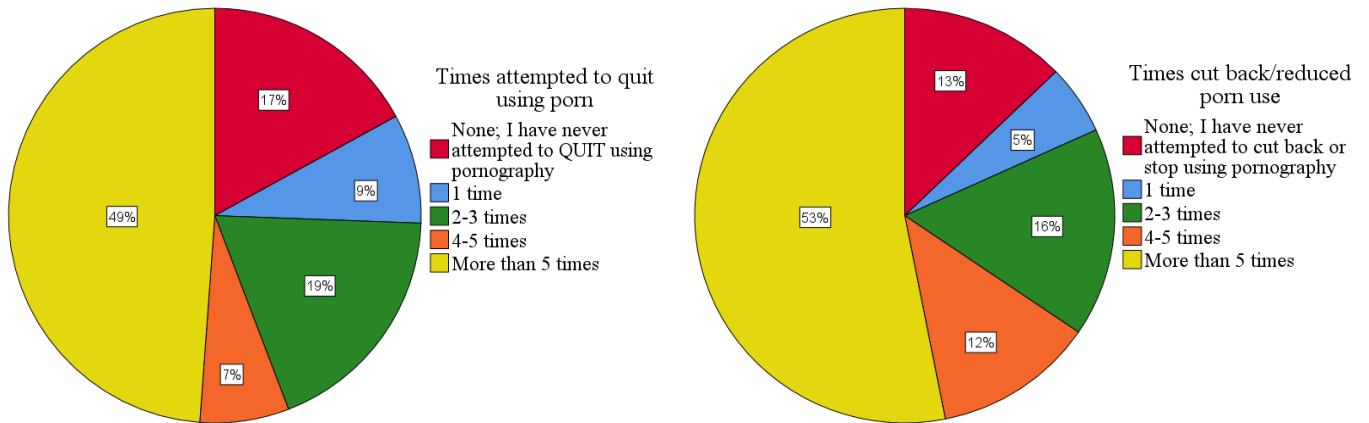


Figure 7. Attempts to reduce or quit pornography use

Twenty-nine percent of participants had sought out professional help for their pornography use, with 19% saying it was either extremely or very helpful, 53% somewhat or a little helpful, and 28% stating that it was not at all helpful. Of the 184 participants who had not sought professional help, 50% stated they would like to. This means 65% of the sample can be seen as help seeking.

On the Problematic Pornography Use Scale (PPUS) the participants had a mean score of 33.37 (SD = 12.02), min 2, max 60:

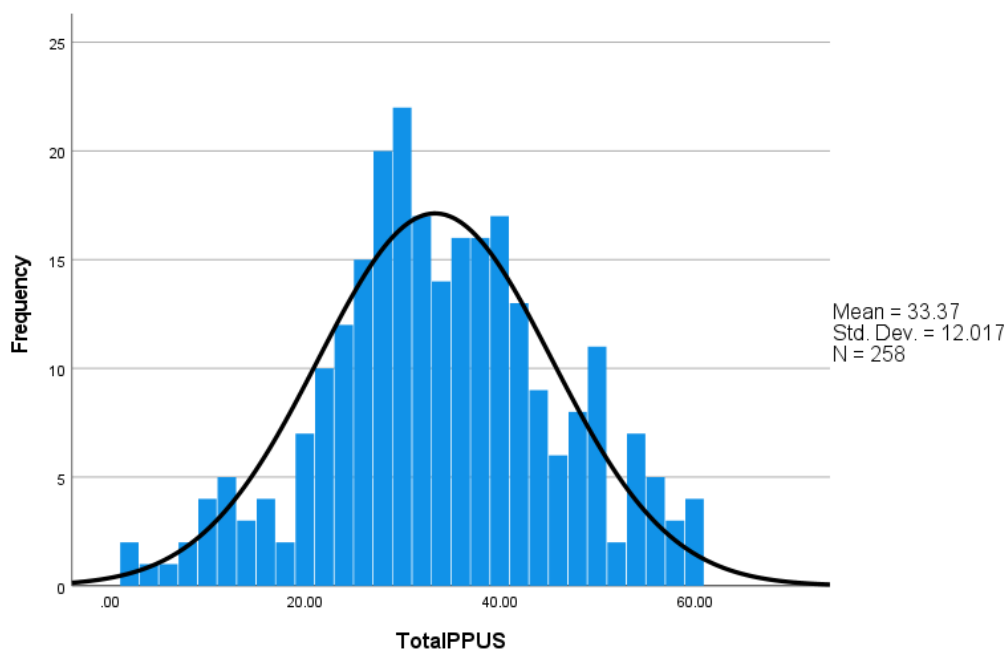


Figure 8. Distribution of PPUS scores

A reminder that the minimum score is 0 indicating no evidence for self-reported PPU, the maximum score is 60 indicating the highest score possible. Normative data ranges from a mean of 5.54 (SD = 8.58) to 5.73 (SD = 8.71). This indicates that the sample of participants scored highly on the PPUS.

Recruitment into study

How participants accessed the study is now presented as a bar chart. Single responses were collapsed accordingly into Other (addiction) and Other (non-addiction):

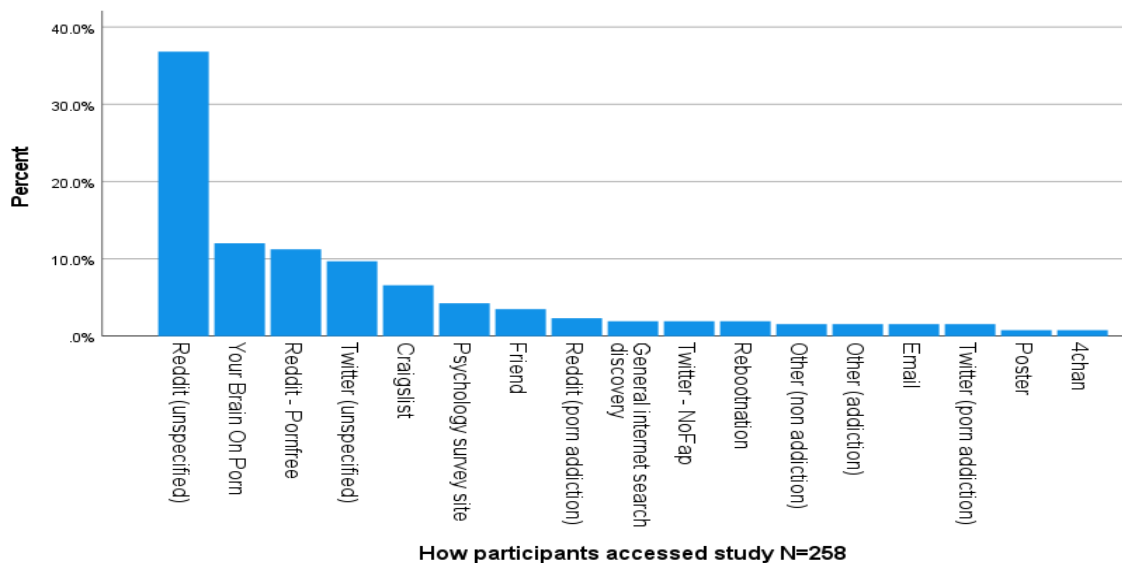


Figure 9. How participants accessed the study

How participants accessed the study was then collapsed into those sites or organisations that focused on the concept of addiction and those that did not. For example, YourBrainOnPorn clearly has an addiction narrative, whilst Craigslist does not. Many participants entered ‘Reddit’ or ‘Twitter’ without specifying the ‘channel’ or user, therefore these were allocated as unknown:

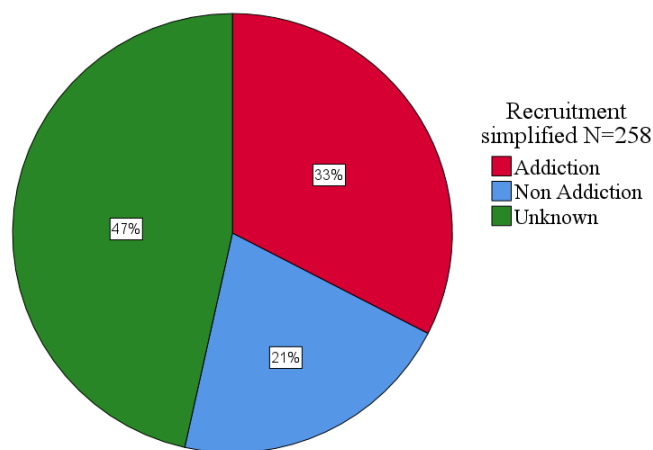


Figure 10. Separation into addiction and non-addiction sources of recruitment

Data from the journal section of the survey

Two hundred and sixty-three journals of pornography use were completed. Five participants completed additional journals. As the uptake was low these additional journals were removed as a longitudinal perspective could not be taken. The remaining 258 journals contained 24882 words in total, a mean of 96 words per journal. The distribution of words across different aspects of the journals was as follows:

	Before			During			After		
	<i>Behaviours</i>	<i>Feelings</i>	<i>Thoughts</i>	<i>Behaviours</i>	<i>Feelings</i>	<i>Thoughts</i>	<i>Behaviours</i>	<i>Feelings</i>	<i>Thoughts</i>
Total words	1848	2675	3605	2099	2460	3589	2288	2257	4061
Mean	7	10	14	8	10	14	9	9	16
Range	0-80	0-118	0-132	0-108	0-145	0-98	0-89	0-66	0-377

Table 1. Number of words within each aspect of the journals.

The 258 participants reported that they used pornography for a median (skewed to the right) of 45 minutes per session/event, with the minimum being 1 and the maximum 480 minutes (average time on Pornhub in 2023 was 10 minutes 9 seconds [Pornhub, 2023]):

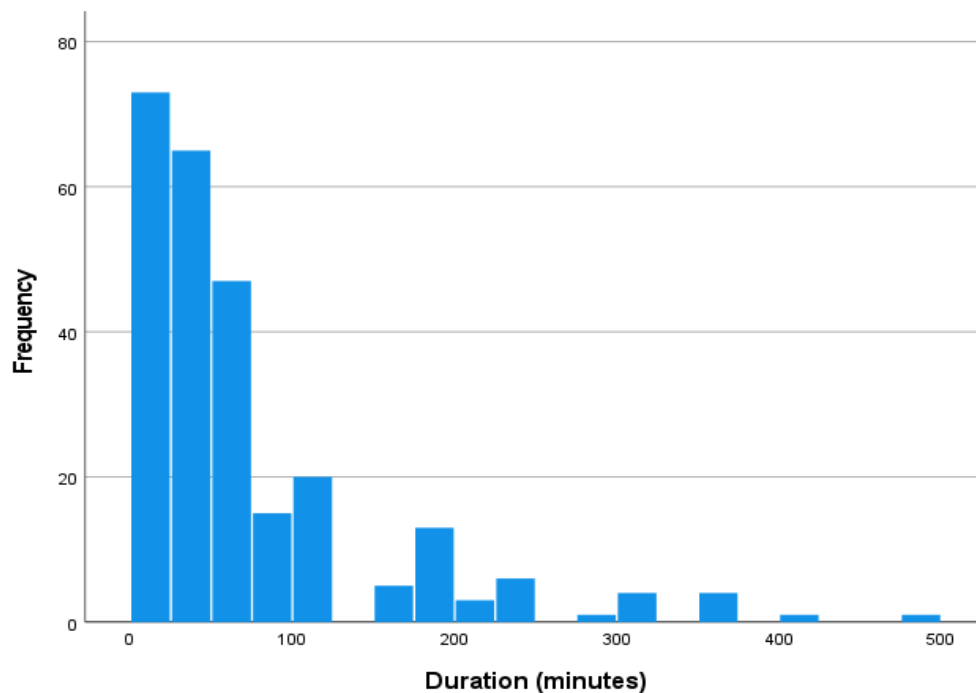


Figure 11. Time spent using pornography.

Interview information:

Twenty-two participants completed the semi structured interview. One participant later withdrew, and their data was subsequently destroyed. The details of the 21 interviews are as follows:

Participant number	Recruited from	Mode of interview	Duration (minutes)
1	Reddit NoFap	In person	60
2	Twitter NoFap	Zoom/Skype	72
3	Reddit Pornfree	Zoom/Skype	71
4	YourBrainOnPorn	Zoom/Skype	72
5	Friend	Zoom/Skype	70
6	Facebook (non-addiction)	In person	66
7	Reddit NoNutNovember	Zoom/Skype	51
8	YourBrainOnPorn.com	In person	60
9	Twitter (unspecified)	Zoom/Skype	55
10	Reddit Pornfree	Zoom/Skype	82
11	Reddit Pornfree	Zoom/Skype	50
12	Reddit NoFap	Zoom/Skype	80
13	Reddit Pornfree	Zoom/Skype	75
14	Twitter (unspecified)	Zoom/Skype	56
15	Reddit (unspecified)	Zoom/Skype	48
16	Reddit Pornfree	Zoom/Skype	69
17	Reddit Pornischeating	Zoom/Skype	66
18	Reddit Pornfree	In person	72
19	Reddit Pornfree	Zoom/Skype	69
20	Reddit Pornfree	Zoom/Skype	56
21	Reddit (unspecified)	Zoom/Skype	60

Table 2. How interview participants accessed the study, mode, and duration of interview

Many interviews were held online using Zoom or Skype. Online interviews were used for international participants, but due to the Covid19 pandemic and associated lockdown protocols, some UK interviews were also held online. The demographics and the pornography viewing of the participants who were interviewed are as follows:

Participant number	Age	Gender	Sexuality	Ethnicity	Relationship status	Religious	Employment status	Education	Living circumstances	Country
1	23	Male	Heterosexual	White	Single	Not religious	Unemployed	Undergraduate	With parent/s	United Kingdom
2	21	Male	Heterosexual	White	Single	Not religious	Student	Undergraduate	With parent/s	Canada
3	41	Male	Heterosexual	White	Single	Not religious	Employed	Undergraduate	Acquaintances	Ireland
4	33	Male	Heterosexual	White	In a relationship	Not religious	Unemployed	Undergraduate	With parent/s	Sweden
5	65	Male	Bisexual	White	In a relationship	Not religious	Employed	Some college	With own family	United Kingdom
6	34	Female	Heterosexual	White	Single	Some religious beliefs	Employed	Postgraduate	On own	United Kingdom
7	20	Male	Bisexual	White	Single	Unsure about religion	Student	Some college	With parent/s	United States
8	26	Male	Bisexual	White	Single	Not religious	Unemployed	Some college	With parent/s	United Kingdom
9	23	Male	Heterosexual	White	In a relationship	Religious	Unemployed	Undergraduate	On own	United States
10	23	Male	Heterosexual	White	Single	Unsure about religion	Other	Postgraduate	On own	Finland
11	35	Male	Heterosexual	White	In a relationship	Not religious	Employed	Doctorate	With partner	United Kingdom
12	22	Male	Heterosexual	White	Single	Unsure about religion	Student	High school	With parent/s	Italy
13	40	Male	Heterosexual	White	In a relationship	Religious	Caregiver	Undergraduate	With own family	United States
14	43	Male	Heterosexual	White	In a relationship	Not religious	Employed	Professional	With own family	United States
15	24	Male	Gay	South Asian	Single	Unsure about religion	Employed	Postgraduate	Acquaintances	Netherlands
16	50	Female	Heterosexual	White	Single	Unsure about religion	Unemployed	Undergraduate	On own	Australia
17	40	Male	Heterosexual	White	Single	Not religious	Employed	Undergraduate	On own	United States
18	25	Male	Heterosexual	White	In a relationship	Not religious	Employed	Undergraduate	With friends	United Kingdom
19	23	Male	Heterosexual	Jewish	Single	Religious	Student	High school	With parent/s	Israel
20	22	Male	Heterosexual	White	In a relationship	Not religious	Student	Some college	With parent/s	United States
21	30	Male	Heterosexual	White	In a relationship	Not religious	Employed	Undergraduate	On own	United States

Table 3. Interview participant demographics

Participant number	Use of porn in last six months	Time using porn in last week	Sought professional help	Usefulness of help	Would like professional help	Times reduced porn use	Times attempted to quit	Total PPUS
1	Several times a month	Up to 1 hour	No	-	Yes	More than 5 times	More than 5 times	34
2	4 to 6 days a week	11+ hours	Yes	Very helpful		More than 5 times	More than 5 times	48
3	Several times a month	6-10 hours	Yes	Very helpful		More than 5 times	More than 5 times	28
4	4 to 6 days a week	30 minutes or less	No	-	Yes	2-3 times	2-3 times	28
5	4 to 6 days a week	6-10 hours	Yes	A little helpful		More than 5 times	4-5 times	46
6	Every couple of months	Not applicable	Yes	Extremely helpful		2-3 times	2-3 times	26
7	4 to 6 days a week	3 to 5 hours	No	-	No	None	None	2
8	Several times a day	Between 1-2 hours	Yes	Very helpful		More than 5 times	2-3 times	37
9	Every day	3 to 5 hours	Yes	A little helpful		More than 5 times	2-3 times	29
10	4 to 6 days a week	3 to 5 hours	Yes	A little helpful		More than 5 times	More than 5 times	40
11	Every couple of months	Not applicable	No	-	Yes	4-5 times	2-3 times	51
12	Several times a day	3 to 5 hours	No	-	No	2-3 times	2-3 times	34
13	None	Not applicable	Yes	A little helpful		None	4-5 times	35
14	1 day a week	Between 1-2 hours	Yes	Somewhat helpful		More than 5 times	2-3 times	53
15	Every day	30 minutes or less	Yes	A little helpful		2-3 times	None	27
16	Several times a month	Not applicable	Yes	Somewhat helpful		More than 5 times	More than 5 times	26
17	Several times a month	11+ hours	No	-	No	2-3 times	1 time	30
18	Every couple of months	Not applicable	Yes	Somewhat helpful		More than 5 times	More than 5 times	37
19	At least once a month	Not applicable	No	-	Yes	More than 5 times	More than 5 times	36
20	1 day a week	6-10 hours	No	-	Yes	More than 5 times	More than 5 times	55
21	Several times a day	6-10 hours	No	-	Yes	More than 5 times	More than 5 times	38

Table 4. The interviewed participants use of pornography

All interviewed participants (N=21) accessed pornography through the internet and whilst alone; participant 16 mostly used pornography through audio media – for example erotic stories.

4.7 Analytic procedure

The analysis of data was guided by the constructivist approach to grounded theory (Charmaz, 2006; 2014). There was simultaneous data collection and analysis, i.e., the transcribed data from each interview was analysed, whilst still recruiting further participants to interview. The exception to this was the analysis of the data resulting from the journals of pornography use. These were analysed once data collection ended. This was because several hundred journals were amassed. Although not yet analysed, the demographics of the journal data was reviewed periodically, as outlined in section 4.4 Recruitment and sampling.

NVivo was used throughout the analysis as a large amount of data was produced and NVivo allows for the storage of data and helps structure the analytical procedure. The method of data collection whether it was through the journals or from interviews was easily identifiable using NVivo and thus allowed for effective triangulation.

4.7.1 Structured memo writing

At the end of the interview each participant had been given a speculative, initial, verbal formulation and had the opportunity to add or amend it as they thought best. All participants seemed to appreciate the verbal formulations and said that it resonated with them. Each time this process sparked further conversation about their PPU and how they considered it had been developed and maintained. After each interview was completed, notes would be taken about my thoughts and feelings concerning what occurred, detailing my initial ideas about what developed and maintained their problems. After the interview had been transcribed each participant was subject to a participant profile using the formulation approach (see section 3.7.3).

I chose to follow the same procedure for each participant profile. I used an amended version of Weerasekera's (1993) framework as it was familiar and would provide a comprehensive account of each participant's difficulties. The framework uses 4 Ps: predisposing, precipitating, perpetuating, protective. Predisposing accounts for how problems are developed, what events occurred in childhood, what aspects of personality are considered important. Precipitating describes what events were important in the run up to the problem. Perpetuating highlights what factors are important in how the problems are maintained. Protective focuses upon what strengths the person has, what support networks were in place. In this project I chose to exclude 'protective' as it was less relevant to the research question. This has a precedent in previous research, for example Spielman, Caruso and

Glovinsky (1987). To abide by a more constructivist leaning I also started each participant profile with their own construction of their problem, and then followed the 3 Ps with my own re-construction - a preliminary re-construction had been presented and discussed verbally with the participants at the end of each interview. Demographic details from the questionnaire data were also included to provide more contextual detail. When constructing the participant profiles a high level of reflexivity was required. It was acknowledged that my training in psychotherapy would influence the content of the profiles. All participant profiles using the formulation approach can be seen in Appendix 15.

After five interviews and subsequent participant profiles had been completed, I made the following reflection:

Reflections after initial interviews

I was glad that recruitment was going well. Five interviews in and I was creating the participant profiles. Even at this early stage I had wanted to see some kind of pattern or similarity with the problems participants presented with. It seemed at this stage that each participant had their own set of very different issues. I do not think I was expecting to find that they had come from similar backgrounds, or had similar life events, but I thought that there would be something apparent that linked them together apart from self-reporting PPU. Five interviews complete, five different stories told, five different profiles constructed. Each participant's difficulties were understandable on the individual level so it was possible to create the profiles, but I had hoped, naively maybe, that something more akin to a pattern would be occurring.

This led me to start thinking about PPU and the concept of addiction; what did these labels actually mean. If I could not see overlap between the participant profiles, did this mean that the concept of PPU or pornography addiction held no construct validity? Or simply that I needed to collect more data.

Figure 12. Memo concerning reflections after initial interviews.

4.7.2 Initial coding

Once interviews were transcribed, they were uploaded to NVivo. Using the 'node' function on NVivo initial coding began. The coding followed the procedures outlined in Charmaz (2006;14), detailed in section 3.7.1. Initial coding involved going through the data line by line, looking for processes, actions, and meanings. Using the noun form of verbs, a gerund, i.e., a 'ing' word, allowed for the generation of action orientated codes. A new code would be generated each time a process was highlighted. This did not occur for every line of the transcript, often participants would discuss issues that were not so relevant to the research question. Also having the participant profiles completed prior to the coding meant a lot of contextual information, specific dates, or demographics, for example, did not

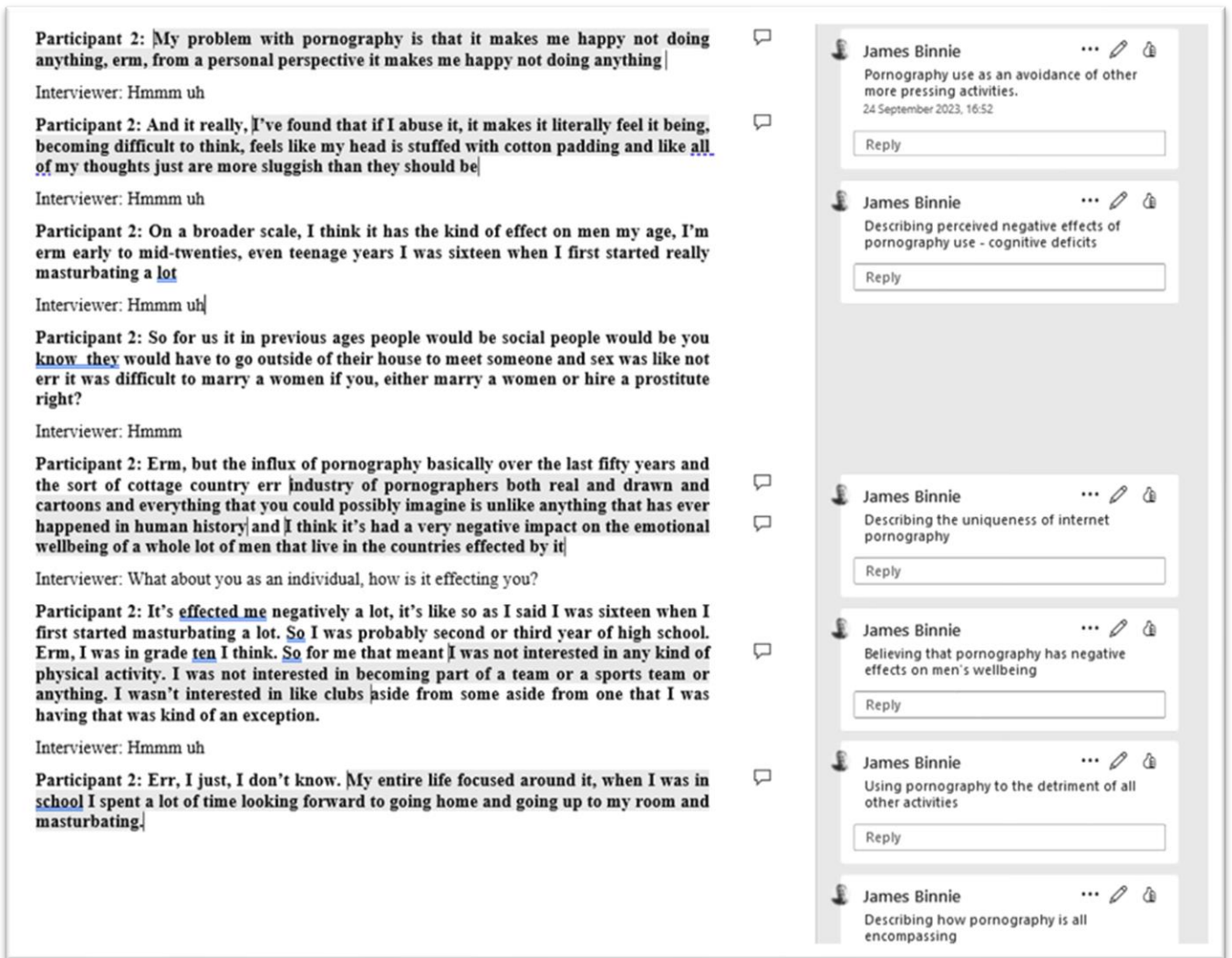


Figure 14. Example of coding using MS Word.

As more and more interviews were analysed fewer new codes were created. Many codes were expressed by multiple participants. In NVivo this is referred to as 'files' for participants, and 'references' for how many times the code had been used. For example, the code 'feeling ashamed of pornography use' was referred to 11 times by five different participants. Table 5 shows the codes that were referred to more than five times.

Code	Files	References
Regulating emotions and feeling by using pornography	14	39
Everyday triggers for porn use	14	36
Stating identity as an addict	16	24
Describing an escalation of content, extreme, dark, taboo	11	20
Medicalisation of porn use	7	12
Describing porn as 'bad'	5	13
Comparing porn to drugs and alcohol	7	11
Describing binge nature of porn use	7	11
Feeling ashamed of porn use	5	11
Describing a desire for self-improvement, porn getting in the way of this process	6	9
Feeling powerless and automaticity	6	9
Feeling resigned to relapse	5	8
Committing to abstinence	4	8
Preferring porn to sex, real life can't compare	6	7
Describing journey as success and failure	4	7

Table 5. Expression of codes within NVivo

Alongside the coding process memos were written to expand upon the codes, or to explore new avenues of reflection on the data and what may be going on in terms of process.

An example of memoing about the code 'medicalising pornography use' is now presented:

Medicalising pornography use

I first used the code 'medicalising pornography use' when coding the transcript for participant 1. Four times in the interview he used certain phrases and analogies that stood out to me. The first was how he described pornography use as having 'side effects'. I thought that this was an interesting way of describing how he felt after using pornography. Rather than expressing how he felt emotionally or physically he used an established word with given connotations. It struck me that 'side effects' implies what occurs alongside a medicine or a drug. Was he simply equating pornography with drugs? I held this thought and when he began talking about 'testosterone' and 'dopamine' I expanded this idea from 'drugs' to biology generally. He later equated pornography use with acne, and having an outbreak that eventually subsides by being 'clean'. I saw these codes as saying something similar, how participant 1 equated his use of pornography as something medical, almost outside of himself. He also indicated that he believed not using pornography had behavioural benefits such as being able to have better eye contact with people due to the changes in testosterone. He explained that he got this information from online sources. He seemed to equate testosterone as manly, therefore suggesting that using pornography was not manly or weak. If he held these beliefs, then it follows that he would feel stronger, prouder when not using pornography, potentially explaining why he felt he had better eye contact with others. This idea made me think about the role of shame, an idea that become part of a category later in analysis.

This code was used again when participant 10 gave an in-depth account of what he had read about pornography, the dopamine, the brain chemistry, delta fosB. He said how this helped him, understanding his pornography use from a biological perspective. His reasoning implied that like participant 1 he saw it as occurring outside of himself, a medical process.

Participant 2 also used words such as dopamine, oxytocin, when describing using pornography. I started to think why these words were being used, why they seemed to be almost externalising their behaviours, medicalising them. Was this process occurring to reduce their autonomy, to reduce their responsibility, a sense of powerlessness over a medical process.

Figure 15. Memo concerning the medicalisation of pornography use.

At the end of coding all transcripts 539 unique codes were constructed. Going back over the codes it was decided to remove those that were purely factual, if relevant these were placed in the participant profiles. This left 469 codes.

4.7.3 Focused coding

Interviews

The focused coding followed the procedures outlined in Charmaz (2006;14), detailed in section 3.7.1. The 469 codes were scrutinised, codes that were very similar were reviewed and if appropriate merged together and new focused codes created. The codes in table five were given more attention due their frequency, however all codes were analysed. Using NVivo was helpful during this stage of the analysis. For example, I had created several codes related to when participants discussed their involvement in the Pornfree or NoFap online communities. I noticed general codes about these sites, such as 'wanting to make a difference to others' and 'using reddit when having an urge'. But I was also becoming aware that several codes related to the participants first experience of the sites, how they 'discovered' them and how they related to this new experience. I therefore created two new focused codes, 'continued experiences with reboot sites', and 'discovering reboot sites'.

Another example were the multiple codes relating to the participant's relationship to pornography. From 'obsessed with pornography', and 'pornography as all encompassing', to more nuanced codes such as 'seeing pornography as more important than other areas of life', and 'equating pornography to 'being with' women'. I started to see these as related to an idea of how the boundary between the participants and pornography was blurry – I created the focused code 'fusing with pornography' to describe the relationship between the similar codes.

Journals

The analysis of journal data occurred after data collection due to the volume of journals collected. The journal data was transferred onto MS Excel. The early stages of analysing the journal data used an inductive method during the first twenty or so journals. The codes constructed were then used deductively as a framework to code the rest, any new codes were then additionally used as a template.

For each sub-section of the journal a word was used to describe what had been written.

Examples include:

Coding the behaviours before using pornography – TV, social media, internet browsing, became 'media'. Household chores, eating, bathing, became 'tasks'.

Coding the feelings before using pornography – depressed, anxious, stressed, became 'negative'. Feeling good, excited, became 'positive'. Suddenly feeling aroused, craving, feeling horny, became 'urge'.

Coding the thoughts before using pornography – making a conscious decision to use pornography, choosing to respond to an urge, became 'considered decision'. Being cognisant of wanting to escape

painful or distressing feelings, experiences, past or present, became 'escape'. Using pornography as have not done so in a long time, to be able to sleep, to punish a partner, as a reward for completing a task, became 'justification'.

Coding the behaviour, feelings, and thoughts during the use of pornography followed a slightly different format as nearly all journals indicated that participants were masturbating. When for example participants wrote that they were putting themselves into the scene, feeling pleasurable, fantasising, this became 'enjoyment'. When participants wrote no feelings but phrases like 'having a wank', 'knocking one out', or words such as 'routine', this became coded as 'functional'. When participants were aware whilst using pornography that they were escaping their difficult feelings the code 'escaping' was used. When recording words such as disgust, hopelessness, comparing oneself to the performers, recreating past abuse, the code 'negative' was used. Likewise, the code 'mixed' was used when their words indicated both positive and negative thoughts and feelings. When participants expressed they had no agency, were resigned to what they were doing, the code 'powerlessness' was used.

Coding the thoughts after using pornography – wasted time, letting myself down, why do I keep doing this? became coded as 'regret'. Labelling self as bad, weak, stupid, became 'negative self-evaluation'. Seeing the experience in a positive way, became 'positive reflection'. Making a resolution not to do it again, seeking help. Became 'commitment'. Thinking what to do next, became 'tasks'.

Coding the feelings after using pornography – ashamed, frustrated, disgusted, depressed, became 'negative'. Sleepy, numb, drained, became 'tired'. Relieved, calm, became 'relaxed'. Satisfied, buzzy, better, became 'positive'.

Coding the behaviours after using pornography – taking a nap, went to sleep, became 'slept'. Washing, showering, wiping up, became 'cleaned'. Chores, going for a walk, going to work, became 'tasks'. Getting on with what they were doing before became 'continued'. Watching TV, social media, gaming, became 'media'.

For the thoughts and feelings each code was assigned a colour, and a heat map of the whole data set was created. For example, negative was coloured red, mixed orange, normal yellow, positive blue. Considered decision was blue, justification was yellow, escape and powerless was red. Any missing cells were grey. Behaviours were not colour matched as a judgment concerning whether they were positive or negative was not feasible. This heat mapping allowed patterns in the data to become more visible (see Appendix 16 for an example of the heat mapping). It was possible to sort the rows according to the content and compare before to after for example. As the data collection was based upon the concept of functional analysis, I started to notice patterns and constructed labels for each participant's entire journal. For most participants it was clear that a sequence was occurring, for example:

media	negative	escape	negative	negative self evaluation	negative	cleaned	failed regulator
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Figure 16. Example of a coded journal using heat mapping 1.

The above indicates how this participant was using media, feeling negative and wanted to escape these feelings. When using pornography, they felt bad, and once finished they continued to feel bad, judging themselves negatively. They then cleaned up. I saw this as someone who wanted to change how they were feeling, to regulate their feelings, but they were unsuccessful. This participant was given the overall code ‘failed regulator’.

media	bored	considered decision	enjoyment	tasks	tired	slept	happy user
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Figure 17.: Example of a coded journal using heat mapping 2.

The above indicates how this participant was using media, feeling bored, and made a decision to use pornography. They enjoyed it, thought about what to do next, felt tired, and slept. This participant was given the overall code ‘happy user’.

When the codes were not as clear as the examples above, I would go back to the journal data, the exact text written, to help with my thinking. The heat mapping would indicate what might be going on for each participant, which was supported by going back into the raw data.

The following overall codes were used to classify each participant’s journal:

Failed regulator	33%
Guilty user	32%
Happy user	11%
Habitual/routine user	11%
A means to an end	9%
Successful regulator	4%

These were then converted into four focused codes and are now described (see Chapter 5, section 5.4.1 for an in-depth account):

Emotional regulation: This focused code contains the regulators, both failed and successful. The participants were seen as consciously attempting to change how they felt. Most were unsuccessful in this and continued to feel bad after using pornography.

Habitual: This focused code was used to describe participants who were aware that they had used pornography as part of a daily routine, something they just did without much planning.

Instrumental: This focused code related to those participants who consciously used pornography to achieve a goal, mostly in order to go to sleep, but there were occurrences of using pornography as a way of punishing someone else, a partner for example.

Morality: This focused code was used to describe the participants who felt guilty after using pornography, the majority had responded to an urge to use, but had not been feeling particularly negative beforehand. However, after using pornography they did feel bad. From looking at the raw data these participants reported regretting using pornography and often berated themselves for doing so. The word morality was used to highlight their self-judgment. Happy users were also included in this focused code as all participants reported problematic use of pornography; what had been recorded was not seen as representational of their pornography use per se. Likewise, it can be speculated that those coded as guilty users may also be happy users at different times.

The focused codes derived from the journal data were then compared and contrasted with coding from the interview data. As seen in table five the code 'everyday triggers for pornography use' contained 36 references/occurrences. These references related to the situations that the participants thought triggered their pornography use and could therefore be seen within the context of the functional analytic design of the journals. The focused code 'changing feelings with pornography' was seen as directly related to the idea of emotional regulation. Likewise, the code 'Feeling powerless and automaticity' could be comparable with the idea of pornography use being habitual, as constructed through the analysis of the journal data.

4.7.4 Theoretical coding

The structured memos following the formulation approach were compared to each other on a regular basis. Words were created to summarise the participant's construction of their problem, and each P from the participants formulation (predisposing, precipitating, perpetuating). As more participants were interviewed it was at last possible to see patterns, similarities, and areas of interest. The following two memos helps illustrate the development of my thinking:

General development of ideas

The predisposing factors seemed unique to each individual - self-esteem, loneliness, depression, amongst others. The precipitating factors were also seen as individual but involved a crisis, with many searching online for help. I wondered if shame stopped these participants seeking professional help.

For some participants using pornography was another stick to beat themselves with. Some already had a negative view of themselves, and their use of pornography reinforced their negative beliefs. However, their focus on addiction concealed their problems, displacing them. They seemed to believe that if they can stop/quit/defeat the addiction then the other problems would go away.

Figure 18. memo concerning the development of ideas.

Morality and pornography use

I saw an issue with how participants related to their pornography. Their amount of use did not seem so important but how they saw or judged their pornography use, their morality towards it. Not necessarily their dislike or disagreement with pornography per se, although some did highly disapprove, more how they judged themselves for using it. I wondered where this morality arose from. Most of the participants interviewed were recruited from reboot websites and forums, sites that promote abstinence from pornography. Did participants pick up this desire for abstinence from the sites? If this were possible then this could help explain why the amount of pornography consumption seemed less relevant. Being abstinent from pornography, denying an expression of sexuality, especially for those not in a relationship, basically becoming asexual, would be incredibly difficult, and therefore 'relapse' more likely. The participants could then 'double down' on the concept of being addicted to pornography, due to a 'relapse' and engage more in the reboot sites.

Figure 19. Memo concerning morality and pornography use.

The participants' construction of their problems all seemed to centre on the concept of addiction. The precipitating events leading up to their realisation of 'having' PPU was clearly expressed by the participants and could be grouped as 'reboot', 'a relationship', 'therapy', 'a professional', 'religion' – all external agents. The perpetuating factors focused on abstinence, resigning themselves to their addiction and their identity as an addict. My reconstructions all focused on the idea of replacing one concept with another, I was using the word 'displacement' for this process. I then saw this

displacement in relation to how the participant's predisposing factors varied. It had not been possible to see their predisposing factors within a singular concept, however, with the concept of displacement this was no longer a concern. Having PPU or being a pornography addict seemed to be displacing whatever previous problems or issues the participants had.

From reviewing the participant profiles in this way, and following Charmaz's (2006;2014) procedures (see section 3.7.1) I developed the following tentative categories:

- Realisation of 'having PPU'/pornography addiction via an external agent
- Perpetuating or maintaining factors of abstinence, resignation, and identity as an addict
- Displacing underlying problems/issues (possible core category)

From the journals of pornography use I developed the category:

- The function of pornography

Having these developing categories allowed me to add existing focused codes from the interviews. I then started to diagram the above processes with the aim of creating something visual to map the focused codes onto, and to develop further categories.

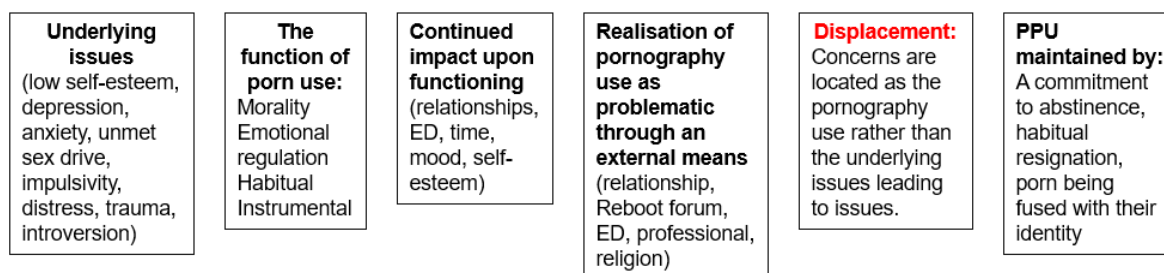


Figure 20. Progression of category development.

The focused codes were developed into categories when there was convergence of ideas. Although initially started during the recruitment stage, theoretical sampling really took off during the development of categories. Changes to the interview schedule and a re-focusing on certain elements was dependant on how the analysis was progressing. By comparing and contrasting existing data, different attention could be paid to certain aspects of the interviews themselves; for example, participants who were in relationships were asked more questions about the impact on their relationships as previous analysis of data from single participants had not covered this area. See figure 21 for another example of theoretical sampling in relation to a developing category.

Widening recruitment again

When developing the tentative category 'realisation of pornography use as problematic through an external means' I was aware that several participants recruited so far constructed their PPU from an addiction perspective, that they identified with this concept. As the majority of recruitment at this time point had been through sites with an addiction narrative this was not a surprise. I wanted to explore whether those self-reporting PPU did not subscribe to an addiction narrative and if their journey to PPU was different. I therefore widened the recruitment to include places/sites that did not focus upon addiction. I had the ethics application amended to display posters in the university and approached pornography websites. Several journals were completed through these new avenues, but only one participant volunteered for interview. He had been informed about the study through a friend who had seen the poster. Interestingly this new participant also identified with the concept of addiction.

Figure 21. Memo concerning further widening of recruitment.

As the categories developed the constant comparative method using abductive reasoning was used; this involved relating codes to codes, codes to categories and categories to categories. Fully utilising the concept of theoretical sensitivity, how categories related to each other, the categories were developed and became more explanatory - as can be seen in the development of the diagramming:

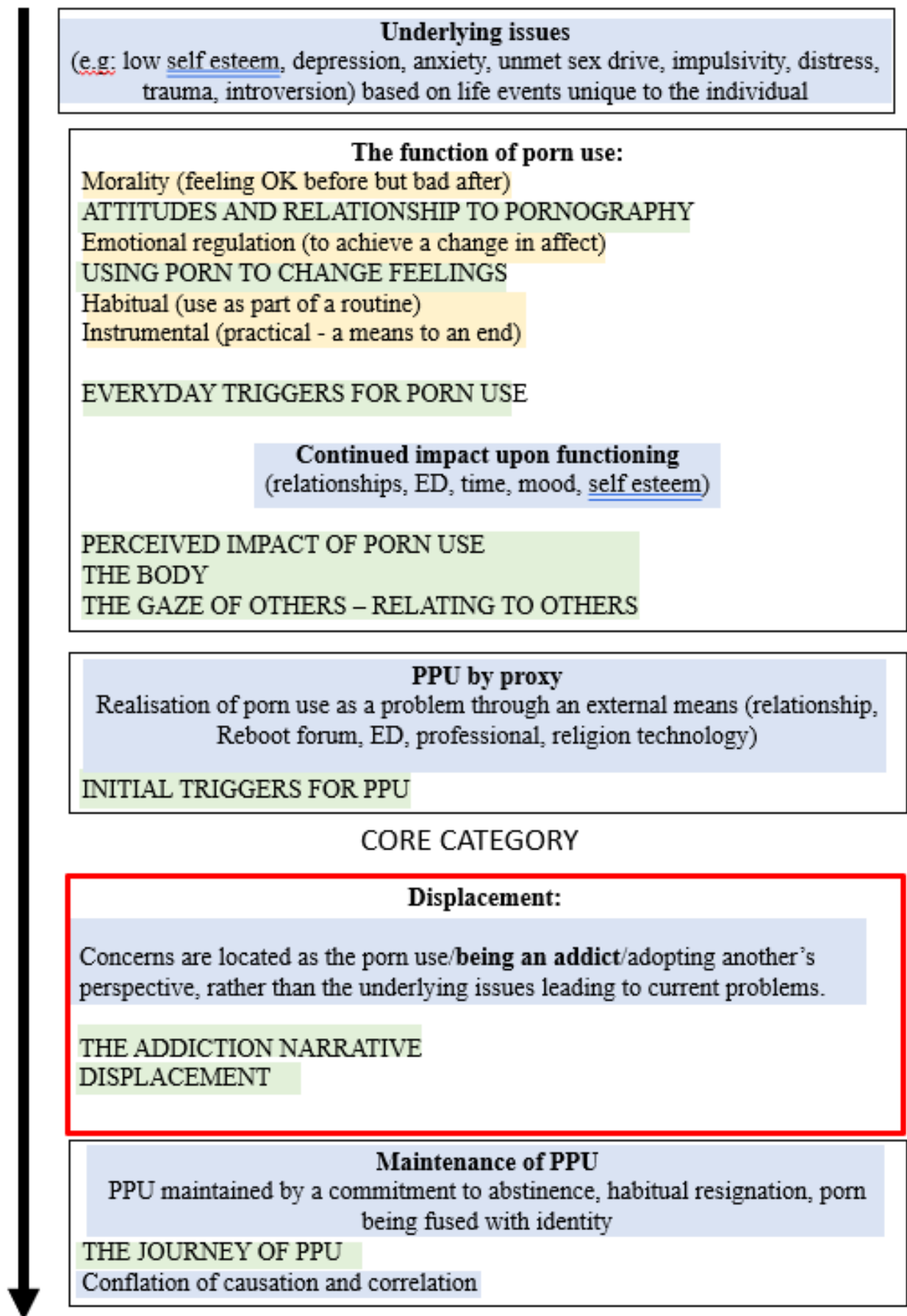


Figure 22. Diagram incorporating theoretical coding.

The process of coding and category formation continued until there was theoretical saturation; whereby new data did not expand or create any categories. The relationship between categories was then reviewed in keeping with the research question: *how do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?* A narrative was created, a story of how the participants problems were developed and how they were being maintained. The wording of the tentative categories was changed, some were merged together. Five categories were created: **Distinct problems, function and functioning, PPU by proxy, displacement of the problem (the core category), and committing to the mission.** The following diagram was constructed as a way of demonstrating the grounded theory:

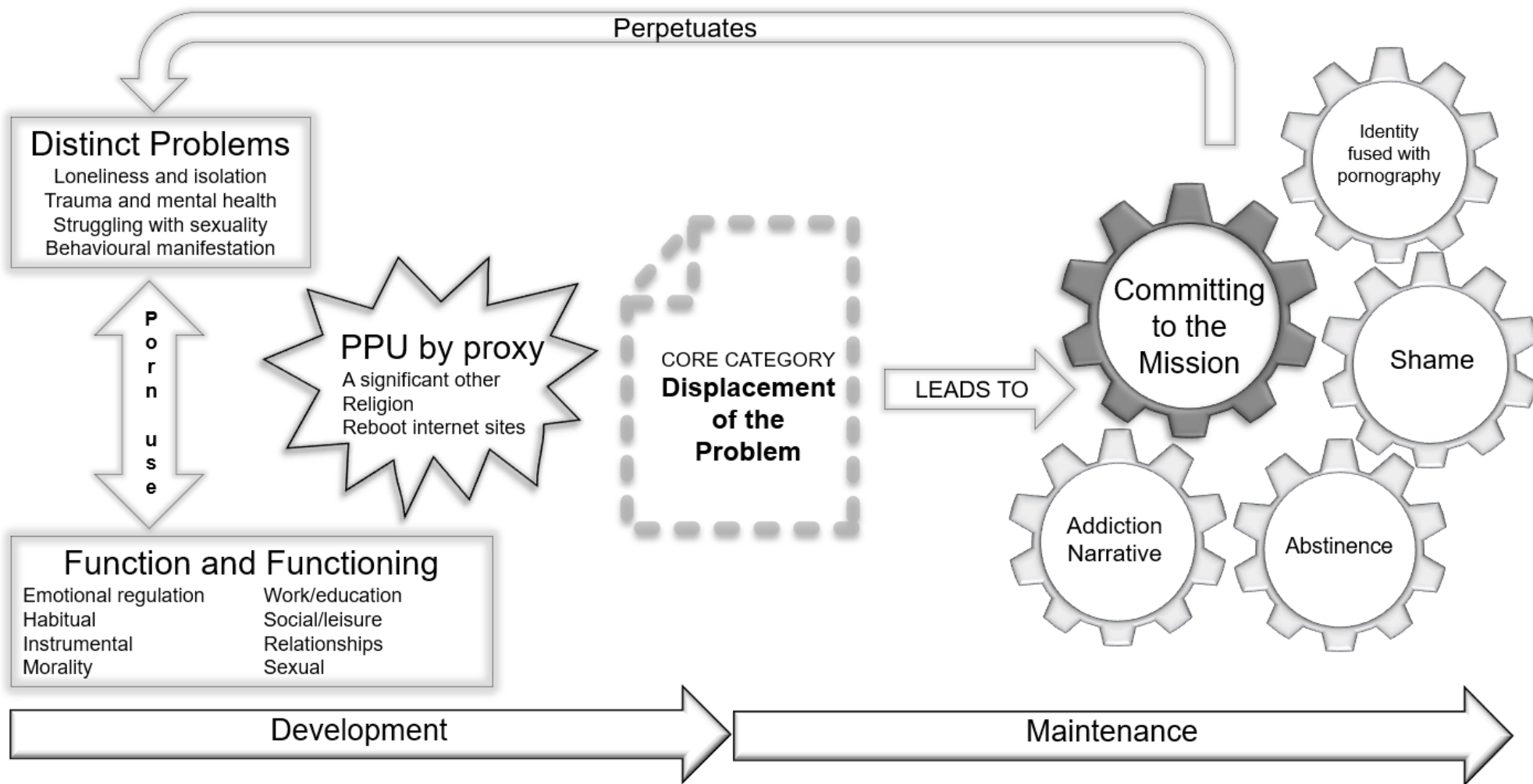
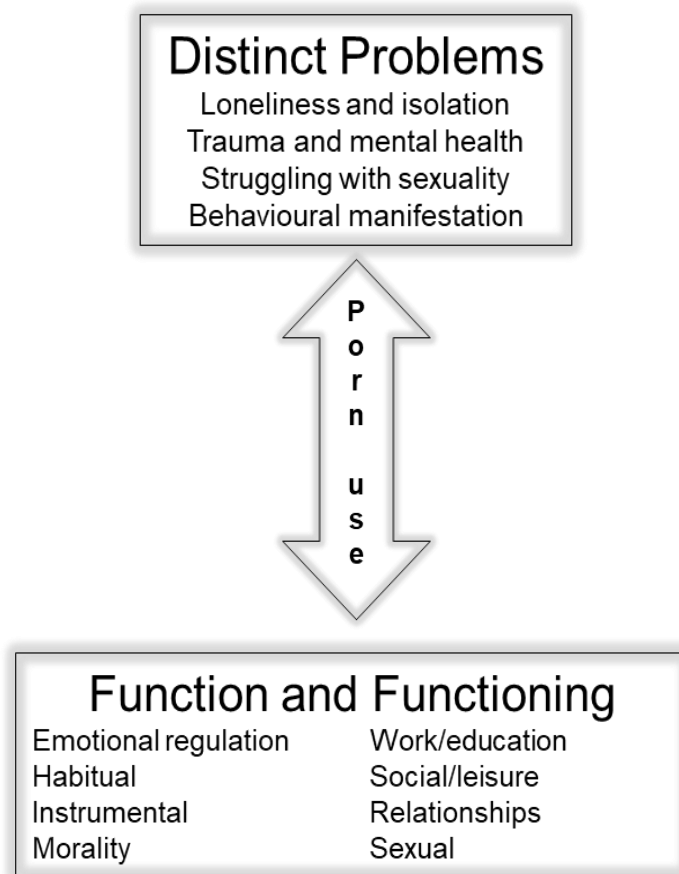


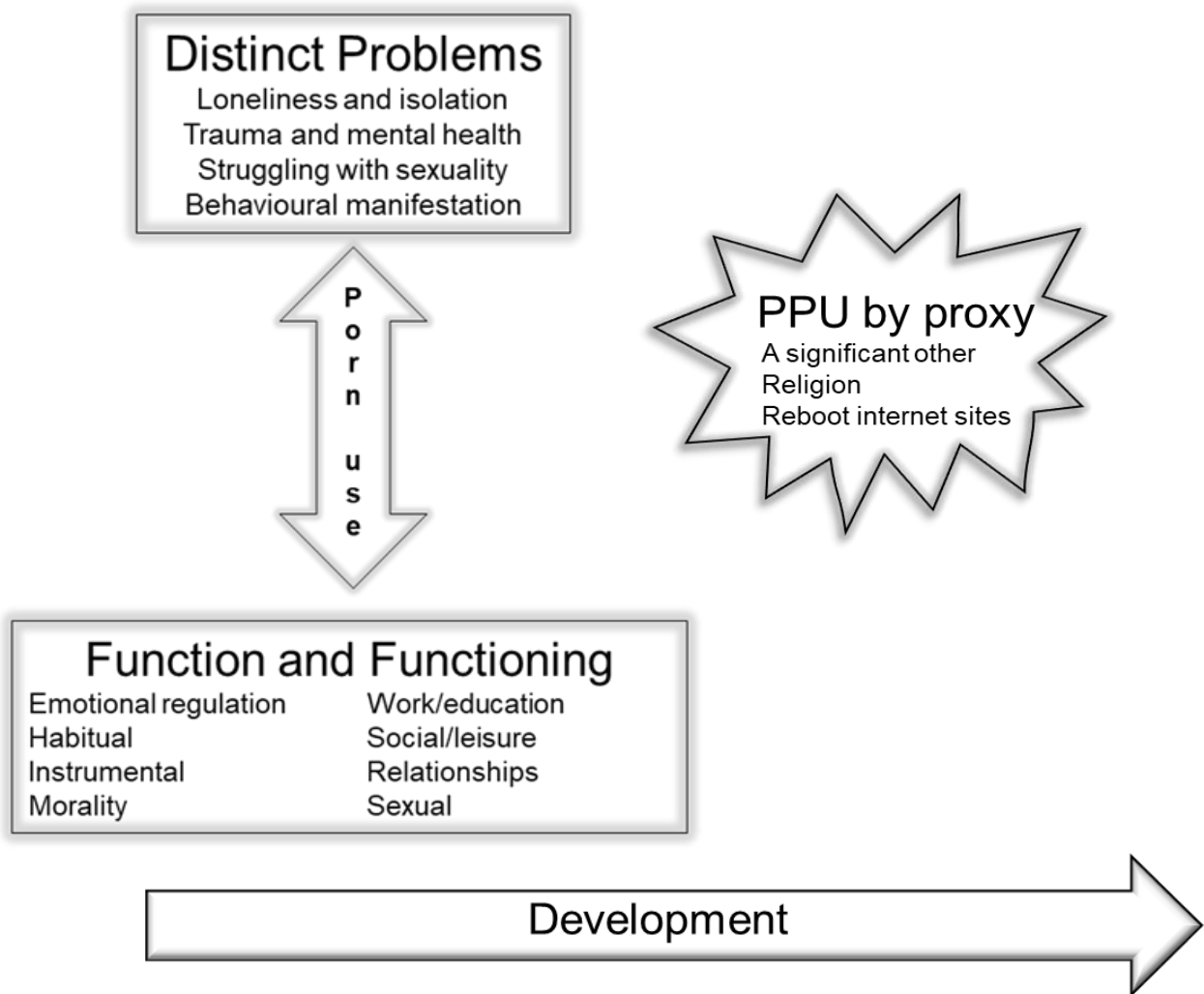
Figure 23. The constructivist grounded theory of PPU

The diagram can be broken down and the theoretical coding or linkage between categories explained.



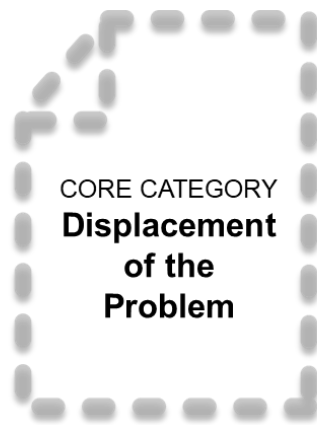
The category **distinct problems** was created to describe how all participants had underlying issues prior to developing PPU. The category **function and functioning** detailed the purposeful nature of the participants' pornography use, and the consequences of using.

The bidirectional arrow indicates how the distinct problems influenced the function of the pornography use, with pornography in part being a coping strategy. The arrow also indicates that the participants' functioning could also be attributed to their problems in addition to their pornography use.

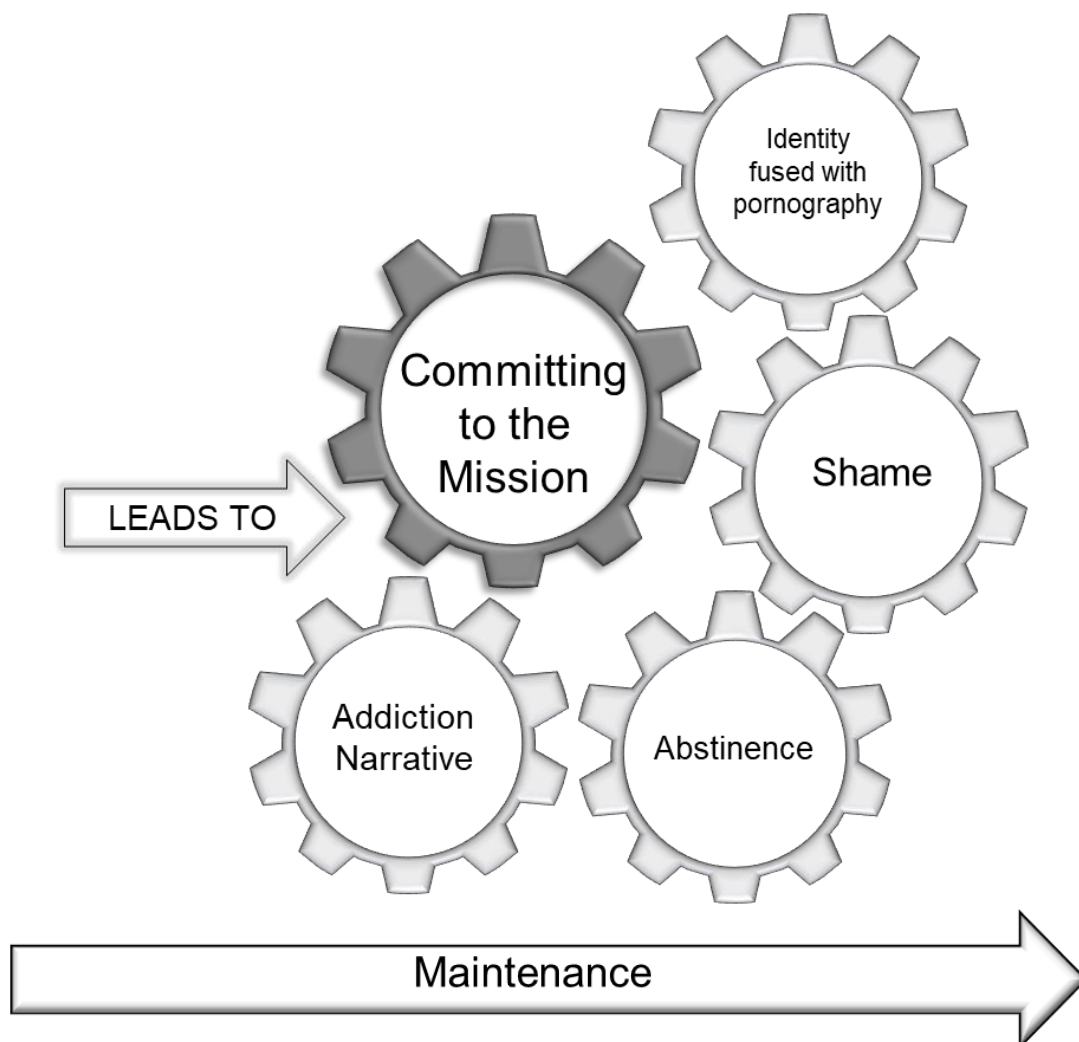


The category **PPU by proxy** seems to appear from nowhere within the diagram. This was intentional and aimed to demonstrate how the realisation of ‘having PPU’ or being addicted to pornography was influenced by an external agent.

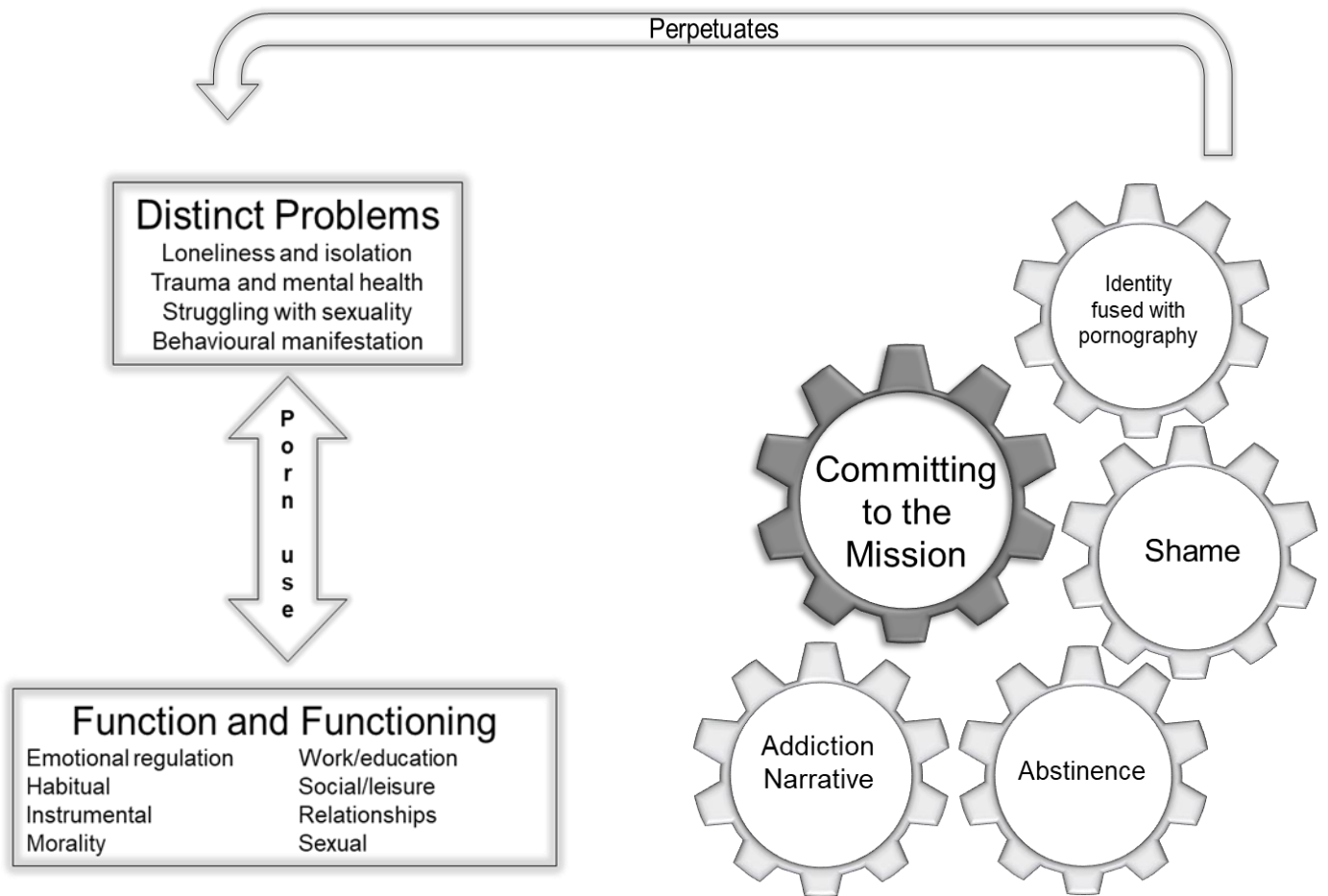
The addition of the arrow indicates how when taken together these categories explain the development, or what leads up to PPU.



The core category **displacement of the problem** is placed in the centre of the diagram, in the middle of the arrows, to show how it holds the two aspects of the theory together, the development and maintenance.



The core category leads to the category **committing to the mission**, indicating how PPU is maintained. The use of cogs is deliberate, implying a mechanistic system that is interlocked and perpetual. This system represents the maintenance of PPU.



An arrow with the word 'perpetuates' was included to demonstrate the process of how focusing upon **committing to the mission** excludes attending to the **distinct problems**. The direction of travel returns to the beginning of the sequence; the **distinct problems** are exacerbated, and in turn impact upon the **function and functioning**.

Chapters five to seven explore the categories in further detail, offering detailed analysis of the data.

Chapter 5: Stage one of the grounded theory

5.1 Introduction to the findings chapters

The findings are presented across three chapters. The chapters aim to present, explore, and justify the grounded theory constructed from the data. The overarching research question informing this study was:

'How do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?'

A grounded theory should have explanatory power. It is hoped that the theory explored here provides a robust account of the experience of self-reported PPU and indicates how the participants' problems were developed and maintained. In the preceding chapter the overall grounded theory, including the theoretical coding, was presented diagrammatically in order to situate the subsequent exploration of the categories. As displayed within figure 23 there is a flow through the theory from left to right. A narrative has been constructed to show how PPU was developed, and then towards the right how it was being maintained. To structure the presentation of these findings chapters, the five categories have been grouped together into stages. Each stage represents a movement through the theory. Stage one includes the categories 'distinct problems', 'function and functioning', and 'PPU by proxy'; together these explain the development of the participant's problems. Stage two focuses upon the core category of this grounded theory, 'displacement of the problem'. Stage three details the maintenance of the participant's problems, using the category 'committing to the mission'. Figure 24 shows how the categories were put into stages.

Attention was paid to each participant's voice during this presentation of the theory. Appendix 17 demonstrates the attention given to each participant within each category, and a total category and biographical representation per participant. All participant interviews were analysed and coded, however as the coding developed some content was given less prominence due to not adequately adhering to the research question. Therefore, some participant accounts were seen as more significant than others, and this is reflected in the presentation of the theory.

The presentation of the stages does not include pre-existing theory or research unless highly relevant to do so, this is in keeping with the tenets of grounded theory. Incorporating theory and research into these chapters would obscure the rich description and analysis of data central to this grounded theory. As far as consciously possible, I did not let myself be influenced by already established ideas concerning addiction when creating this grounded theory, this is echoed in the presentation of the theory; considerations of this process of reflexivity have been presented in section 3.2. The evaluation

of pre-existing theory and research in relation to the grounded theory occurs in Chapter 8, adding another layer of analysis.

A note on terminology: pornography is described throughout these chapters as being 'used' rather than 'watched' as all participants masturbated whilst viewing pornography, thus suggesting an active behaviour rather than something that occurred passively. In addition, most participants used this phrasing to describe their relationship with pornography.

Certain words are used to identify patterns in the data, such as how many participants experienced or related to a code or aspect of the category. Vaguely defined words such as 'few', 'some', 'several' or 'many' are used to give an indication of regularities and idiosyncrasies in the data, but not an indication of the generalisability of the findings beyond the sample studied (Neale, Miller & West, 2014).

Quotations from the participant data have been slightly amended to increase the readability, for example words such as 'like', or 'you know' were removed, as were utterances such as 'umm'.

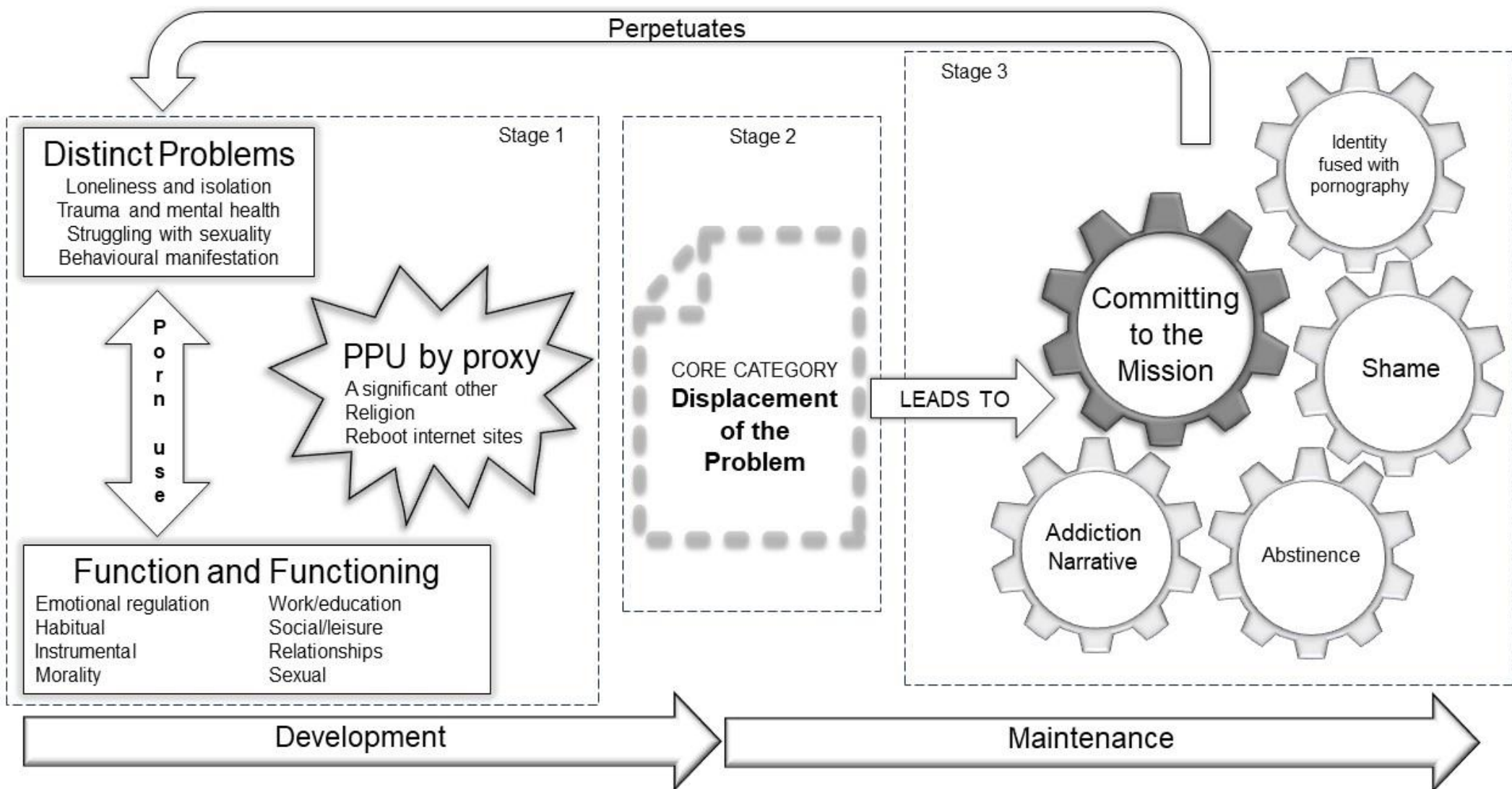


Figure 24. The constructivist grounded theory of PPU presented as stages

5.2 Introduction to stage one

This stage of the grounded theory explains how the participant's PPU developed over time. The process begins with an interaction between the category 'distinct problems' and the category 'function and functioning'; both categories outline the difficulties faced by the participants. The difficulties are labelled by the participants as PPU or pornography addiction, through an external mechanism. This process of identifying with the concept of PPU/addiction constitutes the category 'PPU by proxy'.

The presentation of this stage of the grounded theory begins descriptively before developing a more analytic perspective. The category 'distinct problems' was co-constructed alongside the participants and as such is presented descriptively. The intent behind this is to set the scene and demonstrate what problems the participants faced, and how they used pornography alongside these problems. The category 'function and functioning' begins with a detailed analysis of the journal data, before reporting on the participants perceived impact of using pornography. The discussion becomes more theoretical when proposing the mechanism in which the participants labelled themselves as having PPU.

5.3 Distinct problems

The category 'distinct problems' was derived from the focused coding of the interview data and the formulation memos that were created shortly after. During the interviews participants constructed their narratives concerning their difficulties, and what they believed contributed to their experiences. In turn I re-constructed these narratives into tentative formulations. Although many participants defined their underlying problems quite clearly, several did not. The distinct problems must be seen as a construction between the participants and I rather than an indication of pathology. Towards the end of the interviews a reconstruction of their problems was verbally offered, creating a space for reflection and member checking, agreeing upon a definition of what became called their distinct problems. All participant reconstructions of the distinct problems rarely contained the concept of addiction; despite the focus of the interviews being self-reported PPU. As all formulation memos are included in Appendix 15, a briefer summary is presented here to indicate the type of problems the participants had before labelling themselves as having PPU.

Before they considered their pornography use problematic, all participants reported having difficulties in living, or some form of psychological distress or disorder. They may have been using pornography alongside the development of their difficulties, but they only identified as having PPU once the distinct problem had become established. Several participants used psychiatric language to define their problems, such as depression, obsessive compulsive disorder (OCD), ADHD, autism. However, many used less formal terms such as anxiety, low self-esteem, or introversion. A few reported having what

they considered to be traumatic events and a history of abuse or neglect. A few reported having troubles with their sexuality. The aetiology of the distinct problems was highly individual. Whilst the distinct problems all contained negative views of the self, this is not to say that other more positive views did not exist for the participants, but these were not the focus of the interviews, therefore this data does not exist.

From analysing the data, the category distinct problems clustered around four focused codes:

- **Loneliness and isolation**

Many participants reported feeling lonely, struggling socially, recounting a feeling of being isolated from the world. Several had adopted the persona of the outsider, struggling with their mood as a result. One commonality was a difficult childhood, feeling different at school, being introverted, with some being bullied. Feeling alone and being too anxious to socialise, participants turned to pornography, replacing the need for connection with others, a safer alternative as compared to the unknown actualities of society.

- **Trauma and mental health**

Some participants, to a greater or lesser degree, had experiences they saw as traumatic, or they had more severe mental health issues. As with the previous focused code, the participants' difficulties had materialised before they considered their pornography problematic. For one of the participants their trauma influenced their pornography use; they described using incest-themed pornography as a way of having a meaningful connection, fulfilling a need. Another turned to pornography after a trauma, an attempt to block out painful feelings. One participant had a traumatic childhood and later developed OCD, feeling that there was something wrong with them. This influenced their sexual behaviours, using sex and pornography as a way of gaining a sense of belonging with others. OCD was prominent for another participant who used pornography to combat their intrusive thoughts.

- **Struggling with sexuality**

For a couple of participants, although having their own mental health or social difficulties, their distinct problems seemed to focus upon their struggles with their sexual orientation. For one participant they were insecure about their sexual orientation and body image, later being diagnosed with anxiety and depression. Their pornography use became a way of fantasising about an idealised self. The other used pornography as an outlet for their sexual orientation. Growing up in the 1970s they felt they could not express themselves as a bisexual, marrying conventionally they turned to gay pornography, and later to meeting up with men for sex. They identified as a sex addict, this was described as their central problem, rather than their problems resulting from their inhibited sexuality and relationship to sexual activity.

- **Behavioural manifestation**

Several participants had developed certain masturbatory techniques over the years that they acknowledged in the interview in part created sexual dysfunction. For a couple of participants rather than the distinct problem being a set of life experiences and associated emotional difficulties, it can be said that their distinct problems were of a behavioural nature. One participant routinely used prone masturbation (a face down masturbation technique that can lead to sensitivity issues) likely to be causal in their subsequent erectile dysfunction (ED), as this has been found in several research studies (Sank, 1998; Kafkasli et al., 2021; Can et al., 2023³). The ED was seen as the primary issue leading to identifying as having PPU. The other had an operation for their tight foreskin which meant their first sexual experience was painful. This in turn created anxiety which was seen as leading to ED, again described as the main reason for citing PPU.

The distinct problems were not just historical; to a greater or lesser degree most participants at the time of data collection still experienced issues related to their distinct problems. For many the onset of their perceived PPU occurred shortly after the onset of their psychological distress. For others there was more time between these difficulties. This distinction could be related to the participants' age and access to online sources of information concerning PPU. Many of the older participants described more distinct psychological issues occurring before their pornography use. Whereas several younger participants perhaps identified their pornography use as problematic at an earlier age due to the increased accessibility to the internet and the subsequent familiarity with the term 'porn addiction'. This category of distinct problems proposes that all participants had a pre-existing problem prior to identifying with the concept of PPU. This is not to say that these distinct problems in themselves 'created' PPU; causality cannot be inferred from the methodology of this study. However, by constructing this category 'distinct problems' it is proposed that self-reported PPU only encapsulates a limited set of difficulties. All participants expressed accounts of current and historical distress that by themselves can be seen as problematic.

The analysis now turns towards the participants pornography use itself. Aiming to further explore how and why the participants used pornography, what was the purpose, and what were the impacts of using pornography.

³ Despite research and theory not being integrated into these chapters, research is included here to give insight into prone masturbation that may not be familiar to the reader.

5.4 Function and functioning

The previous category focused upon the participants underlying problems that were distinct from their self-perceived PPU. From the formulation memos there was an indication of why many participants initially used pornography, it was constructed that some were replacing the need to be in relationships, or as an outlet for their sexuality for example. The focus now changes to thinking about the participant's day-to-day use of pornography, to better understand what keeps it going, why participants persist with using pornography despite it being reported as problematic. This category is presented in two parts: 'function' and 'functioning'. The former relates to the purpose and utility of the pornography use, the latter to the level of participants functioning, their ability to engage across several life domains – how using pornography is experienced as problematic. The terminology of this category was influenced by my experiences as a mental health professional. The function of a behaviour is a key concept within behavioural theory, and functioning is a concept taken from occupational therapy – a profession I have often worked alongside.

5.4.1 The function of pornography

Here there is a focus on the drivers of the participant's pornography use. The word function is used to explain the purposeful nature of the pornography use.

This part of the category is mostly informed through the analysis of the data associated with the 258 journals of pornography use. The journals of pornography use focused upon a singular event. Participants were asked to record their thoughts, feelings, and behaviours; before, during, and after using pornography. The analysis of the journals indicated several findings:

- The behaviour of using pornography had a function, at that time it served a purpose.
- For at least some of the time, in the moment, the majority of participants recorded that they enjoyed using pornography.
- The intended outcome of using pornography was rarely achieved, with most experiencing negative feelings afterwards.

The above components are typical of what would be expected through a functional analysis of behaviour (see section 4.5) - the behaviour was purposeful, with short term consequences prioritised over long term consequences. All participants described their use of pornography as problematic, in addition the survey found that all participants used pornography at least once a month and scored highly on the PPUS. As such it can be suggested that using pornography was not new to the participants - what was recorded in the journals was not their first-time using pornography. It could be

that the participants may have experienced similar processes before, but it cannot be claimed that the journals were representative of the participants' typical use of pornography.

The participants' journey through the journal had similarities. As such four focused codes were constructed:

- Emotional regulation
- Habitual
- Instrumental
- Morality

These codes were also echoed in the focused coding of the interviews, therefore where appropriate the following presentation also includes segments of data from the interviews. In addition to presenting and exploring the idea of function, there is also a consideration of how function changed over time as this adds to the temporal narrative of the grounded theory.

Emotional regulation

37% of the journals were analysed as having a focus on emotional regulation; how participants used pornography to change their affect. This aspect concerned the reasoning behind using pornography in the moment. Participants indicated that they wanted to change how they felt, to distract themselves, or to feel something more positive. Only 12% of the participants constructed as emotional regulators were successful in their undertaking, in that their mood did change for the better. The remaining 88% may have momentarily felt differently, for example when using pornography, but this was very short lived and most felt worse afterwards. An explanation for this 'failure' of emotional regulation is discussed in the focused code 'morality' presented later in this chapter.

The majority of participants classed as emotional regulators were cognisant of wanting to escape their painful feelings and took a considered decision to use pornography. Feeling depressed, anxious, worried, stressed, distressed, lonely, sad, agitated, angry, were recorded in the journals before using pornography. For example, participant 53 stated:

"Boredom, depressed feeling, wanting to fill a void with stimulation."

Here participant 53 records how prior to using pornography they experienced negative emotions. "*Wanting to fill a void*" is a clear example of making a considered decision with the intention of changing how they were feeling. The word "*stimulation*" implies wanting to fill their emptiness with something more positive, regulating how they felt. Like participant 53, several participants were mindful of how they felt before using pornography:

“How alone and sad I feel” (participant 103).

Whilst some were more aware of their thoughts, being in the midst of self-denigration before using pornography:

“I was thinking badly of myself. Like I'm of little worth: unattractive, unfunny, and generally an unlikable person” (participant 57)

Several participants seemed to ‘battle’ the urge to use pornography. Some acknowledged that they were feeling bad but also wanted this feeling to go away, for example:

“I was trying to convince myself not to do it, worrying about something that had happened the day before made me do it, pornography makes the stress temporarily go away” (participant 161)

Here, participant 161 identifies both the internal state (*stress*) and the content of their worries (*something happening the day before*). They also state from their experience how to make the negative feelings dissipate (using pornography). Interestingly they absolve their agency by stating *“[the event] made me do it”*. Some participants expressed more ownership of their decision to use pornography. Participant 202 expresses how they went against their better judgement and committed themselves to using:

“I was thinking that I should not watch porn, telling myself the reasons why it is a bad idea, but in my state, I cared less and less before I consciously decided to watch porn the minute I got home” (participant 202)

All participants lost the battle to not use pornography, either resigning themselves to it:

“I know this isn't good for me, but I can't stop myself” (participant 168)

or justifying it:

“I want to give myself a break” (participant 95).

Given that they all used pornography it was interesting to see some of the thought processes involved, in particular how using pornography was eventually achieved in gradual steps of justification:

“Maybe I could just... peek a little” (participant 86)

“Maybe I can see how close to porn I can get without actually viewing porn” (participant 64)

“Let's just watch a little bit, I won't even masturbate” (participant 164)

The journals of pornography use seemed to capture the immediacy of the pornography use. Having completed the journals shortly after using pornography, their awareness and thought processes can

be seen as 'fresher'. Still subject to interpretation, but less so than in the interviews where participants had longer between their use of pornography and discussing it.

All participants classed as regulators had some kind of negative affect before using pornography. Most were aware of this and wanted to change how they were feeling. Some fought against the urge to use, and some tried to trick themselves into not using. Whilst using pornography the majority (40%) of regulators enjoyed what they were doing, 20% had a mixed experience, 18% a negative, and 22% had a realisation whilst using that they were trying to remove their bad feeling, trying to lose themselves within the pornography but not succeeding.

Thirty-two percent of the regulators felt tired after using pornography, which is not surprising as the median time using of those that felt tired was 60 minutes (25% more than other journal completers, and 500% more than the average Pornhub user (Pornhub, 2023). Fifty-six percent described feeling negative after using pornography, this is contrary to their expectation of feeling better. Typical quotes include:

"Even more depressed than when I started. I felt super fatigued and just empty" (participant 220)

"Very bad, annoyed about it, feeling lost, weak" (Participant 110)

"Felt like a total piece of trash for relapsing. Felt disgusted with myself and was angry at myself" (participant 22)

The above participant quotes all indicate an awareness of failing in their endeavours. However, as noted, 12% of regulators were 'successful', in that they felt bad before using pornography, they wanted to change how they felt, they used pornography, and they did indeed feel better afterwards. However, the journals only recorded a 'snapshot' of pornography use, one episode. As all participants identified as having PPU then it follows that these participants were not successful every time – likewise the 'failed regulators' may also be successful at times. If an analogy to gambling can be used here, then the odds of success would be approximately 1:9. This perhaps proposes a suggestion as to why so many participants used pornography multiple times a day – more chances to reduce their painful feelings.

The interview data also included several codes related to emotional regulation or using pornography to change feelings. Interview participant 10 stated:

"That's one of the times when it got really worse because I was feeling so bad and the only way that I knew how to cope with negative emotions was porn...Bad porn after break up [of relationship] and again a few years later at university when depressed."

Participant 10, like many of the journal participants, describes using pornography to cope with difficult feelings. When they say “...*the only way*...” this indicates that using pornography had become their default coping mechanism, using it ‘badly’ or excessively after challenging life events. The role of pornography in reducing negative emotions was echoed by interview participant 5:

“One of my major triggers for using pornography was stress. I was really stressed at work, I was looking for something else to do, something to get away from it, something to relieve stress.”

Here participant 5 describes how they responded to stress by using pornography, again suggestive of pornography being used a coping mechanism. The same process can be inferred from the account given by interview participant 15, who gives an example of their thought processes:

“So, the self-talk would be something like, ‘wow, I’m just completely dead, I don’t have any energy. Wouldn’t it feel good to be sort of like sexually excited? Wouldn’t it feel good to have an erection?’”

Participant 15 in this excerpt sees themselves as ‘dead’, lacking any ‘energy’. The analogy of a battery comes to mind when reading the above – wanting to recharge using pornography. Several interview participants actually used the words ‘coping strategy’ to describe their pornography use. Interview participant 1 stated:

“Life conditions, mental health, emotions, whether you are stressed, depressed, anxious, you use it as a coping mechanism ... you use it depending on how bad it is at the time or what your emotions are sort of pushing you to doing.”

Here interview participant 1 by speaking in the second person, indicates an almost involuntary aspect to their pornography use. That their painful emotions are so strong they can make them use pornography. Interview participant 20 also used the phrase ‘coping strategy’:

“It totally just became my coping mechanism. I didn’t have to feel my sadness, my aloneness, my whatever. I was dealing with depression at that time. Now if I feel sad that can be triggering for me.”

Here they identify their pornography use as coping strategy, and with this realisation they are able to identify fluctuations in their mood as a trigger for using. With this awareness however comes a prediction of future use, a sense of being vulnerable, or powerless. Interview participant 15 also described how they used pornography to regulate their feelings, and how they had to be aware of this ‘danger’:

“I would wake up feeling like shit and the way I would relieve that generally would be by looking at pornography. Whenever I feel emotionally flat or drained, if I have an exhausting meeting or an exhausting conference call, and I just feel like kind of flatlining, like sort of dead. That’s the most dangerous time for me now.”

Interview participant 3 recounted a very recent episode of using pornography and how they successfully 'escaped' their feelings of loneliness:

"I didn't find good ways of coping, and I found this, it's an escape. I was lonely yesterday. For those hours I didn't feel lonely. It just switched it off."

Here participant 3 admits that using pornography is not a healthy coping mechanism, but for them it works, they are able to escape their loneliness. Several interview participants made more reflective statements, recounting how their pornography use had served a purpose for them throughout their life. Interview participant 18 said:

"When I was younger, I worried about what everyone thought about me. I was kind of trying to find my place and my voice or whatever in my group and everything. So, I think it was just an escapism from that."

This idea of fitting in with a social group was also something that interview participant 2 clearly identified with, for them their Asperger's syndrome made social situations difficult, and using pornography was their way of retreating from the world:

"I felt that it was necessary to go home, lock myself in my room, or the attic or wherever, and do that [pornography use] in order to cope with all the stress that interacting with people and being part of society would inflict upon me."

Interview participant 6 neatly summarised their difficulties and the role of pornography in their life:

"I had no other way of dealing with how I felt. I do genuinely believe that we pick things up because we can't deal with our emotions, we can't deal with life."

Perhaps their viewpoint cuts across many of the stories heard from the participants. An acknowledgment that using pornography is purposeful, a coping strategy for the distress leading from the distinct problems.

The idea of emotional regulation, attempting to change painful feelings by using pornography was very prevalent across the journals and interviews. However, it was not the only function of the participant's pornography use.

Instrumental

I assigned the descriptor 'instrumental' to 9% of the participants. Similar to those intending to regulate their emotions, these participants also had an intention underpinning their pornography use. Several

saw their pornography use as a 'means to an end', that it was justified. As such the pornography use was more pragmatic, and shorter in duration, a median of 30 minutes.

Several participants used pornography to help them get to sleep, for example participant 141 stated:

"I knew I didn't want to look at pornography or masturbate, but I knew I needed to in order to fall asleep."

Interview participant 7 was adamant about their 'need' for pornography:

"It's hard for me to go to sleep at night. So that's [pornography use] really what just puts me to sleep. That's what I got just in the back of my mind. I'm like, ok, I need to be off at this time tomorrow. And the only way that I can do that is if I do this to get me there. And then, I can actually have rest, I can actually fall asleep, otherwise, I might be up all night. I need it to sleep, there's no other way."

These two excerpts demonstrate how a decision was being made between using pornography and not being able to sleep, clearly outlining the function of the pornography use. Perhaps they saw using pornography as the lesser of two evils. This is in keeping with some of the tenets of functional analysis, short terms measures supersede longer term consequences. The participants knew on one level that continued use of pornography was not good for them, as inferred from their identification as having PPU. However, the immediate consequences of not being able to sleep and perform the next day were given prominence.

Interview participant 11 also recounted how their early pornography use served the purpose of getting to sleep:

"Initially I was using it more and more heavily as a thing to actually to help me get to sleep."

They then describe how the function changed over time:

"It was a thing that I use to help me get to sleep and help me get out of bed in the morning."

Again, in keeping with behavioural theory there is generalisation of the behaviour or coping mechanism, from being used initially to get to sleep, to having to use it to be able to start the day.

Some participants used pornography as a reward for completing a difficult task:

"When I finish what I'm doing, I can take a break and view some porn and masturbate" (participant 197).

For a few it was a way of punishing or getting back at their partner. Although appearing different in terms of the content, the process was the same, a clear intention. Like previous examples, these participants wanted a specific outcome. For example, participant 159 recorded:

"I was thinking about how I would be justified to act out because I was just rejected by my wife."

All were considered decisions to use pornography. For many participants the outcomes were as they predicted, those that used pornography to get to sleep felt tired and fell asleep. Others seemed to regret using pornography, with several making a commitment to themselves not to do it again.

Habitual

As opposed to the two previous aspects, Emotional regulation and Instrumental, several participants (11%) did not seem to make a considered decision to use pornography. They reported that they used pornography in a habitual or automatic manner. Many used pornography at different time points of their day, triggered by returning from work for example, or as part of a set daily routine. After using in this way, several participants felt 'powerless' regarding their pornography use, feeling as if it had been an automatic process. Many felt that they were just going through the motions, doing what they do most days. Participant 178 was clear about their habitual use:

"I had woken up and was on social media. I started masturbating while on social media out of habit."

Most participants regretting their habitual use, several did not really get much out of it, with most carrying on with their day. Participant 186 described:

"a weak orgasm [being] "rarely satisfied."

Being not satisfied was echoed by participant 136:

"No longer frustrated and like I could finally move on with my day, but not very satisfied."

These two excerpts are suggestive of a perfunctory process to the pornography use – they did it because they did it. Participant 60 clearly stated the temporality of the experience:

"I just moved on to thinking about work"

whilst others were left with a more lingering negative feeling:

"Shame, disappointed with not being able to quit" (participant 27)

"I regretted it, and how gross I am" (participant 190)

Some interview participants also used pornography habitually. Interview participant 7 stated:

"Porn is really routine. It's just something that I need to do, every day."

The use of the word 'need' implying a lack of choice. Interview participant 4 really highlights the automaticity involved:

"I come home and then my brain like computer, nobody home equals porn."

The use of a computer analogy along with the associated speech adds to the idea of an automatic process. Interview participant 15 describes their use of pornography:

"I have this kind of a weird routine, which I'm aware of, that I want to break away from."

They acknowledge that having a routine is weird, but awareness alone does not seem to be enough to change their behaviour.

Morality

The largest focused code, at 43% of participants, was those classified as having a moral, or judgmental, aspect to their pornography use. Most were considered to be feeling generally OK before using, most reported having an urge, triggered by everyday behaviours such as watching some form of media or getting ready for bed, for example participant 244 quoted:

"I just wanted to watch a TV show when a sexual scene intrigued me, and I felt I needed a sexual relief."

Some became aware of the opportunity to use pornography or thought about using when feeling bored:

"I was bored of watching TV, which I had been doing all day. It was a public holiday, and I didn't have any plans" (participant 56).

Once the urge was experienced most took a considered decision to use. Here participant 138 describes their thought processes:

"I felt slightly horny. I started thinking about how much I'd like to watch something hot."

Similarly participant 119 became aware of an urge but was also cognisant of the likely consequences of acting upon it:

"A strong urge to do it. A tingle sensation and then a feeling that something was missing if I didn't do it. And all the repercussions that I know about seem trivial."

As a result of thinking about the consequences of using pornography many participants tried to resist using:

“My morality telling me to stop. Trying to wrestle back control and telling me what I was about to do was not right for myself. This was contrasted with feelings of excitement, anticipation and the potential of elation and feeling good at what could be if I did engage with the pornography” (participant 95).

Here participant 95 uses the word ‘morality’, suggesting using pornography is wrong, against what they really want to do. As someone who identifies either as having PPU or being addicted to pornography it can be assumed that they consider using pornography is a bad thing. The majority of participants actually enjoyed the experience of using pornography with only a few having a more negative set of feelings whilst using, participant 177 gives an indication of more negative thought processes when using:

“I was thinking about how I would regret this, upset that I couldn't stop, and felt a sense of hopelessness.”

74% of those with a moral aspect to their journals felt bad afterwards, guilt, shame, regret were common words used. Participant 71 stated:

“I felt intensely guilty about looking at porn and that disgusted that I did.”

Participant 179 compared their feelings in relation to their desires when using pornography:

“I felt stupid for succumbing to the urge yet again. The desire to taste my semen completely vanished, it's repulsive to me after I orgasm.”

Several participants berated themselves afterwards, an expression of their painful feelings:

“Mad at myself for staying up so late. Mad at myself for using porn. Mad at myself for breaking my plan again and setting back my recovery again. Hopeless about stopping porn use. Depressed and empty. Used up” (participant 173).

Therefore, despite feeling OK before and during, most felt bad afterwards. This was described as a post hoc judgment about what they had done, moral disapproval, summed up nicely by participant 56:

“This is not OK, this is disgusting. I definitely need to go to confession and stop this once and for all”.

Their wording of confession implies a definite moral quality to their relationship with pornography, that it is sinful. In addition to the idea of sinfulness, the experience of feeling bad after using pornography is also constructed as being based upon the participant's desire not to use. Therefore, when they did use, they felt regret.

As part of this process of self-denigration, regret and shame, several participants made a commitment to themselves not to use pornography again:

"I was upset. I thought about how unnecessary it was, I wondered why I even did it. I wondered how harmful that particular episode might be to my overall recovery. I decided to get back on track, to consider it a "lapse" and keep going with my recovery. Be resilient, don't let this affect me - except to make me stronger in my resolve to quit forever" (participant 112).

26% seemed to enjoy the experience with no discernible short-term consequences. However, all these participants are still grouped under the idea of 'Morality' as they all reported having PPU. Therefore, the episode recorded in the journal may not be representative of their general experiences of using pornography.

This act of judgment concerning their pornography use may also help illuminate why so many 'regulators' felt worse after using pornography. As detailed above their intention had been to feel better, but because of their moral disapproval they felt worse. They reported feeling ashamed, guilty and regretful due to their beliefs about using pornography.

Beliefs about using pornography were a common theme throughout the participant interviews. Beliefs about pornography itself, and the industry are discussed in the core category – displacement of the problem. There seemed to be a distinction between participants who felt ashamed of their pornography use as it contravened their beliefs, their morals, and those that felt a sense of failure, that they had broken their self-imposed rule of not using.

Several of the participants interviewed described their reaction to using pornography. Interview participant 1 stated:

"As soon as you sort of finished you almost take a second look at what you have been looking at and you just want to delete it or close the window as quick as possible."

Here it is suggested that interview participant 1 is disgusted by what they had been doing, that what they had been watching is against their ideas about what is right or wrong. Likewise interview participant 20 suggested:

"I just feel like a massive hypocrite in a lot of ways because watching porn, especially the type of porn that I would watch sometimes, does not align with my values and how I am in any other part of my life whatsoever really."

They go further saying:

"Super ashamed - it's not like on the level of I'm sinning, but on the level of like, what the fuck did I just watch."

Like the journal participants, for a few interview participants their pornography use clashed with more external sources of morality, they saw themselves as sinning. Interview participant 19 said:

“I knew it was kind of wrong, a lot of guilt. Part of it is religious, because it's against religion, to masturbate.”

This clash with religion is echoed by interview participant 14:

“In a way I've been becoming more religious, I've always thought it was disgusting and sad, the idea of women being promiscuous, I've always found very, very difficult to deal with.”

In addition to interview participant 14's religiosity, they also judge themselves for using as it is something they no longer want to do:

“I think I have realised what porn is, what it does to me, and I don't want it to be a part of my life anymore.”

This idea of failing at something you have decided to work towards resonates with interview participant 19:

“The problem is you get discouraged when you fail. I had this moment where I was super strong and I was like, ‘alright, I'm going to stop and then I'm never doing this again’. Then a week or so later I did; I just feel so sad and frustrated, it feels like it's something that will stick with me forever.”

The experiences of failing or relapsing are re-visited in Chapter 7 in the category Committing to a mission.

From analysing the journals and interviews four focused codes were constructed to explain the function of the participant's pornography use. As has been presented the function varied between participants. Due to the static nature of the journals of pornography use, they only recorded one episode, it has to be considered that it is likely the function would change in different circumstances, with participants having multiple reasons to use pornography, not just to get to sleep for example. Those that used pornography instrumentally could also use it for emotional regulation. This changing function is now given more attention.

5.4.2 Changing functions

From analysing the journals several functions have been presented. However, the interviews also highlighted temporal aspects of pornography use; an aspect that the journals could not pick up. Many participants described how the function of their pornography use had changed over time. They

discussed how their pornography use had changed from excitement, novelty, or expressing their sexuality for example, to coping with their distinct underlying problems. Interview participant 2 when describing their teenage use of pornography stated:

"I thought it was great, I thought that anybody could look at it any time, it was almost all of it was free, there is so much free porn. I thought that it would make me feel good so why not."

They then described how their usage changed:

"I would have more of an emotional reaction, if I'd had a bad day at school, or if I'd been on assignment or something so I would feel better after I orgasmed or even just thinking about pornography."

Interview participant 11 details how their pornography use changed over time:

"Initially I used it for pleasure. But I was also using it more and more heavily as a thing to help me get to sleep. Then afterwards, it was a thing that I used to help me get out of bed in the morning. It got worse to the point where I would use it just to give me a little like boost in the middle of the day ... I remember using porn quite a lot, just to turn my mind off. I found myself using it as a something to help me get through depression basically."

Participant 15 discussed how they initially used pornography to explore their sexuality:

"For sexual minorities, because it's one of the things I see that that's been my only source of how I have to learn about it and sexual health."

However, over time the function changed:

"I've noticed the pattern is now I feel like maybe I don't need any anyone else's company because I can just stick to this [pornography]. So, I just stopped meeting people and I was quite disturbed and yeah, I was getting a lot of anxiety."

The above shows how the function of pornography changed over time for the participants. The mechanism for this change is suggested to be an interaction with the distinct problems. As outlined earlier, the distinct problems occurred prior to the reported PPU. It could be that the distress related to the distinct problems created the change of function of the pornography use. When the distinct problems were not as prominent, pornography was used for enjoyment or exploration. However, when the distress increased the pornography became a coping mechanism.

5.4.3 The impact upon functioning

This part of the category refers to the participants' accounts of how their pornography use directly affected their functioning - the impact of the pornography on their life. Data from the interviews and the related formulation memos were the primary resource that informed this aspect of the category. The word functioning is used here as it relates to the idea of social indicators of well-being (Andrews & Withey, 1976), the ability to function or perform across different life domains. Four domains are described in this section:

- Work/education
- Social/leisure
- Relationships
- Sexual

It is important to note in this category it was difficult to ascertain whether the participants report of their functioning were seen as driven by their pornography use or their distinct problems. It seemed that participants on the whole were presenting their difficulties within the context of their pornography use, but the causal factor remains unknown. However, the focus here is how the participants constructed their difficulties, therefore their account is the focus, what they report to be the impact is presented. A theoretical understanding of their reports is explored in the category 'PPU by proxy', and in stage 2 in the core category 'displacement of the problem'.

Before the four domains are presented there is an exploration of the idea of time. The first two domains seemed to be impacted, in part, due to the time spent using pornography. Therefore, this aspect is explored first to give context to the other domains.

Time

Figure 25 demonstrates the interview participant's time spent using pornography in a typical week (the frequency of pornography use was presented earlier in section 4.6). It can be seen that there is variation in the amount of time. Several of the participants interviewed had not used pornography for many months, most of these described themselves as abstinent. When discussing their time spent using pornography, they recounted their past use. Several participants, as can be seen below, reported to use pornography for a considerable amount of time each week.

TIME SPENT USING PORNOGRAPHY IN A TYPICAL WEEK N=21

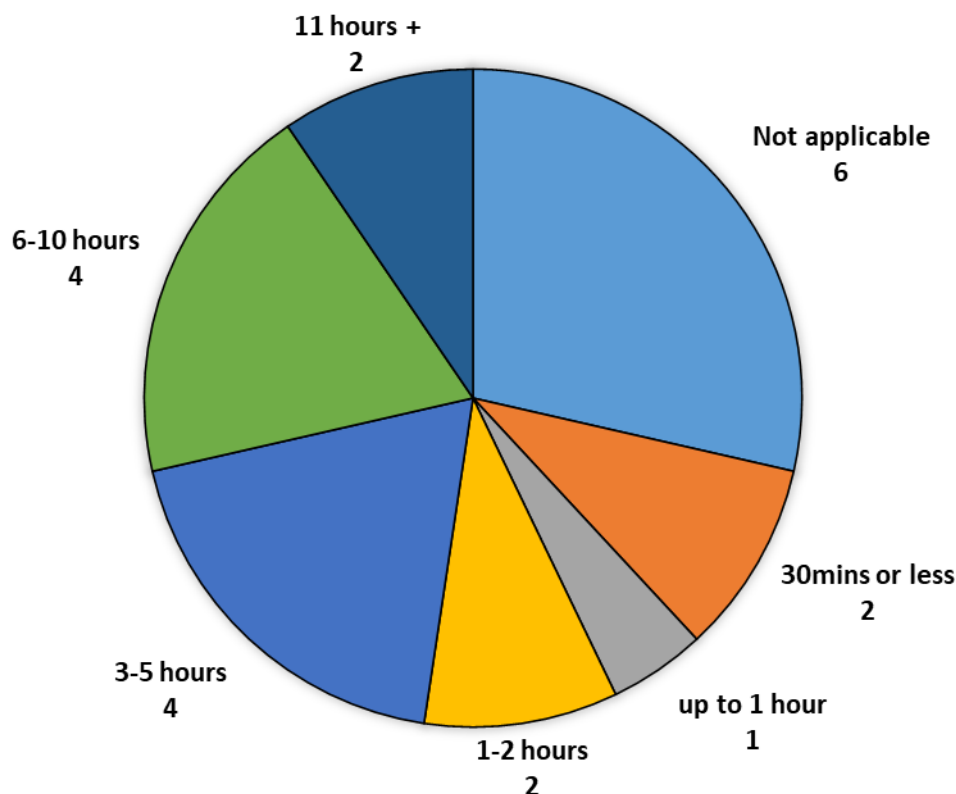


Figure 25. Time spent using pornography – interview participants

When talking about the impact upon their functioning, the time spent using pornography was prominent. Most participants referred to the duration of their pornography use rather than the frequency. For example, participant 10 stated:

"I'm not proud of this, but my longest session is like thirteen hours or something. Of course, I had breaks, no normal human being could do that for thirteen hours straight."

Participant 10 was not alone in using pornography for so long. Participant 3 described:

"My porn use is not an hour here or half an hour here. If I start, it's normally five or six hours, sometimes it can be long, incredible periods, 12 hours easily."

Participant 18 recollected the physical consequences of using pornography for an extended amount of time:

"At that point it is actually painful. Like it's ridiculous, and yet you're still doing it and like, you know, you got no cum coming out."

Others, rather than one prolonged session, would use several times in one day, for example participant 21 said:

“It could be two hours before work and four hours in the evening that wasn't uncommon. My bigger issue was the weekends, waking up and it's a few hours and then going about my things coming back to my room and it's another few hours, and then maybe even a couple hours after that.”

The examples above maybe from the participants reporting a higher amount of time using pornography, however time spent was a factor for all participants although for some to a lesser degree.

Using pornography for a long period of time is not necessarily problematic in of itself. However, time spent using pornography came with costs. Participant 5 described how they ‘wasted their time’:

“I would be buying VHS videos. I can remember a whole afternoon virtually in the newsagents once; just looking through every single pornographic magazine. I was in there for hours just looking at all the magazines on the top shelf. I remember coming out and thinking, I've wasted an hour or two of my life.”

This was echoed by participant 17:

“The problem is probably with the amount of time. It's like, probably an hour, you know, maybe an hour or two a day. So, it does interfere with sleep, I'm generally getting probably maybe three to four hours of sleep a day, I think the porn is a part of that.”

Here we have a general sense of judging how time is spent, and also an indication of a specific cost, sleep. As discussed, the analysis of the interview data developed codes within certain domains. The cost of spending time using pornography impacted upon all domains, but mostly work/education and leisure/social functioning; these are now explored.

Work/Education functioning

Several participants discussed how they felt their pornography use had a negative impact on their ability to work or study. Participant 10 gave a general statement of how they felt:

“I was really struggling at school. I've thought about it afterwards, I feel like it was partially because of my addiction.”

Here participant 10 equates their struggles at school with their ‘addiction’. It is likely that they mean the time spent on their addiction, but by using the singular word it could be implied that they see their

pornography use as akin to a disability or an illness. Participant 2 also reflected on their past and what could have been:

“All these people I went to high school with are doing things since high school and some of them are doing things in college and university, and I've just been, you know in my room looking at pornography, masturbating. So, I'm very aware of what I could have accomplished by now if I had done anything else, and it really bothers me a lot when I sit down and think about it.”

Although understandable, participant 2's reasoning is flawed. It could be that without their time spent using pornography they could have been more 'successful', but this cannot be assumed. Participant 2 has also dismissed their Asperger's Syndrome and related social isolation (part of their distinct problems) as a contributing element that could account for their unsatisfactory achievements. However, participant 14 was more specific when explaining how their productivity was affected:

“I remember I had this job in which I logged my own hours. I was doing research for a professor. What I realised is that I couldn't do more than three hours of work a day because I'm spending so much time just kind of fucking off online and much of that was pornography.”

Whilst participant 19 described how pornography made them distracted when at school:

“I would be having a private lesson with a teacher, just thinking about teachers in a sexualised way just seemed wrong, because I don't think that way, it [pornography] kind of perverted my mind and made me think in a way I don't want to think.”

All these accounts are suggestive of how participants believed their pornography use impacted their ability to perform well at work or study. Two of the examples were quite generalised, using hindsight; it may well be that blaming their pornography use for their self-perceived poor work/education performance was a scapegoat – this idea is explored in more depth in the subsequent category 'PPU by proxy'.

Social/leisure functioning

Many participants explained how their use of pornography affected them socially and impacted their leisure activities. Participant 2 described how they lost interest in other activities, how they prioritised their pornography use, and how this made them feel:

“I was not interested in any kind of physical activity. I was not interested in becoming part of a team or a sports team or anything. I wasn't interested in like clubs ... one time I could have gone to someone else's event, and I just chose not to because I prioritised the short term high that pornography gives

me over socialising with people, because socialising makes me feel drained and exhausted and so on.”

Participant 2 struggled in social situations, in part to their Asperger's Syndrome. This could account for 'feeling drained and exhausted'. It therefore makes sense that they would prioritise an activity that gave them a 'short term high'. Participant 17 also discussed their priorities, describing how other activities were replaced with pornography:

“It's probably just replacing you know enjoyment. You don't go out and do things with friends, go out on dates and stuff. I mean, just life activities that some other people have. It's like it's probably just replacing that.”

Rather than replacing enjoyment participant 6 stated how they retreated into their pornography use, becoming frustrated when not able to use:

“I became really quite frustrated with other people, I wanted to be on my own. I became really locked in around privacy and other people being in my space or around me. They really started to annoy me because that was time away from being able to use pornography.”

The above statement by participant 6 indicates how using pornography had become all-encompassing and that other activities could not give them what they got from using pornography. Perhaps for participant 6 the function of their pornography use outweighed the function of being around other people.

Apart from the time spent using pornography and the cost to other activities, several participants talked about how they felt differently when in social situations after they had used pornography. Participant 1 gives a good example of this:

“When I've been watching porn and then afterwards when I'm with friends and someone is cracking a joke I won't laugh as hard, a joke isn't as funny or doesn't give you as much pleasure because it can't compete with porn. I just won't be in the moment as much...just kind of a bit spaced out.”

It seems as if participant 1 is distracted in social activities, they see this as a direct result of using pornography as if it has some kind of aftereffects. It could also be that when in the social situation they want to be using pornography as they consider this a better use of their time. The idea of being 'spaced out' after using pornography was echoed several times in the interviews, with participant 9 stating:

“You're in a fog afterwards for about an hour and a half.”

participant 10 used a similar phrase:

“Afterwards I kind of woke up in a porn haze.”

and participant 2 giving a useful analogy:

“I’ve found that if I abuse it, it makes it literally difficult to think, feels like my head is stuffed with cotton padding and like all of my thoughts just are more sluggish than they should be.”

The reported concept of a ‘haze/fog’ is perhaps related to the time spent using pornography, the intensity of concentration and the physical exertion. The pragmatics of using pornography for an extended amount of time in relation to the cost are relatively straightforward. However, participants reported other domains that were impacted upon.

Relationship functioning

Most participants felt that their pornography use impacted upon either their desire, or ability to form romantic relationships, to develop them, or to maintain them. In terms of forming relationships participant 4 suggested that they were not interested, because pornography filled this need:

“I had no contact with any real women, I wasn’t like socially awkward or strange or shy in any way, quite the opposite. But it was just that it [pornography] was convenient.”

The word ‘convenient’ suggests something transactional about participant 4’s idea of contact with women. That it can be replaced with pornography implies that contact with women is purely sexual. The idea of pornography replacing the need to be in a relationship or to be with a partner was expressed by other participants. Participant 12 stated:

“[talking about meeting a woman] I lost interest. She asked me ‘Hey, come on, let’s have some sex over and over’. I was like, no, please. Because to be honest, I like pornography more than actual women. [when using pornography] I use my hand at such a speed, watching such perfectly baked sheened images and videos, compared to that, I mean, she was gorgeous, but entertainment always wins over real life.”

Here participant 12 gives a blatant account of their preference for pornography, highlighting the perceived visual and kinetic superiority of using pornography. The statement ‘*entertainment always wins over real life*’ is interesting and could have several meanings. It could imply that entertainment is not real, that the two are mutually exclusive, that entertainment can reach perfection. For participant 12 perhaps they equate pornography as the perfect fantasy, fulfilling all their needs. If this has been their experience, then real life would always lose.

Participant 11 discussed how pornography replaced intimacy with their wife:

“There was definitely an impact with my sexual relationship with my wife, because I just looked at porn all the time, so I wouldn't have a very fulfilling relationship with her.”

This account seems different to that of participant 12. Here participant 11 does not seem to be making a conscious choice, prioritising pornography over sex, but more that using pornography ‘*all the time*’ had consequences.

Participant 13 recounted how their pornography use impacted their relationship, how it affected their wife:

“Back then it [using pornography] definitely prevented me from working to get into relationships to meet girls and stuff like that. I later met my wife, and it's been an undercurrent in our relationship almost since we met. One time when I knew we were going to get together later in the evening, and I knew there was a good chance that we would have sex, but I watched porn and masturbated anyway, I then couldn't perform when I got there. This brought it to my wife's attention, and I've had to come clean to her and promise that I wouldn't do it anymore. But I would fail on that promise. That caused a lot of strain on our relationship because my wife always viewed porn as a form of cheating. So, it's caused a lot of strain. It's caused all the issues you might expect from a woman's perspective ‘you know, why doesn't he like me?’ ‘why am I not good enough?’ Our lack of intimacy has contributed to self-esteem problems for her. All that pain, all that damage it's done to our marriage is the worst part.”

Here participant 13 acknowledges the suffering that their pornography use has caused their wife, but at the same time only partially accepts responsibility for this. Their description of the issue as “*an undercurrent*” suggests something that is beneath the surface, something hidden, despite both of them being aware of it. Their use of the words “*from a woman's perspective*” suggests that this is not their perspective, that it is her problem. Finally, the use of the word ‘it’ in “*all that damage it's done*” demonstrates how they are denying their agency, that the damage to their wife is caused by the pornography rather than their actions.

Several participants reported how they believed their pornography use ended their relationships, with participant 20 stating:

“I dated a girl for a year, and it [pornography] really negatively impacted our relationship. We ended up breaking up, it was bringing out a lot of her insecurities.”

Participant 10 only once identifying their pornography as a problem did they see the impact upon their past relationship:

“The amount of porn I was consuming back then was affecting my relationship really heavily. I could see problems in our relationship, I could see that my girlfriend was unhappy a lot of the time, but I had no idea what was causing it. Thinking about it now, I feel like it all came down to my addiction, to be

honest, back then it felt like I preferred consuming porn than being with my girlfriend, and I had no idea that was wrong, or like that's not normal."

Participant 5 gave a concrete example of how their pornography use affected their relationship:

"The reason for the separation was to be frank, I thought she was out the house, she came back, she caught me masturbating to porn. That was the final straw for her."

The above excerpts all focus on the idea that it was their partner's decision to end their relationships. The participant's role in the relationships ending all seemed diminished. Statements such as "*her insecurities*", "*I had no idea that was wrong*", "*the final straw for her*" indicate at the time there was a perceived diminished responsibility. An example is when participant 10 attributes the cause of the relationship ending to '*addiction*' rather than their behaviours – this is taken up later in Chapter 7 when discussing the '*addiction narrative*'.

Other participants described other impacts upon their relationships. Several focused upon how their behaviours changed as a result of using pornography. Participant 6 seemed to adapt how they were when with a partner:

"I'd still look at it a lot when with partners, and it sort it played into what I was like when I was having sex. I would take on a role if you like that I'd seen thinking that that's how it should be. I need to be sort of a porn star if you like, that's what's expected that's what normal is."

Participant 14 also developed a different way of relating to others:

"I had a serious girlfriend at the time, and I think it was a problem with her because I kind of expected things to be like pornography, you know. I'm looking for the right word, but it's like the threshold of excitation keeps getting higher and higher. The pornography I was looking at was more and more extreme, the things I wanted to do with my girlfriend were more and more extreme. She wasn't comfortable with it; it became a touchy subject."

The above two excerpts focus upon the idea of the participant's use of pornography impacting upon how they are with other people. A deeper perspective would be that in some way the participants have been influenced by their pornography use – this notion is explored further in Chapter 7 when discussing '*identity fused with pornography*'. This idea of expectations of how others should be as a result of using pornography was also reported by several other participants. Participant 16 described how they found themselves comparing people to their fantasies, being despondent when unable to find what they were looking for:

“You will just ignore what you see around you. You won’t interact with people in your day-to-day life. You won’t make as much eye contact. You’ll have this idea in your head of the guy that you want, but they’re not anywhere around you.”

Other participants also reported how their expectations or standards had changed. Participant 17 talked about how they had given up looking for a relationship:

“So, you know, you don’t approach people. It’s like you don’t want to let people in your life. I don’t date very often; I don’t even ask girls out very often. I think part of that maybe the desensitisation to the attractiveness - if they’re not gorgeous I’m not going to be interested in them.”

Participant 1 echoed this idea, giving a dehumanised account of their ideas concerning others:

“I don’t know if that’s part of my brain just seeing what you are having sex with, sorry that sounds very impersonal, seeing the women you are having sex with and she may be a very fine good-looking woman, but she is not unrealistic porn standard.”

Participant 2 seemed aware of how their perceptions had changed:

“I prefer illustrations. I think it’s giving me an unreasonable idea of what the human body looks like. It impacts my self-esteem because you look at an illustration and it’s like this chiselled body, you have two impossibly beautiful people who are having sex, and I don’t measure up to either of them.”

Participants 17, 1 and 2, all put the imagery contained within pornography on a higher level than what they find in real life, when meeting other people. However, words such as ‘unrealistic’ and ‘impossibly’, used by participant 17 and 1, imply an awareness of this process, an awareness of the purposeful aesthetics in the pornography industry. However, participant 2 internalises these standards of ‘perfection’ and compares themselves with pornographic images, finding themselves to be inferior. Participant 15 also struggled with their self-esteem, believing their pornography use was the contributing factor:

“I have body issues of course, because I think if you are gay that’s another thing altogether. People in the community have this expectation of having a certain body type. It is being marketed in the porn, in all the homosexual porn at least. That’s like the mainstream, and then you feel that you’re not in the mainstream.”

Participant 15’s experience of the gay community was online, using pornography. However, their beliefs also impacted upon their day-to-day experiences and within relationships:

“The kind of porn I’m watching, I’m trying to look for that in some sort of a physical intimacy. It’s usually white guys. I’m sexualizing them in my head as well in a certain way. In my very first relationship I

was kind of disappointed or there was not that satisfaction because I had a certain expectation set in my head and that wasn't met when I was with the guy.”

Participant 15 not only developed ideas about how they should be, but also how other men should be. They also described how these beliefs held them back in developing relationships, ultimately further retreating into pornography use:

“Maybe I don't need anyone else's company because I can just stick to this [pornography]. So, I just stopped meeting people.”

Sexual functioning

There was a strong narrative across several participant profiles that their pornography use impacted upon their sexual functioning. Several participants reported having problems related to sexual dysfunction, most commonly erectile dysfunction (ED). All attributed their issues to pornography, believing that their pornography use caused the difficulties.

Participant 20 had been using pornography for several years before being sexually intimate with women. In their initial encounters they report struggling to maintain an erection and difficulties climaxing. At the time they saw this as a result of excessive alcohol consumption, they would be socialising, drinking, when meeting up with women. After identifying as an addict, they re-framed their sexual dysfunction as pornography related. Likewise participant 21 and participant 9 both reported having ED and delayed ejaculation, these were among their main reasons for identifying as a porn addict, believing a direct causal relationship between their pornography use and sexual dysfunction. Participant 21 was quite clear about their problems:

“I have all the physical things. I regularly feel pain in every joint in my right arm, from my fingertips up to my shoulder, I have the erectile dysfunction it's certainly a huge, huge issue for me.”

Both had not been very sexually active, and they were both anxious when with women, coupled with the fact that they had always masturbated prone could be an alternative explanation for their sexual difficulties.

Participant 10, like participants 21 and 9, developed a particular masturbation technique. Participant 10 had used 'edging' (a system of delaying orgasm, resulting in extended masturbation) since the age of 11. Some years later when in their second sexual relationship, during a stressful time in their life, they experienced ED. Although only experiencing this occasionally they still attributed these experiences to their pornography use, rather than their reliance on edging techniques and stress. The following quote demonstrates their initial thinking well:

"I first noticed some problems with my erections when trying to have sex with a real girl. They were quite rare, but they happened sometimes. It drove me mad because I had no idea at first what was causing them."

Participant 18's first sexual encounter was painful as they had recently had a circumcision, this made them anxious about having sex. They also drank alcohol before meeting women, they had not had sex within a committed relationship. Again participant 18 believed that their ED was caused by their pornography use. They stated:

"The first time I was going 'Hang on, something's not right here.' Later when that relationship ended there were a few one-night stands. I was experiencing the same problem. I was thinking, I was thinking 'Why is this problematic? this shouldn't be happening'. I looked at everything, diet, you know, all the standard things, but probably avoided the actual core of it, which is pornography."

Participant 4 also reported ED due to their pornography use and this was their main reason for identifying with PPU. As with the other participants, there were several competing notions that could account for their ED. Participant 4 used pornography often to challenge their intrusive thoughts related with their diagnosis of obsessive-compulsive disorder. They developed a set routine of masturbation. When sexually intimate they found that they preferred pornography, sex was disappointing for them leading to feeling anxious. They then experienced ED. They began medications for their erectile problems. When with women they knew well, they did not experience any physical difficulties, implying perhaps that their ED was anxiety related rather than caused by their pornography use.

How the participants considered the impact of their pornography use across several domains of functioning has been presented. The participants all believed that their pornography use had a negative impact upon their life. It appeared to interfere with their perceptions of 'normal' functioning; hindering their ability to have meaningful romantic or sexual relationships, being the best they could be at work, being popular with peers. Whilst not diminishing the participants distress and concern, often the direct impact appeared vague. The impact of the pornography use becomes elusive when seen in combination with the participants distinct problems. However, for the participants the impact was a lot clearer. Participant 13 sums these ideas up nicely:

"I don't know where the damage ends, and I begin. I wonder so much how things would have been different if I had never, ever looked at porn."

5.4.4 Summary

So far, this chapter has explored how all participants had distinct problems. All participants started to use pornography, some at a younger age than others, all became regular users. For most, the purpose

or function of their pornography use was initially recreational. The function then changed and seemed to focus more upon emotional regulation or coping with their distinct problems. This function did not work out well for most of the participants. Ultimately using pornography in this way increased their distress, often due to attributions made after using. The time spent using pornography led to less time being available to focus on more valued activities, in turn resulting in regret, distress, and isolation. Other domains of functioning were also reported to be affected, such as relationships. From analysing both the journal and interview data, there are indications of the role of pornography and its impact upon the participants. However, given that all participants had distinct problems prior to identifying with the concept of PPU, there remains overlap between the reported impact of their distinct problems and the impact of their pornography use. As all participants identified as having PPU, how this process of identification occurred warrants exploration.

5.5 PPU by proxy

This category aims to answer the question ‘why did participants identify with the concept of PPU?’ All participants that volunteered for this study self-identified as having PPU. This category proposes all participants labelled themselves as having PPU through an external act, someone else making the decision, or in other words ‘by proxy’.

In addition to PPU, all participants identified with the concept of addiction, some more so than others. Many used the actual terminology by saying that they were addicted to pornography; or that they were a porn addict. Whilst others did not use these exact terms it can be interpreted that they at least saw parallels with their own struggles and the concept of addiction.

The participants arrived at this identification with addiction, through an external event, rather than an internal process. As such, participants did not seem draw their own conclusions concerning their pornography use, they relied on the viewpoint of an external source. The external sources varied but three focused codes were constructed to describe the similarities:

- *A significant other*
- *Religion*
- *Reboot internet sites*

These focused codes are now examined. There is a temporal aspect to how the participants came to their discovery of being an addict. For most this was during the time in which their pornography use was starting to cause difficulties, for some it was a post hoc discovery.

A significant other

The realisation of having a definitive problem with pornography was facilitated for several participants through a significant other. This mostly occurred within a sexual or romantic relationship, however for participant 15 this occurred during a professional encounter:

“Having a conversation with the psychologist made me realise that there is some sort of an issue.”

Before this conversation participant 15 had not thought of their pornography use as problematic, but afterwards took on the notion from a trusted other. This sudden realisation and comprehension that pornography had become problematic also occurred in quite dramatic ways for participant 5. They described a ‘rock bottom’; they had accidentally accessed child pornography and admitted this to their wife. Their wife became distressed and told someone else who then reported it. This resulted in their children being interviewed by social services. They remember his wife saying:

“There is something wrong with you.”

Participant 15 was encouraged to go to Sex Addicts Anonymous. Likewise participant 14 was also told they had a problem before engaging with the idea of addiction:

“It was two separate prostitutes in the course of a year told me that I was a sex addict, which was like, really kind of struck me. I also had a very close friend who was in Alcoholics Anonymous, and we went on a long wilderness trip and so we were talking about all this stuff and talking about addiction, and then I read a big book on addiction by Gabor Mate.”

The above excerpts all contain the notion that they were told that a problem lies within them, there is ‘something wrong with you’. For most participants grouped under the idea of ‘a significant other’, it was a romantic relationship that was the catalyst for their revelation. Participant 3 describes realising their pornography use had become problematic once their partner found out about it:

“About six years ago, I knew I had a problem as I just, I think she found something or something like that and it just all came out in the wash.”

Again ‘I knew I had a problem’, implying something real, something internal, but activated by an external agent. Participant 20 explained how when they told their partner about their pornography use it hurt her, and they responded with seeing their pornography use as problematic:

“I told her about it, and it was very hurtful for her, but she was like ‘work on it’, you know, she really liked me. That was when I really started trying to quit it in earnest. She was just like, ‘I hate porn, you really can’t have this in your life, it’s pretty gross and fucked up’ and I was like, I don’t want it either.”

Participant 20 after hearing this went online and as presented shortly, identified with the concept of porn addiction.

For some participants their realisation of having PPU or being addicted to pornography arose from difficulties during a sexual relationship. As explored earlier some participants experienced sexual dysfunction and attributed this to their pornography use. For these participants their sexual dysfunction was the precipitating factor for their self-perceived PPU/pornography addiction. Participant 18 discusses the development of their thinking:

"The only time I could get an erection was when I was thinking about porn. If I had never experienced erectile dysfunction I would not associate pornography with this. I would assume everything's fine."

Here participant 18 believes it is the pornography use which caused their ED, they were certain of it, however whether or not it was a contributing factor will always be unknown. Participant 20 gave a clear account of their attribution:

"She [girlfriend] was very understanding about it. But then it still didn't work. Finally, something clicked at some point. I was like maybe porn is the issue. I started looking it up and I started reading all this stuff about porn induced ED, and I was like that's got to be it, that's definitely the problem."

When participant 20 states they had a hunch about pornography causing ED, with something clicking, they went online and had this idea confirmed. Participant 10 probably gives the best example of how sexual dysfunction becomes linked to pornography, with the notion of addiction getting intertwined with this process:

"I feel like my usage wasn't that bad before the relationship at least I didn't feel any, like addictive behaviour...That's when I started to connect the dots. That's when I realised that my erection problems had been caused by my porn use. Around that time, I made the decision to try to quit."

Their initial usage of the words 'addictive behaviour' implies that is how they now perceive the situation.

Religion

Religion can be seen as PPU by proxy in a wider sense. Taking on the ideas of others rather than developing one's own beliefs about a subject. This theme of religion resonated with some participants, for example with participant 6 saying:

"I worry about a judgement afterwards. How my porn use makes me a bad person."

The use of the word *'judgement'* clearly suggests an external mechanism, not something arising from themselves. But it was only participant 19 that clearly identified their pornography use, which can be considered mild in comparison with other participants, as against the teachings of their religion. They saw any masturbation as *'sinful'* and pornography itself as degrading and immoral. They classed themselves as an addict as they could not completely stop using pornography. It could be argued that without their religion they would not consider their pornography use as problematic or themselves an addict.

Reboot internet sites

About half the participants sought help online after feeling some concern about their pornography use. Until going online they had not identified as having PPU or being an addict. Once online, given the search engine algorithms, the participants found themselves on rebooting websites, forums, and subreddits. For many this was the first time they had heard the phrase 'porn addiction'. Participants reported that they found the message from the reboot sites, the addiction narrative, enlightening, or as participant 1 stated:

"Something profound in my life was coming across NoFap. It really made me think about things. I thought it was interesting and started researching."

There was a clear theme in many interviews that finding the rebooting sites was a pivotal moment for participants. Participant 10 clearly stated that their realisation of having a problem only occurred after going online:

"I'd say it was probably around a year afterwards [a relationship ended] that I realised that I had a problem after finding out about the site called yourbrainonporn.com."

Once enticed by the message on the reboot sites participants became engaged with the content. Participant 9 described what they were learning about their addiction:

"I read something like all this porn addict, addiction stuff, I read it on a ton of forums, how it affects your biochemistry, especially heavy use, it affects relationships. You're now masturbating to like visual stimulation instead of physical stimulation, how hard it was to stop. I read all this stuff. Finally, I made a commitment to myself that I was going to try and stop."

Participants clearly identified with the medicalisation of addiction, the technical, science sounding information gave the reboot sites gravitas, and this appealed to participants. Participant 20 discussed how they started to understand how their problems were related to pornography:

"I started realising that I was watching too much porn. It was negatively impacting my life. I wanted to stop watching porn, but I couldn't. I'd watch porn and masturbate and then feel terrible after. I would be like 'fuck this, I'm never doing this again'. And then two days later, I'd do it again. I then looked at this PornFree subreddit which was cool. I started using all these different resources online like Your Brain on Porn. A lot of it resonated with me, I understood how this rewiring is happening, and this dopamine rush and all these addictive cycles."

Here participant 20 considers their use of pornography excessive and difficult to stop, and acknowledged it was having a negative impact upon their life. This was not unusual for the participants, there was a reason for them going online to seek information and possibly help with their issues with pornography. However, the message received online was 'you are addicted to pornography'. This notion lacks any nuance and as explored in the category 'committing to the mission', hindered self-awareness and effective problem solving. Several participants did seem to initially benefit through adopting the addiction narrative found on reboot sites. Participant 13 was clear about how they related to the messaging:

"I found out about Porn Free on Reddit and watched all the stuff in their sidebar, all the stuff they recommend. I learned all about it. I watched that video from Your Brain on Porn, there's an hour-long video that they have on YouTube that gives you a brief overview of the neurology of it. That was just a complete eye opener, it changed my life."

Participant 11 was amongst the clearest in their discovery of a new way of thinking:

"The biggest help I found was from the Porn Free subreddit. Before I found it, I didn't even consider it [my pornography use] a problem. Actually, I would say I was blind to it really. I just thought I was just using porn a lot because it was a good thing. Then you look to that [Porn Free] and then you start to learn, it kind of clicked in my head."

These two excerpts demonstrate the idea of 'by proxy'. Participant 11 did not consider their pornography use problematic until going online and absorbing the messages received. Whilst perhaps initially helpful for some, the narratives from the online reboot sites were by themselves not enough to resolve the participant's problems. As will be explored in chapter 6, within the core category 'displacement of the problem', the concept of being addicted to pornography overrides the participant's original problems, as outlined in the category 'distinct problems'.

It is proposed that all participants saw themselves as having PPU or being addicted to pornography through an external factor, a relationship, religion, or an online source of information. This is not to say that adopting the ideas of PPU/addiction from elsewhere is unusual or unhelpful. But why this occurred requires exploration.

For some, like participant 1, having an external attribution of their difficulties, like addiction, resonated with their way of seeing themselves. Participant 1 found it difficult to describe their problems with their pornography use, but also described beating the addiction as their number one priority. Does this imply that this is simply a challenge and has less to do with pornography, in some ways the pornography use is arbitrary, it could be any task? Participant 1 explained how they were very interested in self-improvement; this idea is perpetuated throughout reboot sites. Participant 1 seemed to want to be the idealised image of a successful man, they believed that they must purge all impurities, which includes pornography and masturbation. The idea that if all impurities are removed then they will be pure and successful. This has almost monastic qualities, with participant 1 wanting a simpler life:

"I kind of want to go back to basics a bit, live life how it's sort of meant to lived, without all this technology stuff getting in the way."

Participant 1 seemed to believe that if they followed the steps outlined in the reboot sites then they would achieve their goals. They also took this approach with other aspects of their life as well, for example looking at motivational YouTube videos and putting self-affirmations on their mirror. The messaging from the reboot sites tends to be very prescriptive, set rules of behaviours, goals to reach, competing for who can be abstinent the longest – this aspect is taken forward in the category 'committing to the mission' in Chapter 7.

Again, the above is not an indication that external sources of sense making are unhelpful, people tend to need a catalyst before a change can be made, but perhaps for most participants adopting the notions of PPU or pornography addiction were overly simplistic.

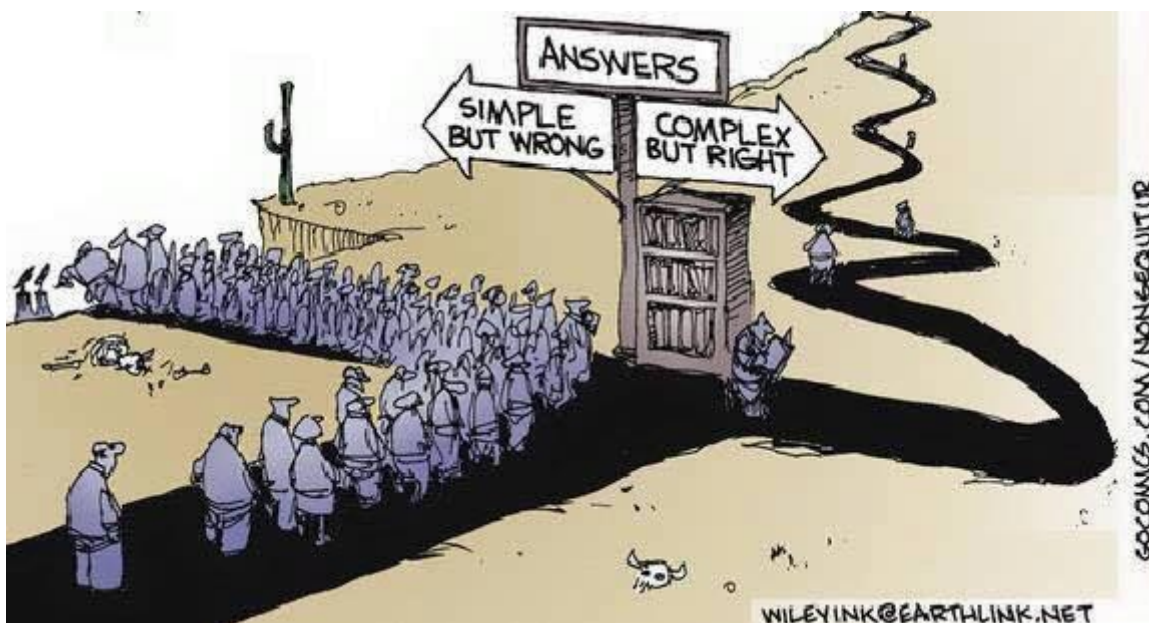


Figure 26. Simple but wrong/complex but right

The preceding image (used with permission from Andrews McMeel Syndication) does not intend to suggest that an addiction narrative is wrong, but rather complex problems require complex solutions (Hersen, 1981). As can be seen in figure 26 the majority of people are blindly falling off a cliff; this misdirection is explored further in the next chapter.

5.6 Chapter summary

This stage of the grounded theory has explored the process up until and including the identification of having PPU or being a pornography addict. The ramifications of this are presented in the subsequent stages. The stage began by accounting for how participants were considered to have distinct underlying problems. This initial theorisation was a construction between how the participants saw their problems and how I saw them, the result being a fusion between narratives. As discussed in section 4.7.1 there was a process at the end of the interviews whereby the participants problems were collaboratively formulated. These formulations provided what became the distinct problems. The distinct problems included distressing experiences, strong emotions, unhelpful behaviours, and at times the notion of disorder was considered appropriate to describe their issues. Classifying the distinct problems in this manner allowed an initial framework for the entire grounded theory. The category of distinct problems serves as the beginning of the grounded theory, presenting who the participants were and the difficulties they faced.

The stage moved on to the role of pornography in the participants lives, both historically and up until the time of the interviews. The participants pornography use was constructed as having a purpose. The interaction between the distinct problems and using pornography was seen as fulfilling an unmet need. The distinct problems created distress and often a lack of meaning, pornography became a way of relating to these experiences. Participants initially found using pornography useful and for many a sense of connection and enjoyment. However, the function of using pornography then changed. The continued use of pornography was seen as having different functions. These functions associated with using pornography were presented, a combination of using pornography to regulate painful emotions, a sense of resignation and habitual use, and a means to an end. It was constructed that there had been a change of function, from enjoyment and sexual expression to being used as a coping strategy. Using pornography in this manner was considered by the participants to have a negative impact across different life domains, however it was difficult to see whether this decreased functioning was a result of the pornography use or the continued presence of the distinct problems.

Most participants were aware to some degree that their pornography use was creating problems in their lives. Many looked for information online and were met with a narrative from the reboot forums that they were addicted to pornography. Some were told categorically by trusted others that they had

a problem with pornography. The mechanisms for identifying as having PPU or being an addict were therefore constructed as occurring due to an external agent, or 'by proxy'.

With their gaze drawn towards the idea of being addicted, participants began to see their pornography use as the causal factor of their distinct problems. The external process of identifying as a pornography addict seeped into how they constructed their problems, leading to a re-attribution of the causation of their problems, away from their distinct problems towards the disease of addiction. Participants had found their scapegoat, rather than looking inwards and finding a difficult and complex aetiology of their problems, they could externalise their problems as addiction, thus protecting their core sense of self. This displacement of the distinct problems is explored in more depth in the next chapter of this grounded theory.

Chapter 6: Stage two of the grounded theory

6.1 Introduction to stage two

This stage of the grounded theory focuses upon the core category of the constructivist grounded theory. 'The displacement of the problem' is justified in its position as the core category as without it there would be no cohesion amongst the other categories. In figure 23 (section 4.7.4) displacement of the problem is placed in a central position tying together the development and maintenance of PPU. The choice of the word 'displacement' was a carefully thought through decision. Other words such as 'concealed' were considered, but displacement implies something more than being hidden. Displacement involves a redirection from an original source onto another – theoretical understandings of the word displacement are explored within the discussion, Chapter 8.

The previous stage ended with the participants identifying with the concept of PPU and seeing themselves, to a greater or lesser extent, as addicted to pornography. This newer way of seeing themselves was constructed as occurring 'by proxy', in that the participants made this shift through an external mechanism, most commonly the reboot forums. The impact and consequences of the participants identification as having PPU or being addicted to pornography is the focus of this stage of the grounded theory. The next, and final stage concerns how PPU is maintained over time.

All participants, some more than others, displaced their distinct problems with their new idea of having PPU/being an addict. By this it is meant that the participants perceived their pornography use and/or addiction to be the problem rather than their underlying distinct problems. Whereas before they were mostly aware of the impact of their depression for example, once identifying as having PPU/being an addict they saw their addiction is their primary problem, with the underlying distinct problem becoming unattended, or displaced. It is perfectly reasonable to assume that participants may have had two sets of problems, the distinct problems and problems associated with their pornography use. But at the time of interview their 'presenting problem', and for some their only conscious problem, was with their pornography use. As has been explored previously in the category PPU by proxy, all participants identified as having PPU and with the concept of pornography addiction. It was only after questioning and reconstruction within the interviews did participants acknowledge the presence, and for some the eventual primacy of their distinct problems.

The presentation of the data and subsequent analysis in this chapter has been organised to demonstrate the construction and reconstruction of participants problems. The analysis includes content from the participant formulation memos and the spoken word. The focus fluctuates between how participants initially saw their problems arising from their pornography use, and how this was reconstructed, taking into account their distinct problems in the formation of their distress and dysfunction. It has to be acknowledged that I created the reconstructions, and that the creation was

influenced by my pre-existing knowledge and skills in psychotherapy (see section 3.2). Appendix 15 contains all the formulation memos, more information about the participants histories, and more detail concerning the construction and re-construction of the participants problems can be found there.

6.2 Displacement of the problem

The specific impact of using pornography was often conflated with what seemed to be the participants past or present poor general functioning resulting from their distinct problems. All participants had experienced difficulties or emotional problems prior to identifying their pornography use as problematic – see Chapter 5, section 5.3. These issues had impacted upon the participants life across several domains, as presented in Chapter 5, section 5.4.3. For example, participant 7 had experienced what can be seen as depression from their early teenage years. Before using pornography regularly, they described themselves as follows:

“I'm a terrible person. I'm okay with saying that I'm a terrible person, when I'm talking to people, because I know it's true. I know for fact that I'm a very selfish person. I'm not only selfish, but I'm also an introvert. A lot of the time, I will seclude myself away, just to do whatever on my own.”

Through describing these ideas about themselves, participant 7 indicates the global nature of their self-concept, *a terrible person*, and how they feel they are *an introvert*, spending time on their own. These concepts pre-existed their pornography use. It can be speculated through their formulation that they were ashamed of their sexual orientation. Being bisexual within a religious family, having a father as a church leader, may account for their negative self-concept. When they were a teenager they moved to a new area, they felt isolated at school and spent more time alone. They retreated from the world and started to use pornography, a way of numbing their feelings. Their isolation impacted upon how they led their life, their ability to study at school, their time spent with friends. Now identifying as an addict (see Chapter 5, section 7.2.2 for more on this process) participant 7 attributed their problems due to their pornography use rather than acknowledging they had been there for a long time:

“I don't have a lot of confidence because of pornography. At the back of my mind there's always I'm this freakin weirdo that goes home and just literally jerks himself off.”

Spending several hours using pornography would have a detrimental impact upon their functioning, for example less time being available to engage in other behaviours, however, the original driving cause of the poor functioning becomes less apparent for participant 7. A move from the distinct problems to the concept of addiction, with the problems now being seen through the lens of addiction. Participant 7 adds to this by saying not only are their problems a result of pornography, but also their positive moods result from not using:

"I feel a lot more confident when I go without for sure. I mean, teachers have said that I act differently. They don't know, obviously. But there was one teacher that literally said, 'hey, I really respect the way you're leading the class right now. You're not being such a dick, or whatever it was.'"

Logically it is unlikely that participant 7's positivity is a direct result of not using pornography, otherwise all those who do not use pornography would feel good. Therefore, it is likely there is an internal attribution made by participant 7 when not using, that they see it as a success and this makes them feel good, more confident, *not such a dick*. This also means that conversely using pornography is failure and produces negative feelings.

Likewise participant 2 was bullied at school from a young age and was diagnosed with Asperger's syndrome in middle school. Their childhood was difficult, feeling isolated most of the time. They began using pornography in their teenage years and saw themselves as addicted after finding NoFap online. Their interview occurred shortly after dropping out of university and being diagnosed with depression. They stated:

"My problem with pornography is that it makes me happy not doing anything. I've found that if I abuse it, it becomes difficult to think, feels like my head is stuffed with cotton padding and all of my thoughts are just more sluggish than they should be."

The way in which participant 2 describes their experience with pornography, the way in which they feel after using it, could be called cognitive deficits. Their ability to think clearly is affected, they report a lack of motivation. Both deficits are often associated with a diagnosis of depression. Therefore, there seems to be a blurring between causative factors for how they feel. Participant 2 generalises the impact of pornography, possibly in an attempt to externalise their problems:

"The influx of pornography basically over the last fifty years, and the sort of cottage country industry of pornographers both real and drawn and cartoons and everything that you could possibly imagine is unlike anything that has ever happened in human history. I think it's had a very negative impact on the emotional wellbeing of a whole lot of men that live in the countries effected by it".

It seems that participant 2 may be holding on to something more tangible, that pornography is the problem, and the cause of their problems. It is perhaps harder for them to look inwards and reflect on more internal causative issues. Rather than pornography being their sole problem it could be that their anxiety and difficulties in socialising accounted for how they felt and their general struggles in life.

Like participant 7, participant 2 used pornography frequently, every day for up to eleven hours a week. This time spent using pornography would hinder other activities, and therefore could impact on mood, or general functioning. But prior to the frequent pornography use, participant 2 had been struggling socially and had been isolating themselves. Again, the pornography was seen as the problem, with the underlying issues displaced.

Participant 17 described their childhood as being in 'a prison'. Their parents were reported to be overprotective, and they did not engage in out of school activities. They described themselves as quiet and reserved. They said how they had been diagnosed with avoidant personality disorder and had seen a counsellor for their anxiety. They stated:

"We're talking about avoidant personality disorder. There's a shell around me and anyone who tries to get in is pushed away. In social settings and work settings I feel like I'm on a TV show sitcom or something. There's a script, one person says something and then another, that person says something, then that person does something, and that person says something. I feel like I want to jump in, but I just don't have any lines. I'm left wondering, how are they doing it? that person talks, and everybody stopped, but I can't even get in. Any group situation that's how it goes."

This powerful excerpt demonstrates participant 17's struggles in social situations, not 'having any lines' could imply not knowing what to say, or maybe not being included within the group. If experiencing these difficult situations, and related feelings, it makes sense that they would want to avoid them and push people away, choosing to be alone. Their loneliness and need for a connection with others being met through their pornography use, or as they stated: 'replacing' these activities.

Once the idea of being addicted to pornography was identified with, most participants focused their energies on fixing this rather than their distinct problems. Even for those who were aware of their underlying issues they seemed to hope that by conquering their addiction then all their problems would disappear. The problems with pornography seemed to blinker participants to their underlying issues. This is not to say that their pornography use was not distressing them, rather there seemed to a conflation of causation and correlation. Participant 17 gives a good example of this when describing how they felt they were as a person:

"I'm generally a pretty quiet, reserved person. So, you know, you don't approach people, you don't want to let people in your life."

However, when asked what their life would be without pornography they answered:

"I could have found somebody been married right now had a child."

There is clearly a disconnect here between their appreciation of their distinct underlying problems and what the impact they believe pornography has had on their life.

Participant 3 was raised in an emotionally avoidant, religious family where they were taught that sex was wrong. They described their family history:

"I grew up in a house where nobody really addressed issues. Both my grandparents were alcoholics, and that affected my parents. My mam would see somebody fighting on the street across from her and she would get anxious about that. She's been in hospital with anxiety and stuff. One Granny, she

was afraid to leave the house. She ended up not eating and she ended up just dying from not eating. The other Granny, she was hospitalised from anxiety and stuff like that. One Granddad, the alcoholic, he tried to kill himself in the shed a few times. And they had to cut them down. What we say here is 'he didn't lick it up off the ground'."

Participant 3 describes their family events in a matter-of-fact way, '*the other Granny*', '*anxiety and stuff*', '*the alcoholic*', '*tried to kill himself a few times*', diminishing or avoiding what must have been difficult times. By using the Irish proverb, they indicate that by extension they also have difficulties. Now in their forties they looked back upon their younger self and described themselves as being very anxious and lacking confidence when growing up, struggling in secondary school and being very lonely:

"I remember going to school and a friend asked me how I was. I can remember where I was standing when he asked, nobody had asked me that before ... I would have been very anxious growing up in school and stuff like that, from being a kid to being a man and I just didn't cope well with that at all... I would have no confidence with women growing up at all, I was a virgin till I was 28. It wasn't even that girls weren't interested. I just could not talk to them... I didn't have anyone to talk to, I look back now and laugh and think you wonder why you went mad when you were 20."

They said that they isolated themselves due to their anxiety and started to spend an increasing amount of time using pornography. They replaced the need for connection with others in real life, with a connection to pornography. They explained this as:

"It was just loneliness; it is something I just do not like feeling ... I want to be wanted by women, to connect with people over the internet."

Although participant 3 had a thorough understanding of the difficulties they had faced in their life, they attributed their anxiety to their pornography addiction:

"Pornography takes away my confidence. It takes away my concentration. It takes away my motivation, I'm more easily swayed. I'm like a balloon that goes up in the air and whatever anyone says to me, I kind of take it on board, whereas there's more resilience when I'm sober."

As a result, participant 3 attended Sex Addicts Anonymous (SAA) and attempted to be completely abstinent from pornography, their illness as they saw it. However, they remained lonely and turned to using camgirls for a sense of connection, this was seen as a relapse in their addiction. Their underlying distinct problems of anxiety, a lack of confidence, and chronic loneliness remained unattended.

Participant 13 had only used pornography once in the last two years. They identified as an addict in recovery. The interview focused more on their experiences earlier in life when they were using pornography regularly. They described themselves as introverted, an outsider. They were bullied at

school and lacked confidence. They avoided going out and socialising and did not mix with girls to avoid the risk of rejection. Talking about this time, participant 13 described themselves as follows:

“I would have liked to be a guy who meets girls and goes out with girls and that kind of stuff, but I've always been somewhat introverted, and never really been that quick witted. So, you know, I've never had the skill set.”

During their teenage years they isolated themselves and began to watch more pornography. This behavioural pattern lasted into their twenties. They then met their wife and identified as being addicted to pornography shortly after. Looking back on their life participant 13 regretted their pornography use:

“I wonder so much how things would have been different if I had never, ever looked at porn.”

Although they had already discussed how they had been reclusive before using a lot of pornography, participant 13 sees the pornography as the main issue in their life that held them back, rather than their introversion for example. They then go on to state:

“I don't know where the damage ends, and I begin.”

This powerful statement implies that their life would have been different if they had not used pornography. That the pornography had changed them for the worse, that it was to blame for their lifelong problems. This was a common theme amongst the participants, the idea that ‘if I had not used pornography then...’. For many their pornography use had got in the way of some kind of self-improvement, this was an important focused code developed from the data. However, what or who they would have been without pornography remained vague for most participants. It was almost as if pornography had become an excuse for not achieving their undefined life goals. For many the blame in not achieving what they desired from life was put on the pornography industry itself. Like participant 2, participant 13 puts themselves forward as being almost powerless to pornography. They describe a deliberate and malevolent industry that preys on the weak:

“The people making it (pornography) are as aware as any purveyor of products, that the human brain can be taken advantage of. They know how to take advantage of people. And they're aware that is what they're doing. I would say that I have a problem with them morally, I don't ever want to take advantage of the weakness of another person in order to get what I want. I do think that it's harmful to society, especially in the way that it conditions young people and their expectations about what sex would be like, before they ever have it. I think it's irresponsible to create something like that, knowing that it's gonna get in front of kids.”

Participant 13 implies that they are a victim, and that they are weak. The causation of their problems is therefore an interaction between both external agents and an internal state. However, these

attributions ignore their distinct, underlying issues, which arguably account for their past difficulties in life.

Similar to participant 13, participant 11 identified as being in recovery from pornography addiction. Like the other participants they presented their pornography use as their main issue, despite having longstanding pre-existing difficulties. Their formulation suggests that participant 11 developed a fear of rejection, a fear of failure. Their mother had been depressed when they were young, they had difficulty in relating to girls growing up and to women as an adult. They found that their pornography use was a way of connecting emotionally to women. Later in life their work became very stressful, and this impacted upon their mood, becoming depressed. They used pornography as an escape from their painful feelings. When their work situation changed their mood improved and their need for pornography reduced. They still used pornography at times afterwards, especially when experiencing further episodes of depression. As they identified as a porn addict, any use of pornography was seen as problematic. They could accept that they had been depressed, but over the years they had spent more time on 'curing' their porn addiction than focusing on their mood management. However, this balance was starting to change at the time of the interview:

"I found myself using it (pornography) as a something to help me get through depression basically. So, I see the two going hand in hand...the biggest help I had so far is, I believe, linked to depression, was the tools to get out of it. And I found a really good book on CBT [cognitive behavioural therapy], which helped me kind of put some of the feelings into perspective and kind of give me some tools to help me understand. So, you don't say I'm going to use porn because I am in a bad emotional state, you say I will put myself into a better emotional state by doing something else."

This indicates that for several years participant 11 attributed their problems to pornography, seeking help from the reboot online communities for their perceived addiction. Only more recently had they sought help for their distinct problem, depression. This suggests the importance of the attribution given for their problems. Only recently had participant 11 acknowledged their depression and sought appropriate support. Prior to this, although still depressed, they had seen their pornography use as problematic and accounting for all their difficulties, including their depression. This conflation between causative factors could be said to have delayed receiving evidence-based treatment.

Participant 4 reported a long history of OCD, characterised initially by checking and washing behaviours. In their late teens they experienced intrusive thoughts of being gay. This caused them a lot of anxiety and they watched gay pornography to see if they were aroused. When indeed they were aroused, they became more distressed, saying they were suicidal at times:

"I had severe pure OCD, in different periods of my life. I can go one or two years where I basically live on the verge of suicide on an hourly basis, and then, I snap back and become like 100% normal again."

I literally go between heaven and hell sometimes. They (OCD) are actually sexual in nature. Sometimes, not often, but sometimes, I've used porn to see where I am in reality so to speak."

Their anxiety and OCD related doubts about their sexual orientation impacted upon their sexual performance and they experienced erectile dysfunction (ED). They then attributed their pornography use as the causational factor in their ED:

"Well, it's probably what they call porn induced erectile dysfunction. It is actually my main problem. You can never be 100% but I'm 99% sure, it's a life changer."

Participant 4 held a biomedical understanding of their difficulties, in part due to the physical nature of the ED. After adopting the narrative from the reboot sites, they believed that 're-wiring the brain' by stopping using pornography was the only strategy. They equated pornography to a drug, experiencing withdrawals and side effects when not using.

Participant 6 discussed how they believed they had a poor attachment to their alcoholic father (participants wording) and did not have their needs met. They experienced severe bullying at school and developed OCD about being contaminated, that there was something fundamentally wrong with them. They stated:

"I had to go and see a therapist for a good couple of years. I was medicated because I was so manic, and it [OCD] was at a stage where it was so compulsive and so obsessional; 'am I clean? am I OK?' I was managed at home, but it was touch and go for a while whether I could be contained at home."

Several years later they formed an attachment to a group of older youths who sexually abused them and their friend. They performed sex acts to feel a sense of belonging to the group and watched pornography with them. They described this time as:

"It was just tapped into self-worth for me; that's what people want from me. I don't have anything else to offer."

This compounded the sense of there being something wrong with them. Their pornography use escalated to violent porn and their masturbation was described as a form of self-harm. Although at the time of the interview they were in a better place their issues still lingered:

"It stays with me the wrongness. I feel that there's something that almost, you know, it sounds absurd, but almost that I must have, something must have happened that I don't know about or that I don't remember that I must have done that I can never atone for in some respect, I can never redress the balance of things. And it stays with me that self-loathing, that badness."

Their pornography use exacerbated their pre-existing negative view of the self, the *self-loathing*. However, the pornography use then became seen as the problem:

"I'm in recovery, from what I call sex addiction for nearly five years. I didn't know anything about it until I was in my mid 20s. I had no idea that there was any issue. But, looking back on it, it's something that has been an issue for a long time."

Later in life they found themselves in a loving relationship and this changed how they saw themselves, leading to them stop using pornography. Therefore, it can be seen that the pornography use resulted from their negative self-view, as it was this that was challenged by being in the relationship. Despite being in recovery and no longer using pornography, participant 6 continued to see themselves as addicted and was on guard against a relapse.

Participant 16 had a traumatic childhood, parental mental health issues, and childhood sexual abuse. They described their family as dysfunctional. Their father was overly critical, and their mother was depressed and often suicidal. A family relation sexually abused them when they were three years old. They stated:

"It goes back to stuff from my early childhood. A lot of it goes back to a lot of abandonment issues in childhood and a dysfunctional family. At one point there was the sense that there was no one there to really meet my needs, emotional or otherwise."

They felt emotionally neglected and experienced bullying at school. They turned to pornography to meet an unmet need, they were lonely and wanted to connect to other people. They perhaps wanted an unconditional relationship with a significant other, to be wanted emotionally and sexually. They created an elaborate fantasy life about having an older sibling. This fantasy developed into them using incest themed pornography, thus creating the feeling of having a meaningful connection, fulfilling a need, imagining someone who would have protected them. However, now identifying as an addict they spend their resources trying to conquer the addiction:

"I've been in a lot of SAA meetings...I've been through a lot of different [addiction related] healing therapies techniques."

Here it can be seen that the concept of addiction had displaced participant 16's original traumas. Despite much effort they continued to use pornography problematically, never attempting to resolve or heal from their childhood trauma.

Trauma was a theme for participant 10, but in a very different way to participant 16. Participant 10 described a happy childhood, their pornography use *"wasn't that bad"*, but they did use the masturbation technique of edging, delaying ejaculation for an extended period of time. When they were 16 years old, they broke up with their girlfriend and found it traumatic. They described it as follows:

"It was after my first breakup; my first heartbreak and I was feeling really bad that I started to turn to porn whenever I was feeling sad... the only way that I knew how to cope with negative emotions was with porn."

Here participant 10 recounts how they used pornography when feeling distressed. The phrase used by participant 10 "turn to porn" implies that it fulfilled a need. Using pornography became a coping strategy for when subsequent relationships ended when feeling "really sad, stressed, even depressed".

After experiencing ED, they went online and found YourBrainOnPorn and saw themselves as addicted to pornography. As their pornography use had increased during difficult times in their life, they considered that they had been addicted for a long time, making post hoc attributions:

"I used to really struggle at school. Since I've thought about it afterwards, I feel like it was because of my addiction."

Participant 10 stated the following concerning their addiction to pornography:

"I describe it as really problematic and pretty life defining. I tried to not think of myself as defined by my addiction, but it effects so many different areas in my life that I have to... Thanks to my addiction I really have lost all my confidence... What my addiction has done to me is really damaged my motivation levels to do things".

Being defined by their addiction would imply that other factors in why they felt as they did were sidelined or displaced. For example, having a lack of motivation could be related to their underlying distinct problem of depression. There could be other reasons as to why they felt so distressed after relationship break ups, but these are not examined. Their focus becomes on defeating their addiction as the sole method of feeling better.

Participant 8 described a childhood where they believed they were taught that the world was a dangerous place, and that they were encouraged to stay inside, developing a sense of being trapped:

"When I was growing up there was a mechanism to parenting. A mechanism to almost keep me safe and keep me in a shell, in a bubble. To avoid going out, to stop meeting dangerous people."

They reported that their mother had severe anxiety, potentially accounting for why the world was seen as a dangerous place. They also knew from an early age that they were bisexual. Unfortunately, their family were homophobic which meant they could not express their sexuality. They became interested in computers in their teenage years and started to use pornography. This allowed them to express themselves, but they also got attached to an exploitative online community. They said that a few years later they became depressed due to their social isolation.

When reflecting on their perceived pornography addiction, rather than seeing their depression as the contributing factor to their difficulties, they considered their “addiction” to be the source:

“I missed out on a lot. I lost a lot of potential as a result of not getting the help that I needed. I think I'm gonna have this problem for the next 5 or 10 years. It's gonna stamp upon my development, to do the normal things that, other people do.”

As a result, participant 8 invested their time in defeating their “addiction”, instead of looking inwards and starting to become more comfortable with their sexuality and how they relate to the world.

Participant 15 reported having a good childhood. When eighteen years old they realised that they were gay, this created an insecurity, later being diagnosed with anxiety and depression when in therapy. They had poor self-esteem and body image. Their pornography use became more frequent at the same time, as a way of fantasising about their idealised self. They stated:

“Even in if the guy is very average, I just end up thinking lowly about myself, because of my body issues. People within the community have this expectation of having a certain body type. Then you feel that you're not in the mainstream, and that has had a huge impact.”

Here they compare themselves to the porn actors and feel inferior as a result, thus indicating a pre-existing poor body image in keeping with their low self-esteem. However, rather than addressing their low self-esteem they stated:

“My pornography use is something I need to work on”.

This became the focus of their attempts to feel better about themselves. Each time they relapsed they felt worse about themselves.

Participant 5 discussed how they used pornography as an outlet for their sexuality. Growing up in the 1970s they felt they could not express themselves; they knew from an early age that they were bisexual:

“My sexuality, I'm bisexual. I've always I've always struggled with that. I've always tried to deny it.”

They report never seeing an emotional connection between their parents and they attended a single sex school, they said as an adolescent they never saw a healthy romantic relationship, they saw this as the reason for how later they had sex with their wife rather than making love:

“I never actually ever really saw my dad kiss my mum be loving towards her. They never had any tender moments. I don't know whether that actually influenced me as I was growing up and having my relationships.”

After their father died, they found his stash of pornography and they were drawn towards it. They got married conventionally and had children. They tried to be creative in their sexual relationship with their wife, by trying to include other men, but she was against this. They therefore turned to gay pornography, and later to meeting up with men for sex. They saw their issues as related to the pornography and being a sex addict, rather than resulting from their inhibited sexuality and relationship to sexual activity:

“So, I was I was watching porn, seeking porn, all types of porn. It got me into dark, deep areas that I shouldn't have been in. It was just uncontrollable, and I was searching on the internet for sex addiction and SAA came up. I'm definitely an addict. I hate to think how much time and money I've wasted in my in my life, how many people and I've hurt. It's just too horrendous to think about sometimes. I just couldn't stop it. Whatever I try, for however long, it would never last, I would always go back to it. I think I've got a problem. That I've got an illness”.

Attending SAA, although undoubtedly reported as a positive, also supports the notion of being powerless before the addiction and that one must be abstinent. Both of which can be considered unhelpful for participant 5 as the nature of their problems concern sexuality and sexual expression. Their pornography use and affairs were an outlet of their denied sexuality.

Seeing oneself as addicted was an external act as outlined in Chapter 5 (see section 5.5). An act that covered up and displaced, the underlying issues. This could be seen as a kind of defence against seeing problems as internal. Perhaps it is easier to see oneself as addicted rather than facing up to the distinct problems. The adoption of an identity as an addict or centralising problems within a system of PPU, held utility for many participants. The concept of addiction for the participants was something to hold on to, it was a simpler word to use. The distinct problems were more complex, and for some were not fully understood. Once the distinct problems were externalised on to the concept of addiction, then personal responsibility could also be externalised. Several participants directly blamed the pornography industry for their problems. This dilution of responsibility was expressed in clear terms in how many described the industry and pornography in general:

Participant 2: Their (pornography industry) idea of human decency its, they are almost animals. I don't think it has any place in the world and I think that the fact that it is very popular is sort of a reflection of lower moral societal standards and the degradation of a lot of the moral fibre and ethical back bone of the country I live in...the overall effect that porn has on the human brain and the greater effect it has on society is very unhealthy...I feel porn turns people into animals who are just controlled by their instincts.

Participant 1: As an industry it's not good. And looking into the future it's only going to get worse. I think they are not very moral in thinking about what they are producing is doing to people. I don't have

anything good to say about porn producers to be honest... I think it's quite irresponsible money grabbing ... porn is evil, I hate it.

Participant 16: It's been designed to be addictive.

Participant 20: It's a devil.

Participant 13: It does make me feel preyed upon you know.

Participant 10: They're even creating custom porn that has texts or captions that encourage you to masturbate more and give in to your addiction. It's really dark stuff.

It is suggested in the above excerpts that the participants felt as if the pornography industry was deliberately creating their problems, that the industry was purposively creating addicts, as it is *designed to be addictive*. By demonising the pornography industry these participants absolve themselves from personal responsibility, they see themselves as *preyed upon*. They deny their agency, *turning into animals*. Pornography had become the enemy for some participants, *it's a devil*, resulting in some engaging in a battle to conquer their perceived addiction, with some seeming to surrender and become hopeless.

6.3 Summary

As has been outlined this core category, displacement of the problem, permeates all other categories, therefore elements of this category can be seen throughout the presentation of the finding chapters. Up until this chapter the theory has demonstrated how participants had problems unrelated to their pornography use, often leading to a drop in functioning across several life domains. Their pornography use changed function from enjoyment to emotional regulation, becoming habitual for several participants. For many this change of function occurred alongside a deterioration in their mental health or difficulties in life. The concept of PPU or pornography addiction was adopted by participants via an external mechanism, for most this was online reboot communities. It is proposed that the processes outlined in Chapter 5 account for the development of PPU. As will be explored the maintenance of PPU is accounted for in Chapter 7. However, it is this core category, displacement of the problem, that facilitates the movement between development and maintenance. This chapter has explained how the concept of PPU/addiction displaced the distinct problems. This re-focusing occurred outside of most of the participants awareness. PPU or addiction more generally became the problem and the distinct underlying problems fell into the background.

With the concept of addiction displacing the distinct problems the participants experienced prior to identifying as having PPU, most attempted to 'cure' their addiction. Part of the process of identifying

as an addict was seeking help or understanding. With the term addict comes addiction treatment. It is understandable that many participants would combine the two and begin a prescribed journey towards recovery.

Chapter 7: Stage three of the grounded theory

7.1 Introduction to stage three

This stage of the grounded theory begins after the participants had displaced their distinct problems with being addicted to pornography. The distinct problem was no longer their focus, being addicted to pornography was now considered by the participants as their main issue. This final chapter consists of the category 'committing to the mission' and accounts for the maintenance of PPU, why participants continued to believe they had PPU/pornography addiction. The choice of words in this category warrant explanation. 'Committing' has been used to describe how participants were resolute in how they chose to deal with their addiction, focusing only upon the addiction, and overlooking other avenues to explore. The use of the word 'the' in the title of this chapter is also intentional, as will be presented, nearly all participants adopted a singular journey towards recovery that was steeped in an addiction narrative. Therefore, the word 'mission' was chosen to indicate the structured, quasi-religious, ethos of the well-known 12-step approach to addiction treatment (see section 8.2.3 for details on the 12-step approach).

As with the previous two stages, this stage does not include research or pre-existing theory within the presentation of the analysis. This to ensure that these chapters demonstrate the grounded theory's originality. A full exploration of research and pre-existing theory in relation to the grounded theory occurs in the next chapter, the discussion.

7.2 Committing to the mission

As suggested previously, participants had 'been sold' the idea of being addicted to pornography. This had diverted their attention away from their distinct problems, displacing them. The notion of addiction was then prioritised. There is a focus upon the processes involved once the causation of their problems was reattributed to addiction. Four focused codes were constructed to help explore how participants committed to the mission of defeating addiction:

- Identity fused with pornography
- The addiction narrative
- Abstinence
- Shame

Each focused code is now presented incorporating data from the participant interviews. After the focused codes there is a summary of the overall grounded theory.

7.2.1 Identity fused with pornography

This focused code relates to how pornography itself and using pornography had become an essential part of the participants' lives. For many participants their relationship with pornography was intense, some seemed obsessive about it. Several participants saw pornography as an important aspect of their psyche, even if they had not used pornography for several years. Participant 9 was clear in how they understood their relationship with pornography:

"Why do I need to do it to the extent and to the degree that I do it? It's part of my identity."

Pornography as something intrinsic to the individual was put forward by participant 6:

"It's hard when it's been internalised for so long to put it where it belongs, where it lives. If you like and step out of it, because it's then become completely a part of who I am. I've made that a part of me. Who would I be without pornography? I need to sort of get to Who will I be without? What if I was nice to myself? And how frightening is that, very. It's quite frightening to be someone new."

Here participant 6 describes how the pornography has become internalised, a part of them. This aspect of becoming one with pornography was also frightening for participant 19:

"The scariest part is does this ever go away? Could it ever go away? It's just scary to think that it's something that is a part of me forever."

All three excerpts above give good examples of how several participants saw pornography as integral to who they were as a person, how it was *part of [their] identity*. Participant 6 indicates that they would feel lost without pornography in their life, questioning *who would [they] be without pornography?* It can be implied that participants were not happy or comfortable with this situation, that pornography could be *something that is a part of [them] forever*. If pornography is experienced as being part of the individual then it stands to reason that shaking it off, stopping using pornography would be very difficult. Therefore, these aspects are considered to be part of the maintenance of PPU, why it persists.

Participant 16 gave a more personal account of how they felt intertwined with pornography, that it attached to their 'energy levels':

"I think there's a level of energy harvesting that goes on because sexual energy can be harvested. I know stuff from the healing that I've done on myself and that there are such things as non-physical entities that can attach to you that can attach to people who are alcoholics, drug addicts, but also porn addicts. I think they actually harvest people, and they attach to you and syphon energy."

As presented above, whilst equating pornography use with other addictions, participant 16 sees their pornography use as part of them, a part that is harvested by an unknown entity. This is their way of understanding and explaining why they remain addicted to pornography, externalising their responsibility onto a powerful, perhaps supernatural force. Pornography became important for most participants, to the extent that many felt a special connection with it. Several participants indicated different mechanisms for why this assimilation occurred. Participant 11 described an emotional connection to pornography:

"I would look to porn for that [relationships], and I remember never looking back. Fantasising not about the pornography, but about the relationship aspect of it."

Here participant 11 seems to be replacing the need for a connection to other people with a connection with the porn stars. They maybe imagining themselves in the scene, being involved, being able to satisfy someone else sexually. This relational aspect was also prominent for other participants. Participant 9 alluded to how pornography was akin to having actual sex, in an almost grandiose way:

"It's almost always I would get bored after one video. You try to skip through to the good parts; I call it like being able to sleep with like 30 women in one session."

During the interview when participant 9 said the statement above, I felt that they were trying to show off about their sexual prowess. They were sexually inexperienced and reported ED on the few times they had had sex. However, I also felt sad, I saw it as a way of them feeling better about themselves. Whether they actually believed using pornography was the same as having sex remains unknown.

Participant 15 described how pornography fulfilled the need to be in a romantic relationship:

"I'm sexually satisfied in that sense. So now I don't need anyone, any other guy or needs for that relationship or any other like any other individual. Porn becomes all encompassing."

Participant 15 uses the words 'all encompassing' to describe their relationship with pornography, this resonated with several other participants. At times the participants seemed to be obsessed with pornography, being an intrinsic part of them. Participant 2 made a definite declaration:

"My entire life focused around pornography."

Participant 5 described the ubiquitous nature of their pornography use:

"If I didn't do it, there was something wrong. You know, I was missing out. I was missing out on it. I just wanted it every chance I got. I just wanted to look at porn, all types of porn, different porn."

Participant 5 when describing their pornography use above seems intoxicated by their ability to use pornography, the language used, with the short statements, suggests an almost excitable quality. But

the feeling when hearing the above is that it is not a positive experience. This is echoed by participant 6 when suggesting how their pornography use became all consuming:

“Towards sort of the end stages, before I sort of got any help, there was a lot what ended up with it being quite compulsive and the compulsivity meant that I became really quite frustrated with other people. I wanted to be on my own, I became really locked in around privacy and sort of other people in my space or around me really started to annoy me because that was time away from being able to use pornography.”

These participants seemed to live in a world of pornography use, it was normalised, part of their being; their pornography use had supplanted their existence:

“I’ve been trying to slowly work out what sexual desires are mine and what sexual desires porn is planting in my brain.” (Participant 20)

If participants had almost fused their identity with pornography, then this indicates that separating from it, or stopping using pornography would be difficult. The value placed upon pornography was constructed as a maintenance factor for participants considering themselves to have PPU. In addition to the pornography use itself, as outlined earlier, participants also aligned themselves with the concept of being addicted.

7.2.2 The addiction narrative

Even those not directly reporting that they considered themselves addicted, still considered their use problematic, and subscribed to several narratives often expressed within the concept of addiction, for example aiming for abstinence, relapse, feeling powerless. This focused code of the addiction narrative outlines the way in which participants understood and took on the concept of addiction. In turn this adopted narrative led onto certain ways of coping that were for some participants helpful but for most unhelpful, maintaining their distinct problems. The coping strategy most utilised was abstinence, presented in the subsequent focused code.

As outlined in the category ‘PPU by proxy’, all participants saw their primary problem as being addicted to pornography via an external mechanism. Many participants related their concept of addiction through a medical lens, that the ‘disease’ of addiction was having an impact upon their biology. The medicalisation of addiction originated on the whole from reboot related sites. Participant 10 summarises this idea nicely:

“I’m actually super addicted to this thing because it’s already this hard to quit. But I kept trying, I started to read, basically everything you can read about the addiction, how it works on your brain, about the

brain chemistry, how the dopamine receptors work and all the other stuff, how the deltafosb accumulates in your brain, and I've like basically read everything that relates to porn addiction. I've studied a lot about it because the usual recommendation by other people who are trying to get better from porn addiction is to educate yourself on how it works on your brain so you can understand it better. I have to agree that it has helped at least somewhat in realising why I feel this way."

On the surface the above excerpt suggests that participant 10 found their 'research' on pornography addiction useful. However, *this way* implies one way of understanding their experience, a way promoted by the reboot sites that may or may not be helpful. Participant 1's experience of using pornography was also heavily influenced by a biomedical explanation:

"Every time you are watching porn and having a sexual release you are coming back to base level testosterone and then it's building up for about a week until you hit top point."

Other biological terms were frequently used by participant 1 and other participants:

"It's the effects of dopamine you know, how the sort of tolerance builds up" (participant 1)

"It's something I now recognise is purely just a feeling of dopamine firing off in your brain. But I just did, it felt good. I enjoyed it, you know" (participant 13)

"Pornography and the rush of dopamine and oxytocin and whatever" (participant 2).

This use of biomedical language did not arise from nowhere; it is the narrative from the reboot sites. Rather than just using the language, some participants also gave a biomedical account of why they had their difficulties:

"I think people are genetically predisposed to one kind of addictive streak" (participant 17)

"I'm not sure maybe some brains are more, I don't know susceptible [to pornography addiction]" (participant 4).

The above indicates how the addiction narrative permeated the participants thinking and understanding of their difficulties. If the narrative was very strong and all-encompassing then this would leave little room for a competing narrative. Once addiction had been viewed within a biomedical framework, several participants started to make analogies between pornography addiction and other addictive behaviours. Participant 12 was direct in this:

"Pornography is a drug, just like any other."

As was participant 2:

"I consider it to have similar effects on men's brains to substance abuse like drugs and alcohol"

and participant 4:

"It's a drug in the sense that, I can physically feel how my brain reacts to porn."

Whilst others used addiction related ideas:

"To get the feeling, or the hit, I suppose that I needed" (participant 18)

"I think I'm just wanting hit of instant release" (participant 1)

It can be seen that as the addiction narrative is building up, several participants equate their problems with using pornography as akin to drugs and alcohol. This was also seen in those that had not used pornography for a long time, they considered themselves to be 'in recovery' with participant 11 making an analogy:

"It feels like I'm an ex-smoker or ex-drinker where I still get a lot of craving pangs"

Other addiction related concepts were also visible within the participants accounts. Participant 10 gave two clear examples of this:

"I think I hit rock bottom in some way... In a way I was doing it partially for them and not completely for myself. I now believe that everyone needs to do it 100% for themselves."

In the core category (section 6.2) it was presented how participants related to the pornography industry, with many participants seeing it as a malevolent, powerful entity. This idea of power was also seen within the analysis of journals. One function of the pornography use was that it was habitual, participants reported that they just did it without the presence of a considered decision. Many felt powerless to do anything other than use. This aspect was also a theme amongst the interviews. It is revisited here as feeling powerless before an addiction is another aspect of the general addiction narrative. Participant 9 explains how they got to feeling powerless, whilst using another addiction concept 'relapse' (covered in the next section):

"There was a period in the relapse probably like three or four days, where I'd basically thought that I was mad. You just kind of at that point, just think ah fuck it, you know, and might as well like. So, two or three or four times a day, and it's like aggressive. I kind of like got a hold of myself, but you know, once again, you get in those moments where the brain rationalises it in a weird way and you just almost like feel powerless, control less."

Having a lack of control over using pornography was a recurring theme for many participants. Participant 1 states this in terms of not being able moderate their use before describing being 'taken over', not having any power to resist:

"I've found that I can't moderate myself using it...It's the self-gratification part of me almost taking over and just going for instant pleasure."

Participant 16 also related an aspect of themselves taking over:

"Particularly at those hormonal times of the month, it's just sort of like no way I'm gonna resist really."

Participant 2 simply felt a lack of power at all times:

"I was realised that it was bad for me, but I wasn't strong enough to stop myself."

The feeling of being powerless led to a feeling of hopelessness for participant 17:

"I wish it was not a part of me, but I just know that I probably wouldn't be able to leave or stop. If it just never existed or something, I would prefer that probably to happen. But it's like I've never really considered that I could just make it stop."

At the time of the interview participant 7 had resigned themselves to their pornography use, no longer berating themselves for using:

"I've gotten past the stage of regret and 'oh my gosh, what I'm doing?' I remember back in the day when I used to do it, I used to just think 'oh, I'm the worst, this is this is ridiculous, whatever'. But now it's just like 'clean up, we're done with that, moving on to the next thing'. It's literally just like a routine now."

The 'addiction narrative' is considered a key focused code for several reasons. A strong addiction narrative leaves little room for the competing narrative that it was their distinct problems that needed addressing rather than focusing on the concept of addiction. Also, the addiction narrative leads directly onto the next focused code. Once participants were consumed by the addiction narrative there seemed to be a logical leap into a prescribed journey towards abstinence. This was mostly apparent for those that engaged in the reboot communities. This leap is now explored.

7.2.3 Abstinence

Most participants made attempts to be abstinent from using pornography. Many struggled with this, however given the sample contains only those who identify with PPU then it makes sense that this would be the case. Nonetheless, some participants had been abstinent for a long time, years in some cases, but still identified as having PPU or being addicted to pornography. It could be suggested that for some at least, abstinence was a successful strategy. For the majority though it is put forward here that a commitment to abstinence is a maintaining factor in the experience of PPU.

The association of feeling addicted to pornography and wanting to be abstinent was clearly expressed by many participants. Participant 10 describes how they started this journey:

"I quickly came to the realisation that I was actually really damn addicted. I thought that quitting wouldn't be that hard. But after I started trying, like the first week, I think I got to like, four or five days without and even that was really hard. I was having a hard time sleeping because I felt so horny. Back then I didn't know if I was actually horny, or whether it was just my brain wanting more porn."

Here it is seen that the journey towards abstinence was a difficult process. Participant 10 embarks on this journey as they believe they are addicted, and abstinence seemed to be the only viable approach to addiction. Participant 10 initially thought that it would be easy to completely stop a long-term behaviour that served multiple functions. They made two attributions as to why they were struggling: being horny, or the brain was equated with a kind of external mechanism. This difficulty was experienced by participant 14 amongst many others:

"I was very focused on trying to quit pornography and I couldn't do it. I couldn't do it. I couldn't really do it. I could, you know, I could take two weeks off or something, but that was the best I could do."

Here it can be seen that participant 14 is taking an absolute approach to being abstinent, that it has to be permanent, rather than being abstinent for a select period of time. Several participants put a lot of effort into their attempts to be abstinent:

"A huge thing for me, it's been really like admitting that this is like a real thing for me, and I have to put a lot of effort into it." (participant 20).

Participant 9 expressed their desire to stop and their disappointment in not being able to so:

"I've tried to stop plenty of times before, but finally I did it. I told my friends that I was going to do it. I did a tracker on it. Literally the first day I tried to do it I break it. I just kind of sat back and reflected, like what the fuck. The crazy part is in that specific moment I did it, you rationalise it and you just can't control it, and that's the scariest part about it. In that moment it's 100% rational for me to break it because I thought ahh I'll just start tomorrow. Oh, it's no big deal maybe it will feel really good right now. I'll just start tomorrow."

The excerpt above indicates participant 9's commitment to quit. Different strategies are used, a tracker, telling friends. They admit to making a decision to use, but one they immediately regretted afterwards. Participant 6 reflected on their struggles with abstinence, looking inwards to try to understand:

"I guess for me being in recovery means having a healthy sexuality. That's something I really struggle with. There's part of me thinking it'd be far easier if I could just remove all of those urges, if everything could be taken away. So, I could just be nonsexual, I wouldn't have to deal with any form of sexuality."

In the above excerpt participant 6 indicates that they would prefer not to have any sexuality, to be asexual, rather than live with their pornography use. This gives a powerful statement regarding how participants invested in their battle to become abstinent. The example above by participant 6 suggests how the goal of being abstinent from pornography was so highly valued that they were prepared (hypothetically) to lose an important aspect of their life. It also suggests how they saw using pornography and masturbation as separate from being sexual, that the two were mutually exclusive. Given the difficulty in being abstinent from what can be seen as an expression of their sexuality, most participants had experience of what they called 'relapse'. However, the concept of relapse was vague, and not consistent within the sample of participants. Some found themselves questioning what a relapse is:

"If I'm watching Game of Thrones, am I relapsing? It's always a question of where do I draw the line" (participant 19)

"Even the totally innocent stuff is just so quickly connected in my mind to the hardcore stuff, so I avoid that. I used to enjoy watching anime when I was younger, but I've had to remove that from my life because it's just not worth the discomfort that it makes" (participant 13).

These two excerpts indicate, for at least some participants, that the boundary between abstinence and relapse was blurry. If the relapse is not defined for the individual, then there would almost be a constant threat and likelihood of relapse, thus maintaining the idea of being addicted to pornography. Participant 8 described it as fighting a physical need:

"It is a chronic need for masturbation. That's one of the ultimate things that I want to be in control of and get rid of. It's difficult when there's an imagination that can just be warped to different things."

Participant 8 expresses the difficulty in trying to abstain from masturbation when it can be triggered by their thoughts. Here they see masturbation as relapsing, irrespective of whether pornography is involved. In Chapter 2 it was put forward that pornography nearly always involves masturbation (Reid et al. 2012; Boies, 2002), however participant 8 has reversed this by saying that masturbation is a relapse in pornography addiction, whether or not actual pornography is being used. There is an expectation here that any sexual thoughts during masturbation is a relapse in an addiction. It is difficult to imagine what would be acceptable to think about when masturbating, it is perhaps easier to equate masturbation and pornography as the same thing and attempt to abstain from both.

Although unclear on an exact definition of relapse, participant 13 knew it when it occurred:

"I hadn't watched pornography for a long time, then my grandfather died, and the emotional process eventually led me to relapse. I was literally driving home from his funeral in the middle of night, and I pulled over and watched porn. That led to a three-month relapse."

Participant 13 when in an emotional state, reverted to their coping mechanism for distress – pornography. Given their previous abstinence, they were additionally disappointed in themselves. This was a common theme amongst several of the participants. The longer participants maintained their abstinence the more disappointed they were when they relapsed:

"That's why I've been so annoyed with myself yesterday because I had a good streak going that you want to keep going. The problem is you get so much more sad and frustrated and discouraged when you fail. The problem is that you're more afraid of restarting" (participant 19).

Here it is suggested that the disappointment arises not only from using pornography but by breaking a commitment not to use. Participant 1 recounted their positivity in achieving 'a long streak' of not using pornography:

"I had a few good streaks going on of maybe saying two, three a month I think during, yeah during university, I had my best streak of I think a hundred and fifteen days. I feel good about myself when I am on a good streak."

The fact that some participants recorded and remembered how long they refrained from using pornography indicates how important it was for them. Participant 13 stated:

"I'm 230 solid days clean right now. So, I'm pretty solid, pretty committed."

Participant 9 clearly expressed their pleasure in their success:

"I got to point basically I was wasn't watching porn and I did that for probably, eighty-five, ninety days. It was the longest in my entire life - I'd never gone more than a week, ever. I did ninety days, and I was so proud."

There seemed to be some conflation between wanting to quit pornography as it was problematic and wanting to quit pornography to achieve a goal. Participant 1 is a good example of this process (as previously explored in section 6.2). Participant 1 found it difficult to describe their exact problems with their pornography use but also described beating the addiction as their number one priority. Given that participant 1 was very much into self-improvement, it could be that they created a goal to work towards, and their distress when they relapsed was more to do with failing their goal rather than what the goal consisted of – using pornography.

As discussed in the category 'PPU by proxy', many participants went online and found reboot sites and forums. Abstinence is a key aspect of these sites, as suggested by the names: NoFap, PornFree.

Being part of an online community with likeminded individuals also wanting to stop using pornography was reported as useful by some participants:

"I felt they [reboot site] were the most useful when I could not take myself out of wanting to masturbate. So, I would browse the subreddit and find likeminded people. It gave me a bit of a kick; it gave me something to get my way out of it" (participant 11)

"Typically, the first thing I will do [when triggered by sexual images] is actually go to my accountability group and report it. We have like a group on Reddit for reporting urges in real time and I've found that even if no one's logged in at that moment, it kinda doesn't matter. That has been sufficient to keep me out of trouble" (participant 13)

Participant 13 continued and expressed why they continued to use the sites despite being abstinent for a long period of time:

"Now that I'm free of it, it makes me feel really good about myself. It makes me feel you know, I'm outside of the problem looking in, and I've got nothing but pity for the people who are still in it, and I want to help them. I spend a lot of time trying to help people on Reddit and give advice and stuff and usually it's just smoke in the wind, but at the same time, it's good for me to try. So that makes me feel good. I look at it as I screwed up, and I screwed up really bad, you know, but I'm not screwing up anymore and I'm working really hard to fix the damage it caused."

The majority of participants did not achieve long lasting abstinence from pornography, and several did not find the reboot sites useful:

"Those subreddits I don't really use them that often. I found that the conversations were quite repetitive, and the key messages was, you know, there was nothing novel there for me to understand" (participant 11)

Some participants explained how they felt different when not using pornography for some time. The reboot sites and forums often express the positives of not using pornography, how people will feel different, and how 'superpowers' can be achieved from prolonged abstinence. Participant 11 stated:

"After I went six months [not using pornography] after the first couple of months, I started to feel like levity, I felt lighter, I felt easier in myself. So, I could see why people would attribute those to having some kind of superpowers."

Participant 1 went further and described the following:

"I feel more confident in myself. I'm able to keep better eye contact with people. I think you have a physical edge by through semen retention."

It is unlikely that “semen retention” creates superpowers or as a physical edge as expressed by participant 1. It may be better seen, as discussed previously, as achieving a goal, and feeling proud, being more confident generally.

The role of reboot communities in the maintenance of the participant’s PPU is complicated. As noted, some found it useful, others did not. However, within this grounded theory, it is proposed that the reboot sites contain an unscientific philosophy and promote an approach which lacks any agreed evidence base. The reboot approach as seen within this grounded theory perpetuates the participants’ concept of addiction and worsened how they felt when they relapsed.

Irrespective of whether the participants found the concept of addiction helpful, or they achieved abstinence, these factors were instrumental in why they considered their pornography use problematic, and why their-self reported PPU persisted. Even though some saw themselves as in recovery they still identified as having PPU, whether it was ‘active’ or not. However, most participants did not remain abstinent, most failed in their commitment not to use pornography. Abstinence seemed to be their only strategy in defeating their PPU, after relapsing most double downed and went further into the addiction narrative. The consequences of this, as presented in the core category – ‘displacement of the problem’, were that participants continued the mission of defeating addiction rather than refocusing on addressing their distinct problems. Another aspect of persisting with abstinence was how they felt when not successful. Continued pornography use created a sense of shame and failure, and this in turn exacerbated pre-existing negative feelings and perpetuated their distinct problems.

7.2.4 Shame

The idea of shame as presented here is multifaceted. It considers how the participants felt after using pornography, especially when they considered it a relapse in their attempted abstinence. The word shame is used to describe the way participants reported feeling and how they judged themselves cognitively. Two different elements of shame are considered: ‘before the self’, and ‘before the other’. This distinction relates to how participants made a judgement about their behaviour which contradicted their personal morality, and also their concerns about how other people would judge them.

Some participants, for example participant 18, felt a general sense of shame, instantly regretting what they had done:

“I mean probably shame, it’s sometimes pretty filthy and you kind of think what the hell have I just done.”

For participant 9 there was a stronger sense of disgust:

"I kinda lay there and usually I just feel dirty, I feel gross, and I just feel like I like heavy. It's almost like you want to go and try to do something to make up for what you just did."

Both these participant statements can be seen in relation to pornography itself. Participant 18 saying *"It's...pretty filthy"* suggests a judgment about what they had seen, whilst participant 9 describes the physicality of using of using pornography, for example having to clear up afterwards. Despite the immediate feelings of shame some participants used pornography again, perhaps to avoid the painful and shameful feeling itself:

"It's like a weird thing that I would think like, oh, I would finish bingeing porn and I feel so guilty about it and shameful and be like, I'm never going to do it again. And then I would like, sometimes that day, do it again" (participant 20)

For participant 20 their sense of shame was in relation to how they saw themselves, and how using pornography contradicted this:

"I just feel like a massive hypocrite in a lot of ways. Because watching porn, especially the type of porn that I would watch, like does not align with my values and how I am in any other part of my life whatsoever really."

Likewise, participant 1 described having a 'real self' and a 'porn self':

"As soon as you sort of finished [using pornography] you almost take a second look at what you have been looking at and you kind of just want to delete it or close the window as quick as possible. It's almost as if you have come back to who I'd say the real you is. It's icky, I feel ashamed."

From exploring the above statements there seems to be a difference between how the participants see themselves, their self-concept, their real self, and how they view themselves after using pornography. For participant 1 they create a split between these two aspects, a form of dissociation. Perhaps this process allows them to feel less responsible for their actions. With this in mind and pre-empting this experience, participant 1 designed their own, unsuccessful way of stopping themselves using pornography:

"At the top of my screen there is a note written by myself trying to help myself, saying not to use. In the moment though, before I click on the porn it's kind of a mental thing that I had to take off the sticky note. If you look at that as being an eye from my real self-looking at me, I don't want that [using pornography] to be associated with the real me and who I want to be."

These examples illustrate how using pornography contradicted the participants sense of personal morality, feeling a sense of shame afterwards.

For some participants their sense of shame originated from ‘the other’ – how they worried about how others would view them for using pornography. As outlined in the category ‘PPU by proxy’ this was an external process, originating from a grand morality such as religion:

“I’ve always attributed it [pornography use] with a bad feeling. I knew it was kind of wrong, been a lot of guilt. Part of it is religious, because it’s against religion to masturbate.” (participant 19).

Or in relation to other people, they knew personally. Participant 6 gives a good account of this notion:

“I was talking to my partner about pornography, and he said what do you want to watch? And I remember being really quite cautious around it and he put something on, and I thought this is just like, what’s the point? sort of thing. He said again what do you want to watch. And I remember telling him and him being quite uneasy. I remember it was around orgies and gang bangs, that side of things. And he was uneasy and that sort of pulled me up quite short thinking, well, you’re judging me on that. And that tapped into the idea this is something I should be ashamed of, my preferences, those things are clearly something that aren’t Okay, or aren’t normal.”

For participant 13 using pornography was a ‘dirty secret’. They reported how their secret influenced how they were around other people and how this made them feel:

“From using pornography, I thought this is the thing that you do with girls. And so, whenever I would see a girl or be around a girl, that’s what was going on in my mind, you know wanting to do this or that. And so that would make me really nervous around girls because I would feel like I’m having all these dirty thoughts and I’m scared that they can tell somehow. It’s not fun and playful, they could tell it’s icky and creepy.”

Here participant 13 feels that their internalised shame concerning their use of pornography is visible, that it can be picked up by other people, that they can read their mind. This is such an uncomfortable feeling impacting them socially. This idea of people finding out about their secrets was echoed by participant 19, but in a more pragmatic sense:

“A girl won’t want me you know if this is what I do in my free time.”

Participant 1 gave a telling account of how they felt when not using pornography:

“It [quitting pornography use] can slightly drop your voice, make you feel more manly.”

This implies that the opposite is true, that using pornography is not manly, something to be shameful of. Rather than seeing their perceived unmanliness arising from their sense of shame, projecting this onto other people, feeling as if they know what he has done, participant 1 explained it within a medical context using testosterone to explain the effects (see memo - medicalising pornography use, figure 15). They understandably equated testosterone as manly, but also believed that using pornography

decreased testosterone, therefore not using it increased testosterone levels, and being manly. This particular analysis regards participant 1, a man, and how they equated using pornography to a biological process involving male hormones, for women this idea was not prevalent within the data.

Rather than an internal or external aspect to their shame, some participants expressed their shame as regret over a loss of time and opportunity. Participant 5 stated:

"I don't particularly like my past and I hate thinking about it at times, how much time I've wasted. I hate to think how much time and money I've wasted in my life, it's just too horrendous to think about sometimes."

Being ashamed, having regret or disappointment was a common theme amongst the participants. Rather than an internal disgust or shame before another, a relapse could be conceptualised as regret for failing more generally. Several participants felt a sense of shame at not being able to stop pornography. They were disappointed in not achieving this task, failing at achieving abstinence. Again, it was participant 1 that most clearly demonstrated this idea:

"I think it does subconsciously stay with you in your conversations with people for example that you've failed on something that you are trying to do."

This sense of failure was common both in the interviews with participants and also throughout many of the journals, as presented earlier (see section 5.4).

The consequences of feeling ashamed, having regret and disappointment were varied. For those feeling ashamed by their continued pornography use it made sense that they would go online for help rather than seeing a professional; the anonymity hiding their shame. As put forward earlier this online help seeking only reinforced the addiction narrative, leading to a greater commitment to abstinence and a greater chance of failure. As all participants had some form of distinct problem unrelated to their pornography use then an increase in shame, guilt, a sense of being a failure made them feel worse, reinforcing their negative views of self.

7.3 Summary

This stage of the grounded theory, encompassing the category of 'committing to the mission', has presented several contributing factors in the maintenance of PPU. Unsurprisingly, participants had a strong and binding relationship with pornography. Participants also identified with the concept of addiction, including approaches to addiction treatment. This was a purposeful and logical decision, but one that excluded other options. All participants made several attempts at being abstinent, sometimes abstinence was just a goal to achieve, for others pornography use was also an expression

of their sexuality, therefore refraining or being abstinent from pornography was challenging for them. For those that had periods of prolonged abstinence, identifying themselves as in recovery, their continued concern about relapsing reinforced their concept of being addicted to pornography. When abstinence was not achieved this resulted in different forms of shame. Feeling ashamed after relapsing led to a 'doubling down' on the addiction narrative and further (failed) attempts at abstinence. These difficult feelings are also seen to add to or exacerbate pre-existing, distinct problems. For instance, if a participant had low self-esteem before seeing themselves as having PPU, then the shame associated with their relapse would make them feel worse about themselves, further decreasing their self-esteem.

7.4 Overall summary of the constructivist grounded theory of PPU

Figure 23 is now revisited to help definitively answer the research question for this study:

'How do adults experience their self-reported problematic pornography use, and how can sense be made of the development and maintenance of their problems?'

This constructivist grounded theory of PPU suggests that the participants in this study had pre-existing problems before they identified their pornography use as problematic. The pornography use itself may have caused distress and dysfunction, however alone it did not account for the totality of the participant's experience. The feelings associated with the distinct problem were a driver for continued pornography use through emotional regulation. This coping strategy did not work for most participants, with participants tending to judge themselves negatively for using pornography, thus further exacerbating their negative feelings. The realisation of 'having PPU', or being addicted to pornography, has been put forward as occurring due to an external factor. The participants seemed to take on the morality concerning pornography from 'the other', a relationship or more commonly a reboot forum. Once this realisation occurred the participant's pre-existing problems were displaced. The participants began to see their use of pornography as the main problem and embarked on a mission to conquer their addiction. Perhaps PPU was seen as more tangible and less nebulous than the distinct problem (as presented in figure 26); it is perhaps harder to look inwards for a difficult solution. This mission distracted participants from the actual causation of their underlying, now displaced, problem. Most participants were unable to 'complete' their mission and felt worse for their failure. These emotions further perpetuated the feelings associated with their distinct, underlying problems. Most participants became trapped in a loop of trying to defeat their addiction, with limited success. They hoped that by defeating their addiction all their problems would dissipate. Those that were successful in their drive for abstinence continued to self-report PPU or pornography addiction, despite not using. They were proud to have stopped using pornography, but this did not irradiate their distinct problems as expected.

This constructivist grounded theory of PPU sees the addiction narrative as a contributory factor in the participants focus on the consequences of the problem not the cause of the problem. In essence, the coping strategy (pornography use) became the focus for the participants, diverting attention away from their underlying problems.

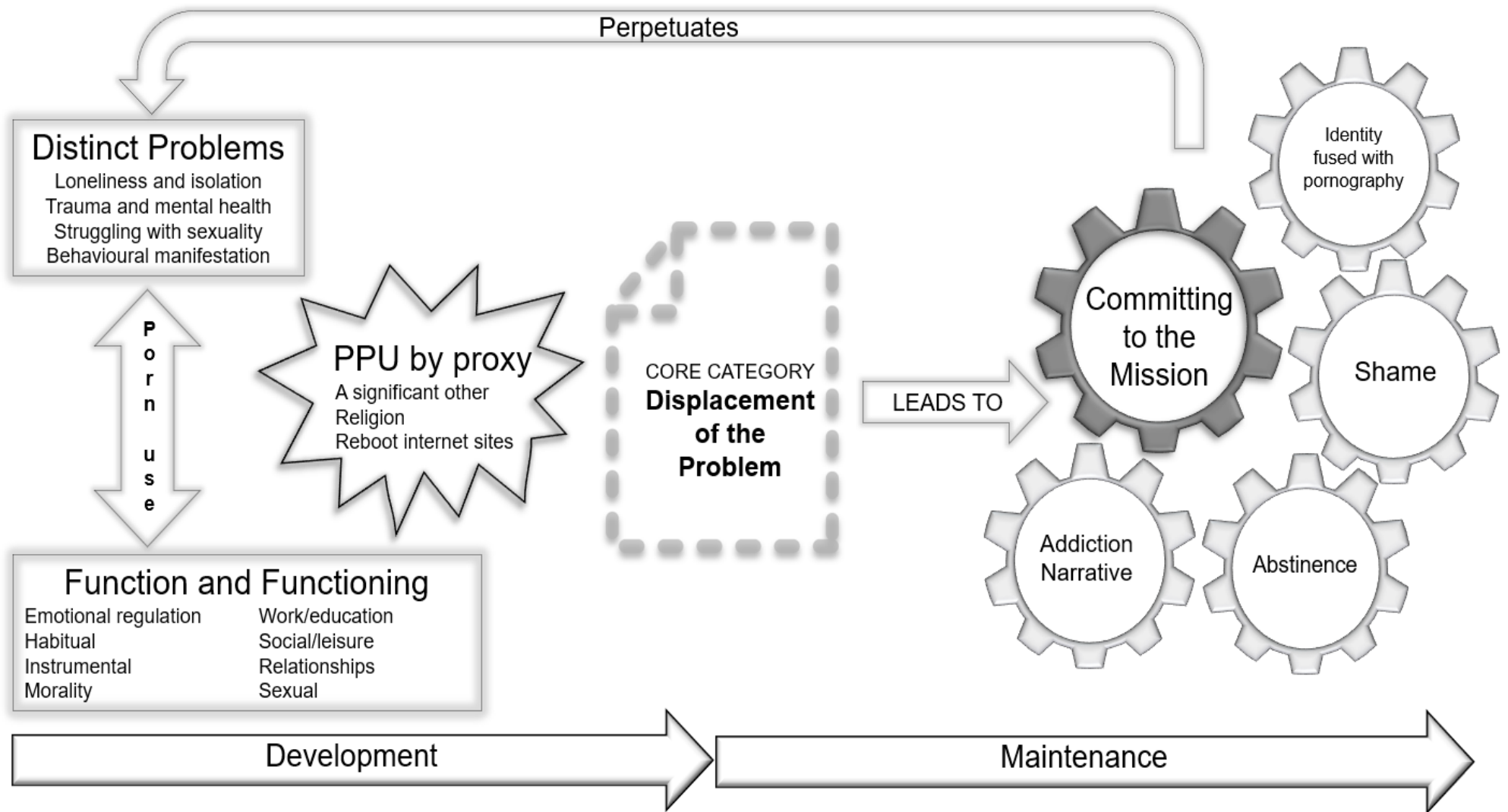


Figure 23. The constructivist grounded theory of PPU

Chapter 8: Discussion

8.1 Introduction

This chapter aims to explore the grounded theory in relation to pre-existing theory and research. Although the findings of this project are seen as original, it is hoped an exploration of existing theory and evidence will further elucidate the theory. After the grounded theory is re-situated in light of an examination of pre-existing literature, the quality of the grounded theory is evaluated, the limitations are put forward, and overall conclusions made.

8.2 Situating the constructivist grounded theory of PPU

The constructivist grounded theory of PPU presented in this project has many discrete elements that when taken as a whole provide a plausible account of the development and maintenance of the participants' problems. During the literature review pre-existing theories of addiction were not thoroughly examined in order to maintain an inductive analytic approach in keeping with the tenets of grounded theory. How this grounded theory relates to other theories of PPU, and addiction more generally will now be explored. Some research findings are included here, but the focus is on pre-existing theory, as these were purposely excluded from the literature review in keeping with grounded theory methodology.

This section is organised according to each stage, before situating the entire grounded theory. Within stage one the category 'distinct problems' is given less prominence. This is to avoid the category being seen as containing content that is 'factual'. It would be straightforward to compare the findings from distinct problems and existing research. For example, the findings from Butler et al. (2018), that loneliness is a predictor of PPU, is supported by this grounded theory with the creation of the focused code of 'loneliness and isolation'. However, this approach is not being taken. The focused codes within the category distinct problems are not 'predictors' of PPU but are an important aspect of the development of the grounded theory. Directly comparing the findings from this grounded theory to existing research is not in keeping with the methodology. What 21 participants say in an interview cannot be generalised, and then used to support or refute previous research from different methodologies. In addition, what participants say in an interview is contextual. Davies (1997) puts forward a radical perspective on addiction. He critiques commonly held conceptions of addiction and suggests that conducting research (within a realist ontology) directly on what 'addicts' say is flawed. He proposes that people's responses to questions are contextual, people will make attributions depending on the function they serve. The language used in different situations can vary, the language

of addiction may be used with professionals on purpose as this is what the professionals may expect. When with peers the narrative of addiction changes and can become more colloquial. Therefore, responses to questions cannot be taken verbatim, and cannot be compared to other forms of data. This contextualism is acknowledged within the constructivist methodology used in this grounded theory. The fact that participants construct their narrative, and in turn this is re-constructed by the researcher, is fully acknowledged. When exploring the findings of this and all categories, a more nuanced approach is taken – seeing the findings alongside theory and research, taking a pragmatic approach, adopting new perspectives if merited. I did not want this chapter to read akin to a quantitative study. Most psychological research concerning PPU uses a questionnaire design, therefore unless highly relevant and theoretically meaningful, general results from these studies are not included.

8.2.1 Stage one of the grounded theory in relation to pre-existing theory and research

Distinct problems

The distinct problems consisted of four focused codes: Loneliness and isolation; Trauma and mental health; Struggling with sexuality; Behavioural manifestation. Seen together these codes could be said to account for a wide range of underlying issues. As presented throughout the grounded theory these distinct problems were seen as the main problems the participants experienced irrespective of their self-reported PPU. The distinct problems were the starting point in the grounded theory, positioned as accounting for the development of the participant's PPU. The wide-ranging nature of the distinct problems suggests a highly individualistic aetiology. This idiographic account of the development of PPU is in keeping with the formulation approach. Life histories, previous experiences of distress are fundamental in understanding the current problems that individuals face. The category, 'distinct problems', postulates even more than this. Through a constructivist process the distinct problems were the problems faced by the participants. Each participant had their own unique history and events leading up to the notion of having a distinct problem. The qualitative work by Chasioti and Binnie (2021) also suggests this individualistic approach. They consider there to be a range of intrapersonal, interpersonal, and socio-cultural narratives leading up to the onset of PPU. They add the idea of 'being weak', as reported by the participants, as a key theme running through the data. This resonates with the focused codes within the category distinct problems. All can be seen as centring on the concept of weakness, being a victim, many having been 'de-individualised' (Chiou, 2006) – not acknowledged within society.

Considering the distinct problems to be the underlying aetiological structure in PPU goes against a disease model of addiction, and therefore against the nosology presented in section 2.3.3. The participant's self-reported PPU could not be reduced to an underlying causal pathology based

upon physiology; in keeping with some literature discussed in Chapter 2, for example Ley et al. (2014). However, acknowledging the primacy of distinct problems within the concept of PPU does not ignore, or downplay, the distress and dysfunction experienced by the participants in relation to their pornography use, or indeed, negate the participant's reaction or way of coping with their distinct problems, both of which were covered within the category 'function and functioning'.

Function and functioning

Function

The focused codes that comprised the 'function' aspect of category 2 were: Emotional regulation; Habitual; Instrumental; Morality. Each will now be considered alongside existing theory and research.

Emotional regulation

Emotional regulation was seen as a main reason for, or function of, pornography use for the participants in this study (N=258). Emotional regulation involves several processes that aim to control the experience and expression of emotions (Gross, 2007). The role of emotional regulation within pornography use is widely reported within the academic literature. For instance, Reid, Li, et al, (2011) suggest through their use of questionnaires that there is a relationship between PPU and experiential avoidance, those that score higher on measures of PPU also score highly on avoiding emotions. However experimentally this has not been supported for those reporting PPU (Prause et al., 2013). Within the wider addiction literature, emotional regulation is seen as a central aspect of several theories.

One of the main addiction related theories, and the one most pertinent to this discussion, is the self-medication hypothesis (Khantzian, 1985). The self-medication hypothesis is a psychodynamic theory proposing that addiction to substances results from a disorder of self-regulation. However, the self-medication hypothesis suggests something more than changing state emotions. Consciously or unconsciously, individuals use substances to alleviate or cope with psychological suffering. Khantzian (2012) suggests that addicts have an inability to recognise feelings, maintain a coherent sense of self, and establish meaningful relationships with other people. This lack of self-care leads to self-medicating with drugs or alcohol. The substances contain or subdue the original feelings and temporarily lift self-esteem (Khantzian, 2012), thus becoming a coping mechanism. The self-medication hypothesis makes intuitive sense, giving a theoretical lens through which to see the process of emotional regulation. However, as with many psychodynamic theories, there is a lack of

evidence supporting it. The links between psychopathology and addiction are tentative, but no causality has been found (Woody, 1996).

Another theory accounting for the concept of emotional regulation is operant conditioning (Skinner, 1937) – that behaviour is controlled by its consequences. If the pornography use is seen as the behaviour, then its frequency will be determined by how the individual feels afterwards. There are two mechanisms involved: positive and negative reinforcement. Positive reinforcement focuses on the pleasure derived from using pornography, and negative reinforcement on the removal of the aversive stimuli – the pre-existing painful feelings. Behavioural theory is a well-known component of the general addiction process (Everitt & Robbins, 2005; Koob, 2013), and also within behavioural addictions, in particular pornography addiction (Blaszczynski, 2016).

Whether psychodynamic or behavioural models of emotional regulation are prioritised, the general concept of using pornography to control how one feels is arguably an important inclusion in any theory of addiction. It is therefore unsurprising that this grounded theory constructed the focused code ‘emotional regulation’.

Two common codes within the analysis of the journals were ‘considered decision’ and ‘escape’ – participants were seen as making a conscious decision to use pornography to change how they felt. Rather than a drive or a result of conditioning, this inclusion suggests a cognitive mediator between feelings and behaviours. Bandura (1977) suggested that internal cognitions determined the relevancy of environmental events, the interpretation of events, and related behaviour. The intended goal of the behaviour was seen as dependant on the values and desires of the individual rather than whether they would be observably beneficial or not. In part as a response to the determinism of behaviourism and psychodynamic theory, cognitive social learning theory was developed and emphasised personal expectancies and beliefs about the outcomes of drug-using behaviours (McCusker, 2006). As applied to addiction, Bandura’s (1977) learning theory can relate to how the consequences of an action can influence future behaviour. An individual experiences the consequences of their behaviour and draws a conclusion from this. For example, the negative effects of drinking too much alcohol may decrease future behaviour, whereas positive effects may increase drinking behaviour (Lee et al., 2018). It is these positive and negative expectations of a planned behaviour that are named expectancies (Marlatt, 1979). Expectancies are a product of past experience, a network of memories (Goldman et al., 1991).

From exploring psychodynamic, behavioural, and cognitive theories concerning emotional regulation it is clear that there are a multitude of influential processes. The focused code ‘emotional regulation’ was derived from both the data from the journals of pornography use and the interviews. Within, the journals it was constructed that most participants were aware of their motivations leading up to using pornography, they had an expectation as to what would happen afterwards. For some, their

expectations were achieved, they escaped their painful feelings, for most however their expectations were not achieved. If expectancies are a product of past experience, then this would assume that there would be continued learning. For the participants that did not experience a positive outcome one would assume that their expectancies would alter over time – a realisation that using pornography to escape their feelings did not work. However, the journals only captured a ‘snapshot’ of experience. Participants would logically experience both successful and unsuccessful expectancies. As suggested previously, it was a gamble as to whether the desired outcome would be achieved. When analysing the interview data, it was possible to take a more idiographic perspective, highlighting the importance of taking a formulation-based approach. Another explanation of the role of emotional regulation is more complex, that another process is occurring concurrently. This process is conceptualised within the core category ‘displacement of the problem’.

Habitual

The above discussion of emotional regulation centred on the idea that using pornography was a conscious decision. This focused code, habitual, proposed a different perspective. The function of pornography use within this focused code was that it was automatic, routine, without a conscious expectation or plan to use. Pornography use as an automatic process warrants some further thought. Cognitive science defines automatic processes as being fast, without intention, autonomous, effortless, difficult to control, and outside of awareness (Posner & Snyder, 1975). Bargh (1989) introduced the word automaticity to describe this process; how the control of behaviour patterns shifts in cognitive control from an intentional to automatic process. Tiffany (1990) provides helpful analogies to understand this process. They likened addictive behaviours to non-addictive, rehearsed, skilled actions, such as piano playing or driving a car. In these examples it is clear how at the beginning the behaviours are guided by intentional cognitive processes, but over time the behaviours are guided by processes outside of consciousness. This change of process is taken up at the end of this section when exploring the idea of changing functions.

The dual systems model (Strack & Deutsch, 2004) neatly combines elements of the previous focused code and this notion of habitual use. In their model they theorise that addictive behaviour is governed by the interplay of two systems, a reflective system (conscious decision-making), and an automatic system (responding to habits and impulses). The reflective system attempts to override the demands from the automatic system, but this is dependent on the resources available to the individual. Self-regulation is possible, individuals are able to refrain from engaging in undesired behaviours, but this is not achievable all the time. Using this model in relation to our participants helps explain why participants had multiple functions involved with their pornography use.

Instrumental

Returning to the notion of a conscious process, the focused code 'instrumental' related to how participants made a decision to use pornography in a considered manner. The participants were seen as believing their pornography use had a rationale, a purpose, a practical outcome, as opposed to relieving negative affect. Although not necessarily 'rational' as in sensible, but at the time, for the participants it made sense to them to use pornography. A few participants reported how they used pornography as a way of punishing someone else, most commonly a partner. However, for most participants who used pornography in this manner, it was reported as a sleep aid; therefore, this section will focus on this aspect.

Using pornography to help one sleep can be explored within the wider literature concerning the effects of sex and orgasm in relation to sleep (seventy-one percent of the journals completers always masturbated to orgasm whilst using pornography). One of the first researchers to investigate the relationship between orgasm and sleep were Kinsey, Pomeroy and Martin (1949). From their survey-based research participants frequently reported feeling relaxed, and sleepy after orgasm. This finding has also been found by Koba (2022) using mixed methods, survey, and interviews. In a larger sample Lastella et al., (2019) also indicated that the public perceive sexual activity as helping sleep outcomes. However, experimental investigations into whether orgasm promotes sleep have been hindered by methodological issues. Brissette et al. (1985) attempted to experimentally test this hypothesis using polysomnography. However, no discernible effects were found. An explanation for this given by the authors was that removing the anal probe after orgasm disturbed sleep latency. Nonetheless, a theoretical link is evident as orgasm is associated with the release of oxytocin, prolactin, and the inhibition of cortisol (Brody and Krüger, 2006); and in turn oxytocin (Braga, 2014) and prolactin secretion (Spiegel, 1994), and reduced cortisol (Bush & Hudson, 2010) is associated with the onset of sleep. This discussion concerning the biology of sex and sleep may give an indication of why participants reported using pornography and masturbating to orgasm as a sleep aid. In addition, if they were successful in their endeavour the using of pornography would become classically conditioned with sleep. There would also be expectancies developed over time, further strengthening the links between using pornography and sleep. This exploration helps make sense of why participants used pornography instrumentally in this way.

Morality

This focused code related to how participants made a post hoc judgement about using pornography. They tended to feel bad afterwards and judged themselves negatively. Although many had an expectancy of relieving stress or feeling good, this was not achieved. The function of their pornography use was not as they had intended. Several participants expressed how using

pornography was against what they really wanted to do, against their morals. Several felt that they had let themselves down, that they had failed. As explored previously, several participants held strong negative beliefs about pornography per se, the use of it generally, and how they viewed themselves for using it.

Societal morality surrounding pornography was presented in the literature review when exploring the history of pornography (section 2.2.2). For the individual, where their morality concerning pornography originated is taken up later when discussing the category 'PPU by proxy'. For now, an exploration of the literature concerning PPU, and morality may illuminate this aspect of the category, how the function of the participant's pornography was influenced by this process.

As presented in the literature review concerning PPU (section 2.3.3.1), Grubbs, Wilt, et al. (2018) found that rather than the amount of pornography used, individuals saw themselves as more addicted to pornography if they had strong beliefs against using it; therefore, using pornography would be a moral transgression. It was proposed by Grubbs, Exline, et al. (2015) that distress related to using pornography was strongly related to having conservative values and religiosity. Based on these findings, Grubbs, Perry, et al. (2019) proposed a moral incongruence model of PPU; meaning that the distress associated with PPU is moderated by the individual's morality concerning their use of pornography. Grubbs and Perry (2018) suggest that the cognitive dissonance (Festinger, 1957) created by the discrepancy between ones supposed values and their actual behaviours theoretically creates distress. Perry (2018a) found that viewing pornography was associated with depressive symptoms but only for those morally disapproving of their pornography use. In their case study of psychotherapy, Smaniotto et al. (2022) found that focusing on the participant's sense of morality concerning his pornography use was more beneficial than focusing on the problematic behaviours, the frequency of using, for example. What can be taken away from this inclusion of research surrounding the notion of morality is that the construction of the focused code 'morality' is justified. The idea of cognitive dissonance is an important factor, further elucidating the mechanisms by which the expectancies held by the participants were not realised, and why participants experienced distress resulting from their pornography use.

Changing functions

In section 5.4.2 it was presented that the function of pornography use changed over time for the participants. The above four functions can be seen as the end point of the process. However, many participants reported how this had not always been the case. In the past participants used pornography for different reasons, mostly excitement, pleasure, and sexual exploration. This notion of changing functions is well accounted for within the research literature concerning addiction. This is now explored.

Baumeister and Nadal (2017) propose that addiction begins with sources of pleasure. They state how this is a natural process, humans seek behaviours and substances that improve survival and reproduction. However, some behaviours and substances can 'fool' the reward system in the brain and are therefore repeated becoming habitual. This move from pleasure to habit can also be called from 'liking' to 'wanting' and is central to the 'Incentive-Sensitization Theory' (Robinson & Berridge, 1993). This theory describes how hedonic enjoyment is central early on in addiction, but this is replaced with a visceral wanting or craving. Berridge et al. (2009) explain how incentive salience is more than a cognitively controlled idea of wanting, being mediated by cortical circuits (a hypersensitive reward system), thus the wanting can be irrational in that it is not consciously desired.

There is some research in relation to the above and PPU. Klein et al. (2022), in their review paper, concluded that incentive sensitisation is an important factor in PPU, finding attentional biases towards sexual rewards, and an increased initial response. However, they were uncertain whether these factors fully supported the incentive sensitisation theory or were due to classical conditioning. It is therefore difficult to assess the role of 'liking' and 'wanting' within PPU. The liking part is relatively straightforward and an important factor in this grounded theory. Many participants reported having initially found pornography pleasurable, many still had the expectation that it would be. The move to 'wanting' seems more problematic. Robinson and Berridge (1993) propose how wanting is facilitated by craving, tolerance, and withdrawal. Whilst some participants described experiences that could be called craving, withdrawal was not a common feature. This is supported in research explored within the literature review (see Ley et al. 2014; Prause, 2017, concerning craving – section 2.3.3.1). Physiological withdrawal symptoms are not possible with pornography use. Tolerance is more complicated as it could mean an increase in duration or an escalation of content, vanilla pornography to extreme pornography for example, this was an issue frequently reported by participants. Many journal participants reported having an 'urge' to use pornography. This was taken to mean having a sudden thought or desire to use, rather than a prolonged craving.

Functioning

The focused codes within this section included: Work/education; Social/leisure; Relationships; Sexual. As with category one, the functioning section of category two could easily fall into being compared and contrasted with pre-existing research literature, so this approach is not taken. Within this grounded theory the focused codes are considered to be the impact of using pornography. However, as discussed in section 5.4.3, differentiating between the impact of pornography and the impact of the distinct problems was challenging. During the coding of data, the impact of using pornography was a commonality across all participants, it was primarily this that led to the construction of the focused codes. The voice of the participants was given priority, whilst at the same time reflexivity

was used, and on occasion the veracity of the participant's reports was questioned as part of the formulation process. The inability to distinguish between factors in a conclusive manner is not isolated to this grounded theory. It has been said to be a major issue within the concept of dual diagnosis (concurrent mental health problems and substance misuse) with researchers suggesting that differentiating symptoms is difficult (Carrà et al., 2015). Examples include whether an individual's anxiety results from an anxiety disorder or withdrawal from alcohol; or whether a flight of ideas is symptomatic of bipolar disorder or stimulant use. There is often diagnostic confusion whether an impairment or dysfunction results from substance use, a mental health condition, both, or neither (Bennett & Gjonbalaj-Morovic, 2007). What has been suggested though is that those considered to have a dual diagnosis have poorer functioning compared with those that only have one condition (Bennett & Gjonbalaj-Morovic, 2007).

An important aspect of the section 'functioning', and one that can be evaluated alongside existing research, is the idea of the duration versus the frequency of pornography use. The interview participants use of pornography in this study can be seen in section 4.6. Within the academic literature focusing on PPU the frequency of pornography use has been a defining feature (Duffy et al., 2016). It was presented in section 2.3.3.1 that there were discrepancies as to what is considered frequent use of pornography, thus limiting frequency as an indicator of severity of PPU. Other researchers have prioritised the impact of the pornography use in whether people seek help or not (Gola et al., 2016), and how this is moderated by the individual's attitudes towards using pornography (Grubbs, Exline, et al., 2015). Within the grounded theory time was seen as more influential than frequency. In section 5.3.3 it was presented how time spent using pornography created distress and dysfunction. There was a pragmatic aspect in that time using pornography meant less time devoted to other activities. The participant's judgment about the 'wasted' time rather than their attitudes to using pornography per se seemed to account for the distress experienced, mostly disappointment and regret. This is the opposite of what Twohig et al. (2009) found in their study, they proposed that negative outcomes were mediated by controlling urges, rather than the time spent using pornography. Time within this grounded theory is seen as an important factor. Intuitively it makes sense that if X amount of time is spent using pornography, then there is X less time to engage in other activities and there would be feelings of regret. However, causation cannot be assumed, it could be just as likely that those with poorer functioning turn to pornography, rather than spending time using pornography causes a decrease in functioning.

Another aspect that requires further exploration is the research/practice gap outlined in section 2.3.3.1 concerning PIED (Pornography Induced Erectile Dysfunction). As presented in the literature review there is some academic writing concerning the role of pornography use in erectile dysfunction; however, the research methods have been questionable. Other sources of the existence of PIED are those found online in reboot related sites reporting user experiences. Several participants in this grounded theory also reported experiences with erectile or other sexual dysfunctions. However, as

part of the formulation memos it was constructed that their dysfunctions had alternative explanations other than pornography use. For most this was in relation to masturbatory practices, or physical health conditions. This reframing of the role of pornography is echoed in several higher quality research studies (see Ley et al. 2014 for a review). This leaves PIED linked with self-reported PPU but perhaps not with pornography use per se.

Summary

The category 'distinct problems' accounted for a wide range of underlying issues and are seen as the main problems faced by the participants. However, this is not to discount additional problems created by their pornography use. Focusing on an individualistic approach to the aetiology of PPU has some support, with the notion of 'being weak' resonating with the focused codes created within the category. Seeing the development of PPU as individualistic highlights the importance of a formulation approach, moving the narrative away from a disease model of addiction.

The role of emotional regulation was an important facet of the function of pornography use. Exploring psychodynamic, behavioural, and cognitive theories has helped to explore this process at a greater depth. The theory of automaticity and addictive behaviours being a rehearsed activity adds further gravitas to the idea of pornography use having a habitual function. Through investigating the physiological mechanisms concerning sleep and masturbation there is now a greater understanding of a potential mechanism accounting for why so many participants used pornography in this manner. The creation of the focused code 'morality' was enhanced by exploring existing research suggesting it as a mediator between pornography use and distress. It was interesting to explore theories of 'liking' and 'wanting' but the move to wanting was less influential than that of liking in the context of this grounded theory. The liking component may explain how the PPU developed, but it is felt that wanting adds little to the thinking concerning the maintenance of PPU. As presented the participants in this grounded theory all had a reduction in their functioning and reported distress associated with their PPU. The contributing elements to these however remains elusive, unease about this was alleviated through a consideration of similar processes with the context of dual diagnosis.

A useful, comprehensive model that also moves the narrative away from biomedical explanations towards a more psychological perspective is the excessive appetites theory. All addictions, not just substances, are a form of extreme appetites (Orford, 2001) that people can become attached to. They obtain pleasure at first, the behaviour also performs other functions such as coping with stress but with this comes a lack of control and people will prioritise their appetites over other life domains. The level of appetite will depend on several different characteristics such as personality and cultural dimensions. This theory seems to be tie together both facets of the category, function and functioning.

PPU by proxy

As expressed in category 1 and 2, all participants had distinct problems prior to identifying with the concept of PPU, even if the extent of their distinct problems was not fully acknowledged at the time of the interviews. The realisation of 'having PPU' or being addicted to pornography has been put forward as occurring to an external factor. Three factors were explored: a significant other; religion; reboot internet sites. Most participants were seen as having this identification of being addicted when the distinct problems, in combination with their pornography use, was becoming particularly stressful. Once drawn to the concept of being addicted to pornography participants shifted the causality of their distinct problems onto their pornography use, their addiction – this process formed the core category 'displacement of the problem'. How participants took on this external attribution is now discussed alongside pre-existing theory and research.

Pornography addiction is not a diagnosis, as such for those considering themselves addicted to pornography there must have been a self-diagnosis. Individuals self-diagnosing with pornography addiction is highlighted within the PPU related literature (for example, Taylor, 2020). However, the concept of pornography addiction was not invented by each participant, it had to be derived from somewhere. Apart from the couple of participants who took their morality and pornography related beliefs from their religion (religions generally have an antagonistic view of pornography use (Boulton, 2008; Sherkat & Ellison, 1997; Thomas, 2016), all other participants found out about the concept of pornography addiction from a trusted source. Mostly this was the reboot websites or general web searches. Smaniotto et al. (2022) highlight the process of seeing oneself as addicted in their case study of a young man. In the case study, the man is caught using pornography by his partner. Feeling ashamed and unwilling to own the behaviour, he denies his agency and considers himself as sick, addicted to pornography, therefore seeking treatment for his disease.

Turning to social media or online sources of information to better understand mental health experiences is not uncommon (Moreno et al., 2011); however, many people also self-diagnose (Yıldırım, 2023). The research on self-diagnosis is not definitive, some studies suggest that self-reported diagnoses correspond well with those made by professionals, especially for common disorders such as anxiety and depression (Rutler, 2023). However, findings from a recent meta-analysis found that the current evidence does not support self-diagnosis for conditions managed in primary care (McLellan et al., 2023). Other researchers have concerns about the dangerous consequences of misdiagnosis within psychiatry, producing increased anxiety in patients (Jutel, 2017). The quality of online health information has been questioned, being seen as inaccurate with little empirical research (Cline & Haynes, 2001), often having commercial interests (Jutel, 2017). There are also implications for social resources as a result of self or inaccurate diagnosis - resources go to the wrong areas (Fellowes, 2023).

A brief introduction to the nature of reboot sites was given in section 4.4. As the concept of being addicted to pornography was mostly gained from these sites then further coverage is warranted. Pornography addiction is seen as the only available explanation on the internet when people are concerned about using it (Attwood, 2002). The message is central to the reboot communities. The term 'rebooting' is used to imply the brain being restored to its "factory settings" (Deem, 2014). The reboot community is an online group of younger, heterosexual, adult males; but there are also specific sites for women and sexual minorities. The community generally believes that abstaining from using pornography will undo its harmful effects and will reset the body to its healthy state (Prause & Binnie, 2023). There are also claims that following the prescriptive advice (at least 90 days abstinence) will cure ED (Imhoff & Zimmer, 2020) and have some more imaginative consequences, such as a bigger penis, and superpowers resulting from semen retention (more confidence, ability to 'pick up' women). The reboot communities have differing opinions on what is a relapse, milder ones see it as watching pornography and masturbating, stronger versions see it as thinking about pornography and/or any orgasm outside of heterosexual marriage. Reboot communities, especially NoFap, contain sexism, homophobia, and antisemitism (Prause & Binnie, 2023), and are seen as the most conservative group of the manosphere (Burnett, 2022). Manosphere values expressed on NoFap include the idea of a battle for masculinity, the natural male hierarchy, and the objectification and instrumentalisation of women (Smith, 2023). The reboot communities are led by 'coaches' who have no credentials, and as such no accountability. This is concerning as nearly a third of participants in one study reported feeling suicidal after relapsing (Prause & Binnie, 2023). The identification of being a pornography addict has been conceptualised as a 'storyfication trap' by Chasioti and Binnie (2021). They proposed a narrative amongst those engaging with reboot communities that started with a search for help, typically for ED. Participants saw the communities as an 'eye opener' and started to move from an internalised view of distress to that of the disease model promoted in the communities. This is echoed in ideas from a media studies perspective that concern addiction generally. Room (2014) describes how in modern culture 'addiction' gives an explanation of the inexplicable. It is also seen as 'alien' to the 'real' character, allowing the audience to sympathise. The character becomes the 'hero' as they battle the addiction. Figure 26 showed how simple answers to complex questions are often wrong. PPU or being addicted to pornography is seen, within this grounded theory, as an oversimplification, one gained from online sources. Participants found it easier to adopt the concept of addiction, rather than focusing upon their distinct problems. The ease of this re-narrativising is now explored.

When the participants went online for sources of information for their pornography use, they often encountered the reboot sites. Giving a straightforward answer to their questions, the participants engaged with the material, returning to the sites on a regular basis, becoming part of the community. The illusory truth effect (Hasher et al., 1977) suggests that people are more likely to believe information if they have experienced it before, when they are familiar with it. Studies indicate that the illusory truth effect is more powerful after repetition of the information due to being processed faster,

having more references in memory (De Keersmaecker et al., 2020). The more the information is engaged with the truer it seems (Begg et al., 1992). This theory therefore seems to give an account of why the reboot content was adopted by so many participants.

The messaging on the reboot sites may have been helpful for some participants. However, research suggests that greater engagement in reboot communities can lead to increased harms: ED; depression; anxiety (Prause & Binnie, 2023). In addition, by focusing upon their addiction their distinct problems were displaced, resulting in help or treatments for their distinct problems being overlooked. The discussion now turns to the core category of this grounded theory.

8.2.2 Stage two of the grounded theory in relation to pre-existing theory and research

Displacement of the problem

The word 'displacement' was used to describe the process occurring within the core category. The Collins dictionary definition of displacement is "the removal of something from its usual place or position by something which then occupies that place or position" (Collins, n.d.). This was the intended meaning of the process of how the distinct underlying problems experienced by the participants were removed and replaced with PPU. This simple definition of the word displacement was all that was in mind during the developing analysis. However, I was aware that the word displacement is also used within psychoanalytical theory; I attempted, as far as possible, to bracket my knowledge during the analysis. An exploration of this theory is now undertaken to see if the category can be expanded theoretically.

In psychoanalytic theory, displacement is a defense mechanism, first introduced by Freud in his 'The neuro-psychoses of defense' (Freud, 1894/1964). Cramer (2015) considers defense mechanisms to be at the core of psychoanalytic theory, allowing any type of mental material to screen or conceal another. The purpose of defense mechanisms is to protect the ego and avoid experiencing difficult or distressing feelings. Defense mechanisms are expressed by everyone, but particularly when there are difficult stressors or life events (Bowins, 2004). Displacement involves the unconscious redirection of an emotion or object from its original target to a substitute target that is less threatening or more acceptable (Bowins, 2004). According to Freud, displacement is the unconscious preservation of a narcissistic ideal of perfection (Bonnigal-Katz, 2017) – the subject of narcissism is taken up throughout this section of the chapter.

The theory and research concerning the role of defense mechanisms, specifically displacement, within the subject of addiction is now explored. Dodes (2009) sees addiction as a form of displacement, the addictive behaviour being a substitute action. Taking a direct action to the non-displaced pain and helplessness is inhibited as it is morally unacceptable, it would be a threat to the

ego. The substitute action, the addictive behaviour, aims to reverse the helplessness. This process can be called a narcissistic defense (Kohut, 1971), it protects the ego. The direction of the substitute action is how the addiction is named, for example if the helplessness is displaced with alcohol, then this is alcohol addiction, with illegal substances then drug addiction. If addiction can be seen as a displacement, then this can account for why individuals with addictions often shift from one addictive behaviour to another (Steinberg et al., 1992).

Situating psychoanalytical theory in the context of PPU or pornography addiction is limited. There are some theoretical papers focusing on pornography per se, and a non-peer reviewed MSc thesis concerning attachment and pornography addiction, but otherwise nothing can be found using academic internet search engines. However, the subject of narcissism in PPU has had some attention. Although conceptualised within a non-psychoanalytic framework, namely personality psychology, there are two known studies that explore the relationship between narcissism and PPU. Grubbs et al. (2023) found through their large sample surveys that narcissism and perceived addiction to pornography were highly associated; Prause and Binnie (2023) suggest through their single item measure of narcissism that it predicts self-perceived addiction to pornography. They also found that those more engaged in reboot communities had a stronger belief in conspiracies, which in turn have been seen as a response to uncertainty, an attempt to feel more in control (Adam-Troian et al., 2012). These studies propose interesting findings but do not give a theoretical account of why narcissism and PPU/pornography addiction are related. This grounded theory conceptualised the 'displacement of the problem' as a process of re-focusing of attention, rather than as a psychoanalytical narcissistic defence. Although, narcissism appears to be a potential facet, the participants in this study were not constructed as narcissists in the analytical process.

Taking all the above, in relation to the core category 'displacement of the problem', it can be suggested that psychoanalytical understandings of addiction and research findings concerning narcissism lack specificity to this grounded theory. The general psychoanalytical theory of displacement does have some similarities when compared to the core category. Both involve the process of redirection, however the psychoanalytical theory pertains to the movement of emotions, whereas the core category suggests the movement or re-attribution of 'problems'. By this it is meant that within this grounded theory there is change of what the problem is, not just emotions. The participants seem to go through an unconscious process, displacing the distinct problems with PPU/addiction. Any pre-existing problems they were aware of were seen through the lens of addiction, blaming their use of pornography for these problems. Any current problems were seen as purely pornography related, separate to their distinct problems. Emotions may form part of the distinct problems, but the conceptualisation of distinct problems proposed here is wider, encompassing a wider range of experiences. It is not only emotions that are displaced within this theory, as presented in Chapter 7 there is also a consideration of how identity is key in the maintenance of PPU. In addition, assimilating the psychoanalytical concept of displacement within this grounded theory may well be interesting but

perhaps not fitting, as Freud's theory lacks clear evidence (Baumeister, Dale, et al., 1998).

However, despite the limitations, seeing oneself as addicted as a defence can help illuminate the process of displacement outlined in this grounded theory. It does make intuitive sense that people may be attracted to the 'addict' label to avoid seeing themselves as a failure (Bailey, 2005), an external rather internal attribution. If we return to the 'why' question, why participants displaced their distinct problems with the concept of addiction then some aspects of psychoanalytical theory may give some insight. Khantzian (1999) proposes one of the purposes of addiction is to turn uncontrolled, passive suffering, into controlled, active suffering. This concept is an attempt to explain how addiction can be seen as an attempt to relieve suffering even though so much suffering is caused by addiction. Therefore, suffering with addiction is more acceptable, it is knowable, whereas what are seen here within this grounded theory, the Distinct problems are unknowable. The known is more tolerable than the chaos of the unknown. Dodes (1990) sees feelings of helplessness or powerlessness as overwhelming. These feelings were often associated with the underlying distinct problems, the participants did not know how to deal with them. It therefore makes sense that they would displace them with the concept of addiction as this is commonly seen as more manageable; addiction treatments are well known, there is a prescribed pathway to sobriety or abstinence, a pathway needing a commitment to the mission.

8.2.3 Stage three of the grounded theory in relation to pre-existing theory and research

Committing to the mission

This category focused upon the maintenance of the participant's PPU. All participants were seen as committing to the mission of defeating their perceived addiction to pornography; thus, further distracting the participants from their distinct problems. The category was subdivided into four focused codes that were interlinked. Relevant pre-existing theory and research is now explored with the intention of assessing whether the category can be enhanced, to be more explanatory. The first two focused codes are explored together as the theoretical investigation contains similar content.

Identity fused with pornography/The addiction narrative

The focused codes 'identity fused with pornography' and 'the addiction narrative' both focus on the mechanisms that influenced the participants use of pornography. Both pornography and the concept of addiction had become an essential part of the participants' lives, identity, and self-concept, persisting for some despite not using pornography for several years.

Theories of identity propose systems in which people can become part of a group and the group in turn can become part of the person (Abrams & Hogg, 2004). Two main theories are prevalent in the research literature: identity theory (Stryker, 1980), and social identity theory (Tajfel & Turner, 1979). Identity theory is the categorisation of the self in terms of roles. Roles have expectations and form a set of standards that guide behaviour. Social identity theory describes how social group memberships inform the self-concept of the individual through a process of self-categorisation. In both theories ‘the self’ names itself in relation to other classifications, thus forming an identity.

What these theories mean to the categories ‘identity fused with pornography’ and ‘the addiction narrative’, is now discussed. Firstly, in regard to the participants identity being fused with pornography then this can be seen through the lens of identity theory. Having spent so much time using pornography the participants may have seen themselves as a pornography user, or for some time at least as a fan of pornography. Many participants collected a large library of pornography, several were actively engaged with file sharing sites, one had attended pornography exhibitions. Research on fan culture has mostly been from the perspective of the outsider; however, Reysen et al. (2022) explored fan’s perceptions of what made being a fan obsessive or even pathological. From their qualitative analysis they considered the following as ubiquitous across fandoms: fan behaviour negatively impacting on life; fan interest becomes the sole or defining feature of their identity; pushing fan related opinions on others; losing touch with reality; a connection between fan interest and sexual desire. These findings do relate to the category ‘identity fused with pornography’. In particular the role of pornography being a defining feature of their identity (see section 7.2.1 for several examples); and losing touch with reality. In section 7.2.1 it was presented how several participants saw pornography as replacing the need to be in a physical or emotional relationship, a few preferred pornography. Therefore, if the participants saw themselves as a pornography user, then the role would be to use pornography, to invest time into it, further reinforcing their identity.

In regard to ‘the addiction narrative’, then social identity theory would further elucidate how this aspect of the participants identity was developed. As outlined in the category ‘PPU by Proxy’, many participants took on the addiction narrative when finding reboot sites. This is an important aspect as adherence to the “addict,” rather than recovery, identity has been associated with more negative behaviours, lower self-efficacy, and distress Buckingham et al. (2013). Within the reboot communities PPU is seen as an addiction, competing narratives are rarely expressed. Several 12-step related concepts are frequently seen: hitting rock bottom; doing it for someone else, not myself; being powerless; addiction as a disease. These folk concepts (Morris, 2022) concerning addiction were expressed by many participants. Therefore, if spending a lot of time within the reboot communities then the participants identity as an addict would be strengthened, and as proposed in this grounded theory one of the ways in which PPU is maintained. This maintenance occurs as the distinct problems are displaced with the concept of addiction. It is not proposed here that 12-step approaches are not effective per se, there is some supporting evidence (see the latest Cochrane review by Kelly et al.,

[2020]). Twelve-step approaches are likely to increase abstinence, but this grounded theory suggests using pornography is not the problem, the distinct problems are the problem, and are thus overlooked due to the preoccupation with the concept of addiction. Chasioti and Binnie (2021), drawing upon Dingle et al.'s (2015) work on social identity and addiction, suggest how reboot communities offer a sense of belonging to those with a fragile self-image. However, this is dependent on the identity transition from pornography user, to addict, to Nofapper. The inherent sense of competitiveness expressed within the forums provides a sense of power and achievement, and also devastation if one uses pornography. This insight helps elucidate how 'committing to the mission' really does become a commitment.

Another aspect to consider in relation to identity is the age of the participants. Most started using pornography in their adolescence, in keeping with previous research (for example Bóthe, Vaillancourt-Morel, et al., 2013). According to Erikson (1963, 1982) adolescence involves a conflict between identity and role confusion; a time that involves trying to figure out who one is. Many participants identified as a pornography addict, especially after engaging with the reboot communities. It is possible that in this crucial time that pornography addiction had even more importance, becoming part of their identity. This would however interrupt the process of maturation, and selfhood. Buber (1960) describes how one can only become an authentic self after developing real relationships, separating ourselves from others. Interestingly, Khantzian (2012) suggest that addicts have an inability to maintain a coherent sense of self, and attachments to others. Perhaps the role of identity formation does add something to this aspect of the category.

Abstinence

As highlighted above, seeing oneself as addicted to pornography had ramifications, as did being part of a reboot community. One of the main consequences was how participants subscribed to the concept of abstinence. Being an addict involves addictive behaviours, likewise, being in recovery includes abstinence (Buckingham et al., 2013). Being part of a recovery group (such as rebooting) leads to persisting with abstinence (Best et al., 2014) despite relapse. The discussion of abstinence within this grounded theory is not intended to suggest that abstinence within addiction is unhelpful, but within PPU it is seen as maintaining factor, further distracting participants from their distinct problems. Whilst an approach based on abstinence from pornography does have some limited evidence in non-clinical populations (see Fernandez et al. 2023), this does not mean that it is effective for those reporting PPU. It is proposed here that abstinence may lead to a reduction in pornography use, but it maintains the identity of being addicted to pornography.

Difficulties in maintaining abstinence were explored in section 8.2.1 when discussing the incentive-sensitization theory (Robinson & Berridge, 1993), the move from liking to wanting. However, within

the literature concerning PPU this theory has been disputed (see section 2.3.3.1). Within this grounded theory participants used the words relapse and abstinence but not the term withdrawal and rarely the word craving. But several participants who had not used pornography for a long time, seeing themselves as in recovery, seemed to be in stage that resembled 'wanting'. Separate to the process of withdrawal or craving, Torregrossa et al. (2011) suggest that drugs alter systems of the brain associated with reward and memories. Addicts continue to use as positive memories are enhanced and negative memories diminished. This way of seeing abstinence resonates with how the participants recounted their past pornography use, searching online for content they used to find exciting. Baumeister and Nadal (2017) suggest that relapse is mostly associated with desires and habits rather than cravings. The idea of pornography use becoming habitual was explored in Chapter 5 section 5.4.1. However, relapse as a failure of self-control, or according to the participants in this grounded theory 'being weak', does have some relation to existing theory. Baumeister, Bratslavsky, et al. (1998) developed the concept of ego depletion to describe how individuals have a limited amount of resources when performing a task and how this can be depleted, leading to engaging in less desired behaviours. Despite recent evidence for ego depletion being mixed (Englert & Bertrams, 2021), it does give a more psychological, less blaming, account for relapse.

Shame

Shame has been analysed as resulting from predominately two processes: internal and external. The internal related to how participants viewed themselves negatively after using pornography, feeling ashamed. The idea of shame resulting from a moral transgression was proposed by Grubbs, Perry, et al. (2019). Their moral incongruence model positioned morality concerning pornography use as the main factor in determining distress and dysfunction. This notion is relatively straightforward, individuals feel bad, a sense of shame, after doing a behaviour that they see as immoral. This helps account for so many participants in this grounded theory reported feeling a personal sense of shame in relation to their pornography use. They had broken their moral code, or for some the code given to them by their religion - religiosity has been proposed as a mechanism contributing to PPU (Perry, 2018b; Perry & Whitehead, 2019). There was also the more pragmatic idea of being ashamed as a result of failing at something, abstinence for example, or of the time wasted using pornography that could have been spent more productively. The external process of shame involved seeing oneself as judged by others. Shame can be viewed existentially as a mode of consciousness related to other people; "of oneself before the other" (Sartre, 1943/1956, p.246). We assess others in terms of how they may affect us, thus the other becomes embodied as an object. We also become an object, imprisoned by their gaze. They deny us of the ability to control how we see ourselves and the world. Shame is the revelation of reality, we recognise who we are, however unpleasant this may be. This more social process was seen within several participant accounts. There were frequent references to

a porn haze or feeling detached and anxious when in public after using pornography, concerned that others would know they had been doing something immoral. The participants could not know what others actually thought of them, therefore the judgement concerning using pornography belonged to the participant themselves.

Psychoanalytical considerations were outlined in relation to the core category, these can also be seen in relation to shame. Narcissistic rage was first described by Freud but was extensively examined by Kohut (1972). It involves righting a wrong, undoing a hurt, a need for revenge, an unrelenting compulsion in pursuit of these needs. Underlying these needs are inferiority and shame. Shame is seen as one of the most devastating emotions (Tangney & Dearing, 2002), often transformed into anger at the sources of shame (Lewis, 1971). Although the concept of narcissistic rage, like many other psychoanalytical concepts, has been questioned (Krizan & Johar, 2015), it may help explain why several participants felt so angry with the pornography industry (see section 6.2).

8.2.4 Summary

Through further exploration the four focused codes within this category 'committing to the mission', can be seen as linked together, forming a loop. With the participant's identity being fused with pornography and subsequently the addiction narrative adopted, they endeavour to be abstinent, resulting in shame when relapsing. This shame is externalised onto pornography, they become the victim. This perpetuates the addiction narrative, but more importantly, further distances the focus from the distinct problems.

8.3 Re-situating the constructivist grounded theory.

Several theories of addiction have been considered in relation to the categories within this grounded theory. Other theories and research have also been explored. It is proposed that this grounded theory is new thinking concerning PPU, however, some elements are similar to pre-existing theories of addiction. For example, the dual systems model (Strack & Deutsch, 2004) resonates with the focused code 'habitual'; the moral incongruence model (Grubbs, Perry, et al., 2019) has similarities to the focused code 'morality'. As discussed in section 2.4 there are three existing models or theories encompassing elements of PPU. The first, moral incongruence (Grubbs, Perry, et al., 2019), has been explored in relation to morality in section 5.4.1, and in 7.2.4 when exploring the concept of shame. Although this has been a useful exercise, allowing for a fuller examination of the categories, the moral incongruence theory focuses upon only one aspect of PPU. It cannot account for the development and maintenance of PPU. The remaining two, are either too generic (I-PACE, Brand et al., 2016)) or lack specificity (Sexhavior Cycle, Walton et al., 2017)). Therefore, this grounded theory of PPU can

be seen as original (see section 8.4.1.2 for an exploration of this facet), existing theories of addiction cannot account for the intricacies within this grounded theory of PPU. The concept of dual diagnosis is an interesting consideration though and can serve as an analogy. This grounded theory suggests that PPU or pornography addiction can be seen as a dual diagnosis, but only a dual diagnosis, PPU/pornography addiction cannot exist by itself.

8.4 Conclusion

In this final section, the quality of the constructivist grounded theory of PPU is evaluated, the limitations are put forward, and overall conclusions made.

8.4.1 Evaluation of the substantive theory

Charmaz (2006, 2014) recommends a set of quality criteria for constructivist grounded theories: credibility, originality, resonance, and usefulness.

8.4.1.1 Credibility

Credibility begins with having sufficient data to address the research question. Analysis should be transparent, including accounts from the researcher – being reflexive. Charmaz (2006, 2014) adds that grounded theory studies should fully involve the participants throughout the analytical process, wherever possible participants should be involved in guiding the data collection, participants can be allowed to check and give feedback to the developing theory. Finally, their voices should be heard within the written account.

This constructivist grounded theory demonstrates credibility in the following ways:

- Having two forms of data collection allowed for a greater sample, more voices, than having a singular approach; 258 participants completed journals, and 21 interviews were held. This is far beyond any other qualitative studies in this area.
- The interviews all lasted for a sufficient amount of time. Rich data was collected through using good quality interviewing skills, enhanced through prior professional training and practice.
- Reflexivity has been demonstrated by using memos throughout the research process.
- The amount of data collected meant that category saturation was achieved. There did not appear to be any avenues unexplored.
- Member-checking generally refers to taking the researcher's ideas back to research participants for their verification (Charmaz, 2006). Although participants were not re-interviewed, they were at the end of the interview presented verbally with my initial speculative

formulation and asked if it resonated with them and if they would like to amend it. This collaborative method of data collection can be seen as a form of co-production.

- All participant voices are presented in this thesis. See Appendix 17 for a breakdown. Some participants were quoted less than others, but their voice can still be heard within the text itself.

8.4.1.2 Originality

Charmaz (2006, 2014) put forward that grounded theory studies should develop fresh categories, offering new insights. The theory should have theoretical significance, challenging, extending, or refining current ideas and practice.

The preliminary model, derived from pre-existing research concerning PPU (see section 2.4), can be used to demonstrate the originality of this grounded theory. In essence the preliminary model attempted to explain how distress and dysfunction was mediated through one's attitudes towards pornography, inability to control urges, and the avoidance of painful feelings. This grounded theory builds upon these ideas in several ways.

- The grounded theory highlights the importance of taking a formulation-based approach, and not assuming that a traditional addiction framework is applicable to the issue of PPU.
- Part of the originality consists of reformulating the concept of PPU into an alternative explanation of distress and dysfunction.
- The theory prioritises the underlying issues, classed as the 'distinct problems', as one of main factors for consideration.
- The identification of 'having PPU' or being addicted occurs through an external mechanism.
- Displacement within this theory relates to responsibility and identity, rather than a more psychodynamic understanding, that of emotional displacement.
- Abstinence is in relation to being a sexual human being, thus more difficult to obtain.
- Abstinence is considered the main factor in the maintenance of PPU, and the major strategy that those who identify as having PPU engage with.
- Those who consider themselves to be in recovery, still suffer as the distinct problems remain unresolved.

8.4.1.3 Resonance

Resonance refers to whether the theory makes sense to a range of audiences. Participants should understand the theory in relation to their own experiences. However, at the same time other readers should be able understand as well.

As this constructivist grounded theory has not been fully disseminated at the time of writing (the paper is in review rather than published) this criterion is harder to demonstrate. However, there are elements worthy of discussion:

- As described above, participants were involved when formulating their difficulties, thus demonstrating their understanding and the acceptability of the ideas put forward. These formulations were integral to the creation of the theory, suggesting that the totality of the theory is understandable.
- Two peer-reviewed review articles have been published in academic journals. These were derived from the literature review/Chapter 2. A synthesis of Chapter 2 has also been presented, and well received, at academic conferences, and user focused events (see the declaration on page i).
- My PhD supervisors have been involved in the process of the research. I have regularly feedback to them the progression of the theory development. Feedback has been positive and constructive.

8.4.1.4 Usefulness

According to Charmaz (2006, 2014), the final grounded theory should be contextual, based in the setting where data collection occurred. The theory should have utility, explaining relevant problems within the setting, but also offering elements that others can use in their experiences. The theory should help generate further research and have an impact in the real world. The clinical applications and research consideration of this this constructivist grounded theory of PPU are now explored.

Implications for clinical practice use

Essig (2012) asserted when clinicians use the term addiction for internet related issues, they do so diagnostically, implying that the causes of the problematic behaviour, the prognosis, the treatment options, are the same as other problems in the diagnostic category of addiction (Essig, 2012). This statement neatly summarises the current implications of adopting an addiction model for those experiencing PPU. As outlined in section 2.3.3.1, Billieux et al., 2015 highlighted the therapeutic ramifications of applying interventions primarily designed for substance-based addictions to PPU. The grounded theory constructed in this thesis develops these notions; a possible direction for psychological interventions is now explored.

The grounded theory of PPU does not support the concept of pornography addiction, particularly in terms of how it should be 'treated' or worked with psychologically. It has already been suggested that abstinence, in the context of PPU, maybe unhelpful, that committing to the mission of beating

addiction perpetuates the notion and often the experience of PPU. It is put forward in this grounded theory that persistence with committing to the mission prevents attention being played to one's distinct, underlying problems. These underlying problems do not therefore receive any input, effective evidence-based treatments are not applied. This grounded theory proposes an alternative. An alternative based upon psychological formulation and a re-formulation away from the concept of addiction, onto the distinct underlying problems that individuals reporting PPU are likely to experience.

In section 2.5 some speculative recommendations were made in light of the preliminary model of PPU derived from the research literature. These included: focusing upon whether negative or positive reinforcement was involved when using pornography; exploring identities; addressing experiential avoidance with third wave CBT approaches; psychoeducation concerning masturbation and sexual dysfunction; and working with individual factors such as high sexual desire, impulsivity, and loneliness. The grounded theory of PPU builds upon these ideas, and as such further recommendations for clinical practice can be made.

Formulation highlights the underlying clinical focus. However, it is not being suggested that identifying and treating the underlying problem is straightforward or can happen in isolation. When viewing figure 23, it can be seen that the development of PPU occurs on the left of the diagram, and the maintenance on the right. It has been theorised that the underlying, distinct problems become displaced by the concept of PPU, with individuals focusing their energies on conquering their perceived addiction. With this in mind, it is therefore not always possible or appropriate to initially focus upon the distinct problems. From a cognitive behavioural therapy perspective, addressing the maintenance of a problem is often required first before working with developmental factors (Westbrook et al. 2011; Persons, 2008). Within this grounded theory it is also recommended that for many clients it will be necessary to initially focus upon the maintenance of the PPU.

Firstly, it would be important to understand the relationship between emotion and pornography use. A standard functional analysis/recent incident analysis is therefore merited, as this will hopefully reveal the function and therefore the maintenance of the pornography use. Interventions, like those used with habit disorders, may well therefore be warranted, or skills in more helpful ways of regulating emotions based upon dialectical behaviour therapy or acceptance and commitment therapy (ACT). Standard behavioural interventions, such as cue avoidance, could be used for those with impulsivity (Bernheim & Rangel, 2004). For those with a moral driver behind their pornography use, cognitive therapy may be useful in exploring their beliefs related to pornography.

As suggested, participants considered their use of pornography problematic through an external means, the reboot communities or a trusted other. It could be pertinent to therapeutically explore their motivation to change their behaviour. Changing behaviour is more likely to occur if it is tied in with a person's belief system, if they have the motivation to change (Hayes & Levin, 2012). Elements of

different models of psychotherapy would therefore be appropriate; existential, person-centred, motivational interviewing.

The category of 'committing to the mission' contains many elements that have a potential psychotherapeutic application. Compassion Focused Therapy (Gilbert, 2009) could be used to address experiences of shame and responses to relapse. ACT could be useful when focusing upon one's self-perception or self-identity, therefore creating flexibility in the concept of being an addict. Several participants seemed to be obsessed by pornography, seeing it as an integral part of themselves. Therefore, values based behavioural activation could be useful in building up other activities that could compete with using pornography, eventually changing their reliance on pornography.

Once the maintenance of PPU is addressed then it may be possible to work with the underlying distinct problem. Depending on the nature of the underlying issue, evidence-based therapies would be recommended. For example, for issues related to trauma then trauma focused CBT could be an option, as would supportive counselling if there are less prominent PTSD symptoms. If depression is considered the main underlying problem, then the NICE (2002) guidelines can be followed; NICE guidelines can also inform interventions for any mental disorder. For those with difficulties adjusting or accepting their sexuality then person-centred counselling would be advisable. Lastly, if sexual dysfunction is present and is related to masturbatory practices then education and guidance can be given to develop healthier options.

The above recommendations are targeted at those working psychotherapeutically and individually with client self-reporting with PPU. In addition, there can also be other clinical applications of the grounded theory. In Chapter 5, section 5.5, the category PPU by proxy, detailed how participants found out about PPU, and in turn pornography addiction, once going online. Other narratives about PPU could have more of a forum on online sites and communities. This grounded theory could be made accessible to those experiencing PPU. Using this grounded theory as a source of education would mean partnering with organisations who have presence online. A simplified version could be promoted, and links to professionals and treatment organisations who share a similar ideology created.

In section 1.1 I presented how this study's subject matter was, in part, chosen as I had worked with clients with PPU. At that time there were no guidelines on how to approach the work. Although I used a formulation-based approach, having additional information would have been useful. From reviewing the above clinical applications of the grounded theory, I feel that these would have been useful when working with these past clients. In some ways I feel that I have designed the guidance I was looking for several years ago.

Implications for future research

Gary Wilson, the founder of YourBrainOnPorn, a precursor to NoFap, suggested that a study should be conducted where internet pornography is taken away, revealing the positive effects on mental health (Wilson, 2016). This grounded theory suggests the opposite. If the distinct underlying problems were addressed then would this have an impact on distress and dysfunction related to pornography use? This could be investigated using an experimental design. Baseline measures of PPU could be taken. Distinct problems would then be conceptualised for each participant. These would then be addressed with relevant interventions according to NICE guidelines or other forms of evidence-based practice. The measures of PPU would then be taken again and any pre/post results analysed.

The participants in this grounded theory were an opportunistic sample. All reported PPU but there were no other demographic exclusion criteria. This meant that the majority of the sample identified as male and heterosexual. It would be interesting to conduct grounded theories on other specific populations, would similar explanations of PPU be constructed? In the literature review the use of pornography within MSM populations was seen as having unique properties as compared to heterosexual use. This population in particular would be of interest to study further. Do the same elements of this grounded theory apply to MSM? If so, which ones?

To gain an understanding of how different groups react to the grounded theory, focus groups with those self-reporting PPU, addiction researchers, and addiction practitioners, could help refine the theory. They could also widen the thinking about clinical applications.

It has been claimed throughout this thesis that the grounded theory is original and specific to PPU. However, with some amendments, could it also apply to other behavioural addictions or even substance addictions? Again, focus groups would be a good start to determine this.

The original aim of the study, as suggested at the beginning of this thesis, section 1.1, was to inform practice. Many psychological problems and disorders have a related evidence base in terms of treatment options. It was strongly suggested that PPU does not yet have any firm evidence base that practitioners can utilise in their therapeutic work. In the rationale (see section 2.5), a process of building up an evidence based was suggested. However, the idiosyncratic nature of the distinct problems in this grounded theory means that a fully manualised approach to treatment would not be possible. Manualised treatments require homogeneity of the presenting problem or disorder, this grounded theory suggests the opposite. Although the process of developing PPU and how it is maintained is similar between all participants, the content is not. All participants had different beginnings, different underlying issues. Given the centrality of the distinct problems, they would need to be the focus of intervention. Nonetheless, this grounded theory does contain several unique findings (see above sections), and clinical applications. These could form part of an initial treatment guide, with the acknowledgement that afterwards an existing evidence-based approach could be implemented for the distinct problems. Findings from the focus groups with practitioners could be

developed to develop these therapeutic guidelines, not a manual, still taking a formulation approach, but highlighting the specific areas for intervention as outlined in the section above. Once different options are suggested, a Delphi study could be undertaken to develop a consensus. The treatment guidelines could then be put through a system of evidence generation: case study, case series, multiple baselines across participants design studies, randomised control trial. As suggested in section 2.5, this could then be developed into self-help books and online services.

8.5 Limitations of the study

Whilst this study is innovative, original, and has clear application, like any study there are limitations that should be acknowledged.

The duration of the study created some issues that require clarity. There were several years between data collection and completion of the thesis. Although, the coding procedures were instigated concurrently with data collection, final theory development occurred much later. I was aware of this however and made sure to repeatedly go back to the raw data.

Upon reflection a minor omission was made when designing the details of the study. By including one question on the demographics section of the survey would have been beneficial. All participants could have been asked (free text) how exactly they defined their problems in relation to their pornography use. The results could be broken down into whether they considered themselves addicted, not addicted, or something else. This would have helped more with the theoretical sampling. Successful attempts were made to widen the sample to include more participants who may have not identified as being addicted, but this was assumptive.

Another element to the sampling that could have been enhanced was how there were participants who discussed their past use of pornography, they identified as being in recovery from PPU and wanted to help with the research to help other sufferers. Therefore, when asking questions about their pornography use in the interviews, I had to ask how things had been for them in the past. Although rich data was still obtained, several accounts will have been filtered through ideas from the present. Whereas most participants were able to discuss current experiences, those in recovery had to recall past experiences. This impacted upon the interview technique. For those in recovery I was not able to focus on how they experienced pornography, only their post hoc opinions about it. As said rich data was still collected, those in recovery still thought of themselves as 'having PPU' therefore their experiences were valid in helping to answer the research question.

It had been planned for participants to complete more than one journal of using pornography, to be able to see how the function of pornography varied over time per participant. It can only be assumed that this was the case. Although highly unlikely, participants could have completed the journal in exactly the same way each time.

The data collection timeframe coincided with the onset of the COVID-19 pandemic. Although this did not impact upon recruitment, online interviews had been used prior to the pandemic, there is research that the use of pornography changed at this time. Pornhub reported that there had been an increase in pornography use of 11.6% during the pandemic (Pornhub 2020). Fotinos et al. (2024) suggested that this increase in pornography consumption was due to the inability to engage in partnered sex due to the lockdown policies across most of the world. It may have been that this affected those experiencing PPU as their usage may have increased, and therefore their distress and dysfunction. If there had been an impact, then this would have only impacted a few participants as most were not in a sexual relationship at the time of interview.

The role of shame was an important aspect of category 5. Shame could also have been influential on recruitment. Many participants who were interviewed did report feeling ashamed about their pornography use, but they still volunteered. It could be that potential participants did not volunteer due to feeling a greater sense of shame. This aspect remains an unknown, however the study also included a survey which these participants could have expressed themselves. In hindsight a measure of shame could have been included within the study to explore whether there was a difference in shame between those who were interviewed and those that were surveyed.

The inclusion criteria were inclusive of nearly all demographics. This resulted in many different voices being heard. A highly homogenous sample was not planned, the grounded theory intended to be an exploration of PPU per se rather than PPU within a specific population. The sample did reflect the population using reboot forums, mostly heterosexual men, and several attempts were made to widen the demographics. This was partly successful, voices from women and those with non-heterosexual sexualities were heard and incorporated into the grounded theory. But perhaps more voices would have been desirable. In many ways this was out of my control.

Although not amendable to a PhD study, it would have been more methodically rigorous to have more than one person coding the data. Although I was the only person actually coding, my ideas and processes were discussed within my supervisory team.

The final limitation to be considered relates to reflexivity. Throughout the data analysis and theory development I was concerned that a certain narrative was being created. I was aware that the theory could be seen by others as being dismissive of the participant's concerns and distress. By taking the focus away from PPU/pornography addiction to the distinct problems, I could be accused of denying the participant's voice, saying that pornography addiction does not exist. Although concerned about this impression I want to give assurance that this was not the case. As described in section 4.5, all participants were encouraged to feedback on the re-construction of their PPU at the end of the interviews. No participants were offended, none thought their concerns were being denied. I have also at times in this thesis highlighted that I believe that the participants did experience distress and dysfunction, I do not deny their problems. Therefore, as stated above, further research would be

incredibly useful to assess the acceptability of this grounded theory, focus groups with PPU sufferers for example.

8.6 Closing comments

This constructivist grounded theory suggests for those self-reporting PPU, pornography use is a coping mechanism for underlying problems; the coping mechanism becomes erroneously seen as the problem after engaging with external sources. A process of displacement occurs, resulting in the underlying problems being unattended. Efforts at abstinence increase shame and exacerbate the underlying problems.

The above original statement was created through a rigorous research process. Using two sources of data generation, including a 'clinical' sample, and an inductive approach, I believe the theory to have application in terms of research and practice. The theory has the potential to make an impact both within academia and the real world.

Constructing and presenting the grounded theory has been a long process. At different points I was unsure if this conclusion would be reached. Perseverance, and good supervision, have been invaluable. I consider the aims of this thesis to have been achieved. A novel and pragmatic theory has been developed and I endeavour to put it to good use.

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Appendix 1: Turnitin receipt



Digital Receipt

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Page count: 312
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Submission date: 07-May-2024 10:51PM (UTC+0100)
Submission ID: 232626306

LSBU

Displacing Problems: A Constructivist
Grounded Theory of Problematic
Pornography Use

James Binnie

1022-1026 (2024) 40:22-0204-0204

A thesis submitted in partial fulfillment of the requirements of London South Bank University
for the Degree of Doctor of Philosophy
London South Bank University

May 2024

Appendix 2: Adherence to the BPS (2014) code of human research ethics

Informed consent was obtained via the participants reading the information sheets (Appendix 3 and 11) and signing the consent forms (Appendix 4 and 12). In addition, before interviews were initiated participants were asked to give verbal consent.

Confidentiality was maintained through not requesting names of the participants and assigning participant numbers. Where names were freely given by participants, for example in email communication, then this information was stored securely using the universities software and associated firewall. IP addresses were not obtained. Anonymised data was stored on a secure, password protected memory stick, anonymised transcripts were uploaded to the data analysis software NVivo. All anonymised data was to be stored for ten years. In terms of disclosure of illegal activities (viewing of extreme pornography (as defined by UK law), viewing or production of child/illegal pornography, physical/emotional/sexual abuse of children or vulnerable adults) participants were briefed about not participating in the study if they engaged in such activities. Participants were informed that if these disclosures were made in the interviews that confidentiality would be broken, and if personal identifiers were available, they would be reported to the relevant authorities.

Protection from harm was paramount as all participants were viewed as vulnerable as they self-reported PPU and were likely to experience additional mental health challenges. All participants were given debriefs (Appendix 5 and 14) containing the details of relevant web-based support services or telephone lines. As the researcher is a registered health professional there were additional safeguards in place if participants became distressed in the interviews. Regarding risk to others the researcher was fully trained in child and adult safeguarding and has experience of making such disclosures to the police and social services before as part of NHS clinical practice. The researcher had access to their own sources of support in case distressed after interviews.

Right to withdraw was made clear to participants on the information sheet. They were to email the researcher and request all data be destroyed. They had this right up until September 2020 (the predicted date for completion of data collection). One participant who had been interviewed requested to withdraw and their data was destroyed. Fortunately for the researcher this occurred shortly after the interview and coding had not occurred.

Deception was not used in this project.

Debriefing was facilitated through debrief sheets (Appendix 5 and 14) available to all participants containing the details of relevant web-based support services or telephone lines.

Appendix 3: Information sheet



INFORMATION SHEET

Study Title: Developing a psychological model of problematic pornography use

You are being invited to take part in a research study. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please email me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

The purpose of the study:

As you may be aware problematic use of pornography, sometimes referred to as pornography addiction, is a real issue that can lead to real problems.

I am a Doctoral Research Student from School of Applied Science at London South Bank University; I am also a senior lecturer, an accredited psychotherapist and registered mental health nurse. I am investigating the lived experience of problematic pornography use and aim to develop a model or theory that can help users/therapists/researchers in understanding both what leads to problematic use and why it continues.

This research will run for two years. The answers that people give to the questions will be analysed using a method called grounded theory.

Why you have been asked to participate

You have been invited to participate in this study because you consider your use of pornography problematic, that it causes you or other people around you distress, or that it interferes with your ability to live the life you want to lead.

Please do not participate or continue with this study if your use of pornography includes illegal pornography, for example child pornography, or pornography that is defined by UK law as extreme pornography.

The voluntary nature of participation

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to give confirmation on a consent form. If you decide to take part you are still free to withdraw at any time up to September 2020 without

giving a reason. In order to withdraw, you will need to email the researcher James Binnie (contact details below) to ensure your responses to the research are removed, please include your participant number. As a participant, you will receive an email to acknowledge your withdrawal and confirmation that you have been removed from the research.

What will happen you take part

You will be asked to confirm that you consider your use of pornography is problematic. You will then be presented with a series of questions that related to age, gender etc. You will then be asked to complete two questionnaires, the first related to your use of pornography and then the Problematic Pornography Use Scale. This first section should take no more than 10 minutes to complete. You will then be taken to a set of questions about your last use of pornography. These questions will focus on how you felt, thought and what you did, before, during and after using pornography. The time taken on this section will depend on how much information or detail you provide. You will then be taken to a de-brief which will give you more information about the study and also a link that you can use again to record your future use of pornography. If you are interested in kindly volunteering more of your time then contact details will be given to allow you to contact the researcher to arrange an interview.

Possible disadvantages/risks to participation

We do not anticipate any direct risks in participating in the study. It may be that you feel emotional after answering the questions. If this is the case then contact details of relevant support agencies will be provided in the de-brief.

Possible benefits to participation

This project is designed to develop a psychological model of problematic pornography use. Currently such a model does not exist within the academic literature. A coherent model is intended to assist practitioners in their understanding of people's problems in this area, which in turn may lead to more interventions for people with problematic pornography use.

Data collection and confidentiality

All the information collected about you and other participants will be kept strictly confidential (subject to legal limitations). Data generated by the study must be retained in accordance with the University's Code of Practice. All data generated in the course of the research must be kept securely in paper or electronic form for a period of 10 years after the completion of a research project. No identifiable personal data is going to be collected. You will be assigned with a participant number and that number will only be used while conducting study and subsequent analysis. Your information will only exist via a password encrypted flash drive.

This flash drive will be stored in a lockable safe in the office of the researcher and will only be accessed by the researcher.

Who is organising and funding the research

The research is organised by James Binnie (Senior Lecturer and Doctoral Research Student) and Professor Paula Reavey (Doctoral Supervisor) from the Division of Psychology at London South Bank University. The research is not funded by any other organisations.

Who has reviewed the study

This study has been reviewed and approved by the School of Applied Science's Research Ethics Committee at London South Bank University.

Who to contact for further information

Please contact the Chair of the School of Applied Science's Research Ethics Committee, (sasethics@lsbu.ac.uk), if you have any concerns arising from the research project.

If you would like further information about this study, please get in touch with James Binnie or Prof. Paula Reavey. Their contact details are:

James Binnie
School of Applied Sciences,
London South Bank University,
103 Borough Road,
London,
SE1 0AA.
Email: jamesbinnie@lsbu.ac.uk

Prof. Paula Reavey
School of Applied Sciences,
London South Bank University,
103 Borough Road,
London,
SE1 0AA
Email: reaveyp@lsbu.ac.uk

This participant sheet was completed March 2018

Thank you for taking the time to read this information s

Appendix 4: Consent form



Research Project Consent Form

Full title of Project: Developing a psychological model of problematic pornography use

Ethics approval registration Number: Waiting for Authorisation

Name: James Binnie

Researcher Position: Senior Lecturer

Contact details of Researcher: Jamesbinnie@LSBU.ac.uk

Taking part (please tick the box that applies)	Yes	No
I confirm that I have read and understood the information sheet/project brief and/or the student has explained the above study. I have had the opportunity to ask questions.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my participation is voluntary and that I am free to withdraw by September 2020, without providing a reason.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in the above study.	<input type="checkbox"/>	<input type="checkbox"/>

Use of my information (please tick the box that applies)	Yes	No
I understand my personal details such as my name, email address and phone number (if disclosed) will not be revealed to people outside the project.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my data/words may be quoted in publications, reports, posters, web pages, and other research outputs.	<input type="checkbox"/>	<input type="checkbox"/>
I agree for the data I provide to be stored for 10 years (after it has been anonymised) on a password encrypted flash drive.	<input type="checkbox"/>	<input type="checkbox"/>

Participant Number

Date

Confirmation*

Project contact details for further information:

Project Supervisor name: Paula Reavey

Email address: reaveyp@LSBU.ac.uk

*will be on Qualtrics and the signature will be replaced with a tick box

Appendix 5: Debrief sheet



DEBRIEF SHEET

Study title

Developing a psychological model of problematic pornography use

Debrief

Thank you for taking part in this study.

The purpose of the study is to try and get an understanding of people's experiences with problematic pornography use. In particular what is it that keeps the problems going and why they have problems in the first place. Once a theory is developed that can explain both these aspects it is intended that the theory will help inform psychological interventions and lead to more focused research in this area.

The information you have given in your record of pornography use will be analysed using a method called grounded theory and will help our understanding of what maintains problematic pornography use.

The data collected is likely to be used in future publications, talks or websites. All data will be kept completely anonymous and you will not be identified in any of these publications.

All your data will be securely stored on an encrypted flash drive, locked in a safe in the researchers' offices. You can withdraw your data up to the time of publication by September 2020 (please email the researcher if you would like to withdraw from the study and include your participant number). All data collected will be securely stored for 10 years after completion of the research project.

If you would like to complete another record of your pornography use please click the following link (you will not be required to complete any additional questionnaires this time):

(insert link to Qualtrics here)

If you would like to volunteer more of your time to this important project and you are willing to talk to me about your problems with pornography then please contact me on Jamesbinnie@LSBU.ac.uk and we can discuss the best way of arranging an interview.

Contact for Further Information

For further information, please contact:

Doctoral Research Student – James Binnie (Jamesbinnie@LSBU.ac.uk)

If you have any concerns about the way in which the study has been conducted, please contact the School of Applied Sciences ethics coordinator at sasethics@lsbu.ac.uk

If you are feeling distressed or emotional after completing your record of pornography use then please phone the Samaritans on 116 123, or go to their website www.samaritans.org. For those outside of the UK then please visit www.befrienders.org and select your country from the drop down menu.

Thank you for taking the time to read this debrief sheet.

Appendix 6: Ethical approval



School of
Applied Sciences

Direct line: 0207 815 5422
E-mail: dawkinl3@lsbu.ac.uk
Ref: SAS1814

Wednesday 30th May 2018

Dear James,

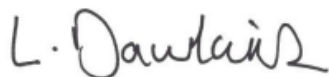
RE: Developing a psychological model of problematic pornography use

Thank you for submitting your application.

I am pleased to inform you that full Chair's Approval has been given by Dr. Lynne Dawkins, on behalf of the School of Applied Sciences.

I wish you every success with your research.

Yours sincerely,



Dr. Lynne Dawkins
Chair, Research Ethics Coordinator
School of Applied Sciences

Appendix 7: Ethical approval for amendments



**School of
Applied Sciences**

Direct line: 0207 815 7959
E-mail: r.oliveira@lsbu.ac.uk
Ref: SAS1814a

Tuesday 26th March 2019

Dear James

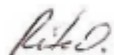
RE: Developing a Psychological Model of Problematic Pornography Use

Thank you for submitting your application.

I am pleased to inform you that full Chair's Approval has been given by Dr. Rita De Oliveira on behalf of the School of Applied Sciences.

I wish you every success with your research.

Yours sincerely,



Become what you want to be

Appendix 8: Online recruitment message

Would you like to participate in research relating to problematic pornography use/pornography addiction?

As you may be aware problematic use of pornography, sometimes referred to as pornography addiction, is a real issue that can lead to real problems.

I am a Doctoral Research Student from School of Applied Science at London South Bank University; I am also a senior lecturer, an accredited psychotherapist and registered mental health nurse. I am investigating the lived experience of problematic pornography use and aim to develop a model or theory that can help users/therapists/researchers in understanding both what leads to problematic use and why it continues.

If you feel that your pornography use is problematic, that it causes you or other people around you distress, or that it interferes with your ability to live the life you want to lead, then I would be very grateful if you could volunteer some of your time.

If you click the link below you will be taken to an information sheet about the research and then a consent form. You will then be asked to complete only a couple of questionnaires that should take no more than 10 minutes. You will then be asked to complete a journal of your pornography use, how many journals you want to complete is up to you. At this point you can leave and your time is very much appreciated. However, if you feel you want to further help the research project you can follow the instructions on the screen and volunteer for a face to face interview (UK nationals only) or you can have the interview via Skype or alternative platform of your choosing.

https://lsbpsychology.qualtrics.com/jfe/form/SV_eRuKYUIB71V14EZ

If you choose to participate in this research your privacy will be upheld. Please be assured that all information given is confidential in line with British Psychological Society guidelines and that the research has been approved by the ethics committee at London South Bank University. Given the sensitive nature of the research you will be assigned a participant

number; I do not need any personal identifiable information, e.g. your real name, exact location or date of birth.

Thank you for your time

Best wishes

James Binnie

Appendix 9: Pornography History Questionnaire

Pornography History Questionnaire

Pornography History Questionnaire

For the purpose of the study, **pornography (porn)** is defined as any kind of material designed to cause or enhance sexual arousal or sexual excitement in the viewer. Such materials show clear and explicit sexual acts such as vaginal intercourse, anal intercourse, oral sex, masturbation, group sex, bondage, sadomasochism, etc. The most common way people watch porn is by streaming videos via the Internet, watch DVDs, look at magazines, or read erotic books.

For this study, porn *does not* include materials such as underwear catalogues (e.g., Victoria's Secret) or materials containing men and women posing naked unless these images portray clear and explicit sexual acts.

- 1) How often have you been watching pornography over the last 6 months?
 - a. Every couple of months
 - b. At least once a month
 - c. Several times a month
 - d. 1 day a week
 - e. 2 to 3 days a week
 - f. 4 to 6 days a week
 - g. Every day
 - h. Several times a day

- 2) If you typically use pornography at least once a week, how much time overall do you spend viewing it?
 - a. Not applicable: I do not use pornography at least once a week.
 - b. 30 minutes or less
 - c. Up to 1 hour
 - d. Between 1-2 hours
 - e. 3 to 5 hours
 - f. 6 to 10 hours
 - g. 11+ hours

- 3) Please mark yes or no if you use any of the following methods to access pornography.

Internet: Computer, Laptop, or Tablet, Smartphone	Yes	No
Rented or purchased DVDS	Yes	No
Magazines	Yes	No
Erotic books	Yes	No
Adult Movie Theatres	Yes	No
Sex Clubs	Yes	No

- 4) Please mark yes or no if you are with any of the following people when you watch pornography.

Alone (by myself)	Yes	No
-------------------	-----	----

With a romantic partner (e.g., boyfriend/girlfriend, spouse)	Yes	No
Friend(s)	Yes	No
Online date (e.g., craigslist, dating site, Tinder, etc)	Yes	No
Other person(s) via online webcam	Yes	No

- 5) Currently, when you watch pornography, what percentage of the time are you masturbating to orgasm?
- Not Applicable: I do not masturbate to pornography
 - About One-fourth of the time
 - About Half the time
 - About Three-fourths of the time
 - Every or almost every time
- 6) Have you ever sought out professional help because of your use of pornography (by professional help we mean a counselor, therapist, psychologist, minister/priest, etc.)?
- Yes* or No
- 7) *If yes, how helpful was the professional help you received?
- Not at all helpful
A Little Helpful
Somewhat Helpful
Very Helpful
Extremely Helpful
- 8) Would you like to seek professional help for your porn use, BUT have not yet done so due to various reasons (for example, shame, embarrassment, not sure where to go, etc.)?
- Yes or No
- 9) In the past, how many times have you attempted to CUT BACK your use of pornography without quitting completely?
- None; I have never attempted to cut back or stop using pornography
 - 1 time
 - 2-3 times
 - 4-5 times
 - More than 5 times
- 10) In the past, how many times have you attempted to COMPLETELY QUIT using pornography?
- None; I have never attempted to QUIT using pornography
 - 1 time
 - 2-3 times
 - 4-5 times
 - More than 5 times

Appendix 10: Problematic Pornography Use Scale

Please answer the following statements regarding the use of pornography as relating to a period of six or more consecutive months over the past year. For the purpose of this questionnaire, this includes the use of pornography on the internet (pornographic films on the internet, photographs etc.) as well as non internet based pornography (magazines, DVD/video, television, movies etc.). Please circle one answer on every line:		Never True	Rarely True	Sometimes True	Often True	Very Often True	Almost Always True
1.	I used pornography when I suffered from a bad mood or hard or unpleasant feelings (such as: depression, sorrow, anxiety, boredom, restlessness, shame or nervousness).	0	1	2	3	4	5
2.	I watch pornographic material when I am feeling depressed.	0	1	2	3	4	5
3.	I use pornographic materials in order to escape feelings of sadness or to relieve negative feelings.	0	1	2	3	4	5
4.	I continue to watch pornographic materials despite the fact that I intend to stop doing this.	0	1	2	3	4	5
5.	I endangered or was about to endanger a significant and meaningful relationship, place of work, educational opportunity or career due to the use of pornographic materials.	0	1	2	3	4	5
6.	I continued to use pornographic materials despite the danger of causing myself physical harm (for example: difficulty in achieving an erection due to excessive use of pornography or difficulty in reaching an orgasm in ways that do not involve pornography).	0	1	2	3	4	5
7.	The use of pornography caused significant problems in my personal relationships with other people, in social situations, at work or in other important aspects of my life.	0	1	2	3	4	5
8.	I was unsuccessful in my efforts to reduce or to control the frequency of my use of pornography.	0	1	2	3	4	5
9.	I often think about pornography.	0	1	2	3	4	5
10.	I spend too much time thinking about pornography.	0	1	2	3	4	5
11.	I spend too much time planning my use of pornography and in using pornography.	0	1	2	3	4	5
12.	I feel that am incapable to stop watching pornography.	0	1	2	3	4	5

Appendix 11: Interview information sheet



INFORMATION SHEET

Study Title: Developing a psychological model of problematic pornography use

You are being invited to take part in a research study

Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please email me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

The purpose of the study

As you may be aware problematic use of pornography, sometimes referred to as pornography addiction, is a real issue that can lead to real problems.

I am a Doctoral Research Student from School of Applied Science at London South Bank University; I am also a senior lecturer, an accredited psychotherapist and registered mental health nurse. I am investigating the lived experience of problematic pornography use and aim to develop a model or theory that can help users/therapists/researchers in understanding both what leads to problematic use and why it continues.

This research will run for two years. The answers that people give to the questions will be analysed using a method called grounded theory.

Why you have been asked to participate

You have been invited to participate in this study because you consider your use of pornography problematic, that it causes you or other people around you distress, or that it interferes with your ability to live the life you want to lead.

Please do not participate or continue with this study if your use of pornography includes illegal pornography as defined by your country, for example child pornography, or pornography that is defined by UK law as extreme pornography (<https://www.cps.gov.uk/legal-guidance/extreme-pornography>). If you decide to participate in this study and voluntarily record your personal details and also disclose criminal activity in relation to illegal

pornography then the researcher will be obligated to inform the relevant authorities in your country.

The voluntary nature of participation

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to give confirmation on a consent form. If you decide to take part you are still free to withdraw at any time up to September 2020 without giving a reason. In order to withdraw, you will need to email the researcher James Binnie (contact details below) to ensure your responses to the research are removed, please include your participant number. As a participant, you will receive an email to acknowledge your withdrawal and confirmation that you have been removed from the research.

What will happen you take part

You will have already been in communication with the researcher regarding an appropriate setting to meet. This may be face to face at the university or in a local library, or a time may have been agreed to meet via Skype or an alternative platform of your choosing. On meeting with the researcher you will be asked to give confirmation on a consent form. The researcher will then sensitively ask several questions relating to your problematic use of pornography. It is intended that the interview will be as relaxed as possible given the nature of the subject. Please be assured that the researcher is an accredited psychotherapist and registered mental health nurse and has worked with several people with similar problems before. The interview should last about an hour, but could end earlier or continue for longer depending on how you feel and the amount of information you wish to discuss.

Possible disadvantages/risks to participation

It may be that you feel emotional after answering the interview. If this is the case then the researcher will endeavour to help you manage your emotions so that you feel as comfortable as possible before leaving. Contact details of relevant support agencies will also be provided in the de-brief for continued support after the interview

Possible benefits to participation

This project is designed to develop a psychological model of problematic pornography use. Currently such a model does not exist within the academic literature. A coherent model is intended to assist practitioners in their understanding of people's problems in this area, which in turn may lead to more interventions for people with problematic pornography use.

Data collection and confidentiality

All the information collected about you and other participants will be kept strictly confidential (subject to legal limitations). Data generated by the study must be retained in accordance with the University's Code of Practice. All data generated in the course of the research must be kept securely in paper or electronic form for a period of 10 years after the completion of a research project. No identifiable personal data is going to be collected. **Settings have been organised so that your IP address will not recorded in any way.** You will be assigned with a participant number and that number will only be used while conducting study and

subsequent analysis. Your information will only exist via a password encrypted flash drive. This flash drive will be stored in a lockable safe in the office of the researcher and will only be accessed by the researcher.

Who is organising and funding the research

The research is organised by James Binnie (Senior Lecturer and Doctoral Research Student) and Professor Paula Reavey (Doctoral Supervisor) from the Division of Psychology at London South Bank University. The research is not funded by any other organisations.

Who has reviewed the study

This study has been reviewed and approved by the School of Applied Science's Research Ethics Committee at London South Bank University.

Who to contact for further information

Please contact the Chair of the School of Applied Science's Research Ethics Committee, (sasethics@lsbu.ac.uk), if you have any concerns arising from the research project.

If you would like further information about this study, please get in touch with James Binnie or Prof. Paula Reavey. Their contact details are:

James Binnie
School of Applied Sciences,
London South Bank University,
103 Borough Road,
London,
SE1 0AA.
Email: jamesbinnie@lsbu.ac.uk

Prof. Paula Reavey
School of Applied Sciences,
London South Bank University,
103 Borough Road,
London,
SE1 0AA
Email: reaveyp@lsbu.ac.uk

This participant sheet was completed June 2018

Thank you for taking the time to read this information sheet.

If you are feeling distressed or emotional then please phone the Samaritans on 116 123, or go to their website www.samaritans.org. For those outside of the UK then please visit www.befrienders.org and select your country from the drop down menu.

Appendix 12: Interview consent form



Research Project Consent Form

Full title of Project: Developing a psychological model of problematic pornography use

Ethics approval registration Number: SAS1814

Name: James Binnie

Researcher Position: Senior Lecturer

Contact details of Researcher: Jamesbinnie@LSBU.ac.uk

Taking part (please tick the box that applies)	Yes	No
I confirm that I have read and understood the information sheet/project brief and/or the student has explained the above study. I have had the opportunity to ask questions.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my participation is voluntary and that I am free to withdraw by September 2020, without providing a reason.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in the above study.	<input type="checkbox"/>	<input type="checkbox"/>

Use of my information (please tick the box that applies)	Yes	No
I understand my personal details such as my name, email address and phone number (if disclosed) will not be revealed to people outside the project.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my data/words may be quoted in publications, reports, posters, web pages, and other research outputs.	<input type="checkbox"/>	<input type="checkbox"/>
I agree for the data I provide to be stored for 10 years (after it has been anonymised) on a password encrypted flash drive.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to the interview being audio recorded/recorded via Skype or alternative platform.	<input type="checkbox"/>	<input type="checkbox"/>

Participant Number

Date

Mark of confirmation

Name of Researcher

Date

Signature

Project contact details for further information:

Project Supervisor name: Paula Reavey

Email address: reaveyp@LSBU.ac.uk

Appendix 13: Interview guide

Participant number:

Introduction: Thank participant for giving time. Explain process of interview, length, content, voluntary nature of questions. Explain confidentiality and legal restrictions.

Preamble: Aiming to lead participant into the interview, developing the relationship and also gathering contextual information.

Examples of questions:

Could you tell me a little about yourself please?

Do you work and if so doing what?

Do you have any interests or hobbies, how often do you socialise?

Main section: Questions relating to use of pornography to elicit the maintenance and development of their problems. The structure follows a standard interviewing approach commonly used within cognitive behavioural therapy assessment.

Overview of issue

How would you describe your problem with pornography?

How often do you use it?

For how long?

Percentage with masturbation?

Consequences of use

How does using pornography make you feel?

In the short term?

In the longer term?

How does your use of pornography affect you?

In terms of work

...Relationships

...Mood

...Socially

Some people report feeling distressed as a result of their continued pornography use. If this is something you can relate to can you tell me more about it please?

Again, some people experience cravings or urges to use pornography. If relevant can you tell me about your experiences?

Recent Incident Analysis

I would like you to tell me about a recent time in which you used pornography, please let me know what your thoughts were before using pornography on this occasion (then feelings and behaviours). Now please tell me what you were thinking during this occasion (then feelings and behaviours). Now finally please tell me what you were thinking after using (then feelings and behaviours).

Attitudes to pornography use

Generally what are your thoughts or attitudes towards pornography?

As an individual?

For society?

Would you say that you are a religious person? If so how does your use of pornography make you feel?

Some people classify themselves as addicted to pornography. What are your thoughts about this and would you apply this term to yourself?

How does your use of pornography affect how you see yourself, your identity?

General question on maintenance

Why do you think you continue to use pornography?

Role of experiential avoidance?

Emotional regulation?

Becoming habitual?

High sexual drive?

Personal history

Take a brief history, from birth, schooling, work to relationships. Including specific sensitive questions relating to trauma, e.g. *have you ever experienced anything particularly difficult or distressing, especially anything early in life?*

(The following questions are worded as closed questions to allow the participant to give the level of information they feel comfortable with. Depending on the response prompts for further information will be used or not)

Have you ever been in contact with mental health services or received any therapy/counselling for issues not related to pornography?

Have you ever had problems with drugs or alcohol?

Apart from pornography have you ever had any other problems with sexual behaviours?

How would you describe your physical health?

Past procedures

Current/past medication

Have you ever experienced difficulties when sexually intimate?

If so, do you consider these related to your pornography use?

History of pornography use

Please tell me about your first exposure to pornography?

When do you consider your pornography use first became problematic?

How has your pornography use changed over time?

Tolerance, gravitation to more extreme forms?

Have you ever sought help regarding your pornography use?

If so what did you do and was it helpful?

Have you ever purposely reduced or tried to quit using pornography?

If so what did you do and was it helpful?

General question on development

Why do you think you have the problems with pornography?

Concluding Questions

Is there anything else you think I should know about you or your problems with pornography?

Is there anything that has come to mind during this interview?

Closing the interview: A summary of what has been discussed will be presented to the participant, akin to a psychological formulation. The participant will then be able to further discuss or critique the formulation with the interviewer. The participant will then be asked if they have any questions for the interviewer. Finally the participant will be thanked for their time and the de-brief presented, highlighting the options for further support if needed.

Appendix 14: Interview debrief sheet



DEBRIEF SHEET

Study title

Developing a psychological model of problematic pornography use

Debrief

Thank you for taking part in this study. The purpose of the study is to try and get an understanding of people's experiences with problematic pornography use. In particular what is it that keeps the problems going and why they have problems in the first place. Once a theory is developed that can explain both these aspects it is intended that the theory will help inform psychological therapies and lead to more focused research in this area.

The information you have given in the interview will be analysed using a method called grounded theory and will help our understanding of what maintains problematic pornography use and why it has developed.

The data collected is likely to be used in future publications, talks or websites. All data will be kept completely anonymous and you will not be identified in any of these publications.

All your data will be securely stored on an encrypted flash drive, locked in a safe in the researchers' offices. You can withdraw your data up to the time of publication by September 2020 (please email the researcher if you would like to withdraw from the study and include your participant number). All data collected will be securely stored for 10 years after completion of the research project.

Contact for Further Information

For further information, please contact:

Doctoral Research Student – James Binnie (Jamesbinnie@LSBU.ac.uk)

If you have any concerns about the way in which the study has been conducted, please contact the School of Applied Sciences ethics coordinator at sasethics@lsbu.ac.uk

If you are feeling distressed or emotional after the interview then please phone the Samaritans on 116 123, or go to their website www.samaritans.org. For those outside of the UK then please visit www.befrienders.org and select your country from the drop down menu.

Thank you for taking the time to read this debrief sheet.

Appendix 15: Participant profiles using the formulation approach.

Participant 1

Initial speculative formulation

Contextual information:

Recruited through Reddit - NoFap

23 years old. Male. White. Heterosexual. Currently unemployed, just graduated from university. Single and not looking for a relationship. Lives with parents. Not religious.

Started to use porn at age 11, became regular from age 13/14. Reported that it became problematic at around 17/18.

Currently uses porn several times a month for up to an hour each time. Has been a lot more frequent in the past, using every day. Not sought help before but would like to. Has tried to quit and cut back several times before. Scoring 34 on the PPUS.

Construction of PPU:

Participant 1 reported that he felt he had not had any major problems in life before using porn. That it is porn that had created his problems. That it disconnects him from other people and the enjoyment of everyday activities. That it takes away his energy that could be spent elsewhere on improving himself. If he achieves his goal of 'defeating addiction' he believes that he will be a better person. Equates his attempts to stop using porn as akin to his attempts to stop smoking weed – try to quit, fail, try again. Also relates his porn use as similar to his video game playing, 'that it is all about the dopamine'. Wanting to take a 'back to basics' approach regarding technology, how life is 'meant' to be lived. Names porn addiction as his number one priority in life, however, is glad that has experienced the addiction as beating it will make him a better person.

Predisposing:

High achieving parents, being successful, having a strong work ethic, and a commitment towards self-improvement was a family script, but definition of success was vague. Became competitive at school, and with sports, but no real felt parental pressure during childhood. Discovered porn quite early and

primarily used it for pleasure. At 15/16 developed severe acne and felt down and depressed, took medication for acne but feels that this made his mood worse.

Precipitating:

During A Levels he became stressed due to academic pressure. He was aware at the time that the function of porn changed at this time from pleasure seeking (positively reinforcement) to emotional regulation (negative reinforcement). Very quickly defined porn use as problematic but only after searching online and getting involved in NoFap; associated his delayed ejaculation with his porn use.

Perpetuating:

Procrastination leading to masturbation, when not actively engaged in a task or avoiding tasks such as essays will often use porn. Wanting total abstinence and believes that anything porn related is a problem, very all or nothing thinking style. Has a reliance on journaling his porn use, by writing it down it is a commitment to progressing in his goal of abstinence, but also a constant reminder of his perceived problem. Is generally unsure what to do in life and is currently unemployed which leaves a lot of free time. Into self-improvement and spends time watching YouTube, listening to motivational speeches and puts self-affirmations on the mirror. Finds research on porn addiction interesting and invested in finding the answer to his problems.

Reconstruction of PPU:

Almost feels as if participant 1 is describing a prescribed journey or challenge, as if there is a correct way to do things. If he follows the rules then success, if not failure. Success regarding these challenges is the only way to get to his goal of enjoying life. Feels like a lot of self-imposed pressure, however this pressure is also found in external sources such as NoFap who promote this challenge as part of their business model.

Saw self as addict and adopted this identity and externalised problems as all related to porn. If can only control sexual urges and revert to a purer state of being, then will get the success that has alluded him. Uses several strategies that continue problem, self-improvement, avoidance, and mostly the addict identity, as relapse (which will always happen as has a sexuality) means he has failed and must start again. This keeps the awareness of the 'problem' in forefront of mind. Essentially porn is a displacement for perceived failure.

Participant 2

Initial speculative formulation

Contextual information:

Recruited through Twitter - NoFap

21 years old. Male. White. Heterosexual. Student. Single and not looking for a relationship. Lives with parents. Not religious.

Started to use porn at age 16, became regular and 'excessive' soon after. Reported that realised that it was problematic at around 18/19.

Currently uses porn 4 to 6 times a week, for a total of approximately 11 hours a week. Has seen a psychiatrist before but not for PPU. Has tried to quit and cut back several times before. Scoring 48 on the PPUS.

Construction of PPU:

Participant 2 reported that he felt his problem with pornography was that it 'makes me happy not doing anything'. That it makes it difficult to think of anything else and leaves him feeling 'sluggish' all the time. Believes is a porn addict.

Predisposing:

Was bullied at primary school, until he physically outgrew them. At age 8 was bitten by a dog and left with visible scars. Diagnosed with Asperger's syndrome during middle school. Did not make many friends at school, isolated self at home. Online world became very important, spending most of his time gaming. Discovered porn by accident when online and believes that as did not have a father figure or close friends was not able to discuss it with anyone so continued to view it.

Precipitating:

Dropped out of university due to depression, felt like a failure. Spent more time online and porn use increased, to 3 or 4 hours a day, as it was a distraction from his painful feelings of inadequacy. Online activities became less mainstream and associated self with alt-right online communities. From there found NoFap and identified as a porn addict.

Perpetuating:

Takes a 'Spartan' mindset, believes that anything that gets in the way of self-development is wrong and should be stopped. As not in a sexual relationship (has never had one) has no outlet for his sexuality and reverts back to porn and masturbation. Goes to a 12-step sex addicts anonymous group but does not contribute, therefore reinforcing his identity as an addict. Spends most of his life online and therefore is easily triggered by content.

Reconstruction of PPU:

It can be put forward that participant 2 is displacing his felt sense of failure and inadequacy onto his use of pornography. Rather than looking at other factors that may be influencing how he feels about himself and his current situation he attributes his predicament to his addiction to porn. His identity as a porn addict is reinforced through his online (NoFap) and offline (SAA) communities. To achieve his life goals (which are vague) he feels he must first conquer his addiction and stop masturbating. This will undoubtedly fail as this is his only outlet for his sexual needs, the 'relapse' then reinforces his sense of failure.

Participant 3

Initial speculative formulation

Contextual information:

Recruited through Reddit - Pornfree

41 years old. Male. White. Heterosexual. Student and working part time in gardening. Single and looking for a relationship. Lives with acquaintances. Not religious.

In teenage years was 'obsessive' about sex on TV. With internet porn becoming available quickly adopted a binge pattern to using it.

Currently uses porn several times a month, binge pattern with a total of approximately 6 to 10 hours a week. Has had help for PPU before and found it useful. Has tried to quit and cut back several times before. Scoring 28 on the PPUS.

Construction of PPU:

Participant 3 reported that his main problem was feeling 'hangover' akin to having 'withdrawals' after using porn and feeling like he has failed, it takes away his confidence and concentration and all he wants to do is sleep for days afterwards. His binge nature of his use, 6 hours, often until late at night, means that he often feels terrible the next day and this impacts on his ability to do tasks or enjoy situations.

Predisposing:

Grew up in a religious household where sex was wrong. An emotionally avoidant family. Both grandparents had problems with alcohol to the extent that one died because of it. Mother was anxious (had been hospitalised). Reporting to be very anxious and lacking confidence when growing up, especially in secondary school. Was lonely as a child.

During teenage years started to watch sex on TV programmes and became quite obsessive about it. Used to prioritise watching these programmes over going out with friends. When got internet porn use started. Found that porn use helped to avoid difficult emotions. Felt that 'beat self up' for not talking to girls in real life and missing out on opportunities in life generally. Porn use started to follow a binge pattern with hours of watching a couple of times a week and reporting that afterwards both physically and mentally tired. Was late starter sexually and lost virginity at age 28. Has spent several years

working abroad and away from family, has had one brief sexual relationship and a long-term long-distance relationship that recently ended.

Precipitating:

Did not see porn use an issue until caught by a previous girlfriend. Said he had a problem with porn and then identified as a porn addict after going online for support and now attends SAA.

Perpetuating:

Defines self as addict and attends SAA and struggles to be completely abstinent (is not in a sexual relationship so no other outlet). Loneliness currently a trigger for binge nature of relapse. Binge nature of use associated with being online using camgirls and trying to feel wanted by others.

Reconstruction of PPU:

Participant 3 seems to be lonely, anxious and lacking confidence. He spends hours online with camgirls so he feels less lonely. His identity as an addict reinforces the idea that there is an external causation to his problems, an illness that must be defeated, rather than working on the underlying issues (anxiety) that drive the unhelpful behaviours.

Participant 4

Initial speculative formulation

Contextual information:

Recruited through YourBrainOnPorn.com

33 years old. Male. White. Heterosexual. Currently unemployed. In a casual relationship. Lives with parents. Not religious. Has lived abroad (Asia) for several years, been in the army, worked as a security analyst. Recently decided to change career and go back to studying.

Started to use porn at age 13, at time was getting to know his body, figuring out how it worked. Porn use was standard and fine until age 20, preferred porn to sex in first relationship and then in second relationship had ED.

Used to use porn 4 to 6 days a week. 30mins each time, states that was not an extreme amount of time. Used four times in the last 233 days (keeps a journal) vowed not to use it again. Not sought help before but would like to. Has tried to quit and cut back several times before. Scoring 28 on the PPU.

Construction of PPU:

Participant 4 reported that his problem with porn was his experience of porn induced erectile dysfunction (PIED). 99-100% certain his ED is related to porn. States that it is a life changer, used to have to take medication to have sex (since early twenties), but this no longer works. When sees a partner he is comfortable with then less of an issue. Avoids going out and socialising and meeting women as cannot perform. Feels has no libido and is now asexual. In past when watching porn felt got his libido back. Does not consider self to be an addict as can stop using porn for periods of time. Believes that has his issues as had sex later in life and therefore porn had 'hardwired' his brain.

Predisposing:

Long history of OCD going back to childhood. Not been seen by mental health services or had any therapy. OCD used to be fairly typical and concentrated on washing and checking behaviours. Since late teens OCD became more 'pure O' and experiencing incongruent thoughts of being gay. Used porn to test if attracted to men. At times has been suicidal due to the distress caused by his situation. Masturbation to porn became a routine that has never deviated from, the routine worked really well and as did not have sex until fairly late found that being with someone else very different to the experience of using porn.

Precipitating:

During first relationships found sex very different to porn. Was also anxious due to OCD intrusive thoughts. Initially OK performance wise but then in second relationship developed ED. Quickly took medication for ED and became reliant on this until it stopped working.

Perpetuating:

Holds a biomedical view of mental health generally and re-wiring the brain the only strategy aware of, therefore not been successful. Equates porn to a drug and when stops porn states that has withdrawals and side effects.

Repeated attempts to quit porn reinforce failure and prediction that will have ED, leading to anxiety when intimate with women and ED. Reliance on medication to relieve ED created psychological dependence and perceives that is unable to perform. Also watching gay porn to prove sexuality to self, however when aroused this supports the content of the intrusive thoughts leading to more anxiety when with women.

Reconstruction of PPU:

Quite usual ED presentation. Porn use also in tangent with OCD to challenge intrusive thoughts, but ultimately reinforces them. Prediction of ED, content of OCD and real sex being different to routine of masturbation, all lead to anxiety when intimate which then leads to ED. As believes porn use is causal rather than correlational to ED then labels self with PPU.

Participant 5

Initial speculative formulation

Contextual information:

Recruited through a friend.

65 years old. Male. White. Bisexual. Employed full time been in same professional career for 45 years. In a serious relationship, been married to second wife for 20 years. Two adult children and also grandchildren. Used to live with wife and children but separated six months ago and now lives with sister. Not religious.

Started porn use at age 11 or 12 shortly after father died and finding his stash. Porn use in twenties excessive and described as obsessive, spending a lot of time watching, reported PPU started at this point.

Used to use porn 4 to 6 days a week. 6-10 hours per week. Had couples counselling before and was useful. Has tried to quit and cut back several times before. Scoring 46 on the PPUS.

Not used porn for past six months since wife caught him, still masturbates using fantasy. Currently abstinent in order to move back home.

Construction of PPU:

Participant 5 reported that his porn use first experienced as problematic when realised was spending so much time using it. Was using edging, saw self as a master at it. Took almost every opportunity to use and found was triggered by everyday media. Described feeling obsessed with porn and did not want to miss out on an opportunity. Stress also a strong trigger for porn use; binge nature of porn use allowed for a prolonged escape from stress and the real world, feels despairing and anxious afterwards, feels helpless regarding porn use, which creates more stress. Believes that he has an abnormal sex drive, an illness, whereas it could be said to be within the high end of normal.

Predisposing:

Four older sisters, and two older brothers, one of whom died. Grew up an only child. Never saw parents show affection for each other. Went to an all-boys school, never socialised with girls. Realisation that was bisexual in teenage years, always struggled with sexuality, tried to deny it, never discussed it with anyone. First sexual experience with a women at age 19, met first wife soon after. First marriage at age 20, wanted more varied sexual experiences, wife was uncomfortable but went

along with it. Tried swinging a few times. First marriage ended due to participant meeting men for sex. He reports not being able to leave it alone even when married and having children. Wives have both described their sex life as using them for sex not making love. Both wives have let him back only for him to do it again.

Precipitating:

Different precipitating events over time. In general found that porn use 'worsened' as technology changed, magazines, videos, DVDs, internet. Crisis occurred after being caught using porn or meeting with men for sex. Has committed to abstinence in order to prolong relationships but has never been to do this. Later realisation of problems when porn became 'darker', stumbled upon child porn unintentionally and was shocked at the depths he was going to and went to SAA, defines self as a sex addict. Told wife about what he found, she told her doctor and police investigated, no charges made.

Perpetuating:

Using porn to escape feelings and difficult life situations. Attending SAA, although undoubtedly reported as a positive also supports the narrative of addiction and is powerless and must be abstinent. Both of which are unhelpful as nature of problem concerns sexuality and sexual expression.

Reconstruction of PPU:

Participant 5 sees issue as an addiction brought on by an abnormal sex drive. Whereas it could be seen as an expression of his sexuality. He has self reportedly struggled with sexuality since childhood. He did not see an emotional connection between his parents, and was schooled in an all male environment. When older porn was first opportunity to explore sexuality. However married conventionally and although trying to be creative was not able to have an outlet within the marriage. This and perhaps because of a high sex drive and some compulsivity created the environment for continued online and eventually offline sexuality. Has always tried to return to a 'normal' relationship despite it not fulfilling him and therefore unable to do so. By adopting the addiction narrative sees this as relapse and believes to successfully overcome his addiction must deny his sexuality.

Participant 6

Initial speculative formulation

Contextual information:

Recruited through Facebook.

34 years old. Female. White. Heterosexual. Employed full. Single and not looking for a relationship, partner died 18 months ago. Lives on own. Some religious beliefs.

Started porn use at age 13 after being introduced to it by friends. Watched by self at age 17, couple of hours a day. In mid-twenties porn use became more problematic and more extreme and involved self-harm. Stopped using at age 31 after meeting partner and having a loving relationship.

Used porn once in last three years. Still masturbates but to fantasy. Has ongoing professional help for PPU and other issues and finds it useful. Had tried to quit and cut back several times before stopping three years ago. Scoring 26 on the PPUS.

Construction of PPU:

Participant 6 defines herself as a sex and porn addict. She reported that the majority of her problems related to porn where now in the past but she had to be wary of relapse. She believes that early and prolonged exposure within a social setting shaped her ideas about sex; she acted as if in the films. Porn tapped into her low self-worth' she watched sexual movies that also contained violence towards women. Led to shame and more self-loathing and also self-injury through masturbation; which in turn would make her feel worse afterwards. She puts her problems down to, in part, her relationship with her father, that he was absent emotionally when younger. Participant 6 acknowledges that she views herself in a negative way "how can I tell myself, I'm a decent person. When I've watched the things that I find morally, abhorrent".

Predisposing:

Father had problems with alcohol, was emotionally absent. Bullied at school for appearance age 8, from this developed ideas of 'something wrong with me' to understand the bullying. Soon developed quite severe OCD surrounding contamination and cleanliness, which links to belief of something being wrong. In mid-teens parents separating and hung around with friends and older men, drinking, watching porn. Felt had freedom as parents distracted. From age 14 became promiscuous as a way of being accepted by others, again trying to challenge the idea that there is something fundamentally wrong with her. A move from being bullied, to being accepted, to being sexualised. Felt shame and

this reinforced beliefs about self. Moved on from social scene and started using porn by self, in a ritualistic manner. Started to watch extreme, violent non-porn sex scenes whereby the female character would be humiliated, raped, abused. Watching this content led to more shame and a belief that she would be punished for it, perhaps by God, later in life. Porn use influenced sexual relationships and acted as a porn actor when intimate. Reports that there was quite a few one-night stands, which made her feel self-loathing and shame. Feels that she used sex to control people, “if I am good at sex then they will stay with me”, “I can fix arguments and disagreements through sex”.

In mid-twenties porn use became more compulsive and was put before sex in relationships, use was ritualised and masturbation led to physical harm, a form of self-harm. In hindsight believed that this is when it became a problem.

At 28 was unhappy in relationship, general stress and anxiety and had a “mental breakdown” requiring psychiatric medication and moved country.

Did not enjoy sex until age 30 when met partner and was in love. Partner died of an overdose 18 months ago and has been single since.

Precipitating:

Although had issues since late teenage years, participant 6 did not call herself a sex and porn addict until age 30. At this time she had a loving relationship and was able to change her relationship with sex. Only with hindsight could see that her past behaviours had been problematic.

Perpetuating:

It can be proposed that participant 6's past issues with porn and sex continued for several reasons. The first is how she thought about herself, her self-worth. She engaged in sex to receive affection from others. The porn use was a form of self-harm, in keeping with her beliefs of loathing herself, that there was something wrong with her. The continued use made her feel shameful given the dark content of the porn, this reinforced the idea of something being wrong. On a practical level participant 6 later avoids triggering media thus reinforcing the construct of not being able to control her actions and that there is a constant threat and therefore a real entity to be scared of.

Reconstruction of PPU:

Poor attachments to her parents from an early age and not having her needs met were compounded by bullying at school concerning her appearance. This confused her as she was slim but called fat. She internalised this bullying and assumed that something must be wrong with her. This may have

contributed to her OCD in that she believed that she was contaminated and would engage in cleaning behaviours thus perpetuating the OCD.

After the worst of the OCD had been treated by professionals (in her mid-teens) her parents began separating. Feeling ignored and unwanted at home she spent most of her free time with a friend who had an older brother and older friends. This was a sexualised environment and at times her and her friends were sexually abused (below the UK age of consent, but not the country at the time). Hardcore pornography was introduced and participant 6 spent many hours viewing it with her friend and older men. She then engaged in sexual acts for which she now feels ashamed of. Sees porn use as dirty, akin to contamination, uses porn ritualistically to reduce perceived contamination. This reinforced the belief that there was something wrong with her. Her sexual relationships were conditional, she felt that if she performed then she would be accepted. Her porn use became more extreme and became a form of self-harm. After viewing and hurting herself she would again feel shame and a deeper sense of something being wrong with her.

Realisation of a problem when finally in a loving relationship as this changed her ideas about sex and intimacy. Felt accepted for who she was rather than what she could do, an unconditional relationship. This allowed her to stop using porn. However also adopted the addiction narrative and is therefore always on guard for another relapse as believes that being a porn addict is part of her, her identity “who am I without pornography?” To achieve lasting change participant 6 needs to develop a sense of self compassion, which is currently frightening to her.

Participant 7

Initial speculative formulation

Contextual information:

Recruited through Reddit – NoNutNovember.

20 years old. Male. White. Bisexual. Recent high school graduate about to join the marines. Single and not looking for a relationship. Lives with parents. Unsure about religion – brought up Catholic.

Started to use porn at age 13. Used regularly since, reported to be problematic about five years ago.

Currently uses porn 4 to 6 times a week, for a total of approximately 4 hours a week. Not sought professional help and would not like to. Has tried to quit and cut back many times before, but unsuccessfully. Longest time without is a couple of weeks. Scoring 2 on the PPUS.

Construction of PPU:

Participant 7 reported that he believes he is a porn addict. Although he has used it more in the past, he sees himself as a terrible person, selfish and he hates himself. He hates the way in which he has become a loner and how he must be seen as a 'loser' by others. Reports that he feels more confident in the brief times when he has not used porn and that others have said he is different during these times. Feels that he has no sexual desire, that porn has dulled this. Blames porn for his problems. Has now resigned himself to using porn, primarily to help to get to sleep.

Predisposing:

Reports a normal and good early childhood within a tightknit community. Very religious upbringing. Both parents had professional jobs. Father had religious calling and moved family to a new state. Had to leave friends and school and start again. Struggled to fit in socially, felt excluded and mixed with a new crowd. Started porn at this time about 13 years old. Started with soft core but soon escalated. Has seen darker and more niche porn but not into it like some of his friends. Used every day of the week for an hour or two, initially this helped to relieve stress but lost this function and became habitual. Used when had the opportunity or triggered by having an erection. Often would rush home from school to use porn, thus not mixing with others. Had to repeat years at school due to poor performance.

Describes self as always being an introvert.

Precipitating:

Mood changed when moved state. Struggled to fit in and spent more time watching porn. Gave up on his religion and stopped going to church. When realised spending so much time using, he went online found the Reboot communities and identified as an addict. Became a moderator for NNN⁴, however does not prescribe to the more extreme views of forums such as r/SemenRetension, this reinforced his identity as an addict and a sense of belonging.

Perpetuating:

In the past his porn use was reinforced through emotional regulation, but this has become habitual. No longer attempting to change his behaviours, in part due to the powerlessness of being an addict. Is relying on joining the marines as a way of making changes to all aspects of his life.

Reconstruction of PPU:

Participant 7 is likely to be depressed. This change in affect occurred at the same time as starting to use porn. Porn gave him an escape from the difficulties at school and how he felt. It also stopped him engaging in more productive and social activities. Years later he is a product of this avoidance and has given up and waiting for an external agent to elicit change ('the marines will re-invent me'). His past and current porn use is used as 'a stick to beat himself with'. On the form he reported to be bisexual but did not mention it during the interview. This could be a factor in giving up on religion, not communicating with his father and also perhaps feeling self-loathing and shame. PPUS scores very low, seems resigned to porn use therefore no longer distressed by it.

⁴ NoNutNovember

Participant 8

Initial speculative formulation

Contextual information:

Recruited through YourBrainOnPorn.com.

26 years old. Male. White. Bisexual. IT worker, currently unemployed. Single and not looking for a relationship. Lives with parents. Not religious.

Started to use porn at age 10. Used regularly since, reported to be problematic about five years ago after starting therapy.

Currently uses porn several times a day, for a total of approximately 1 hour a day. Has sought professional help and found it very helpful. Has tried to quit and cut back many times before, but only manages a few weeks at a time. Scoring 37 on the PPUS.

Construction of PPU:

Participant 8 reported that at the beginning pornography, and later coming, gave comfort and a sense of belonging it eventually 'imprisoned' him. He is unable to be the person he wants to be and feels he has missed out on life. Believes he has an addiction and porn is a form of self-harm, that it gives a manufactured relatedness and a high rather than reality.

Predisposing:

Reported that his mother was very anxious, and he was taught that the outside world was dangerous and he was encouraged to stay inside. Also reported that his family was homophobic (they still do not know about his sexuality). Initially watched porn, age 10, some masturbation but too young for it to result in orgasm. Explored sexuality, as knew from early age that he was different (still unsure how to describe it, gay, bisexual?), and watched gay porn.

As was very good with IT from an early age he became involved in an online community from the age of 11 to 16. The community involved file sharing of pornographic videos and images, participant 8 stated that nothing illegal was ever seen. Although he felt exploited in the group, he was glad to be part of it as it made him feel welcome and wanted. He used to pretend to his mother that he was gaming so he could spend time with the online community, he now feels he was neglected by his family at the time and missed out on opportunities to socialise.

Continued to watch porn every day and worked in the IT industry and lived at home. Started to spend money on coming. Started 'relationships' with the women and men and was financially exploited. Reports to have spent over £40-50k over the last five years.

Precipitating:

His mood became low about five years ago and was prescribed anti-depressants. Started long term psychotherapy (transactional analysis) and through this realised that his porn/coming use was problematic and that he was addicted to porn.

Perpetuating:

Aims for total abstinence and goes to a support group for porn addiction which reinforces this unlikely goal. He keeps a journal of his masturbation/coming/porn use and sets separate counts between relapses. When he does relapse he hates himself and then uses porn as a form of self harm which further adds to the self loathing.

Reconstruction of PPU:

Participant 8 was taught from an early age that the world was a dangerous place and as a result hid away in an online world. This world helped him explore his sexuality and allowed him to feel connected to other people. However, by avoiding the real world and the connectedness to other people became depressed. Continued use reinforces the idea that there is something wrong within him. Rather than looking inwards he has attributed the problem to porn itself and therefore focuses on removing this from his life (and his sexuality through association). As has no other outlets will inevitably 'relapse' thus reinforcing the narrative of addiction. He is afraid of making inward change, to how he relates to the world, and has bought into the idea of addiction and abstinence as the only solution. Has become comfortable with porn although hates it at the same time. It allows him to not make changes by giving comfort.

Participant 9

Initial speculative formulation

Contextual information:

Recruited through Twitter.

23 years old. Male. White. Heterosexual. Works in own company. In a serious relationship. Lives on own. Religious.

Started to use porn at age 11 or 12. Started with softcore but soon escalated to hardcore. Used to use several times a day. Reported to be problematic during college as could not sleep without using it first and after having ED sought help online. Decided was addicted to porn after looking at Reboot sites online shortly after.

Currently uses porn every day, for a total of approximately 3 to 5 hours a week. Has sought professional help and found it a little useful. Has tried to quit and cut back many times before. Scoring 29 on the PPUS.

Construction of PPU:

Participant 9 reported that his porn use stops him from achieving his life goals and he feels that he let himself down. He also attributes his ED to his porn use and this impacts upon his sexual relationships.

Predisposing:

One of six siblings. Parents divorced at age 5. Reports having a very high IQ at school. In teenage years got into lots of fights. Got referred to a psychiatrist and was diagnosed with ADHD and prescribed medication. Got back on track at school and went to college, been working since. Does a lot of video gaming and states that gets the same 'dopamine hit' as using porn.

Started using porn relatively early and has always masturbated in the prone position. Used porn several times a day and also used it to get to sleep, this became a habit. Due to prone masturbation found partnered sex lacking stimulation and experienced some sexual dysfunction (ED).

Precipitating:

Because of having ED on occasions looked online for guidance and found NoFap. Adopted the addiction narrative and saw his problems as porn addiction.

Perpetuating:

Repeated attempts to quit and the associated relapses reinforce the concept of addiction. Takes on an all or nothing mindset which leads to a binge pattern of use. As has formed the identity of being an addict will plan to use porn as 'this is what I do'.

Reconstruction of PPU:

Participant 9 has potentially developed a set routine and way of masturbating (prone) which has led to difficulties being aroused in sexual relationships. His relatively frequent use of porn could be explained as a way of distracting himself from general stress and a sense of feeling lost in life. After looking online he attributed his difficulties to the porn use rather than the masturbation and labelled himself as a porn addict. He feels shame when he relapses in part due to his religious upbringing

Participant 10

Initial speculative formulation

Contextual information:

Recruited through Reddit - Pornfree.

23 years old. Male. White. Heterosexual. Student and works part time. Lives alone. Not in a relationship. Not sure about religion.

Early exposure to porn at age 8, watching occasionally. Started masturbating at age 11 and regularly from then on. Became problematic at age 18 after experiencing ED and finding YourBrainOnPorn online and identifying as a porn addict.

Currently uses porn most days of the week, for a total of approximately 3 to 5 hours a week. Has sought professional help and found it a little useful. Has tried to quit and cut back many times before. Scoring 40 on the PPUS.

Construction of PPU:

Participant 10 reported that his porn use was 'really problematic and life defining'. He feels it has lowered his confidence with women. He feels depressed and attributes this to his porn use.

Predisposing:

Parents divorced at age 2. Mother felt guilty for how she looked after him when younger, participant 10 does not know why. However, this changed and they had more of a loving relationship after she became religious.

First introduced to porn by an older friend when 8 years old. When able to masturbate at age 11 regularly used porn whenever had the urge to do so. Started to spend longer looking for the right video and began edging, found this very pleasurable/"hedonistic" but time consuming. Had first girlfriend at age 16. Together for about six months. Was devastated when they broke up and felt very sad. Started to use porn more regularly and for even longer periods of time, longest was 13 hours. Used porn to escape painful feelings. In new relationship at 17 had ED for first time, this continued occasionally. In next brief relationship at 18 found that was preferring porn to sex, still having occasional ED.

Due to preferring porn, time spent using it and ED looked online and found YBOP. Identified as a porn addict and blamed porn for his ED. Tried to quit but 'relapsed' after 5 days as felt 'horny'. Studied

online about porn addiction and adopted a strong addiction narrative and medicalised the process. He has battled with his 'addiction' for the last four years, having some brief success but having frequent 'relapses'. Has had relationships in the last few years and has been open about his perceived addiction to porn and found that they have been supportive.

Precipitating:

Because of having ED on occasions looked online for guidance and found YBOP. Adopted the addiction narrative and saw his problems as porn addiction.

Perpetuating:

Repeated attempts to quit and the associated relapses reinforce the concept of addiction, which reinforce identity as an addict. Still uses porn to regulate his emotions. Evaluates his life, whether he is having 'good times' or 'bad times' through the lens of his porn use. Avoids all potential triggers for porn (e.g. social media) thus perpetuating the 'threat'.

Reconstruction of PPU:

Participant 10 developed a masturbation technique which was highly pleasurable but very time consuming. The function of the porn use changed after the break up with his first girlfriend, a move from positive to negative reinforcement. Had ED perhaps as a result of stress and attributed this to porn after looking online at YBOP. Took on identity as an addict. Still uses porn to regulate emotions and to escape stress. However when uses feels bad afterwards, thus becoming more stressed. Currently depressed and feels porn is only coping mechanism. Rather than exploring different reasons for his depression and stress he attributes his problems to his addiction and spends time and effort to trying to be abstinent.

Participant 11

Initial speculative formulation

Contextual information:

Recruited through Reddit - Pornfree

35 years old. Male. White. Heterosexual. Employed full time. Married. Not religious. Uses porn every couple of months. Not had professional help before but would like to. Tried to quit and cut back several times before. Scoring 51 on the PPUS.

First used porn (pre internet) at age 12. Used for pleasure many years, first became problematic when stressed whilst doing PhD in mid-twenties. Currently non-problematic use.

Construction of PPU:

Identifies as a porn addict, despite also saying that PPU is now a historic issue, however, still reports cravings to use. Used to use porn to escape pain and suffering caused by depression and stress which in turn were caused by life events. Also, used to get to sleep, then to get up and then as a 'boost' in the day. Impacted on sexual relations with his wife, in part due to ED. As life situation has changed now able to have longer periods of abstinence. Fears wife will leave him if continues to use.

Predisposing:

Mother had depression when participant was young, may have developed a fear of rejection, a fear of failure. This fear lead to difficulties developing relationships with girls/women, this lasted to the age of 18. Started to use pornography as a way to feel emotional connection to women, something that was missing in his life. Porn use continued for several years, basically serving as a means of connection but also mostly for pleasure, a buzz. When doing PhD became stressed, low in mood and perhaps depressed; first time had experienced these issues. Found that porn use increased and this was the beginning of problematic use. Porn, masturbation and orgasm allowed an escape from the pain of depression, the orgasm releasing chemicals. This use became habitual. Porn use impacted upon sexual relationship with wife. Found Pornfree online and identified with the concept of porn addiction and attempted to quit porn but found could not do so. Unable to quit whilst in stressful life situation. Then moved area and job and depression lifted and was then able to quit porn for six months, but did have several 'relapses'. Currently uses porn every two weeks, mostly for pleasure rather than to escape pain; but identifies as a porn addict. Fear wife will leave if continues use.

Precipitating:

Porn use changed from pleasure to pain reliving, during PhD.

Perpetuating:

When experiencing PPU perpetuated by emotional regulation. No current issues but identifies as a porn addict and therefore always cognisant of risk involved in what is now a non-problematic use of porn.

Reconstruction of PPU:

Participant 11 may have developed a fear of rejection and avoidance of emotional relationships due to his relationship with his mother. This made pornography and the connection to women more appealing. Use became habitual however the function of the porn changed due to life circumstance and were associated with emotional regulation. When life changed so did the need for emotional regulation and porn use reduced. Therefore problems not caused by porn but correlated with it. Participant in part currently attributing past and potential future problems with porn.

Participant 12

Initial speculative formulation

Contextual information:

Recruited through Reddit - NoFap

22 years old. Male. White. Heterosexual. Student. Single and not looking for a relationship. Lives with mother and her 'companion'. Not sure about religion.

Started using porn at age 12. Daily use from 15. Defined as problematic since age 19.

Currently uses porn several times a day, total of 3-5 hours a week. Has not sought professional help and would not like to do so. Has tried to quit and cut back many times before. Scoring 34 on the PPUS.

Construction of PPU:

Reports that believes porn is a problem as cannot stop using it. He believes that porn depletes his 'vital energy' and stops him making a success of himself.

Predisposing:

Brought up in the countryside. Only child. Described his father as a 'hippie', they lived in a isolated self sufficient community. His father was aggressive and insulting. His mother and he left as his father was too idealistic. Moved in with maternal wealthy grandparents in the city until age 10. At 10 as a result of the financial crash moved back in with father for a year. When back in the city was the outsider at school and was bullied from ages of 13-14. Believed he was ugly, became depressed and isolated self, playing computer games (not online) "dawn to dusk". Started using porn every day.

At age 16 started to go to the gym and learning languages so he would appear attractive to women. Started to gain more confidence. Wanted to have contact with women. At age 19 had first sexual experience, had ED on occasion. Relationship lasted a few months. Preferred porn to sex and had bizarre ideas about women and would focus strangely during sex hence the ED, sees women as machines. Has not had a relationship since.

Spends his time in online communities, many that promote misogynistic and incel ideology. His particular niche is the 'black pill' group; sees women as 'machines'. Has seen a psychiatrist before but was vague about this. Has idiosyncratic ideas about society and revolution. Fantasies about having sex with underage girls due to evolutionary beliefs but denies looking at child pornography.

Precipitating:

Experience of first sexual relationship, ED and preferring porn to sex.

Perpetuating:

Strongly held and bizarre beliefs about other people and the world more generally. Describes self as asocial, rarely sees anyone outside of the house. Keeps a detailed record of all porn usage and masturbation. Watches romantic porn to feel loved and also watches violent porn when hating women. Has ideas about 'vital energy' and how porn depletes this, extreme diets and gym attendance increases it. Sees women as a distraction from his higher purpose which is to initiate a technological revolution and save the planet.

Reconstruction of PPU:

His beliefs about women and society in general and his involvement in these online communities instils an idea the world needs to change not the individual. Attributing the catalyst for this change to be quitting porn. Beliefs may have arisen from isolation when younger, bullying and subsequent retreat into an online world.

Participant 13

Initial speculative formulation

Contextual information:

Recruited through Reddit Pornfree.

40 years old. Male. White. US. Heterosexual. Care worker – his two young children, and freelance writer. In a serious relationship. Lives with partner and children. Religious.

Not used porn in the last six months. Has sought professional help before and found it somewhat useful. Has tried to quit several times before. Scoring 35 on the PPUS.

Negative case example – past PPU no longer current – was honest of this prior to interview.

Last used porn 7mths ago (completed survey saying every couple of months), before this went 18mths without. Masturbates (without porn) monthly.

Construction of PPU:

States is in recovery, that his problem is well managed. Has a good support network including a small Reddit accountability group. Only has urges very rarely, when tired. Has found that he does not ogle women as much as he used to (he used to collect mental images to masturbate to). Still hypersensitive to certain content such as anime, so avoids. When triggered reports to his Reddit accountability group, almost akin to abstinence. Describes being in recovery and being an addict but at same time doesn't want to slip up by saying cured. Feels like won a battle and now tries to help others. Last relapse involved when feeling emotional after death of grandfather and impulsively looked at porn on way to funeral.

Porn was worse in the past when living alone after university, in his early twenties. Using once or twice a day (15mins to 2hrs at a time), or if nothing else planned that day then would use porn five times a day. At this time no emotional problems associated with use but did stop opportunities to get into relationships as not meeting so many people. Emotional problems related to porn began when met wife. Would not be able to perform sexually as used porn before meeting up. Said to wife early in relationship that thought was addicted to porn. Wife views porn as a way of cheating, he now sees it that way too. Regrets harm caused to wife, this seems to be the main issue. Six years ago, vowed to wife that he would quit. Went to a sex therapist but didn't go well. Found Pornfree and YBOP - got a lot from it

Predisposing:

Parents divorced at age 13, otherwise happy childhood at home. Bullied a lot at school. Started using porn at age 12 or 13, typical teenage use, Anime to begin with. Images got 'stuck in brain'. Was lacking confidence, spent time on porn rather than socialising, going out, mixing with girls; regrets this now. Avoided the risk of rejection, thought that girls could read his thoughts (not delusional) and would see him as icky and creepy. Took fewer risks as teenager and early twenties, due to confidence and porn use. Describes self as introverted, nerdy, and an 'outsider'. Some gay experimentation - blames porn

Precipitating:

Seeing his porn use as problematic occurred when married and discussed his use with his wife.

Perpetuating:

Although now in 'recovery' and rarely using porn, still sees porn as an issue. This can be said to be perpetuated by his morals/beliefs about porn, his guilt about the impact on his wife, and also continues to be in his consciousness at all times due to his regular journalling and engagement in Reddit group.

Reconstruction of PPU:

Although had been using porn frequently and for long periods of time, did not think of it as problematic. Had no moral concern about porn other than not liking the industry as believing it takes advantage of people. Porn use became habitual and when context changed (wife/relationship) the meaning changed. Developed a strong desire for change, adopted an addiction narrative, evidenced by remembering the exact days since last 'relapse' therefore suggesting very committed to abstinence approach. PPU went from time wasting as a potential issue to impact upon others leading to be called an issue. Now believes that porn has changed him: "I don't know where the damage ends and I begin". He retrospectively sees his porn use as problematic as it occurred so early that he has no concept of normal use.

Participant 14

Initial speculative formulation

Contextual information:

Recruited through Twitter.

43 years old. Male. White. US. Heterosexual. Works full time – professional job. Married with two children. Lives with partner and children. Not religious.

Uses porn once a month. Has sought professional help before and found it somewhat useful. Has tried to quit several times before. Scoring 53 on the PPUS.

Construction of PPU:

Identifies as a sex addict, but not sure on the definition of addiction; frequently used the word 'compulsion'. Not used seen a sex worker for a year, uses porn about once a month. Finds it difficult not to 'use' but gets support for his cravings through 12 step groups.

Used to use porn when awakening in the morning to feel better. Used when feeling drained of energy, feeling numb inside, and also to reward self when completing work. Used to watch porn at work and masturbate in the bathroom. Views porn as disgusting (women being promiscuous in general is disgusting).

Predisposing:

Describes both his parents as sexually repressed. As a small child used to look at nude paintings (father was an artist), got into trouble doing this with mother who is described as a prude. Described mother as having uncontrolled anger towards him. When older got first softcore porn mag and was very excited by it and started to steal them and developed a collection. Had emotional problems as a child and diagnosed with ADD and prescribed Ritalin. Did not have a girlfriend until university. Described a standard use of porn, but felt it impacted on his sexual relationships as expectation were based on porn, found that could not be intimate without thinking of porn. Became lonely at law school, isolated self, used more porn and drank alcohol heavily. Felt that he could not relate to other people, broke up with his girlfriend as he had been cheating on her. Felt he needed relationships to gain approval. Described this time of his life as a 'wreck'. But also met his now wife at this time (long distance relationship).

When working in Asia started to visit sex workers. Would research different red-light zones before departing. Was seeing two sex workers a day. Looking for intimacy and approval from others.

Precipitating:

Last year when realising problem when frequency and duration of porn impacting on ability to work and when sex workers said he was a sex addict. Decided an addict after spending time with friend who in AA, and when wife discovered seen sex workers.

Perpetuating:

Using porn for emotional regulation. Continued ADD, compulsivity and procrastination. Describes a compulsive use of the internet, for example looking at Wikipedia for hours, thus increasing accessibility of porn.

Reconstruction of PPU:

Possible attachment issue with parents. ADD leading to compulsivity. Clearly very intelligent and struggled to fit in socially. Porn was a way of feeling something when what sounded to be depression (emotional regulation). Began seeing sex workers due to accessibility and normalisation in peer group in Asia. Received artificial approval from sex workers suggesting issues with self-esteem. Continued with porn use until adopted the addiction narrative and found a supportive 12 step group and used internet blockers. Sees occasional porn use as a relapse and therefore cycle continues.

Participant 15

Initial speculative formulation

Contextual information:

Recruited through Reddit.

24 years old. Male. South Asian. Lives in Europe. US. Gay. Works full time – professional job. Single – not looking for a partner. Lives with acquaintances. Unsure about religion.

Uses porn once or twice every day for about 10mins each time. Has sought professional help before and found it somewhat useful. Has tried to cut down several times but never tried to quit. Scoring 27 on the PPUS.

Construction of PPU:

Unsure if identifies self as an addict. Using porn for stress relief, loneliness, as a sexual outlet, and sex education. Feels does not need anyone else's company because can have outlet with porn. Has become a part of daily routine. Believes has a high sex drive and uses porn so he is not distracted by sexual thoughts during the day. Believes that porn has made him more insecure and changed how he relates to himself and others. He compares himself to the porn actors and feels inferior. Believes the fantasy of porn that it may become real one day. Now sees actual relationships as just about sex.

Predisposing:

Reported a good childhood. Went to boys boarding school. Started using porn at age 13 – heterosexual porn. Use was on and off until got a smartphone at age 18, use became more frequent. Realised that was gay at same time, age 18. Was a difficult time, diagnosed with anxiety and depression, and saw a therapist concerning his sexuality and self-esteem. Was using a lot of dating apps and felt rejected; not had any long or medium term relationships, only occasional casual sex.

Precipitating:

Realised has a problem with porn when he could not masturbate without it, and was thinking about it when having sex – went to a psychologist and it was then the realisation occurred.

Perpetuating:

Emotional regulation. Habitual use. No clear delineation between fantasy and reality.

Reconstruction of PPU:

Fantasy of being popular, wanted, uses porn to dwell in this fantasy. Watches 'home made' gay porn so believes it is real, and thus can compare self to the actors, thus reduces his self-esteem which in turn is regulated using porn. His porn habit reinforces his negative views about self through masturbation – classical conditioning. Porn (and sexuality) is a dirty secret.

Participant 16

Initial speculative formulation

Contextual information:

Recruited through Reddit Pornfree.

50 years old. White. Not sure about religion. Lives in Australia. Female. Heterosexual. Unemployed looking for work. Single looking for a relationship. Lives on own. Uses erotica/porn every few days for a couple of hours a time. Use increases on menstrual cycle or when stressed. Does not use when in a committed relationship. Has had professional help before and found it somewhat helpful. Tried to quit and cut back several times before. Scoring 26 on the PPUS.

Construction of PPU:

Porn use focuses upon erotic writing and audio. Believes has 'adrenal fatigue' (not a recognised medical condition) due to long sessions of porn use. Extended sessions due to type of porn used and edging techniques. After a porn session feels emotionally and physically 'punished' – believes has depleted her 'chakra energy'. Feels she masturbates more than other women. Is ashamed of content of porn as involves incest (fantasy stories similar to the book 'Flowers in the Attic'). Describes self as a sex addict, currently porn use is main problem.

Predisposing:

Describes a dysfunctional family. Critical, workaholic father. Mother depressed and suicidal. Felt emotionally neglected as a child and was bullied at school. Female relation sexually abused her when she was age three (discovered this whilst in therapy). Relates this to her starting masturbation early, around ten years old. Fantasied about having an older brother, this fantasy turned sexual at age ten. Was attracted to older men during late teens, describes having a lot of 'short term relationships'. Involved in various healing and alternative therapies. Travelled extensively.

Precipitating:

Became fixated with male celebrities and began stalking them. Went to SLAA when realising this was a problem after friends became concerned. Been in 12 step groups for 31 years.

Perpetuating:

Uses porn to destress – negative reinforcement, and as a form of feeling ‘connected’, although connection is to a fantasy that can never be realised.

Reconstruction of PPU:

Continues to use as an escape, to meet an unmet need. Need cannot be practically met. Is lonely, perhaps wanting unconditional positive regard from another, to be wanted emotionally and also sexually. Content of porn continues traumatic themes from childhood.

Participant 17

Initial speculative formulation

Contextual information:

Recruited through Reddit Pornisheating.

40 years old. White. Male. Heterosexual. Not religious. Employed full time. US. Single looking for a relationship. Lives on own. Has not had professional help and would not like to have it. Tried to cut back several times before, never tried to quit. Scoring 30 on the PPUS.

Uses porn every day, 1-2 hours.

Construction of PPU:

Believes is addicted to porn due to the time spent using porn. Effects his sleep as uses it at night time. Only gets 3-4 hours sleep. Believes that his porn use makes him more reserved – feels that real life cant compare to porn.

Predisposing:

Middle child, has two brothers. Described his childhood is OK, was loved, but home felt like a prison, parents were overprotected. Did not do a lot as a child. Was not popular at school. Has had no sexual relationships – had one (non-sexual) serious relationship, but no sex as girlfriend was very religious. Both his siblings still live at home. Describes self as quiet and reserved. Has seen a counsellor for anxiety in the past and was diagnosed with avoidant personality disorder and social anxiety. Has lived alone since leaving college 12 years ago.

Has a keen consistent hobby (bowling) and works in the industry. Knee injury meant could not take hobby professionally.

First used porn at age 12, started with magazines. The frequency of his use has been consistent throughout the years, access to the internet did not increase usage.

Precipitating:

No definitive trigger for identifying with PPU, believes it has always been an issue.

Perpetuating:

Habitual use. Has an 'all or nothing' concrete way of viewing the world.

Reconstruction of PPU:

Continues to use as an escape, to meet an unmet need. Porn use as a replacement for enjoyment/activities/relationships. Has been to porn conventions, is part of his identity, feels cannot stop using otherwise what would he be. Is lonely and finds comfort in porn – his basic needs are met through his work.

Participant 18

Initial speculative formulation

Contextual information:

Recruited through Reddit Pornfree.

25 years old. White. Male. Heterosexual. Employed full time. UK. In a casual relationship. Lives with friends. Not religious. on own. Has had professional help and found it somewhat useful. Tried to cut back and quite several times before. Scoring 37 on the PPUS.

Uses porn every couple of months. Used to use several times a day, using edging. Was at its worst after father dying a year ago, using eight times a day. Been trying to quit for last six months.

Construction of PPU:

Sees self as having a porn addiction and experiencing ED, but not as a porn addict (some identity confusion here – is ED porn or anxiety related?) Also reports anxiety, for which he is seeing a therapist; unsure if anxiety is related to porn or sex. Believes his early use of porn and quick escalation to hardcore maybe contributed to his problems and warped ideas of sex. Believes that porn is wrapped up in his identity. Also regrets the time he has wasted using porn.

Predisposing:

Has two older brothers, parents divorced when participant was seven years old. Reports that father was an alcoholic and was abusive to his mother. His mother later remarried. He went to an all boys school, onto to university, then worked in sales before current job in marketing. Describes self as active, sporty.

Age 18/19 took 'too much' MDMA/cannabis, got paranoid. Also took cocaine but cannabis was main drug.

Starting using porn at age 10, masturbating before puberty. Used to escape usual stress as teenager, about fitting in - relates to concerns when paranoid. Stated porn was like “getting a new toy”.

Had problem with foreskin. Painful first experience with sex - circumcised at age 19. Porn was physically easier than sex and found it useful to escape stress. Experienced ED when intimate and avoided relationships as a result, felt bad about this and used more porn as a result. ED was associated with drunken one night stands whilst at university.

Precipitating:

Porn use seen as causal to ED after going online and finding Reddit sites three years ago.

Perpetuating:

Is now working on quitting porn, but does have occasional binges which he sees as a relapse. Keeps a counter on his wall, thus a reminder of his 'addiction'.

Reconstruction of PPU:

Addiction narrative already within family system. Used porn to emotionally regulate, difficult feelings and anxiety as a result of drug use. Had a painful first experience of sex, followed by ED, which was likely as a result of alcohol consumption. Identified with the addiction narrative and wanted to quit porn. As porn was a coping mechanism for anxiety found this hard and saw use of porn as a relapse thus reinforcing the addiction narrative. Porn use also of source of stress which is in turn reduced by using more porn. However also takes personal responsibility rather than feeling powerless or that porn is to blame, as issues with anxiety resolving the addiction narrative is questioned, but then reinforced when relapses.

Participant 19

Initial speculative formulation

Contextual information:

Recruited through Reddit Pornfree.

23 years old. Jewish. Male. Heterosexual. Student. Single – looking for a relationship (has not had one before). Lives with parents. Israel. Religious. on own. Has not had professional help but would like to. Tried to cut back and quite several times before. Scoring 36 on the PPUS.

Uses porn at least once a month. Surfs internet viewing non-porn sexualised content, initially thinks this is fine, but always leads to porn use. When using, uses for a day or two, a few hours at a time.

Construction of PPU:

Identifies as a porn addict – has tried to stop but cannot. Sees porn use and masturbation as wrong due to religious beliefs. Feels that porn has sexualised his everyday thoughts. Regrets time wasted using porn and believes that his future wife will not want him if she knew that he had been watching porn. Is shamed by his porn use, cannot tell others.

Predisposing:

Describes self as an introvert. Found pornography at age 13 when got an iPad. Used regularly in high school, but virtually stopped at religious school and whilst doing army conscription.

Precipitating:

First using porn at age 12.

Perpetuating:

Goes on Reddit after 'relapse' – reinforces addiction narrative. Keeps an abstinence counter. Looks at non-porn sexualised images as bored, justifies this to self, but still feels guilty afterwards. Feels triggered by TV shows, avoids them.

Reconstruction of PPU:

Morality/guilt/shame and concepts of addiction merging together. So when sees anything that contravenes strict moral code it is a relapse and feels shame and guilt and has to try harder. Constant battle trying to deny sexuality. Addiction narrative of relapsing develops ideas of failure and lack of hope for future.

Participant 20

Initial speculative formulation

Contextual information:

Recruited through Reddit - Pornfree

22 years old. White. Not religious, lives in US. Male. Heterosexual. Student. In a serious relationship. Lives with parents due to COVID. Uses porn at least weekly, binge pattern. Not had professional help before but would like to. Tried to quit and cut back several times before. Scoring 55 on the PPUS.

Construction of PPU:

Identifies as a porn addict. Acknowledges porn served a function in the past – to escape painful feelings of depression. Also attributes sexual dysfunction and relationship difficulties to past porn use. Still uses porn occasionally and sees this as a relapse in his desire for sobriety. Equates porn addiction to substance addiction (alcohol).

Predisposing:

Initially described a normal happy childhood, but then recounted how he felt ignored by his parents due to his brother's disruptive behaviour. His younger brother described as a "problem child", using alcohol and weed resulting in rehab. Also stated that several of his family had problems with addiction, mostly alcohol. He changed school when young and felt lonely, he stopped communicating as much and became 'introverted'. Was sporty as a teenager, but did not have many friends, felt alone, insecure, lacking confidence and felt depressed. Had an accident which stopped him engaging in sports and he became more isolated during his recovery. At this time, he started to watch porn more regularly and used it to escape his feelings. He described the search or discovery of new porn as the main function, leading to searching for it in inappropriate places, for example on his phone when with family in the car. Described his porn use as 'bad' at age 15/16. During his initial sexual encounters struggled to keep an erection and struggled to climax, only later related this to his porn use, although at the time could have been related to his alcohol use or anxiety due to his cannabis smoking. At time of interview mood better but still has some weeks of feeling low.

Precipitating:

Realised porn use was a problem age 20, negatively impacting life (believes that porn use led to the break-up of a relationship, due to her insecurities about porn) found that couldn't stop watching it. Would feel terrible after watching it. Went online found Pornfree and YBOP and the addiction framework resonated with him. But this did not reduce porn use.

Perpetuating:

Attends SAA, aiming for sobriety. Can last longer now without porn but still relapses. Given up smart phone – avoiding triggers such as certain TV shows.

Reconstruction of PPU:

For participant 21 porn use was initially a coping strategy for depression, loneliness. Allowed him to feel something. Impacted on relationship and went online and strongly identified as an addict. Disagrees with porn, elements of a moral conflict, believes porn has planted ideas into brain that are not his. Although depression is better still caught in the trap of a perceived addiction. Function of porn use has gone (reducing depression), addiction framework does not allow for nay use. Therefore currently when uses porn in a functional way equates this to a relapse and this failure produced guilt, shame and disgust and a strengthen commitment to abstinence.

Participant 21

Initial speculative formulation

Contextual information:

Recruited through Reddit

30 years old. White. Not religious but raised Catholic. Lives in US. Male. Heterosexual. Working full time. In a casual relationship. Lives on own. Not had professional help before but would like to. Tried to quit and cut back several times before. Scoring 38 on the PPUS.

Uses porn several times a day. Six to ten hours a week.

Construction of PPU:

Identifies with the term addiction. Has physical problems with his right arm and reports ED. Realises that has used porn as way to escape emotional pain and anxiety.

Predisposing:

Brought up in a suburban middle-class neighbourhood. Reports that his anxiety arose from relationship with his father, being afraid of getting in trouble and a pressure to succeed. Some bullying at school, as went to a different school to his peers, felt different to others and hid away. Started porn at 11 with softcore, as had own laptop use increased when streaming became commonplace, but only hour or two a week. Masturbated prone and this led to problems with ED when older. Believes that ED was cured by confessing his porn use to a priest. Thought that his social anxiety would dissipate at college but it did not, avoided people and started to use porn to escape, leading to several hours a day as the accessibility of porn changed as lived alone. Also reports subtle habit disorders involving bodily movements.

Precipitating:

Realised was using a lot so went online and found NoFap, was drawn to the idea of 'superpowers'. Also learnt about edging and this increased the duration of porn sessions.

Perpetuating:

Avoidance of social situations, isolates self despite saying that his social anxiety has improved. Uses porn to destress – negative reinforcement. Uses internet a lot generally (reported having 20 tabs open during the interview) thus increasing access to porn.

Reconstruction of PPU:

In the past used porn as was lonely, had social anxiety. Currently uses when stressed. Still does avoid being around others but much less than before and no longer describes self as socially anxious. However, does seem to have an impoverished existence. Uses porn to cope with life. Sexual dysfunction has been seen as caused by porn but are likely to be associated with past prone masturbation and anxiety.

Appendix 16: Example of heat mapping

16	media	bored	powerless	enjoyment	regret	negative
17	media	negative	considered decision	enjoyment	negative self evaluation	tired
18	media	negative	considered decision	enjoyment	positive reflection	relaxed
19	media	negative	considered decision	enjoyment	regret	mixed
20	media	negative	considered decision	enjoyment	regret	relaxed
21	media	negative	considered decision	enjoyment	tasks	positive
22	media	negative	considered decision	functional	regret	negative
23	media	negative	considered decision	functional	regret	tired
24	media	negative	considered decision	mixed	ignored	tired
25	media	negative	considered decision	mixed	regret	relaxed
26	media	negative	considered decision	negative	tasks	tired
27	media	negative	escape	enjoyment	negative prediction	tired
28	media	negative	escape	enjoyment	negative self evaluation	negative
29	media	negative	escape	enjoyment	regret	negative
30	media	negative	escape	enjoyment	regret	negative
31	media	negative	escape	enjoyment	regret	tired
32	media	negative	escape	escaping	ignored	negative
33	media	negative	escape	escaping	regret	positive
34	media	negative	escape	escaping	regret	tired
35	media	negative	escape	mixed	commitment	tired
36	media	negative	escape	mixed	regret	negative
37	media	negative	escape	mixed	regret	relaxed
38	media	negative	escape	negative	negative prediction	tired
39	media	negative	escape	negative	negative self evaluation	negative
40	media	negative	justification	mixed	negative prediction	negative
41	media	negative	resisting	enjoyment	negative self evaluation	negative
42	media	negative	resisting	mixed	negative prediction	tired
43	media	negative	resisting	mixed	regret	negative
44	media	negative	resisting	mixed	tasks	negative
45	media	negative	resisting	negative	regret	negative
46	media	negative	unknown	negative	negative prediction	negative
47	media	normal	considered decision	enjoyment	positive reflection	positive
48	media	normal	considered decision	enjoyment	regret	relaxed
49	media	normal	considered decision	functional	commitment	negative
50	media	normal	considered decision	functional	mixed	relaxed
51	media	normal	powerless	functional	negative self evaluation	tired
52	media	positive	considered decision	enjoyment	commitment	tired
53	media	positive	considered decision	mixed	negative self evaluation	tired
54	media	positive	resisting	functional	tasks	positive
55	media	tired	considered decision	enjoyment	commitment	tired
56	media	tired	considered decision	enjoyment	regret	negative
57	media	tired	considered decision	functional	regret	tired
58	media	tired	considered decision	mixed	negative self evaluation	tired
59	media	tired	escape	mixed	negative prediction	mixed
60	media	tired	justification	escaping	negative self evaluation	tired
61	media	tired	justification	mixed	positive reflection	positive
62	media	unknown	considered decision	negative	unknown	positive
63	media	urge	considered decision	enjoyment	ignored	positive
64	media	urge	considered decision	enjoyment	ignored	relaxed
65	media	urge	considered decision	enjoyment	mixed	relaxed
66	media	urge	considered decision	enjoyment	negative self evaluation	positive

Appendix 17: Participant presence in each category

Participant number	Category 2	Category 3	Core category	Category 4	Total
1	4	2	1	10	19
2	6		3	4	13
3	2		4		8
4	3	1	2	2	8
5	3	1	3	2	9
6	3	1	4	4	12
7	2		3	1	6
8			2	1	3
9	2	1		6	9
10	6	2	4	3	15
11	3	1	1	5	10
12	1			1	2
13	2	1	5	7	15
14	3	1		1	5
15	5	1	2	1	9
16	1		3	2	6
17	3		3	2	8
18	3	1		2	6
19	3			5	8
20	4	3	1	4	12
21	2				2