

Change through Stillness:

**Qualitative explorations of heterosexual men as they utilise meditation as
an intervention for self-perceived problematic pornography use**

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

.....

LUKE SNIEWSKI

25 September, 2019

Qualitative Statement of Supervisor

Luke has been primarily responsible for all aspects of the present research and all of the published articles. He has been responsible for at least 80% of the work on all his submitted and published pieces. He been responsible for reviewing literature, developing hypotheses, designing the studies, obtaining ethics approval, organising materials, collecting data, data analysis, writing up the results, and writing the manuscripts for publication in a journal. My role – and that of my two fellow supervisors, has been limited to advising and consulting with him on all these aspects of his PhD research in accordance of what is normally expected of a PhD supervisor.

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Dr. Panteá Farvid

29 September, 2019

Co-Authored Works

The contribution of co-authors for publications arising from these studies and from whom approval has been granted for inclusion in this doctoral thesis, is as follows:

Works in Publications

Sniewski, L. (In Press). Breaking isolation. Men, too, need connection & support.
Psychology Aotearoa.

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Meditation as an intervention for men with self-perceived problematic pornography
Use: A Series of Single Case Studies.

Sniewski, L. (85%) & Farvid, P. (2019). Abstinence or acceptance? A case series
examining the experiences of men as they intervene with problematic pornography
use. *Sexual Addiction & Compulsivity*. DOI: 10.1080/10720162.2019.1645058

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Sniewski, L. (2018). The problem with problematic pornography use. *Psychology
Aotearoa*. 10(2), 116-118.

Sniewski, L. (2018). Mindfulness meditation as a catalyst for behavioural change.
Psychology Aotearoa. 10(1), 43-45.

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adult heterosexual men with self-perceived problematic pornography use: A review.
Addictive Behaviors. 77, 217-224.

Conference Presentations

“Hidden in Shame: Looking Beneath the Surface of Problematic Pornography Use”,
Goodfellows Symposium, Auckland, New Zealand (March 2020).

“Change through Stillness: Examining the experiences of heterosexual men as they utilise meditation as an intervention for self-perceived problematic pornography use”, KiwiCAM, Auckland, New Zealand (November 2019).

“Change Through Stillness: Meditation as an Intervention for Men with Self-Perceived Problematic Pornography Use (SPPPU)”, International Conference on Mindfulness Asia Pacific, Auckland, New Zealand (February 2019).

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Candidate Contributions to Co-Authored Papers

| | |
|--|---|
| <p>Chapter 2</p> <p>Sniewski, L., Farvid, P., & Carter, P. (2018). The assessment and treatment of adult heterosexual men with self-perceived problematic pornography use: A review. <i>Addictive Behaviors</i>. 77, 217-224.</p> | <p>Sniewski 80%</p> <p>Farvid 15%</p> <p>Carter 5%</p> |
| <p>Chapter 6</p> <p>Sniewski, L. & Farvid, P. (2019). Hidden in shame: Heterosexual men's experiences of self-perceived problematic pornography use. <i>Psychology of Men and Masculinity</i>. Advance online publication http://dx.doi.org/10.1037/men0000232</p> | <p>Sniewski 80%</p> <p>Farvid 20%</p> |
| <p>Chapter 7</p> <p>Sniewski, L. & Farvid, P. (2019). Abstinence or acceptance? A case series examining the experiences of men as they intervene with problematic pornography use. <i>Sexual Addiction & Compulsivity</i>. DOI: 10.1080/10720162.2019.1645058</p> | <p>Sniewski 85%</p> <p>Farvid 15%</p> |
| <p>Chapter 8</p> <p>Sniewski, L., Krägeloh, C., Farvid, P., & Carter, P. (Submitted; In Review). Meditation as an intervention for men with self-perceived problematic pornography Use: A Series of Single Case Studies.</p> | <p>Sniewski 80%</p> <p>Krägeloh 10%</p> <p>Farvid 5%</p> <p>Carter 5%</p> |

Signatures of Co-Authors

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Ethical Approval

The ethical approval for this thesis was granted by the AUT University Ethics Committee (AUTE), which was covered by Ethics Application Number 18/81 “Facilitating change through stillness: Examining the effectiveness and experiences of mindfulness meditation as an intervention for adult heterosexual men with self-perceived problematic pornography use (SPPPU)” (see Appendix 1).

Abstract

This project fills significant research gaps in current literature related to adult heterosexual men who identify with a problematic relationship with pornography, including qualitative research examining the experiences and contexts that contributed to SPPPU, its origins, explorations of past attempts at quitting, and experiences of men as they intervene with the problematic pornography use with a meditation intervention designed specifically for this study. While some research would suggest that sexuality and pornography use is very similar between heterosexual and homosexual men, the researcher identifies as a heterosexual man, meaning that potential ethical concerns could have arose when doing research with homosexual men. Additionally, selecting a niched and specific study population follows the established norms of present academic and scientific literature. The aim of this study was to explore the effectiveness of meditation as an intervention and mediator of pornography viewing for adult heterosexual men who identify with Self-Perceived Problematic Pornography Use (SPPPU) utilizing Single Case Experimental Design (SCED). Additionally, the study design explored the previously undocumented qualitative accounts of men's experiences with SPPPU, its origins, contexts for use, and experiences of these men as they intervene with their problematic pornography use. Using a multiple baseline design in accordance with the single-case reporting guidelines in behavioural interventions (SCRIBE), fifteen men (n=3 for pilot study; n=12 for intervention study) with SPPPU participated in a randomized multiple-baseline across-subjects design with one intervention condition: twice-daily guided meditations. Participants logged their daily pornography viewing (both frequency and total duration) throughout the study, and filled out the Pornography Craving Questionnaire (PCQ) and Problematic Pornography Consumption Scale (PPCS) at intake and post-study. Qualitative data provided by pre- and post-study interviews provided rich data, which served the primary function of contextualising data and adding explanatory power in support of other quantitative results. Statistical analyses alone demonstrated modest results in relation to meditation's potential efficacy as an intervention for SPPPU. Thematic analyses helped to reveal both important themes related to how men talk about

SPPPU, as well as supportive data for the perceived benefits and mechanisms of action associated with meditation as it relates to SPPPU. Lastly, the experiences of men as they engage with SPPPU revealed key considerations for researchers/clinicians working with this study population. Potential directions for future research and implications for researchers/clinicians are also discussed.

Pre-Script

When first embarking on this journey towards a PhD, I wanted to help people who, like me, were battling with self-perceived problematic behaviours related to compulsivity. Before taking up this PhD, I had come to realise that my relationship with pornography was problematic. While I never considered my pornography use to be ‘bad’, per se, I had a sneaking suspicion it was an unproductive form of coping that provided little to no relief from the feelings of stress, depression, and anxiety that triggered my compulsive use. I was never concerned with the quantity of pornography I consumed, what piqued my interest was really the result of reflecting on the contexts and situations within my life that would most often trigger viewing. My curiosity about my pornography use led me down the path towards the concepts and practices of mindfulness and meditation. It was through mindfulness and meditation that I started addressing my compulsive behaviour in a more productive and permanent way. It was meditation that revealed my emotion-driven relationship with my problematic behaviours, specifically that my inability to manage and cope with negative emotional states, cravings and temptations triggered my compulsive avoidance strategies. I was disconnected from my own body, and any perceived discomfort triggered behavioural reactions that temporarily numbed, sedated, or relieved the underlying discomfort. Avoidance was a Band-Aid solution.

Whether it was work, social, pornography, or simply pulling my phone out of my pocket to check for new updates or notifications, mindfulness was one of the catalysts that helped me become aware of an underlying general state of seeking, craving, and hunting. The constant search for something outside of myself – something other than the present moment – was an ever-present state that fuelled my avoidance behaviours. This agitated state of living and being had gone largely unnoticed and unattended prior to this realisation. Unsurprisingly, regardless of the object of pursuit, the final destination of my unceasing seeking mental process was exacerbated feelings of depression, anxiety, and sluggishness, often stronger in intensity than before my outward search for relief began.

As I began reflecting upon my life and looking at each aspect of my life under a microscope, I even realized that my intellectual, professional, and academic pursuits

represented fundamentally the same hunt. I sought relief from uncomfortable and unknown internal states. I had a serious problem simply being present in the moment and avoided it at all costs. One of the books/programs that began my experiential journey into present moment was Michael Brown's *The Presence Process*, an actionable 10-week programme meant to assist the reader in becoming more present and cultivating the capacity to consciously respond to situations. The key lessons from the book are that all uncomfortable experiences are opportunities for growth, we are responsible for the quality of our life experience, and becoming more present may well be the greatest human service we can do for ourselves. The Presence Process taught me how to use my own moment-to-moment experience as a guide for navigating through the countless complex situations life brings. Suddenly, the idea that I 'needed' to read more, learn more, or do more was replaced with the understanding and knowing that simply 'being' was enough. Not to be misinterpreted as a passive way of living, but rather mindfully attending to my life as it unfolds in front of me from moment to moment. Each moment packed more wisdom than any book I had read. Direct experience became my teacher.

Not only did I finally feel less constrained and constricted by my compulsive behaviours, I noticed how my life slowly transformed through the process. I felt more at peace within myself, within my inter-personal relationships, and in relation to the world around me. After a busy day of coaching and training clients, I used to feel drained and lethargic. I nearly gave up working with people because I felt so empty after each session. Now I can stay tuned into the moment, attentive to my internal experience (thoughts, emotions, sensations) while being with my clients. At the end of the day, I feel the same as when I started: attentive, alert, and centred. I have no problem cooking for my family and spending quality time building Lego with my son immediately after a long day spent with clients. I notice that my mind and body now remain more still.

Learning to live my life in a more mindful way completed changed my life. My experience has shown me that all the learning and knowledge acquisition is not sufficient for authentic behavioural change. To shift my behaviour and ease my own self-perpetuating suffering, complaining, victimisation, and procrastination, I had to do the 'dirty work' of breathwork and meditation myself. I continue to do that work daily. My daily meditation practice has made it easier to live comfortably and peacefully in the

present moment. As a researcher, I am excited – and curious – to see how other men respond to meditation, and whether they experience the same benefits and insights that I did. I am also curious to observe how participants respond differently, their unique experiences, and what they learn about themselves during the study.

Chapter 1 – Introduction

1.1 Background

The rapid rise in the availability of free and unregulated pornography has given the world instant access to a vast and diverse supply of pornographic content. PornHub – the most popular free pornography website – has over 58 million visits per day, with New Zealanders representing the fifth most regular visitors worldwide on a per capita basis (“Kiwi Porn Habits Revealed,” 2016). People first access pornography for a variety of reasons, included seeking sexual stimulation, curiosity, education, or accidental viewing. Early curiosity and experimentation, however, can escalate into problematic and/or compulsive patterns of use (Hilton, 2013; Meerkerk et al., 2006). While it is possible for both genders to experience a problematic relationship with pornography, the large majority of online pornography consumers – and those who identify as addicted to pornography – are heterosexual men (Weinstein et al., 2015).

Pornography use has increasingly emerged as an area of focus in scientific and academic literature. Problematic pornography consumption – often labelled as ‘porn addiction’ or compulsive pornography use – refers to any consumption of pornography that causes negative interpersonal, vocational, or personal consequences for the user (Grubbs et al, 2015). Self Perceived Problematic Pornography Use (SPPPU) refers to the level that an individual self-identifies as addicted to pornography – or that their use is compulsive or out of their control – and feels unable to regulate use. This definition relies on the user’s experiences and subjective self-perception when determining the degree to which the pursuit, and subsequent consumption, of pornography intrudes on everyday life (Grubbs et al., 2015). Men with SPPPU often feel their pornography use is out of control and have experienced multiple failed attempts at either cutting back or quitting (Kraus, Martino, & Potenza, 2016). Although rare, when men with SPPPU do seek help for their use, they perceive treatment options as inadequate or ineffective (Ross, Månsson, & Daneback, 2012). Additionally, men with SPPPU face a difficult situation because therapists lack the training necessary to manage pornography use (Ayres & Haddock, 2009). This is despite clients disclose their problematic pornography use in sessions

(Ayres & Haddock, 2009), as well as the clinical belief that problematic pornography consumption is worthy of treatment and intervention (Pyle & Bridges, 2012). Lastly, compounding the issue for men who identify with problematic pornography use is that pornography is generally stigmatized by mainstream culture and society, making it even more challenging for men to reach out for help due to the fear they feel that they will be judged for their pornography viewing (Trouble, 2016).

Men can experience their pornography use as problematic for a variety of reasons. Frequency of consumption, in and of itself, is not vital to SPPPU, as the core issues that tend to predict the seeking of treatment are the negative symptoms that men experience (Gola, Lewczuk, & Skorko, 2016). Common reasons include personal or ethical reasons, social and relational reasons, the frequency of use, amount of time spend engaging with pornographic material, consuming pornography in inappropriate contexts, consuming such material at the expense of other responsibilities, or the specific pornographic content is deemed as problematic (Twohig & Crosby, 2010). Research also indicates that central to SPPPU is the concept of experiential avoidance (Wetterneck et al, 2012). Men who identify with SPPPU watch pornography, it is often an effort to cope with unwanted thoughts or negative feelings, even though viewing subsequently leads to additional consequences and/harm (Wetterneck et al, 2012). Indeed, Levin, Lillis, and Hayes (2012) found that the frequency of pornography viewing was significantly correlated to psychosocial problems – such as depression, anxiety, stress, and social function – such that more viewing was related to greater problems.

Mindfulness – as a general concept – can be considered the opposite of experiential avoidance. Mindfulness encourages awareness and acceptance of thoughts, feelings and bodily sensations as they arise, and recognition of their fluid and impermanent nature. Mindfulness-based interventions have been utilized for across broad realms of health sectors (i.e., psychology, mental disorders, trauma, PTSD, addictions), with significant evidence supporting its efficacy as a facilitator for behavioural change (Khouri et al., 2013). Mindfulness-based therapies – namely Acceptance and Commitment Therapy (ACT) – have demonstrated encouraging results for men with SPPPU (Sniewski, Farvid, & Carter, 2017). Indeed, Reid and colleagues have found that mindfulness may be a critical component of successful therapy among individuals

seeking help for hypersexual behaviour (Reid et al., 2014), indicating that the same strategies may be useful and effective for SPPPU. With regards to compulsive behaviours like problematic pornography use, mindfulness is an important concept as a result of the strong link between body sensation (emotional) regulation and addictive/compulsive consumption (Bowen et al., 2007). Indeed, emotional instability and impulse control difficulties have been shown to be positively correlated with compulsive behaviours and consumptions (Kuvaas et al., 2014; Dvorak et al., 2014). Lastly, common pre-existing vulnerabilities that have been connected to problematic pornography use include depression or anxiety disorders (Wood, 2011), deficient self-regulation (Sirianni & Vishwanath, 2016), or high levels of neuroticism (Egan & Parmar, 2013). Meditation has been shown to be a mediator of all of these (Jain et al., 2014; Hofmann et al., 2010; Oken et al., 2016; Tang, Posner, & Rothbart, 2013).

Meditation is a practice that represents one common and prominent way of cultivating mindfulness. Meditation is commonly characterised by an "observe and accept" approach, which refers to being fully present and attentive to current experience but not reacting to, judging, analysing, or being pre-occupied by it (Zgierska et al., 2009). As opposed to everyday, habitual mental functioning (i.e., being on autopilot), meditation can set the conditions for an individual to facilitate a productive, skilful, or mindful response to any given situation (Zgierska et al., 2009). The mental faculty of conscious response is especially useful with individuals presenting with compulsions or problematic behaviours because unwanted thoughts, negative emotions, or uncomfortable body sensations are often the triggers that initiate reactive and/or problematic behaviour (Zgierska et al., 2009).

The core components of a meditation practice are silence and stillness. Within this meditative environment, one can foster self-observation and train attentional skills that assist in cultivating improved self-regulation and self-management in myriad ways (Guendelman, Medeiros, & Rampes, 2017). Developing and training the mental skill of focus and concentration has been shown to improve cognitive functioning and memory (Mrazek et al., 2013), making it easier to sustain voluntary attention (MacLean et al., 2010). Meditation trains the individual to draw attention away from ruminating about the past and worrying about the future during current decisions (Hafenbrack, Kinias, &

Barsade, 2014). The cultivation of somatic awareness sensitizes practitioners to better detect and regulate when the mind wanders from its somatic focus, may lead to enhanced cognitive regulation and metacognition, which is the awareness and understanding of one's own thought processes (Kerr et al., 2013). Enhancement of body sensation awareness skills has been shown to be important in the treatment of addictive behaviours (Berking et al., 2011). Lastly, meditation has been associated with reduction in stress and mood disturbances (Birnie, Speca, & Carlson, 2010) and increased self-compassion (Baer, Lykins, & Peters, 2012).

Meditation may thus serve as a practical training ground, – so called ‘working in the trenches’ – where practitioners can practice, and essentially rehearse, observing their cravings, urges, and unwanted thoughts without reacting to them (Marlatt & Chawla, 2007; Bowen et al., 2006). The enhanced ability to objectively observe one's own internal experience sets the conditions necessary for the practitioner to learn productive ways of responding to their internal experience so that emotional instability and impulse control difficulties stop continuing the cycle of reactive consumption (Kuvaas et al., 2014; Dvorak et al., 2014). Research in meditation demonstrates its effectiveness in managing various addictions and compulsive behaviours (Marcus & Zgierska, 2009), which suggests it may also be used as a vehicle for men with SPPPU to learn how to cultivate awareness of the uncomfortable triggers which likely drive their pornography use. Instead of reacting to external and internal stimuli in an unconscious way (i.e., watching pornography), the practitioner – through meditative practice – cultivates the space and time necessary to make a different choice when faced with the uncomfortable triggers that would have otherwise resulted in habitual use.

1.2 Rationale and Research Aims

The purpose of this doctorate study is to examine the experiences of men with SPPPU as they engage in a meditation intervention programme. Additionally, outcomes related to the efficacy of meditation as a potential intervention for men with SPPPU will be explored. With context to the rationale and on critical review of the literature (Chapter 2), four key areas of investigation account for the design of this study:

- Very little research has used qualitative methods to talk to men about their problematic pornography use. Presently, such in-depth and personal accounts represent a significant gap in the research.
- There is limited academic and research-based knowledge as to why men do not engage with professionals and/or clinicians to address SPPPU, and when they do, why they do not find treatment options helpful or effective.
- Little research has examined men’s experiences and accounts of SPPPU as they go through an intervention in their own words, including the variables and contexts of what would be considered a successful intervention.
- At the time of submission, this research will be the first study to assess and examine its efficacy and potential as a mediator for SPPPU.

1.3 Significance of the Study

The present research will extend work in the fields of mindfulness, meditation, experiential avoidance, and problematic pornography use for adult heterosexual men. While mindfulness-based therapies have been used in SPPPU research, this will be the first study to examine meditation, specifically, and will add valuable knowledge to the fields of meditation, mindfulness, pornography, and problematic behaviours. With mindfulness – and specifically meditation – practices becoming increasingly popular around the world, this study will examine the utility of meditation as a complementary tool for clinicians and practitioners to provide their clients with SPPPU in conjunction with therapeutic approaches.

The in-depth and rich data provided by men provide clinicians and researchers a better understanding of the various factors and contexts that contribute to SPPPU, its origins, the reasons men volunteered to talk about such issues, and an exploration of past attempts at quitting pornography. Additionally, the qualitative data will offer valuable and currently undocumented insights into how men experience SPPPU, as well as the challenges, difficulties, and experiences of going through such an intervention.

1.4 Thesis Structure and Organisation

The design of this thesis consists of a comprehensive literature review (Chapter 2), research design and methodology (Chapter 3), pilot study summary and results (Chapter

4), a researcher's reflection (Chapter 5), and three original experimental investigations (Chapter 6-8). When applicable, chapters are presented in the format of the journals for which they were written, submitted, and/or published; with the exception that each of the studies is preceded by an explanatory prelude in lieu of a summary abstract. For consistency, all referencing is done in APA format. Brief chapter overviews follow:

- Chapter 2 – Provides extensive background on mindfulness, meditation, and pornography. This chapter includes two published articles. The first discusses meditation as a catalyst for behavioural change, thus providing the foundation for utilising meditation as an intervention for men with SPPPU. The second article is a literature review, which gathered all recent studies focused on the assessment and treatment of men with SPPPU.
- Chapter 3 – Provides the overarching study design, methodology, and research methods utilised during the pilot and intervention phases of the study. This chapter also discusses the conceptualisation of the guided meditations utilised in the study, as well as the rationale and justification for creating the guided meditations rather than using other available meditations.
- Chapter 4 – Important highlights and summary of pilot study, as well as changes made to the intervention study as a result of pilot study findings.
- Chapter 5 – A published piece discussing the researcher's reflection on problematic pornography research, specifically focused on the importance of contextualising data and triangulating qualitative measures with quantitative data in order to add explanatory power and robustness to research findings.
- Chapter 6 – This is a published thematic analysis piece exploring how men talk about their problematic pornography use, revealing important themes about the nature of problematic pornography use, common triggers for viewing pornography, and the various ways that pornography influences the men's sexual identity, behaviours, and function.
- Chapter 7 – A mixed methods piece providing insights into men's experiences as they engage in an intervention for SPPPU. Important findings include the identification of important characteristics that create a supportive overarching

intervention structure, regardless of the specific intervention utilised. Factors and contexts that dictate intervention success are also discussed.

- Chapter 8 – Utilising single case experimental design, this study directly examines a guided meditation intervention for men with SPPPU. Specifically, this research examines meditation and its impact on daily pornography viewing habits (frequency and duration), as well as questionnaires related to pornography craving and problematic pornography use.
- Chapter 9 – This chapter provides a general summary of the findings, as well as an additional discussion that integrates and connects the previous chapters.
- Chapter 10 – The final chapter of this thesis (Chapter 10) consists of a general conclusion, key limitations of the research, future research recommendations, as well as conclusions and practical recommendations for clinicians and researchers working with men with SPPPU.

The final portion of the thesis includes a comprehensive reference and appendices that present relevant peripheral materials, including the recruiting advertisement used for promoting the study, ethical approval letter, information sheet, consent form, screening questionnaire, sample interview questions, study questionnaires, a sample of the daily logging spreadsheet, and abstracts (as submitted for publication).

Appendices have been collated to assist with review or future recreation of research arising from this study. Finally, due to the fact that several publications resulted from the data that emerged from this research, there is some repetition of definitions, concepts, and topics because of the similar background information that was required for each publication and journal.

Chapter 2 – Literature Review

2.1 Prelude

Self-Perceived Problematic Porn Use (SPPPU) refers to an individual who self-identifies as addicted to porn because they feel they are unable to regulate their porn consumption, and that use interferes with everyday life. This review article begins with a general overview of pornography and pornography use in order to discern between non-intrusive and problematic pornography consumption patterns. In order to add depth and breadth to the subject matter, some content has been added to the original submission/publication. This section has been italicised so that it is obvious for the reader. Thereafter, an overview and examination of therapeutic interventions specifically for SPPPU are identified and analysed. Finally, the review concludes with important findings, summary conclusions, and recommendations for future research. The second part of this chapter includes an important overview and discusses meditation as a potential catalyst for behavioural change. While the recent popularity of meditation is associated with benefits such as stress reduction, better sleep, and improved capacities to maintain focus, meditation may represent much more than just the practices' associated health benefit. Meditation may be a powerful tool that can complement the work of therapists or clinicians as a catalyst for behavioural change.

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2.2 The Assessment and Treatment of Adult Heterosexual Men with Self-Perceived Problematic Pornography Use: A Review

Burgeoning neurobiological research has called into question the concept of addiction, which has traditionally been associated with the problematic consumption of alcohol and other substances (Love et al, 2015). Evidence suggests, however, that various behaviours can also be classified as an addiction because of the common neurobiological mechanisms and motivational processes at play with both substances and addictive behaviours (Grant et al, 2006; Koob & Le Moal, 2008; Robinson & Berridge, 2008). This radical shift in the understanding of addiction has been accompanied by significant implications for clinical and therapeutic assessment and treatment (Love et al, 2015). This is evidenced by the American Psychiatric Association (APA) acknowledging one behavioural addiction, Gambling Disorder, with its own official classification and another, Internet Gaming Disorder, as a ‘Condition for Further Study’ within the DSM-5 (APA, 2013). The APA has not, however, provided researchers and clinicians with an overarching framework for evaluating other emerging and potentially addictive behaviours. One such behaviour is compulsive pornography use, which may have the highest addictive potential of all Internet-related behaviours (Meerkerk et al., 2006, Griffiths, 2012).

Problematic pornography consumption, often referred to as ‘porn addiction’ or ‘internet porn addiction’, can be conceptualized as any use of pornography that leads to and/or produces significant negative interpersonal, vocational, or personal consequences for the user (Grubbs et al, 2015). Increasing evidence suggests that excessive and compulsive pornography consumption has similar effects to substance-dependencies, including interference with working memory performance (Lai, Schulte, & Brand, 2013), neuroplastic changes that reinforce use (Hilton, 2013; Love et al, 2015), and the significant negative association between consumption and grey matter volume in the brain (Kühn & Gallinat, 2014). Indeed, brain scan studies have shown that the brains of self-perceived pornography addicts are comparable to individuals with substance dependence in terms of brain activity as monitored by functional magnetic imaging (fMRI) data (Voon et al, 2014; Gola et al, 2017).

Sexual disorders, in general, have been excluded from formal classification in the

DSM-5. In 2010, Kafka's proposal for hypersexual disorder (Kafka, 2010), even though a subsequent field trial supported the reliability and validity of criteria for hypersexual disorder (Reid et al, 2012). Pornography addiction, similarly, has been excluded from formal classification because of the lack of published scientific literature in the field (Ley et al, 2014), and because compulsive pornography use is often considered a subset of other sexual disorders, i.e., Hypersexual Disorder (Kraus, Voon, & Potenza, 2016). Much of the current scientific research pertaining to problematic pornography viewing has been conceptualized as sexual addiction (Orzack & Ross, 2000), sexual impulsivity (Mick & Hollander, 2006), sexual compulsivity (Cooper et al, 1999), or hypersexual behaviour (Rinehart & McCabe, 1998), suggesting there may be similarities amongst the criteria of these other, related classifications. Kraus and colleagues have suggested the adoption of the term Compulsive Sexual Behaviour (CSB) to reflect a broader category of problematic sexual behaviours (including pornography use) that incorporates all of the above terms (Kraus, Voon, & Potenza, 2016). Despite similarities, however, literature suggests that problematic pornography use may be distinct and different from other sexual disorders (Duffy, Dawson, & das Nair, 2016). For example, problematic pornography use can differ from general sexual addiction because sexual activity involving human contact may be more anxiety-provoking than the ease of anonymously, privately, and inexpensively consuming pornography online (Short et al, 2016).

Even though problematic pornography use can impact sexual behaviours, create sexual difficulties, and negatively alter attitudes related to sexuality (Cotiga & Dumitrache, 2015), therapists and clinicians are underprepared when it comes to managing problematic pornography use. Individuals who perceive themselves to have problematic use of pornography face a difficult situation in which therapists lack the sufficient training necessary to manage pornography use (Ayres & Haddock, 2009), even though clinicians believe such consumption patterns are worthy of treatment and intervention (Pyle & Bridges, 2012) and clients continue to regularly disclose habitual pornography use in sessions (Ayres & Haddock, 2009). Without an appropriate understanding of the assessment and treatment of problematic pornography use, the possibility for unethical treatment increases since therapist treatment approaches are more likely to be influenced by personal biases and beliefs (Ayres & Haddock, 2009).

Self-perceived problematic pornography use (SPPPU), or self-perceived pornography addiction, has increasingly emerged as a topic in scientific research, despite lacking formal recognition as a disorder and continued disagreements about its definition, or even existence (Duffy, Dawson, & das Nair, 2016). An individual can experience pornography use as problematic for a myriad of reasons. These include personal or moral, social and relationship, time spent viewing, or viewing in inappropriate contexts such as at work (Twohig & Crosby, 2010). Consequently, even though the consumption habits and behaviours may not be inherently problematic, the costs for individuals for whom it is problematic may be significant (Twohig & Crosby, 2010).

SPPPU refers to the extent to which an individual self-identifies as addicted to pornography and feels they are unable to regulate their pornography use. This definition relies on the user's subjective self-perception and experiences when determining the extent to which the pursuit and subsequent consumption of pornography interferes with everyday life (Grubbs et al, 2015). Many individuals perceiving themselves to suffer from problematic pornography use feel they do not have viable treatment options; otherwise they would seek help (Ross, Månsson, & Daneback, 2012). This is typically because they feel their pornography use is out of control and have experienced failed attempts at either cutting back or quitting (Kraus, Martino, & Potenza, 2016). Of the small percentage of individuals who seek treatment, most indicated treatment was only marginally helpful (Kraus, Martino, & Potenza, 2016). The purpose of this literature review is to gather, synthesize, and analyse the current literature addressing the treatment of SPPPU in adult heterosexual men, with the principle aim of contributing towards recommendations for clinicians, therapists, and future research in the field.

Definitions

For purposes of this review, the term 'porn', 'pornography', or 'internet porn', is defined as professionally produced or consumer-generated pictures or videos intended to sexually arouse the viewer (Peter & Valkenburg, 2011). Specifically, pornography usually portrays a variety of sexual activities, including but not limited to, masturbation, oral sex, vaginal and anal intercourse, most often with a focus on the genitals (Morgan, 2011; Peter & Valkenburg, 2016). Since its arrival, the Internet has had a huge impact on the way pornography is consumed, with most current pornographic material accessed via the

Internet (Peter & Valkenburg, 2016). The Internet is credited for having provided pornography the necessary platform for unprecedented dissemination (Cooper, 1998). Some evidence suggests that the Internet has served as a catalyst for changing the fundamental relationship between the individual and pornographic material, allowing access to a seemingly endless supply of free and diverse content (Wood, 2011). The qualities specific to Internet pornography credited for this global dissemination is known as the Triple-A Engine: accessibility, affordability, and anonymity (Cooper, 1998). All indications suggest that the ever-present access to cheap and diverse pornographic material is a reality that will not change.

Early Exposure and Antecedents

Clinicians are better able to address pornography consumption when they understand how and why modern adult heterosexual men were first introduced to online pornography content. Porn is widely consumed by heterosexual boys/men and this is typically considered a normative part of 'manhood' (Antevska & Gavey, 2015). The recent ubiquitous nature of free and easy-to-access online pornography has made exposure to some form of pornography all but inevitable for boys (Sabina, Wolak, & Kinkelhor, 2008). Research shows that men are significantly more likely to watch pornography than women (Bloom & Hagedorn, 2015). Researchers estimate that upwards of 90% of boys will be exposed to porn during adolescence (Sabina, Wolak, Kinkelhor, 2008). Initial exposure to pornography was initiated by a variety of reasons. Some boys were exposed to pornography inadvertently (e.g., pop-up online advertisements or spam emails), while others sought pornography in search of sexual stimulation (Jae Woong & Paul, 2014; Sabina, Wolak, Kinkelhor, 2008), and sexual education and information (Ševčíková & Daneback, 2014).

Sexual script theory (Gangon & Simon, 1973) provides an overarching framework that helps explain how pornography can impact sexual behaviour (Braithwaite et al, 2015). Sexual scripts theory posits that the subjective understandings of a person's sexuality substantively determine their choice of sexual behaviours and the subsequent qualitative experiencing of those sexual acts (Gangon & Simon, 1973). The central tenet of the theory is that concepts and perceptions of sexuality are influenced by a variety of social variables that collectively contribute to perceptions of what sexuality

is, what it means, and what the consequences of various behaviours are likely to be (Braithwaite et al, 2015). Research has shown that mainstream pornography tends to portray sex and sexual acts that would be defined by viewers as violent and aggressive (Malamuth et al., 2012), with some findings estimating that 88% of pornographic content portrayed signs of physical aggression toward women (Bloom & Hagedorn, 2015). The aggressive nature of pornographic content consumed may also be related to the content made and available post-Internet. Internet pornography is relatively effortless to access, which could mean that habituation and needing greater stimulation are relevant factors for consumption. The aggressive nature of most mainstream online pornography, thus, could be the result of requiring incrementally more extreme content in order to feel sexual-stimulation and satisfaction. The fact that the vast majority of pornography consumed is online means that pornography is not well suited to be an adequate or appropriate tool for safe sex education since pornography is a significant source of information for adolescents. Mainstream pornographic content can be used to acquire and/or reinforce aggressive sexual scripts made prolific by mainstream pornographic content (Weinberg et al, 2010).

Antecedent and consumption patterns between adolescent and adult men have been shown to be largely the same, with one significant difference being that adults consume pornographic content more often than adolescents (Peter & Valkenburg, 2010). Aside from frequency of consumption, however, sensation-seeking and life satisfaction characteristics correlated with pornography consumption (Peter & Valkenburg, 2010). Finally, research suggests one key reason for consuming pornography is to view 'special interest' pornography, or fetish pornography, that is only available online (Ross, Mansson, & Daneback, 2012).

Additionally, men who consume pornography tend to be more pubertally advanced – pubertal maturation is advanced by physiological factors such as sex hormone production, though it is unclear how to best measure puberty and how well existing measures capture hormone levels (Shirtcliff, Dahl, & Pollak, 2009) – more likely to score high on sensation-seeking, more likely to be interested in sex, and have more permissive and recreational sexual attitudes (Peter & Valkenburg, 2016). Pornography consumers also tend to have more sexual intercourse and greater experience with casual

sex (Peter & Valkenburg, 2016). While this could simply mean that pornography consumers had sex, or more sex as a result of their viewing, it could also mean such individuals are seeking intimacy and connection. Popovic found that pornography consumption was not just an escape from intimacy but also an expression of the search for it. When intimacy and connection needs of the individual were not being met, pornography thus served as a tool to experience this missing intimacy (Popovic, 2010), even though there seems to be no intimacy at all in pornography use. This could suggest that those who consume pornography could have greater cravings and needs for social and sexual connection than men that do not consume pornography (Popovic, 2010). Lastly, men who consumed pornography had weak or troubled family relations and expressed lower overall levels of life satisfaction (Peter & Valkenburg, 2016), were experiencing high levels of psychological distress (Levin et al, 2012), exposure to harsh parenting styles (Simons et al., 2012), less independent of their environment (Weber, Quiring, & Daschmann, 2012), tendencies toward antisocial personality dispositions (Paul, 2009), and lower self-esteem (Holt, Bossler, & May, 2012); qualities which could be relevant when determining an individual's susceptibility to problematic pornography consumption (Kor et al, 2014).

Correlations, Associations, and Effects

One of the most debated issues regarding pornography is the relationship between consumption and violence or aggression towards women. Thus far, research has been inconclusive, largely due to the fact that determining the direction of the relationship between the two variables is difficult. It is not yet known whether pornography is the cause or symptom of violence and aggression (Watson & Smith, 2012). Pornography could represent another factor within a complex mix of influences for men already prone to violent and aggressive behaviours. Irrefutable evidence is also challenging since the consequences of pornography consumption are difficult to study since assigning individuals to viewing and non-viewing conditions raises both ethical and validity issues (Watson & Smith, 2012).

Simons and colleagues found that men who reported regular consumption of pornographic content also reported sexually aggressive, violent, and/or coercive acts towards women. This lead the researchers to interpret the findings as men being at high

risk for sexual aggression towards women as a result of pornography implanting an image of women as sex objects (Simons et al, 2012). Similar results were suggested by Hald and colleagues (2010), who found a positive relationship when pornography consumption and attitudes supporting violence against women, regardless of whether the pornographic content was deemed violent or nonviolent. Additional research revealed that the quantity of pornography content, as opposed to type, consumed related more strongly to adverse sexually aggressive and coercive outcomes (Gonsalves et al, 2015). Lastly, Wright and colleagues found that adult men who had engaged in aggressive or coercive sexually behaviours were those who frequently consumed pornography and regularly consumed alcohol before or during sex, putting into question whether pornography content or alcohol caused or was related to the sexually coercive act (Wright et al, 2015). Malamuth and colleagues' research, however suggested that pornography consumption was inversely associated with attitudes supporting violence against women (Malamuth et al, 2012). Instead, it was found that for certain individuals with antisocial characteristics, frequent exposure to pornographic material (particularly violent or extreme content) may have a bi-directional effect relationship on violent and aggressive attitudes towards women (Malamuth et al, 2012).

Of particular importance within this debate is the definition of aggression. While acts such as slapping buttocks and causing gagging in pornography have been used in research to describe violence and aggression (Malamuth et al, 2012), without the clear intention to do harm, these acts may not be considered acts of aggression or violence based on commonly accepted definitions of aggressions (Geen, 2001). This issue is further complicated when such acts are seemingly enjoyed by the receiving individual. Nonetheless, the majority of mainstream pornographic content available on the internet through website and streaming services would likely be defined by viewers or observers as deliberate acts of sexual violence or aggression, regardless of whether such acts would meet scientific criteria for being defined as aggressive (Malamuth et al, 2012). Given the increasingly violent nature of pornography today, young women may grow up with sexual scripts based on mainstream pornographic content, thus expecting sex to be aggressive in nature and may not feel permitted to say no when these acts are reenacted with them in real life.

A last issue to consider when determining the social impacts and implications of pornographic consumption as it relates to violence and aggression towards women is the broader social landscape. It would be expected that if frequent exposure to pornographic material caused or correlated with violent and/or aggressive acts towards them, then the increased availability of pornography would result in more sex crimes. The opposite, however, has been found to be true. Utilising studies in the United States and Europe that had compared pornography availability and national crime rates and reports, Diamond found that sexual offenses and crimes either decreased or remained unchanged as pornographic material increased (Diamond, 2009). Research also suggests that pornography consumers hold more egalitarian attitudes and beliefs toward women than those that do not consume pornography (Kohut et al 2016; Tokunga et al, 2105). Instead, negative attitudes towards women may be more closely associated with being older, voting for a right-wing political party, living in a rural area, having a lower level of formal education, and being male (McKee, 2007).

Another debate in the pornography arena is whether consumption is related to engaging in risky sexual behaviour. Here results are also mixed (Weaver et al, 2011). One concern is about whether the lack of standardised and quality formal sexual education in most countries could result in risky sexual behaviour because pornography then subsequently may become the primary form of sexual education (Lim et al, 2016). Some research supporting this possibility has demonstrated positive relationships between pornography use and lower age at first intercourse (Morgan, 2011), greater permissiveness towards premarital sex (Franczyk, Cielecka, Tuszynska-Bogucka, 2013), being intoxicated during sex (Braithwithe et al, 2015), and engaging in other risky behaviours, particularly substance use and binge drinking (Willoughby et al, 2014). Other findings, however, have shown no significant connection between consumption of pornographic content and sexually risky behaviour (Luder et al, 2011) and that only early exposure to pornography was related to sexual risk taking (Sinković, Štulhofer, & Božić, 2013). Finally, similar mixed results have been found with safer sex practices (i.e., condom). Some researchers found that consuming pornography was associated with a lower likelihood of using a condom (Peter & Valkenburg, 2011), while others found no link between viewing pornography and condom use (Martyniuk et al, 2016; Wright et al,

2016), and even a positive correlation between consuming pornography and wearing a condom during intercourse (Wright, 2013).

Problematic Pornography Use

Problematic pornography use presents a difficult challenge for clinicians. Firstly, even though the words ‘pornography’ and ‘porn’ are often seen as negative, research has shown that self-perceived effects of pornography are generally positive, with little, if any, negative effects (Hald & Malamuth, 2008). Even persistent and frequent use can be considered a healthy form of ‘passionate attachment’ to a highly valued activity and reflect a harmonious passion, as opposed to a compulsive or obsessive behaviour (Rosenberg & Kraus, 2014). While at least a portion of the overall self-perceived positive effects of pornography consumption could be explained by biased optimism, cultural bias of study participants (Hald & Malamuth, 2008), and mainstream culture becoming more pornographic in general (Weinberg et al, 2010), evidence suggests that viewing pornography can, nevertheless, become problematic for a small, but significant, percentage of individuals (Cooper, Delmonico, & Burg, 2000; Ross, Månsson, Daneback, 2012). For those individuals, pornography use has created problems in at least one major life domain, with the greatest implications in psychological/spiritual, behavioural, relational domains (Twohig, Crosby, & Cox, 2009).

Research suggests that individuals who are very vulnerable to the particular stimulus produced by pornography includes those with underlying comorbidities such as depression or anxiety disorders (Wood, 2011), impulsivity (Grant & Chamberlain, 2015), compulsivity (Wetterneck et al, 2012), or those displaying deficient self-regulation (Sirianni & Vishwanath, 2016), high levels of neuroticism (Egan & Parmar, 2013), or high levels of narcissism (Kasper, Short, & Milam, 2015). Those that seek treatment are more likely to be Caucasian than from other ethnic backgrounds (Kraus et al, 2015), believe their pornography use to be a religious or moral transgression (Grubbs et al, 2015), and report both early adolescent exposure to pornography, as well as participating in risky sexual behaviour during adolescence (Doornward et al, 2015). When individuals with SPPPU consume pornography, research indicates a it may be a maladaptive coping strategy and form of experiential avoidance, which is an effort to cope with and manage unwanted thoughts or negative feelings even though the coping strategy itself leads to

additional harm (Wetterneck et al, 2012). Lastly, many of those who report with SPPPU are either married, in a committed relationship, or dating, and that their viewing caused problems within their relationship (Daneback, Ross, & Månsson, 2006).

Overall, studies indicate that between 2% and 17% of pornography consumers meet previously established thresholds for compulsive and/or problematic pornography use (Albright, 2008; Ross, Månsson, Daneback, 2012). Problematic pornography use has been quantified as spending at least 11 hours per week viewing pornography (Cooper, Delmonico, & Burg, 2000), consuming daily (Harper & Hodgins, 2016), or surpassing a threshold of seven orgasms per week (Kafka, 2010). It was found that around 9% of consumers of Internet pornography met this quantitative criteria (Cooper et al, 2001). Other researchers believe qualitative factors can help determine problematic use since the frequency of consumption might not be the core issue for patients, and because negative symptoms more strongly predict seeking treatment (Gola, Lewczuk, & Skorko, 2016).

The prevalence and nature of problematic pornography consumption seems to warrant a separate and distinct framework for assessment and treatment. Clinicians, therapists, and researchers, however, are faced with the difficult task of examining a multitude of scattered and conflicting studies on pornography and potentially harmful consequences associated with its problematic consumption. The current review seeks to assimilate and analyse the current studies and interventions that have addressed SPPPU in order to analyse approaches that have been utilized, as well as to assess their relative effectiveness for addressing problematic use.

Method

EBSCOhost, an online reference system with access to a broad range of academic, medical, and scientific databases, was used to access a range of databases, including: Academic Search Premier, CINAHL Plus, MEDLINE, Psychology and Behavioural Sciences Collection, and Academic Search Alumni Edition for researching in April 2017. The primary keyword search used for research was: 'internet porn' OR 'porn*' OR Internet-enabled sexual behaviour OR sex* addict* within the 'Title' field. Studies that focused on the treatment of sex addiction specifically were used only if they specifically mentioned pornography as the determining factor in diagnosis or classification.

Additional keyword fields were used in conjunction with primary keywords,

including: 'treat' OR 'therap*' OR 'problem*' OR 'addict*' OR 'compul*' within the abstract of the study. Subject terms 'child*', OR 'adolescen*' OR 'teen*' were excluded from search fields. Lastly, a secondary search included identifying studies that were referenced within other studies found during initial queries, but were not revealed during initial searches. Studies were included if they were recent (from 2000 to 2017), and in English. The search was limited to peer-reviewed journal articles since they traditionally represent the standard for empirical studies, ensure a base level of comparability, and guarantee basic academic quality within the studies (Peter & Valkenburg, 2016).

Results

This search resulted in 198 relevant articles after being refined for additional parameters, such as studies only in English, only peer reviewed articles and after exact duplicates were removed from query results. 64 studies remained that were relevant and whose abstracts were scanned in order to determine relevance. Out of the 64 relevant studies, 11 studies were used in the review as they specifically addressed the treatment of problematic pornography consumption. Seven of the eleven studies used dealt directly and specifically with problematic pornography use. Of the five remaining studies, four categorized SPPPU as a different, yet related, sexual disorder (e.g., Internet Sex Addiction, Internet-Enabled Sexual Behaviour, Sexual Addiction, or Hypersexuality), while one study identified pornography consumption as a subset of other participants who were treated for Internet Addiction (Young, 2007). Descriptive information from the studies is summarized in Table 2.1.

Table 2.1: Summary details of studies included in literature review

| Author(s), (Year) | Design | Sexual Behavior Classification | N | Age (M) | Treatment Type | Length of Treatment | Assessment or Measures | Summary of Outcome |
|-----------------------------------|-------------------------|---|----------|------------------------|---------------------------------|--------------------------------|---|---|
| Bostwick & Bucci (2008) | Case Report | Internet Sex Addiction | 1 | 24 | Drug: Naltrexone | NA | Not Reported | Decline in addictive symptoms, with improvements in social, occupational, and personal function |
| Capurso (2017) | Case Report | SPPPU | 1 | 69 | Drug: Naltrexone | 2 weeks | Not Reported | Naltrexone treatment resulted in a decrease in pornography viewing, but adverse effect of anhedonia. A lower dose modestly impacted pornography use. |
| Crosby & Twohig (2016) | RCT | SPPPU | 26 | M=29.3 | Acceptance & Commitment Therapy | 10 weeks | DPVQ, SCS, CBOSB, QOLS | 92% reduction and an 86% reduction at 3-month follow-up. Complete cessation was seen in 54% of participants. |
| Fall & Howard (2015) | Case Report | SPPPU | 1 | 30 | Adlerian Counselling | Not Reported | Not Reported | Specific outcomes not provided |
| Ford, Durtschi, & Franklin (2012) | Case Report | SPPPU | 1 | 30 | Structural Therapy | Not Reported | Not Reported | Decrease in porn consumption; increased marital satisfaction |
| Gola & Potenza (2016) | Case Series | SPPPU | 3 | 24, 32, 35 | Drug: Paroxetine | 15 - 20 weeks | Kinsey's Sexual Orientation Scale | Although initially effective in reducing pornography use and anxiety, treatment appeared related to new compulsive sexual behaviors after 3 months. |
| Hardy et al. (2010) | Survey | Hypersexuality | 134 | M=37.9 | Online Educational Programme | M=17.97 weeks | Not Reported | Participants showed significant improvements in all measured aspects of recovery when comparing retrospective and current ratings. |
| Kraus et al. (2015) | Case Report | SPPPU | 1 | 30's | Drug: Naltrexone | 18 weeks | Not Reported | Significant decrease of sexual urges |
| Orzack et al. (2006) | Closed Group Experiment | Internet-Enabled Sexual Behavior | 35 | M=44.5 | Group Therapy: RtC, CBT, & MI | 16 weeks | Orzack, BASIS-32, BDI | Significantly increased quality of life and decreased severity of depressive symptoms. However, no reduction in internet pornography consumption. |
| Twohig & Crosby (2010) | Experiment | SPPPU | 6 | 39, 23, 29, 23, 21, 24 | Acceptance & Commitment Therapy | 10 weeks | Self-Report, OCI, AAQ, QOLS, TAF, TCQ, PIOS | Treatment resulted in an 85% reduction in viewing at post-treatment with results being maintained at 3-month follow-up. |
| Young (2007) | Survey | Internet Addiction | 114 | NA | CBT | 12 weeks | Internet Addiction Test (IAT) | Continuous improvement by the 3rd session, effective symptom management by the 8th and 12th sessions, and overall improved symptom maintenance at 6-months. |
| Zitzman & Butler (2005) | Structured Interview | Sexual Addiction | 6 | NA | Conjoint Therapy | Not Reported | Not Reported | Increase in marital trust, mutual softening, and client-perceived marital enhancement |

Discussion

The case for pharmacological approaches as a potential treatment option for SPPPU lacks the scientific rigor necessary for widespread clinical implementation. Gola and Potenza conducted a case series for three heterosexual men utilizing paroxetine, a selective serotonin reuptake inhibitor commonly used as anxiety medication, along with Cognitive Behavioural Therapy (CBT). All three men reported significantly lower levels of anxiety and decreased pornography consumption, which could be the result of paroxetine's impact on amygdala-related reactivity (Gola & Potenza, 2016). Within 12-14 weeks, however, new risky sexual behaviours appeared that were not present prior to treatment, which included extra-marital relations and engaging in paid sexual services (Gola & Potenza, 2016). One possibility provided by the researchers was that the decrease in anxiety gave the men a sense of confidence necessary to explore sexual relationships and experiences outside of their relationship and pornography consumption (Gola & Potenza, 2016). Researchers concluded that problematic pornography use may arise from the interplay of multiple domains, with paroxetine treatment only targeting anxiety-related aspects (Gola & Potenza, 2016). Consequently, the results of the case series provide little support for paroxetine as a viable treatment for SPPPU.

Three studies used naltrexone as a treatment option for SPPPU, likely because it has been shown to be a relatively safe, efficacious, and tolerable treatment option for other substance-based and behavioural addictions (Aboujaoude, Salame, & Salame, 2016). Indeed, naltrexone has been successfully used as an adjunct treatment for compulsive sexual behaviour (Raymond, Grant, & Coleman, 2010). Kraus and colleagues chose naltrexone because compulsive pornography consumption is often characterized by craving, impulsivity, and higher rates of psychiatric comorbidity, all of which have been shown to be mediated by naltrexone (Kraus et al, 2015). The case study participant reported subjective decreases in urges to masturbate to pornography within two weeks of initiating medication, as well as resuming regular sexual intercourse with his wife (Kraus et al, 2015). Kraus and colleagues suggested that naltrexone might serve as an effective adjunct treatment for problematic pornography consumption, but emphasized that additional testing in a double-blind, randomized, placebo-controlled trial would be

required in order to adequately evaluate the efficacy and tolerability of naltrexone with and without psychotherapy for the treatment of SPPPU (Kraus et al, 2015).

Bostwick and Bucci's case study followed a man self-reporting as addicted to pornography, who spent up to 8 hours per day online, masturbating until tissue irritation or fatigue ended the sessions (Bostwick & Bucci, 2008). Naltrexone produced measurable and significant differences in sexual urges (Bostwick & Bucci, 2008). The patient remained in nearly complete remission from depressive symptoms and compulsive Internet pornography use for 3 years after the study. Since the patient was also receiving sertraline, a selective serotonin reuptake inhibitor (SSRI), it is unknown whether, and how much, naltrexone contributed to successful treatment and recovery.

Finally, Capurso's report represents the first case of intervening with SPPPU alongside a co-existing condition in the literature. Specifically, this case study examines the co-existence of tobacco and pornography addiction (Capurso, 2017). While co-existing disorders are common, treatment strategies have not been extensively studied, especially for behavioural addictions like SPPPU (Capurso, 2017). Despite early signs of efficacy for both decreased smoking and pornography consumption, the subject discontinued naltrexone after only two weeks, citing the adverse effect of anhedonia (Capurso, 2017). Even with a lowered dose, the subject continued to experience anhedonia and therefore discontinued medication altogether (Capurso, 2017). The study's most notable contribution is that it supports the assertion that treatment of one addictive disorder can benefit another in dually-addicted populations (Capurso, 2017).

Overall, the three studies utilizing naltrexone highlight the severe lack of scientific evidence in this field. The total sample size (n=3) of the naltrexone case reports reinforce Kraus's position that more substantive testing is required. The current studies lack clinical controls and are highlighted by unconvincing research methods, inconsistent results, and conjoint treatments that make it impossible to accurately assess naltrexone efficacy. Appropriately rigorous randomized control trials (RCT) conducted in the future may reveal naltrexone to be a viable treatment option for SPPPU. Presently, however, the non-compelling state of the literature shows that research is still in its infancy and that the clinical recommendation of naltrexone is not justified.

Many of those who commonly self-report problematic pornography use tend to be

in a committed relationship (Daneback, Ross, & Månsson, 2006). Indeed, disturbed family and social relationships are often considered diagnostic criteria for SPPPU (Şenormanci et al, 2014). As such, some researchers have attempted to treat SPPPU of the male partner with couples-oriented conjoint therapeutic approaches. Ford utilized structural therapy, a modality in which family structures are altered so that members are empowered them to solve their own problems (Minuchin & Fishman, 1981), in order to not only treat the male partner's problematic pornography use, but also as a way of nurturing the intimate relationship of the couple (Ford, 2012). Ford's case study included a married couple whose marriage was ending due to the male partner's pornography use. Structural therapy allowed the couple to identify distrust and secrecy within the marriage (Ford, 2012). The male partner was allowed to continue consuming pornography when he felt he needed it, as long as he told his partner first (Ford, 2012). Within a few weeks of this newly formed relationship structure, the male partner threw out all of his pornography (Ford, 2012).

Adlerian therapy, similar to structural therapy, emphasizes the relationship between the individual and their lifestyle choice or habit (Adler, 1956). Fall and Howard's case study participant was consuming pornography as a way to cope with, manage, or avoid relationship stress (Fall & Howard, 2015). The case study discovered that the short-term stress reduction he experienced with pornography use was substantively adding to the long-term tension within his intimate relationship with his spouse (Fall & Howard, 2015).

Finally, Zitzman and Butler utilised conjoint couple's therapy with six married couples recovering from the husband's excessive use of pornography. An important part of the therapy included incorporating the wife's experience and story in order to coach the husband how to appropriately respect it (Zitzman & Butler, 2005). Preliminary findings suggested that conjoint couple's therapy not only proved to be an effective mediator of pornography use, but also facilitated the rebuilding of trust and increased mutual support within the relationship (Zitzman & Butler, 2005).

As a whole, there are several limitations to this group of conjoint therapy studies. Firstly, the sample size (n=8) means that results, however encouraging, cannot be extrapolated and applied to broader populations. Additionally, most of the sample size

was homogenous, with mostly Caucasian and Christian participants. Lastly, future studies seeking to find consistent results would be difficult to design since the studies did not report using any reliable scales, assessments, or measuring tools. Further research into conjoint therapy for SPPPU should aim to use reliable and valid diagnostic protocols and measurement tools so that protocols can be improved and refined.

Possibly the most significant takeaway from the studies was that all three directly, or indirectly, addressed the experiences of shame and guilt of the male partner. This is important because shame and guilt have been shown to be relevant with regards to the maintenance of hypersexual behaviour (Gilliland et al., 2011). Gilliland and colleagues found that persons seeking treatment for compulsive pornography use reported experiencing feelings of shame and guilt surrounding the pornography use, with both shame and guilt contributing significantly to the maintenance of their hypersexual behaviour (Gilliland et al., 2011). Male partners from all three conjoint therapy studies reported having to keep their pornography consumption hidden from their respective partners. It is both possible and probable that the efficacy demonstrated by the three conjoint studies – irrespective of whether Adlerian, structural, or conjoint methodologies were utilized – was the result of the couple learning how to communicate about and accept the male partner's pornography use, which subsequently lowered feelings of shame and guilt experienced by the male partner. Further research with conjoint therapy could help determine and/or strengthen this assertion.

The theme of shame and guilt again emerge in the first of three studies, which utilized Cognitive Behavioural Therapy (CBT) as the primary intervention for behavioural change. This CBT-based approach was implemented in a group setting by Orzack and colleagues, and included a combination of Readiness to Change (RtC), CBT, and Motivational Interviewing (MI) over a 16-week program that utilized three different scales to track progress over time (Orzack et al, 2006). On the surface, results were mixed. While quality of life measurements improved and depressive symptoms decreased, the intervention failed to actually reduce pornography consumption (Orzack et al, 2006). Researchers suggested that the feelings of connectedness, bonding, and being listened to created an atmosphere of self-forgiveness and acceptance, both of which have been found to be negatively related to hypersexual behaviour and feelings of shame or

guilt (Hook et al., 2015). The implications for future research are profound since this study shows that merely reducing pornography use may not represent the most important treatment goal. Depending on context, increasing pornography acceptance may be equally or more important. Clinicians would be well-advised to determine the nature and context of each case of problematic pornography use in order to determine the appropriate treatment and recovery approach.

Young also utilized CBT to address pornography addiction, but only as a small subset (34 of 114 study participants) were men addicted to pornography (Young, 2007). Utilizing outcome variables such as client motivation, online time management, improved social relationships, and ability to abstain from problematic online applications, analyses indicated that most clients were able to manage their presenting complaints (Young, 2007). Because this study relied on self-reported data to measure changes in behaviour, however, the results may be biased, inaccurate, and/or unreliable (Young, 2007).

Hardy and colleagues conducted a preliminary study on a CBT-based online psychoeducation and recovery program for hypersexuality, called Candeo, with a specific emphasis on problematic pornography use and masturbation (Hardy et al, 2010). Candeo's approach to mediating pornography consumption is a combination of social and psychological approaches to addictions (Hardy et al, 2010). What makes Candeo's approach unique, however, is their online mode of delivery. This means that the program shares the same fundamental characteristics that may contribute to pornography consuming behaviours becoming problematic: accessibility, anonymity, and affordability (Hardy et al, 2010). Online programs may represent an effective delivery method for other forms of therapy as they overcome some of the barriers of more traditional forms and delivery methods of therapy, while capitalizing on the benefits of modern technology (Greist, 2008).

Preliminary results from participants utilizing the Candeo program reported significant improvements across all measured aspects when comparing retrospective and current ratings and that other treatments attempted by participants in the past were 'somewhat less helpful' than Candeo (Hardy et al, 2010). Initial findings, however, should be viewed with caution. First, there is a sample bias present since all participants

were current customers of Candeo and their perceptions of the program could have been influenced because they had paid for it. Additionally, without experimental studies involving participant randomization to different treatment conditions, it cannot be determined to what extent Candeo's efficacy is substantively different from that of other modalities. Finally, since all data provided regarding participant experience was retrospective, any definitive statements or results should be provisional until confirmed and validated by experimental and longitudinal research.

Finally, Twohig and Crosby treated individuals with SPPPU utilizing Acceptance and Commitment Therapy (ACT), an approach that aims to decrease the effects of many inner experiences on behaviour (e.g. urges and cravings to consume pornography) and increase the effects of other inner experiences (e.g. self-created morals and values) on one's actions (Twohig & Crosby, 2010). Twohig and Crosby tested ACT twice, in 2010 as a case series, and again in 2016 as a randomized control trial (Twohig & Crosby, 2010; Crosby & Twohig, 2016).

The ACT experiment is considered to be the first experimental study to specifically address problematic pornography use (Twohig & Crosby, 2010). The study's encouraging results motivated a subsequent randomized control trial, which was the first controlled report for the treatment of compulsive pornography viewing (Crosby & Twohig, 2016). Again, results indicated ACT as an effective treatment intervention for SPPPU, with a 92% reduction in viewing at post treatment and an 86% reduction at 3-month follow up (Crosby & Twohig, 2016).

ACT's efficacy could be because its approach is fundamentally rooted in mindfulness. Reid and colleagues have already found that mindfulness may be a critical component of successful therapy among individuals seeking help for hypersexual behaviour (Reid et al., 2014), which could mean that the same strategies can be useful and effective for SPPPU. Mindfulness is the state attained when focusing one's awareness and attention on the present moment (Chisholm & Gall, 2015), whilst acknowledging and accepting all of the thoughts, emotions, and body sensations that may be occurring (Kuvaas et al., 2013). In the realm of compulsive behaviours like problematic pornography use, mindfulness is an important concept as a result of the strong link between body sensation (emotional) regulation and addictive/compulsive

consumption (Bowen et al, 2007). In particular, emotional instability (Kuvaas et al., 2013) and impulse control difficulties (Dvorak et al., 2014) are positively correlated with compulsive behaviours and consumptions. Enhancement of body sensation and emotional regulations skills has been shown to be an important in the treatment of addictive behaviours (Berking et al., 2011).

Lastly, while research suggests ACT provides a potential path forward for additional research and treatment, there are a number of issues that decrease the generalizability of both ACT studies. Most important is the small sample sizes from the studies (n=6 and n=26). Samples were also significantly homogeneous with respect to sex (male), race (Caucasian), geographical region (Utah, USA), and religious affiliation (Christian, i.e., Church of Jesus Christ and Latter Day Saints). The two ACT studies highlight what is consistently seen in a majority of the studies included in this review, which is the lack of participant diversity. As such, future research would benefit from the inclusion of diverse populations.

Conclusion

Even though SPPPU is not currently a diagnosable disorder, like other potentially problematic behaviours, it can adversely impact functioning in a variety of significant life domains. SPPPU will likely be a growing problem because an ever-increasing number of people are accessing the Internet, where a diverse and seemingly unlimited quantity of free pornography content can be accessed privately and anonymously. While the case for the existence and prevalence of SPPPU is strong, many questions remain regarding the assessment and treatment of problematic pornography use primarily due to the underwhelming state of existing literature. Currently, the sample sizes are small, clinical controls are lacking, and participant populations are homogenous. The majority of research methods in this field thus far are scattered, unverifiable, and not replicable. Only one RCT exists in this field, and the sample size is small and homogenous. Additionally, because it is difficult to know whether SPPPU represents its own construct or whether it is an indication of another existing comorbidity or pathology, it is essential that future research controls for other psychiatric disorders as potential confounds. Lastly, further research into SPPPU should aim to use reliable and valid diagnostic protocols and measurement tools so study results can be connectable, comparable, and thus help move

the field forward. As research in the field of treating SPPPU is only beginning, such would be expected. Important implications for clinicians are highlighted below.

Whether or not a drug like naltrexone is a good idea for SPPPU is still a research question that remains unanswered and demands more substantive research. Clinicians would certainly benefit greatly from the results of RCTs conducted in this field, and certainly this kind of evidence would be required before clinicians can recommend naltrexone. CBT, conjoint therapy, and ACT have shown promising results, which is likely related to the mindfulness and acceptance-based frameworks of these approaches. Nonetheless, this emerging research has shown that more questions are left unanswered. Mainly, whether reducing pornography or increasing pornography acceptance should be the primary treatment objective. Three of the reviewed studies (Orzack et al, 2006; Twohig & Crosby, 2010; Crosby & Twohig, 2016) revealed that helping people perceive their otherwise non-pathological and/or normal pornography use differently resulted in positive outcomes for the participants.

The continued challenge for clinicians is that the lack of agreed-upon criteria for problematic pornography consumption, which means that determining whether or not consumption is problematic in a standardized way is difficult. This is why self-perception is the driving factor in the experience of problematic pornography use and why an understanding of the specific context and nature of consumption is required. Many variables influence both consumption habits as well as perception. Additionally, despite the widespread social acceptance and consumption of pornographic content over the last several decades, reliable and valid instruments designed for assessing problematic use of pornography do not currently exist. Lastly, it may be useful to explore mobile and online applications since they seem to provide a viable and potentially useful vehicle for implementing such interventions in a cost-effective and efficient way.

2.3 Meditation as a Catalyst for Behavioural Change

The traditional practice of mindfulness meditation has existed for thousands of years, but the teachings of mindfulness meditation have recently surged in popularity within personal, corporate, and academic landscapes (Shonin, Van Gordon, & Griffiths, 2015). Today's trendy soup-du-jour, it seems more and more people are taking a few moments out of their busy days to sit cross-legged and focus on their breath. The reasons for doing

this, however, are myriad. Stress reduction, better sleep, and improved focus are just a few of the benefits that meditation practitioners hope to gain from their consistent investment in the practice. But mindfulness, and specifically meditation, can actually be much more than just a few health benefits; though not many would argue those benefits are not reason enough to at least try meditating. In the world of psychology, meditation represents a powerful tool that can complement the work of therapists or clinicians.

Mindfulness has been defined as consciously and nonjudgmentally paying attention to the present moment (Marcus & Zgierska, 2009). Mindfulness encourages awareness and acceptance of thoughts, feelings and bodily sensations as they arise, and recognition of their constantly changing and impermanent nature. Meditation practitioners are taught to *acknowledge, observe and accept* their internal experience rather than to change, suppress, or react to it. That sounds easy and simple enough, but in the world of behavioural change, that can be anything but comfortable. Sometimes, the present moment – and all the unwanted thoughts, negative emotions, and unpleasant body sensations that come with it – are simply too uncomfortable to bear. So many of us – present company included – tend to do what we've always done to cope: avoid.

Avoidance is not always a bad thing as sometimes it is the choice that makes the most practical sense in the moment. But if avoidance is someone's only strategy for managing the many stressful moments of life, then it could spell problems in the long-term. It should not come as a surprise that roughly 70% of substance abuse relapses result from unpleasant emotions and physical discomfort (Shafiei et al., 2014). And it is certainly not only in the field of substance abuse where this is relevant. Research also shows that when individuals self-identify with problematic pornography use, their consumption may be a maladaptive coping strategy and form of experiential avoidance, which is an effort to cope with and manage unwanted thoughts or negative feelings (Wetterneck et al., 2012). When the realities of abstinence or reduction reveal an internal state that can be fraught with pain, discomfort, or immense craving, sometimes avoidance via substance use – or via engagement with self-soothing behaviour – may seem like the only way to find relief, even if only for a short time. Clinical or not, behavioural change is hard. Avoidance can seem like the easier choice, even though the coping strategy itself

leads to additional harm. And here is where the practice of meditation can have tremendous benefits.

Meditation does not create change by itself. In fact, meditation is actually the opposite of change, tasking the individual to focus their attention on calmly and non-judgmentally accepting whatever the present moment may look or feel like, without trying to change, control, or adjust that experience in any way. With meditation, you stop avoiding and face what you have been running from so that when you face discomfort in everyday life, you will have already practiced sitting with and observing those uncomfortable internal states. When it comes to behavioural change, the desired outcome from meditation is the improved capacity for more conscious and productive decisions.

Meditation is a natural complement to many psychotherapeutic methodologies and interventions. As opposed to being cognitive and intellectual, meditation is more experiential, which means it can be used alongside other cognitive-based therapies, like ACT or CBT, as a complementary tool. In a sense, mindfulness meditation serves as a practical training ground – we can call it working in the trenches – where individuals can practice and rehearse non-reactively observing and being with cravings, urges, and unwanted thoughts (Marlatt & Chawla, 2007; Bowen et al., 2006). Since more than 50% of lapses and relapses can be credited to high-risk situations – namely negative emotional states and cravings or urges to use (Larimer, Palmer, & Marlatt, 1999) – developing and strengthening emotional regulation skills and body sensation awareness are important goals in the treatment of substance dependence and compulsive behaviours (Berking et al., 2011). The enhanced ability to objectively observe one's own internal experience sets the conditions necessary for the individual to learn productive ways of responding to their internal experience so that emotional instability and impulse control difficulties stop perpetuating the cycle of reactive consumption (Kuvaas et al., 2014; Dvorak et al., 2014).

Mike Tyson, one of the most famous professional boxers of all-time, said that everyone has a plan, 'until they get punched in the mouth'. When it comes to behavioural change, we can prepare the best possible plan alongside the world's most prominent experts, but once we leave the safe space of our home or therapist's office, it is the stresses of everyday life that provide the proverbial punches to the mouth. Taking the time to create detailed and personalised plans are certainly worthwhile, but without the

practical application that meditation can provide, it can be an endless cycle of self-sabotage if the underlying behavioural triggers are not addressed. What the individual really needs in their everyday life – outside of their safe space – is improved self-regulation and self-management skills; and those are exactly the qualities that meditation can nurture. The silence and stillness of meditation provide the perfect backdrop for cultivating improved self-regulation and self-management skills.

Meditation develops and trains various mental and attentional skills that can help the individual productively manage their moment-to-moment experience. Meditation allows individuals to be more sensitive to their surroundings and promotes productive thought processes and behaviours (Langer, 2004). Specifically, mindfulness theory addresses the two basic ingredients that form the foundation of all mindfulness-based approaches – awareness and acceptance – in relation to the context of the present moment and how these qualities improve sensitivity to internal and external environments (Demick, 2000; Langer & Moldoveanu, 2000). Attention and awareness seem to work synergistically to enhance capacities for information gathering, developing insight, and facilitating adaptation to the ever-changing variables of life (Brown et al., 2007).

Meditation also cultivates the skill of focus and concentration, which has been shown to improve cognitive functioning and memory (Mrazek et al., 2013), makes it easier to sustain voluntary attention (MacLean et al., 2010), and draws attention away from the past and future during current decisions (Hafenbrack, Kinias, & Barsade, 2014); all of which are important to self-management and self-regulation. Lastly, meditation has been associated with reduction in stress and mood disturbances (Birnie, Speca, & Carlson, 2010) and increased self-compassion (Baer, Lykins, & Peters, 2012). All of these mental and attentional skills contribute to an individual's ability to make constructive decisions from moment-to-moment.

It is worth noting that a meditation practice can be a lot harder – and more challenging – than an individual bargained for. That's because being more present can be downright uncomfortable, especially for someone just starting out. When unpleasant internal experiences have been the driving force of reactive behaviours for a long time, settling into a sense of stillness to face those experiences should be done patiently, carefully, and safely. It is helpful to liken meditating to settling into a hot bath. If you just

jump into the hot water, you'll scream in pain, jump out, and possibly burn yourself. Better to enter the bath slowly – one body part at a time – giving each part of your body time to acclimate to the temperature of the water before submerging completely. If you approach your bath slowly and mindfully, it can be a soothing and relaxing experience, as opposed to potentially damaging or traumatising.

Meditation may not be the holy grail of interventions, but it provides a relatively safe environment in which individuals can turn their attention inward towards the thoughts, emotions, and body sensations that drive unconscious, reactive, and problematic behaviours. Meditation represents the brave and courageous journey inwards, where we come face-to-face with the sensations that trigger our bad habits and prevent us from making the meaningful changes that we want for ourselves. With meditation we become more aware of our internal states, more comfortable with our unpleasant feelings, so we can learn to trust that we are safe in the present moment, and that whatever we are feeling or experiencing will eventually pass, no matter what the experience. Ultimately, this journey is about taking back responsibility for our lives and creating a more conscious way forward. And is not that what all of us really want? Is it not the goal of every psychological intervention to improve the client's capacity for self-awareness, self-management, and self-regulation? Given how important the awareness of our internal experience is to behavioural change, it is well worth the initial discomfort diving into the deep end of meditation.

Chapter 3 – Research Design, Methodology, and Methods

3.1 Prelude

Single Case Experimental Design (SCED) methodology was overarching methodology most suitable for addressing the research questions. SCEDs are acceptable for examining the processes and outcomes of psychological and behavioural interventions (Smith, 2012), but particularly well suited for the present study since the study design requires an in-depth exploration of each participant and the specific contexts and factors that contribute to their pornography use. As such, SCEDs allowed for the qualitative and quantitative data of each respective participant to be easily integrated, organised, and analysed. This section discusses all of the research methods used throughout the study, since the three primary original experiments in this thesis (Chapter 6-8) required only some of the research methods and data to be used. Additionally, while some of the data was not used in any of the publications due to its lack of relevance and scope, some additional data and results has been included in Chapter 9 if it added important information and/or explanatory power to the thesis as a whole. After research design, methodology, and methods are discussed, an overview of the BYOG (Be Your Own Guru) guided meditation intervention is provided, along with information regarding its intent and conceptualisation. Finally, important ethical concerns are discussed, since men with SPPPU represent a vulnerable population who would provide sensitive information to the researchers.

3.2 Methodology

Single Case Experimental Design (SCED) methodology was used to address the research questions. SCEDs are well suited for examining the processes and outcomes of psychological and behavioural interventions (Smith, 2012). Additionally, SCEDs were particularly well suited for the present study because the study design allowed for an in-depth exploration of each participant and the specific contexts and factors that

contributed to their perceptions of their pornography use. In other words, SCEDs allowed for an efficient and effective integration of qualitative and quantitative data for each respective participant. Within SCED research, participants in SCEDs act as their own control for the purpose of comparison in a within-subject – as opposed to between-subjects – design (Smith, 2012). The baseline measurements of the participants represent one of the most crucial design elements of an SCED because this data is essential to accurately extrapolating research effects. A series of single-case systematic replications can provide invaluable data regarding the preliminary efficacy and generality of an intervention and, because of their rigor and success rate in identifying evidence-based practices, some researchers posit that highly-controlled and randomised SCEDs should be considered on par with group designs such as randomised control trials (Dallery, Cassidy, & Raiff, 2013). The present study was intended to be the first step in gathering the data necessary to establish scientific validity and rigour.

3.3 Study Design

A standard AB design was selected because it is the clinically acceptable norm for single-case designs (Kratochwill & Levin, 2010). Within single-subject and single-case research, an AB design represents a two phased design comprised of a baseline (or “A” phase) with no intended changes, coupled with a treatment or intervention (“B” phase). Visual and statistical methods are utilised to assess whether any change or effect occurred as a result of the intervention. As a result of many possible competing hypotheses making strong conclusions difficult, variations of the standard AB design can effectively control for these competing hypotheses, thus allowing for stronger conclusions. One such variant is the four phase ABAB design. The four-phase design was considered, but was ultimately withdrawn, because of the ethical and moral concerns of a return-to-baseline phase that would have required a participant to cease an intervention that was hypothesised to be beneficial and helpful to the participant. Additionally, not only would it be unethical to request that participant cease an otherwise beneficial intervention, it would also be impossible to determine whether the participant actually stopped meditating. Once a participant learns the meditation technique – and experiences

benefits – they may choose to continue meditating during the return-to-baseline phase because of the benefits they have experienced.

The research took place in two phases. The first phase was a three participant, 8-week pilot study in order to test whether the meditation intervention had measurable effects on the pornography use-specific scales, as well as other measures and scales utilised in the study. Summary results of the pilot study can be seen in Chapter 4. After completion of the pilot study, 12 self-selected New Zealand-based participants participated in the 12-week intervention study. A randomised, multiple-baseline design aimed to maximise the internal validity of results and findings. The first step for improving internal validity was using reliable, easy-to-use, and repeated measures, and to use them for the duration of the study (Rassafiani & Sahaf, 2010). Randomisation also improves both the internal validity and statistical conclusion validity of the study (Smith, 2012).

To ensure an appropriate application of randomisation, the present study incorporated easy to use measures, such as daily pornography viewing logging sheets, and scientifically validated and reliable scales and questionnaires. Additionally, the present study utilised multiple levels of randomisation. Twelve random intervention pathways were pre-determined utilising a random number generator that produced a sequence of twelve numbers – between two and five – which represented the length of time – in weeks – that a participant remained in the baseline phase of the study. Thereafter, the twelve intervention pathways were randomly assigned into a sequence from one to twelve. Finally, participants were assigned to the intervention pathway as they joined the study (i.e., first participant to intervention pathway one; third participant to intervention pathway three). No additional blinding/masking was used during the study. No procedural changes occurred during the course of the investigation after the start of the study. There are no planned replications at this time. Participants completed all study measures via email correspondence on a weekly basis through both study phases (baseline and intervention).

3.4 Participants

Fifteen heterosexual men (three for pilot study, and twelve for intervention study) were recruited via advertising, social media outreach, and word of mouth to take part in the 12-

week guided meditation intervention study, which also included pre-study interviews about their pornography consumption habits. The research ad aimed to attract male volunteers who met the basic inclusion requirements (i.e., New Zealand-based, aged 21 or over, and identified as heterosexual male) and who identified with SPPPU (see Appendix 2: Recruiting Ad). The inherent implications of this study population is that this specific group of volunteers of men identify with SPPPU and were at a place where they were ready and willing to talk about their pornography use. The recruiting ad was printed and distributed within Auckland-based universities. Digital copies were sent to New Zealand-based sex therapists and clinicians. Digital copies were also provided to pornography-related social media influencers, who subsequently shared the ad with their Facebook and Twitter followings. The majority of participants from the study came from these social media influencers and their posts via their social media channels (i.e., Facebook and Twitter).

The participants were aged between 22-51 (M=32.5), most identified as Pākehā (Non-Māori New Zealanders of European descent), and who characterized their pornography use as problematic for varying reasons. With regards to the twelve-participant intervention study, one participant who initially consented to be in the intervention study, withdrew from the study after his baseline phase finished (week 5 of the study) due to exacerbated mental health concerns. Thus, 11 participants completed the full 12-week baseline and intervention requirements of the intervention study.

Table 3.1 - Summary details of all pilot and intervention study participants

| Study ID | Age | Ethnicity | Occupation | Reason for SPPPU |
|-----------------|------------|------------------|-------------------|-------------------------|
| PS01 | 39 | Pākehā* | Professional | Personal |
| PS02 | 29 | Pākehā | Professional | Personal |
| PS03 | 37 | Pākehā | Tertiary Student | Personal/Religious |
| IS01 | 35 | Pākehā | Professional | Personal/Ethical |
| IS02 | 29 | Pākehā | Teacher | Personal/Ethical |
| IS03 | 23 | Asian | Tertiary Student | Personal |
| IS04 | 34 | Maori | Did not Specify | Personal/Social |
| IS05 | 40 | Pākehā | Did not Specify | Social |
| IS06 | 51 | Pākehā | Mentor | Personal |
| IS07 | 29 | Asian | Tertiary Student | Personal |

| | | | | |
|------|----|----------------|------------------|--------------------|
| IS08 | 27 | Asian | Tertiary Student | Personal |
| IS09 | 22 | Pākehā | Tertiary Student | Personal/Ethical |
| IS10 | 23 | Middle Eastern | Tertiary Student | Personal/Ethical |
| IS11 | 27 | Asian | Tertiary Student | Personal |
| IS12 | 43 | Pākehā | Therapist | Personal/Religious |

3.5 Research Methods

Using multi method techniques – both qualitative and quantitative methods of data collection – expands the scope and improves the analytic power of the findings (Sandelowski, 2000). The primary measurement and data gathered during the pilot and intervention studies related to the participants’ pornography viewing. Participants were asked to keep a daily electronic log their pornography use, including the number of viewing sessions per day and total time spent viewing per day. After the initial baseline phase had passed, participants were also required to log their meditation sessions.

Various questionnaires were used during the research study to help assess and analyse intervention usefulness and efficacy, as well as to create comparable statistical data for post-study analyses. The Questionnaires included leading into the pilot study phase were the Self-Compassion Scale (SCS), Perceived Stress Scale (PSS), Pornography Craving Questionnaire (PCQ), and Problematic Pornography Consumption Scale (PPCS). After initial pilot testing, however, both the SCS and PSS were not found to be intervention sensitive (see Chapter 4 – Pilot Study) with the study participants. The SCS and PSS were subsequently replaced with the Scale of Body Connection (SBC) and Mindful Attention Awareness Scale (MAAS), which – after the data from the intervention study was collected and analysed – were also found not to be intervention sensitive. All the questionnaires were consolidated into a single document for ease of use and participant convenience.

Interviews provided the principal form of qualitative research, as well as the primary method for exploring the contexts for the respective participants. Interviews were intended to add context, depth, and rich data that could improve the explanatory power and strengthen any of the results, which emerged in analyses and findings. Participants were also given the option to keep diaries, which would record noteworthy experiences or

reflections that would guide post-study interviews. A description of each of the specific research methods is provided:

Pornography Use Logging Spreadsheet. The first step for improving internal validity is to use reliable, easy-to-use, and repeated measures, and to use them for the duration of the study (Rassafiani & Sahaf, 2010). Participants were asked to keep a daily log of various aspects of their pornography viewing, including number of viewing sessions per day, and total time spent viewing per day. At the end of each week, participants were required to provide the primary researcher with an updated spreadsheet which documented the weekly totals for the frequency of pornography viewing sessions per day, the total duration of daily pornography viewing per day, and the total number of meditation sessions per day. While logging provided important quantitative data relevant for determining the efficacy of the intervention, the logging exercise itself served as a soft intervention and impacted and influenced the participant's use and served as an important talking point during post-study interviews.

Semi-Structured Interviews. Pre- and post-study interviews were aimed at helping the researcher understand the context of pornography consumption, perceived efficacy of programme, changes in perception of consumption, progress through programme, as well as perceived benefits or challenges during the study. The semi-structured interviews were conducted either face-to-face – either in person or over Skype – recorded, transcribed, and subsequently analysed for any relevant themes. Pre-study interviews ranged from 30 to 75 minutes (with most about 60 minutes), while post-study interviews ranged between 20 to 60 minutes in length (with most being 30 minutes). It was expected for pre-study interviews to be longer as more time was required exploring the factors and context that contribute to self-perceived problematic use, its origins, the reasons these men came coming forward to take part in the intervention, and an exploration of past attempts at quitting.

Pornography Craving Questionnaire (PCQ). To the degree that craving predicts lapse and relapse, the PCQ could help predict likelihood of relapse following therapy (Kraus &

Rosenberg, 2014). Kraus and Rosenberg posit that such a questionnaire could be used as a research tool to measure the incidence and contextual triggers of craving among different types of pornography consumers (Kraus & Rosenberg, 2014). Correlations of craving scores with preoccupation with pornography, sexual history, compulsive internet use, and sensation seeking provided support for convergent validity, criterion validity, and discriminant validity, respectively (Kraus & Rosenberg, 2014). Participants filled out the PCQ at five different points during the study: pre-study, pre-intervention (after initial baseline phase had ended), post-study, 1-month follow up, and 3-month follow up. In order to apply and interpret results from the PCQ, a mean score is taken from items 1-12 – with a possible range of 1.0-7.0. – and a score of 5.0 or greater is considered positive for craving.

Problematic Pornography Consumption Scale (PPCS). The Problematic Pornography Consumption Scale (PPCS) is 18-item self-report scale that has been shown to have high internal consistency and convergent validity, as well as the ability to correlate with measures of psychopathology, such as low self-esteem, depression, and poor attachment (Bóthe et al., 2018). Additionally, the PPCS has a strong theoretical basis, as well as strong psychometric properties in terms of factor structure and reliability (Bóthe et al., 2018). Participants filled out the PPCS at five different points during the study: pre-study, pre-intervention (after initial baseline phase had ended), post-study, 1-month follow up, and 3-month follow up. A final total of 76 points or more for the 18-item scale indicates possible problematic pornography use.

Short Form Self-Compassion Scale (SCS-SF). The Self-Compassion Scale has been shown to be a valid and theoretically coherent measure of self-compassion (Neff, 2016) and has displayed sensitivity to the practice of meditation (Baer, Lykins, & Peters, 2012; Neff & Pommier, 2013; Campos et al., 2016). The short form of the Self-Compassion represents a reliable and valid alternative to the long-form SCS (Raes et al., 2011). It was hypothesised that due to the connection and association that exists between meditation and self-compassion (Woods & Proeve, 2014), that the participants' SCS-SF scores would be significantly impacted as a result of meditating.

Perceived Stress Scale (PSS). The Perceived Stress Scale has demonstrated evidence-based reliability (Lee, 2012), as well as sensitivity to meditation (Innes et al., 2012). It was anticipated and given the PSS's sensitivity to meditation, participants would experience reductions in their perceived stress levels as they engaged in a consistent meditation practice.

Mindful Attention Awareness Scale (MAAS). The MAAS was designed and developed to measure the individual differences in the tendency to be mindful (Goh, Marais, & Ireland, 2017), and has become one of the most often used measures for mindfulness research (Osman et al., 2016). The MAAS has been shown to be a valid and reliable mindfulness measure among various populations (Phang et al., 2016), but has not – to date – been utilised for the current study population, men with SPPPU. It was hypothesised that practicing meditation on a daily basis would improve MAAS scores, thus potentially allowing the current research to represent the first exploration of the MAAS's applicability to SPPPU.

Scale of Body Connection (SBC). The SBC was developed as a self-report measurement tool to examine body awareness and bodily dissociation in mind-body research (Price, Thompson, & Cheng, 2017). The SBC demonstrates both acceptable reliability, as well as construct validity that supports its use in clinical research as a brief, readily translated, easy to administer measure of body awareness and bodily dissociation (Price, Thompson, & Cheng, 2017). Since one of the hypotheses of the present research is that meditation will enhance the ability of participants to objectively observe their own internal experience so that they can learn to respond to their unwanted thoughts and negative emotions in more productive ways, the SBC was chosen as a potential tool to measure whether or not such a mind-body connection could be quantified and measured.

Email Correspondence and Diary (Optional). The pilot study established that participants keeping and maintaining a daily diary as intrusive upon their meditation experience. Participants reported that they often thought about what they were going to

write or journal about during meditation instead of meditating. As such, participants were given an option to reflect upon their experiences throughout the study in a diary, so that the requirement to do so would not occupy their mind.

Daily Meditation. Participants were provided pre-recorded guided meditations and told to meditate twice daily – morning and evening – following an initial randomized baseline period in which participants continued life as normal. While meditation served as the primary intervention for the study, it was also intended to serve as a quasi-research method since the predetermined time participants spent in silence and stillness each day were intended to provide conditions that support improved self-awareness and self-reflection (Lazar et al, 2005). It was anticipated that meditation would allow participants to reflect on their past and current pornography use, as well as other variables that could be related to their use, thus providing important data.

3.6 BYOG Guided Meditation Intervention

The Be Your Own Guru (BYOG) meditation technique involved 15-minute guided meditations, twice daily. The guided meditation tracks utilised by the study have been uploaded to SoundCloud (<https://soundcloud.com/byog>), an online streaming mobile application and platform, where they were available for streaming. BYOG is a series of guided mindfulness meditations, conceptualised, developed, and pilot-tested by the researcher, that assists users in cultivating self-awareness of their moment-to-moment internal experience (i.e., thoughts, emotions, body sensations). The intention of the BYOG meditation technique is to develop attentional skills that create the conditions necessary for improved self-awareness, self-knowledge, and self-management. Upon completion of the baseline phase, participants of the present study were given access to two different styles of guided meditations (Conscious Breathing and Breath Awareness) in three different formats – Full Instructions, Guided, and Unguided. Participants were asked to listen to the Conscious Breathing track in the morning, and the Breath Awareness track in the evening. The three different formats allowed participants to meditate with detailed instructions when first learning the technique, and progressively use less-guided versions as they became more comfortable and experienced with the

practice. Regardless of style or format, however, the substantive majority of all tracks were complete silence.

BYOG Conceptualisation and Development

BYOG was developed as a secular approach to meditation that is primarily concerned with training the user's mind and body to be with self in a non-reactive way. The conceptualisation of the BYOG programme began in the early stages of the PhD research, when after determining that other guided meditations contained too many explanations, ideas, and concepts. The intention of the meditations was to get users into an environment where they would be able to be silent, still, and observant of their arising and constantly changing internal experience. Instead of focusing on goals, expectations, or potential benefits derived from practicing, BYOG simply encourages users to spend more time in the present moment, with the anticipation that the cumulatively stillness and silence of meditation will quietly transform the way they live their life. When adding concepts, explanations, or presumptions regarding what a listener *should* be experiencing (i.e., *now feel your body as it relaxes, or notice the wave of energy passing through you*), when the thought that is subsequently created by the mind after such a prompt is a layer of conceptualisation placed on top of the direct experience of the listener. As such, the intention of the BYOG guided meditations was to be strictly focused on cues and tasks of direct and objective observation of what is present – presently and currently – for the listener.

Prior to ethical approval and initial pilot testing with PhD participants, three clients of the researcher tested and used the guided meditations, and subsequently provided feedback to the primary researcher. All three of these case studies (two professional Muay Thai fighters and one weight loss client), reported that the meditation component of their lifestyle and performance coaching helped them reach their respective goals. Both fighters won New Zealand's King in the Ring Titles in their respective weight classes, as well as world title belts thereafter. The weight loss client lost approximately 30kg in 8 months.

Technique and Core Mechanisms

The BYOG meditation technique consists of two distinct meditation methods Conscious Breathing (practiced in the morning), and Concentration Meditation (practiced in the evening). The main difference between the two practices was that the Conscious Breathing morning meditation required an active and conscious breathing process that prompted participants to take deeper conscious inhales throughout the duration of the meditation, while the evening meditation required no conscious effort at all as natural, spontaneous breathing was prompted. The morning practice also involves breath holding at three times during the meditation.

The intention of the BYOG meditation technique is to develop the attentional skills help to create the conditions necessary for improved self-awareness, self-knowledge, and self-management. Specifically, the guided meditations aim to train three attentional skills – concentration power, sensory clarity, and non-reaction, which are referred to in the programme as focus, awareness, and stillness. Utilising the user’s breath and internal sensory experience (thoughts, emotions, body sensations), the BYOG meditation technique trains the mind in four different ways: Learning how to restrict attention to a small sensory event; learning how to sustain concentration on one thing for an extended period of time; learning how to evenly cover large and/or broad sensory events; and learning how to notice a momentary state of concentration with whatever experience or sensation randomly demands attention.

Developing and training the mental skill of focus and concentration has been shown to improve cognitive functioning and memory (Mrazek et al, 2013), develops the capacity for sustaining voluntary attention (MacLean et al, 2010), and draws attention away from the past and future during current decisions (Hafenbrack, Kinias, & Barsade, 2014). The cultivation of somatic awareness, referred to by BYOG as sensory clarity, sensitises practitioners to better detect and regulate when the mind wanders from its somatic focus, may lead to enhanced cognitive regulation and metacognition (Kerr et al, 2013). Practicing stillness, non-reaction, and acceptance during meditation has been associated with reduction in stress and mood disturbances (Birnie, Speca, & Carlson, 2010) and increased self-compassion (Baer, Lykins, & Peters, 2012).

The ultimate goal of BYOG is to teach a practical meditation technique that develops attentional skills that are directly applicable in everyday life. In other words, the meditation practice serves as a sort of rehearsal for the way a user can react and behave outside of the meditation practice. For example, a user that is faced with an impulse to behave in a certain way may remain still and non-reactive despite urges to react because they have practiced this exact scenario during meditation.

Pre-Pilot Study Outcomes

Prior to the start of the official pilot study, important outcomes emerged from the three case studies. First, all three case study participants reported significant positive outcomes, including being less reactive to stressful situations, less reactive to interpersonal relationship conflict, feeling calmer, availability of choice and accountability, being able to pause in uncomfortable situations, and improved sleep. One of the interesting bits of data to emerge was that the ability to focus during meditation did not seem to improve (based on diary entries), as participants reported feeling distracted, chaotic, etc. throughout the actual meditation practice. Also, the stressful life situations did not seem to subside in any of the participants' lives (one participant changed jobs, bought a home and car during the short time of the testing). Yet, despite the reported difficulties in focus and the continued presence of stressful life events, the practicing of meditation helped participants manage and cope with their situations in productive ways. One participant called meditation a great coping mechanism for the life-changing events occurring around him.

3.7 Ethical Concerns

The primary ethical concerns for the proposed research are related to privacy, confidentiality, the right to withdraw from research, and the sensitivity of the research topic. Because of the topic under investigation, participants will be disclosing sensitive information that may be emotionally arousing and/or uncomfortable. In accordance with AUTEK Guideline 2.4, study participants will be provided with written information and documents which detail the aim and processes of the study. Prior to partaking in the study, participants will be required to read a Study Information Sheet (AUTEK Guideline

2.1), followed by a consent form, in order to ensure the participant's informed and voluntary consent to be included in the study. The Study Information Sheet will state clearly and simply that they have the right to withdraw from the research at any time and within any phase of the research without any binding to reveal the reason for discontinuation. In accordance with AUTECH Guideline 2.2, all information provided by participants – including their identity – will be kept private and confidential. All data will only be accessible to those directly involved in the research process, including the supervisors. The primary supervisor has extensive experience in conducting sensitive research, as well as sitting on the AUTECH committee during the time that research was conducted, and will train and advise the researcher accordingly.

In order to protect participants within research studies, appropriate protocols or guidelines need to be developed at the beginning of the research process to identify and minimise risk, or respond to risk as they arise during the research process (McCosker, Barnard, & Gerber, 2001). As a result of the sensitivity of the proposed research, specific attention must be placed on anticipating potential problems before they become manifest, for example the exiting of the research relationship in an appropriate and safe manner, both for participant and researcher (Fahie, 2014).

Due to mental health concerns being potentially exacerbated by a meditation practices (Cebolla et al., 2017), an additional screening process (see Appendix 5: Participant Screening Questionnaire) was added so that potential participants who had confirmed interest in the research and signed a consent form, were additionally screened prior to the commencement of research. The screen was designed to identify participants that did not meet the selection criteria (i.e., those that consume illegal porn), as well as to identify risky or vulnerable participants with co-morbidities (i.e., substances addictions, or serious mental health concerns), or those who might engage in risky behaviours as a substitute to viewing pornography (i.e., BDSM, violent/abusive porn). After the screening process, participants considered to be risky were discussed in detail with project supervisors in order to determine appropriate protocols and procedures during the intervention study.

Due to the nature of the guided meditation intervention potentially triggering affective discomfort (e.g., painful body sensations, depressive mood, anxious mood), the

primary researcher checked-in via email periodically throughout the study (most often once weekly) to ensure that those participants identified as particularly risky or vulnerable were coping sufficiently, had not engaged in risky substitute behaviours, as well as to offer suggestions/resources for therapeutic support to those that communicated any mental health concerns (i.e., Panic Attacks, severe dissociative symptoms or experiences, increased anxiety, depressive symptoms, etc.). At any point that a participant was identified as risky or vulnerable, additional care and check-ins were required in order to ensure the safety and wellbeing of the participant. As co-morbidity with other psychiatric illnesses is high (e.g. anxiety disorders, mood disorders, OCD, etc.), it was necessary to ensure that taking away the currently effective coping strategy (i.e., pornography use) was not resulting in an even more problematic behaviour or clinical symptom. Participants thus consented to inform the researcher in the event risky substitute behaviours emerged. The researcher would also periodically check-in on the participants to ensure safety for those participants who had indicated co-morbidities during the screening process.

One of the primary risks was the emotional discomfort resulting from interviews. Due to the nature of the research, and the potential difficulty that participants may experience discussing their behaviour, participants were told at the beginning of interviews that they were not required to answer any questions they did not feel comfortable discussing. Additionally, sharing their stories of problematic pornography usage could have led to the sharing of difficult or traumatic memories and/or situations from their past. In those situations, the researcher provided recommendations for trained practitioners and notified the participant of the free therapeutic support available to AUT study participants throughout the study.

Finally, in accordance with AUTECH Guidelines 2.3 and 2.8, the researcher/participant relationship was explicitly described, especially since the researcher was in constant contact and interacting with the participants throughout the study. The nature of semi-structured interviews – as well as the research topic – would undoubtedly result in the revealing of personal and private experiences. The primary focus of the interview was to focus solely around the topic in general, with any other personal experiences only being disclosed on a voluntary basis. Since the personal

experiences of participants were an important part of the research topic, special attention would be placed on avoiding dwelling too deep into participant's personal experiences so the role of the academic was not confused with that of a therapist. However, in the unlikely event of any traumatic experiences resulted or being shared, the researcher would halt the research and make recommendations to see a trained clinician.

Chapter 4 – Pilot Study Results Summary

4.1 Prelude

The shorter (8 weeks, as opposed to the 12-week intervention study), non-randomized pilot study served multiple purposes. Firstly, it allowed the researchers to make sure that the study design did in fact ensure participant safety, as determined appropriate by the ethics protocols documented for this study. Second, as this research represents the first study of its kind, it was important to assess whether the chosen intervention (guided meditations) would influence the target behaviour (pornography viewing), and whether the intervention would be perceived as helpful and beneficial by participants. The interview data provided by the participants would help contextualize quantitative results. For example, if pornography-viewing decreases, the participant will be able to provide information as to how meditation did – or did not – contribute to those results. Lastly, the pilot study allowed for researchers to assess whether the scales and questionnaires chosen for the study were intervention sensitive.

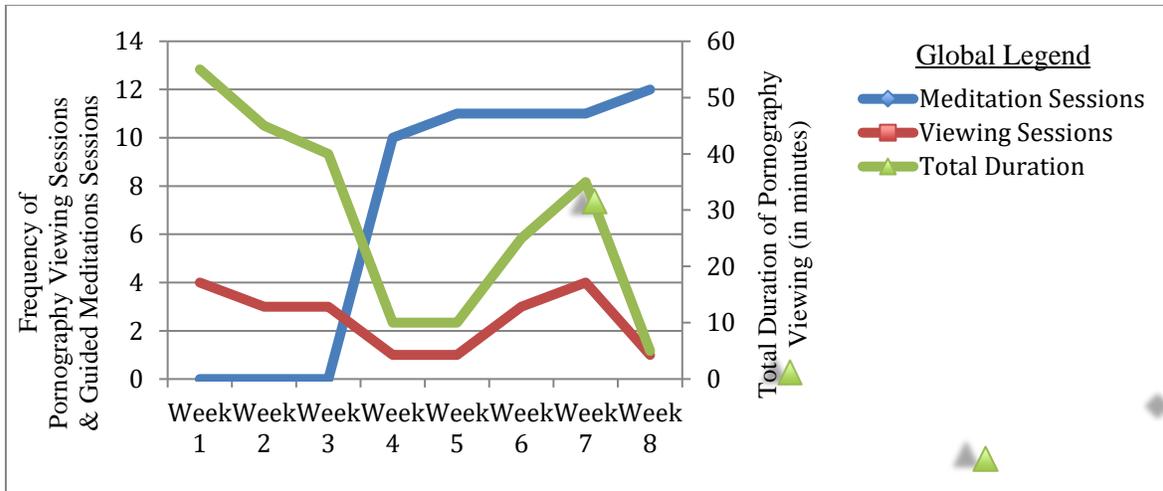
4.2 Results

Initial findings suggest generally positive results for meditation as an intervention for men with SPPPU. Two out of three participants passed visual inspection criteria (see Figure 4.1), suggesting changes in level and/or slope in the meditation-relevant measures occurred when the guided meditation intervention was introduced. These two participants, PS01 and PS02, completed 79% and 83% of the required meditation sessions, respectively. The third participant's (PS03) visually represented result showed meditation as having little to no influence on pornography use. PS03, however, completed only 43% of the required guided meditation sessions. The discussion section that follows will attempt to contextualise these results by weaving in rich, qualitative data from post-study interviews. Additionally, all of the participants (PS01 and PS02) demonstrated changes in PCQ scores in the expected direction after the introduction of the intervention. Two participants, PS01 and PS02, demonstrated changes in PPCS scores

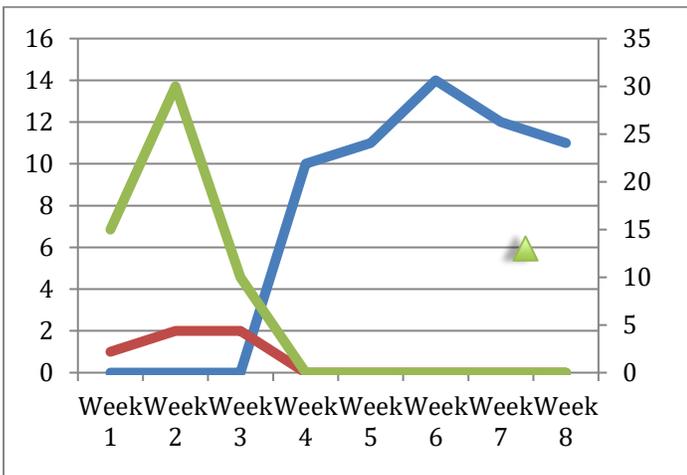
in the expected direction, while PS03 demonstrated no change. The results from the PSS and SF-SCS indicate that these two scales may not be intervention-sensitive for the present study population, as slight changes in the opposite direction of expectations or no changes were observed for all participants. See Figure 4.2 for a summary of scale scores. Finally, all of the research steps, data collection, intervention delivery, and protocols were completed as planned, without any adverse event. Thus, no major administrative or procedural changes were planned heading into the intervention study.

Figure 4.1: Visual results of pilot study participants

PS01



PS02



PS03

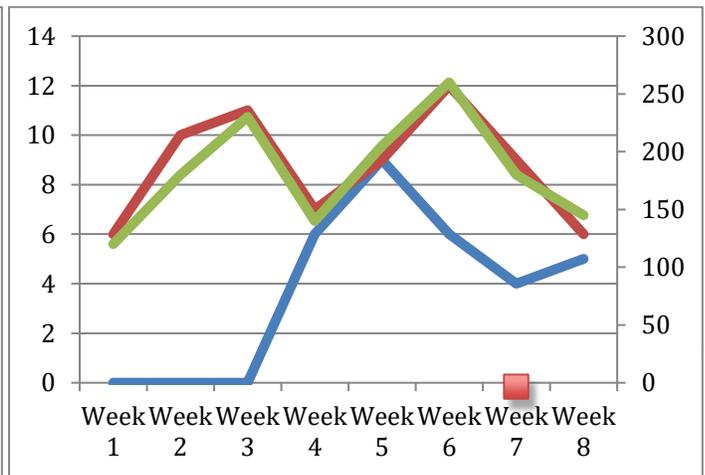


Figure 4.2: Scale and questionnaire scores of pilot study participants

| | PS01 | | PS02 | | PS03 | |
|--|--------|------------|--------|------------|--------|------------|
| | Intake | Post-Study | Intake | Post-Study | Intake | Post-Study |
| Pornography Craving Questionnaire (PCQ) | 2.50 | 2.42 | 3.50 | 1.83 | 3.67 | 2.50 |
| Problematic Pornography Consumption Scale (PPCS) | 67 | 55 | 80 | 20 | 74 | 74 |
| Perceived Stress Scale (PSS) | 11.00 | 10.00 | 19.00 | 19.00 | 17.00 | 22.00 |
| Self-Compassion Scale (SF-SCS) | 26.5 | 23.5 | 21.5 | 20.5 | 19 | 19.5 |
| % of Meditation Sessions Completed | 79% | | 83% | | 43% | |

4.3 Discussion

While both PS01 and PS02 demonstrated encouraging results, it was important to gather qualitative data from these participants in order explain their positive results. The interview data from PS01 and PS02 helped explain how these participants perceived meditation actually contributed to their pornography viewing outcomes. One of the common benefits shared by these two participants was the sense of mental calmness and clarity experienced after meditation sessions:

PS01: With mindfulness, I'm finding that I'm able to start the day and end the day with a sense of inner peace. It's a different equilibrium, but it's a place where my brain doesn't have that drive or that yearning for something anymore. Why would I go there? There's nothing for me there. I'm already feeling still. I'm already feeling happy where I'm at.

PS02: Helped clarify what I was trying to get from my use. Particularly that sense of calm and peace. Coming back to a sense of calmness. I think that's why I was using porn. Even in the mornings, it was waking up with a sense of calm. I say

that because that's what I was experiencing and feeling with mindfulness, and the urge to use wasn't there anymore. I've been very sceptical about mindfulness and meditation, but this showed me mindfulness can be used to get my brain to a certain space.

The sense of peace and calmness that the participants experienced often brought their seeking behaviour and temptation to watch pornography to a halt. These moments of calmness and stillness also triggered reflections about pornography use for the participants. The environment of stillness and silence created the necessary backdrop for self-reflection. These significant moments of reflection would not have been possible without the setting created by practicing meditation. Both PS01 and PS02 were able to see the utility of meditation as a tool for everyday life. They were able to integrate their meditation practice into their respective lives because they could now face stress in a different way:

PS01: [The main benefit I experienced was] just focusing on nothing. Pushing out distractions and focusing on what needs to be done... So when I get back to letting life flood in, I'm in a better position to manage and cope. I can deal with the task at hand.

PS02: Within a week or so of starting the meditations I started to feel a bit different. And it feels like I have more options and ways to deal with stuff. This process has reinforced that I have friends to help me deal with stuff and keeping those channels open. But also I just feel more settled in myself. There's this thing that I've just wanted to calm down, and it's just calmer. And I can deal with the world easier now.

In the past, these participants may have dealt with stress by watching pornography, but it seems now that meditation has improved their capacity to face that stress head on, instead of avoid it through pornography use. This was the underlying intention of the meditation practice, as it means that the men were learning how to

manage and cope with the underlying triggers of their use. In support of the principal hypothesis of the research, cultivating the participants' capacity to objectively observe and sit with their internal experience also resulted in an increased ability to observe temptations to watch pornography and respond to those temptations in a more productive way:

PS02: But I also notice that when I'm using porn it's not giving me the same kick that it used to, so I was going for harder and harder material to get the same response, but this study has given me the space to actually realize that I don't actually like that stuff. There's something I'm finding difficult to articulate, particularly the mindfulness because I felt and feel like I'm feeling and thinking differently, but it's difficult to pinpoint exactly what has changed there. And I attribute it to the mindfulness.

While the interview data helps explain how meditation might be contributing to the positive and supports moving into the intervention phase of the research project, it is important to acknowledge that some other aspects of the research that will necessary to examine during intervention study. Firstly, PS01 and PS02 both scored 'negative' with the PCQ and had low amounts of pornography viewing (both in frequency and duration). This may have been a factor in why meditation worked for these participants. With the intervention study, it is likely that some of the participants will have significantly higher amounts of pornography use, as well as higher PCQ scores. It will be interesting to see if frequency and duration of pornography use play a role in the efficacy of meditation as a mediator of consumption. Secondly, both PS01 and PS02 completed 79% and 83% of the required meditation sessions. This is nearly double of what PS03 was able to complete, which was 43%. It is interesting to note that it was PS03 who experienced no benefits from meditation. PS03, however, reported experiencing higher than normal stress in his everyday life, namely work and relationship stress. He said that meditation became a time-consuming hindrance to his busy schedule since he had to dedicate additional time and energy to stressful situations that had suddenly emerged. In the intervention study, it will be important to check in with the participants that did not meditate regularly, or

whose pornography viewing did not change in the expected direction, and check whether any life circumstances change or became increasingly stressful during the study.

With regards to the specific meditation style, content, and technique that was recorded and provided to the participants, two out of three participants (PS01 and PS02) generally enjoyed the meditations, while one participant (PS03) did not particularly enjoy the meditation style. This could have been a reason that he did not adhere to the meditations during the study, though he did not directly state this as such. He did, however, communicate that he would revert back to a meditation technique he had learned in the past:

PS03: [Will I continue with meditation?] Not this one, but probably yes. More like Vipassana, which I've learned before. I think the meditations would be better with more guidance, so I know the purpose, expectations. Otherwise I didn't know why I should be feeling discomfort.

PS03 did bring up a relevant point regarding his not knowing why he should be feeling discomfort. The intention of the intervention was to provide only minimal educational and intellectual framework – as the hypothesis of the study was based on the practical application of meditation, as opposed to the theoretical knowledge of how it works – so that the participant can focus on their practice, instead of thinking about what was supposed to be happening. Indeed, the experiences of PS02 highlight the importance of learning this subtlety in the practice on your own instead of being told what to expect:

PS02: It wasn't the sort of meditation of mindfulness that I had been exposed to or familiar with... So I ran with it, but it was tough at first with the breathing and the rhythm. Especially noticing the distress I was experiencing. And then it dawned on me that being able to sit with this distress and learn how to cope with it was the help, rather than finding a place to relax and de-stress. It was asking myself 'how can I be stress and okay?' And just let it be.

Despite the promising experiences of PS02, PS03's experience, however, will lead to a very minor change for intervention study participants. Those participants will be told that they may encounter experiences of discomfort, distress, anxiousness, or other uncomfortable states during their meditation. Participants were instructed that learning how to observe these experiences objectively could help them learn how to manage and cope with them when they arise in everyday life.

All three participants noted the benefits of the interview process, daily logging process and weekly check-in requirements. These data collection methods ended up being soft interventions for the participants. Interviews allowed the participants to speak openly and honestly about their pornography use, which was something they rarely – if ever – were able to do. The daily logging process also created a sense of accountability for the participants and allowed them to reflect on their pornography use much more often than before the study. Thus, these soft interventions likely played a part in the success of the intervention:

PS02: The first thing I noticed is that I immediately started talking about this more with people. My partner, a couple of friends. And before I even started the meditation I found myself able to step into a place where I thought 'oh okay, I'm on the path out of this now'. And I had a bunch of other stuff going on, so I was quite consciously keeping myself busy with other bits of life, which made it very easy to continue walking away from porn. That lasted a few weeks. Then I did have a day at home where I started using pornography again. And then shortly after that I started the mindfulness. And that process was quite interesting.

PS01: I guess having someone to be accountable to, someone following my use. Someone is kind of watching it. That was one helpful aspect. Just having a routine to follow.

Lastly, although visual inspection and analysis of results were deemed adequate and appropriate for the pilot study, additional statistical analysis and tools would be utilised for the intervention study since visual inspection has been shown to result in

researcher bias and/or misinterpretation (Parker et al., 2007). Statistical analysis would thus improve the rigour of the findings.

4.4 Conclusion

The purpose of the pilot study was to accomplish three primary objectives: 1) To ensure all procedural, administrative, and intervention protocols ensure ethical standards and participant safety, 2) to test sensitivity of data measurement tools against the proposed intervention, and 3) to assess initial efficacy of the guided meditation intervention for the current study population. Utilising mixed methods within a SCED design, the pilot study was successful across all three objectives and revealed important information and factors that were considered for the main intervention study. Both the PCQ and PPCS displayed intervention sensitivity, and also provided important supporting data supporting the efficacy of the proposed intervention. The SF-SCS and PSS were not intervention sensitive with this population and were replaced with two scales (SBC and MAAS). For the participants that adhered to the meditation protocol (PS01 and PS02), initial results suggested efficacy, and the combination of quantitative and qualitative results indicated that there was sufficient evidence to support moving forward into the intervention phase of the research.

Chapter 5 – The Problem with Problematic Pornography Use: A Researcher’s Reflection

5.1 Prelude

This article discusses the importance of contextualisation, and integrating quantitative and qualitative data in order to improve the validity and rigour of academic research pertaining to men with SPPPU. In clinical settings, contextualisation and examining the patient’s bigger picture is standard practice. Clinicians must fully explore the life of their client in order to understand their behaviours and circumstances. In the critical world of sexuality studies, the context of the individual is taken into account, as well as the broader social, cultural and economic structures that surround the individual. Utilising both of these approaches and applying them to SPPPU research would greatly improve mainstream pornography research. Researchers would be benefitted with a deeper understanding of pornography in a more nuanced manner.

Published works in this chapter:

Sniewski, L. (2018). The problem with problematic pornography use. Psychology Aotearoa. 10(2), 116-118.

5.2 Reflection Article

I began my PhD journey exploring how meditation might work as an intervention for men with problematic pornography use at the Auckland University of Technology nearly two years ago. Quite quickly, it became the humbling experience I probably should have expected. What I thought was going to be a simple, straightforward project, turned into an important lesson in what it means to be a competent and capable researcher. My Postgraduate Diploma, Master’s Degree, and cumulative life experiences did not stand a chance against the nuances, complexities, and the humanistic realities of the subject matter I was diving into. After all, when you consider the currently stigmatised and

shame-ridden nature of problematic pornography use, the last thing I should have expected was simplicity. What I have learned during my study, and what will be discussed in this article, is the importance of contextualisation, and integrating quantitative and qualitative data in order to improve the validity and rigour of academic research.

Naïve confidence is often the seed of inspiration that fuels the brave souls that decide to venture down the path towards a doctorate degree. I surely had plenty of it. And probably like every person reading this article, I wanted to help people that needed help. But it was pure naivety that made me think I already knew enough about pornography, about how men talk about and experience their use, about why men identify their use as problematic, and which interventions would work best. This PhD was going to be a breeze.

Over the last two years of my PhD, however, I have found myself continuously amazed by new, fresh, and thought-provoking perspectives; most of which have come directly from the first-hand experiences and insights offered by research participants. The research process has transformed my emotionally-charged, dogmatic beliefs about problematic pornography into a grounded, practical, and realistic worldview that takes into account the myriad of variables that make each case unique and different. Nothing is ever as simple as sensational media headlines can make it seem, especially problematic pornography use.

Self-perceived problematic pornography use (SPPPU) has become a heated topic within academic and clinical settings (Duffy, Dawson, & das Nair, 2016). SPPPU refers to the extent to which an individual feels they are unable to regulate their pornography use and relies overwhelmingly on the user's subjective self-perception and experiences (Grubbs et al., 2015). Individuals who perceive their relationship with pornography as problematic, however, classify their use as such for a myriad of reasons, including religious, moral or ethical, social and relationship, quantity of time spent viewing, or viewing in inappropriate contexts (Twohig & Crosby, 2009). Because of the variety of quantitative and qualitative factors that play a part in determining if and how pornography use is problematic, it would be unrealistic to assume that a single scale or questionnaire could accurately capture or assess each type of pornography user. This is

why the main problem with SPPPU is likely the same problem that exists within most psychological contexts, fields, and phenomena: contextualisation.

In the clinical world, contextualisation and looking at the bigger picture is likely standard practice. Clinicians dig into the life of their client in order to understand their behaviours and circumstances. In the critical world of sexuality studies, the context of the individual is taken into account as well as the broader social, cultural and economic context of a given society. Utilising both these approaches and applying them to problematic pornography research would greatly improve mainstream pornography research. It would allow researchers to understand pornography in a more nuanced manner; along with a greater degree of contextualising, both in terms of the person and in terms of society. In conducting my interviews, for example, it was surprising that this was the first time many of these men had ever spoken about pornography to anyone. Uncovering and exploring the reasons for the lack of communication and opening up would provide meaningful insights for the field of problematic pornography use.

One of the immediate takeaways (and definitely an unanticipated insight) from my research is that whether or not a man perceives his pornography use as problematic does not correlate well with the existent scores of scales and questionnaires related to porn use. One participant might watch porn very infrequently but consider their viewing to be extremely problematic, while another watches it every day and only feels he needs to tone it down a bit. Additionally, and not surprisingly, every participant identified very different and very specific reasons (i.e., specific content went against moral values, porn was the only coping mechanism for loneliness, violation of religious beliefs, felt unable to control the urge to watch, incapable of proper intimacy with real women, neglects childcare responsibilities in order to view) as to why they perceived their pornography use to be problematic. These first-hand experiences broke through some of the stereotypical myths and expectations around what is perceived as problematic pornography use. The continued challenge is the current lack of criteria for problematic pornography consumption, which means that determining whether or not consumption is problematic in a standardised way is difficult, and arguably impossible because of the many contextual layers involved. The raw numbers and questionnaire scores do not tell the full story.

On the surface, my own research seems fairly straightforward; examining meditation as an intervention for men with SPPPU. The research has been investigating the implications and experiences of an intervention which allows participants to practise sitting and observing their internal experience with non-reaction and acceptance, with the principal hypothesis that the consistent practice of ‘being with self’ will develop the participant’s capacity to respond to cravings and urges to use pornography, and unwanted ruminating thoughts, in more productive ways. The research methods and methodology used, however, had to be carefully selected and designed in order to adequately address contextualisation. Quantitative measures such as scales, questionnaires, and logging sheets were used to assess and analyse the effectiveness of meditation, but in-depth qualitative data in the form of pre- and post-study interviews provided the much-needed contextualisation.

One of the primary reasons for using such a mixed methods approach was in large part due to previous research acknowledging that qualitative factors were often better indicators of problematic pornography use than quantitative factors (Sniewski, Farvid, & Carter 2018). Indeed, the frequency of pornography use is not always the underlying issue with pornography use as negative symptoms experienced by the individual more strongly predict the individual seeking treatment (Gola, Lewczuk, & Skorko, 2016). This made a mixed methods approach the most useful way forward for generating a thorough understanding of the issue.

The initial data from the participants’ actual pornography use confirmed suspicions. Self-reported use was well below thresholds that would be classified as problematic within research settings. For example, the Pornography Craving Questionnaire (PCQ) attempts to predict the likelihood of relapse following therapy by measuring subjective craving for pornography (Kraus & Rosenberg, 2014), while the Problematic Pornography Use Scale (PPCS) helps distinguish between non-problematic and problematic pornography use (Bóthe et al., 2018). Although both of these scales are scientifically validated, scores from neither would have categorised the majority of the participants’ pornography use as problematic even though they identified themselves as having a problem for this research. Additionally, Cooper, Delmonico, and Burg (2000) quantified problematic pornography use as spending at least 11 hours viewing

pornography per week, a threshold that no participant in my research came within 50% of reaching. While the quantitative data provided by the scales and questionnaires can provide some information, it was the in-depth qualitative exploration of each participant that provided a rich, detailed and contextualised account of what these numbers actually meant.

When you combine these methods to match the intention and aim of the study, you get richer data and a much clearer picture of what is actually going on in the lives of the respective participants, and certainly data that is less encumbered by research assumptions. This kind of data would help push the field forward. The results more closely resemble the participant and the many contexts that make him unique. There is more meaning behind the numbers. And this is why contextualisation matters.

In terms of pornography use, and likely many other psychological contexts, contextualisation further reinforces the notion of finding the uniqueness of the client's experience and focusing on the bigger picture context of their life, and not just aspects, markers, scales, and quantitative assessments. The quantitative data is important, especially when the scales have been validated, but information needs to be contextualised with in-depth qualitative discussions. While the literature and data on pornography continues to mount, it will greatly benefit the field to integrate mixed methods that support and build a richer story beneath the scores. It is also this researcher's belief that much of the sensationalism, stigma, and shame would disintegrate if the participant's pornography use were viewed from the contextual reference point of their life.

Chapter 6 – Hidden in Shame: Heterosexual Men’s Experiences of Self-Perceived Problematic Pornography Use

6.1 Prelude

This chapter explores the experiences of adult heterosexual men with SPPPU in New Zealand. Fifteen heterosexual men were recruited to take part in semi-structured interviews about their pornography consumption habits as part of an intervention programme. A data-driven inductive thematic analysis was conducted in order to examine and analyse the different ways men discussed their problematic pornography use. Four primary themes were identified from the data: Secrecy and Silence, Losing Control, Eschewing Discomfort, and Pornography as an influencer. The principal reason men kept their pornography viewing hidden was rooted in the accompanying experiences of guilt and shame that would inevitably follow most – if not all – viewing sessions, as well as failed attempts at communicating openly about their use with others. Pornography eroded the participants’ sense of autonomy and agency because the men perceived a complete lack of control with their use. Men perceived that their long-term pornography viewing habits resulted in unrealistic and altered expectations of women, sex and sexuality.

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6.2 Background

The social and cultural context within the Anglo-West has repeatedly been identified as sexualized and pornified (Atwood, 2006), but in complex and contradictory ways (Gill, 2012). One aspect of this trend has been the rapid rise in the availability of free and

unregulated online pornography, which has given the world instant access to a vast and diverse supply of pornographic content. PornHub – the most popular free pornography website – has over 58 million visits per day, with New Zealanders – on a per capita basis – representing the fifth most regular visitors worldwide (New Zealand Herald, 2016). People first access pornography for a variety of reasons, but early curiosity and experimentation can escalate into problematic and/or compulsive patterns of use (Hilton, 2013; Meerkerk et al., 2006). While it is possible for both genders to experience a problematic relationship with pornography, the large majority of online pornography consumers – and those who identify as addicted to pornography – are heterosexual men (Weinstein et al., 2015). Currently, very little research has used qualitative methods to gather rich and in-depth personal data that focuses on men’s problematic pornography use. Within this paper, we aim to address this issue by examining the experiences of adult heterosexual men with problematic pornography use in New Zealand.

Self-Perceived Problematic Pornography Use (SPPPU)

Pornography use has increasingly emerged as an area of focus in academic literature. Problematic pornography consumption – often labeled as ‘porn or pornography addiction’ – refers to any consumption of pornography that causes negative interpersonal, vocational, or personal consequences for the user (Grubbs et al, 2015). Research suggests that excessive pornography consumption may have similar effects to substance-dependencies, including interference with working memory performance (Laier, Schulte, & Brand, 2013), neuroplastic changes to the brain that reinforce use (Hilton, 2013; Love et al, 2015), as well as a significant negative association between use and grey matter volume in the brain (Kühn & Gallinat, 2014). Indeed, functional magnetic imaging (fMRI) data scans show that brains of pornography addicts may be comparable to drug addicts in terms of brain activity (Voon et al, 2014).

Due to the current lack of published scientific literature supporting the formal classification of pornography addiction (Ley, Prause, & Finn, 2014), current literature related to pornography categorizes problematic pornography use as a subset of other sexually-related disorders (i.e., hypersexual disorder, sexual addiction, sexual compulsivity) due to the similarities between the criteria of these related classifications

(Sniewski, Farvid, & Carter, 2018). Despite the underlying similarities, however, literature indicates that problematic pornography use may be distinct and different from other sexual disorders (Duffy, Dawson, & das Nair, 2016). For example, one of the ways that problematic pornography use is different from other sexually-related disorders in other classifications is that sexual activity involving human contact may be experienced as more anxiety-inducing than the convenience of privately and anonymously consuming pornography (Short et al., 2016). Self Perceived Problematic Pornography Use (SPPPU), thus, refers to an individual who self-identifies as having an addiction to pornography, or a problematic or fraught relationship where they feel unable to regulate their use. This definition relies on the user's experiences and subjective self-perception when determining the degree to which the pursuit, and subsequent consumption, of pornography intrudes on everyday life (Grubbs et al., 2015).

Men can experience their pornography use as problematic for a variety of reasons. These include personal or ethical reasons, social and relational reasons, the frequency of use, amount of time spend engaging with pornographic material, consuming pornography in inappropriate contexts, consuming pornography with content that causes distress, or consuming such material at the expense of other responsibilities (Twohig & Crosby, 2010). While problematic pornography use has been quantified in literature as spending at least 11 hours per week viewing pornography (Cooper, Delmonico, & Burg, 2000), consuming daily (Harper & Hodgins, 2016), or surpassing a threshold of seven orgasms per week (Kafka, 2010), frequency of consumption, in and of itself, is not vital to SPPPU (Sniewski, Farvid, & Carter, 2018). Instead, core issues that predict men's self-definition of problematic pornography use are the negative symptoms that men experience (Gola, Lewczuk, & Skorko, 2016). Research also indicates that central to SPPPU is the concept of experiential avoidance (Wetterneck et al, 2012). Accordingly, when men who identify with SPPPU watch pornography, it is often as an effort to cope with unwanted thoughts or feelings, even though the viewing itself may subsequently lead to additional negative affect or other problematic consequences (Wetterneck et al, 2012).

Men with SPPPU feel their pornography use is out of control and have experienced multiple failed attempts at either cutting back or quitting (Kraus, Martino, & Potenza, 2016). Although rare, when men with SPPPU do seek help for their use, they

perceive treatment options as inadequate or ineffective (Ross, Månsson, & Daneback, 2012). Additionally, men with SPPPU face a difficult situation because therapists typically lack the training necessary to manage such pornography use (Ayres & Haddock, 2009). This is despite clients continuing to frequently disclose their problematic pornography use in sessions (Ayres & Haddock, 2009), as well as the clinical belief that problematic pornography consumption is worthy of treatment and intervention (Pyle & Bridges, 2012). Without an adequate understanding of men's experiences and accounts of problematic pornography use, the possibility for ineffective or unethical treatment increases since therapy and treatment approaches are likely to be influenced by personal biases and beliefs (Ayres & Haddock, 2009). This paper seeks to address a significant research gap related to the factors and contexts that contribute to self-perceived problematic pornography use, its origins, the reasons men volunteered to talk about such issues, and an exploration of past attempts at quitting pornography. The data and results presented here help to identify the contexts in which pornography viewing can be problematic, but can also assist clinicians and therapists working with this specific population.

6.3 Method

Epistemology and Methodology

This work is situated within a critical realist epistemological framework, which allows for an in-depth examination of psychosocial phenomena (Fletcher, 2017). Here we examine how adult heterosexual men with SPPPU talk about their experiences of pornography use from an exploratory qualitative perspective. A critical realist approach means that instead of directly reporting what the participants said, the researchers engaged in interpretive work, identifying the underlying ideologies, psychological mechanisms and/or surrounding socio-cultural structures that shaped the narratives (Houston, 2001). Additionally, exploratory qualitative methodology allowed researchers to develop a better understanding of specific issues and to probe participants for rich, personal, and experiential data (Mack et al., 2005).

Participants

Fifteen heterosexual men were recruited via advertising, social media outreach, and word of mouth to take part in interviews about their self-perceived problematic pornography consumption habits. The research advertisement sought to attract men who met the basic inclusion requirements (i.e., New Zealand-based, aged 21 or over, and identifying as a heterosexual man) and who identified with SPPPU. The implications of this recruitment strategy was that a specific group of volunteers came forward that identified with SPPPU and were ready and willing to talk about this to a researcher (Farvid, 2010). The advertisement was placed on noticeboards across Auckland-based universities. Digital copies were sent to New Zealand-based sex therapists and clinicians. Digital copies were also shared on social media such as Facebook and Twitter.

The participants were aged between 22 and 51 ($M=32.5$), nine identified as Pākehā (Non-Māori New Zealanders of European descent), three as Asian (Chinese, Southeast Asian, and Indian, respectively), one as Pasifika, one as Māori, and one as Middle-Eastern. Six of the participants were employed professionals ($N=6$), five were undergraduate tertiary students ($N=5$), followed by two postgraduate tertiary students ($N=2$), and two participants who did not specify ($N=2$). Ethical approval was gained from the host university prior to commencing data collection.

Data Collection

The heterosexual men were interviewed about the various aspects of their pornography use in Auckland, New Zealand between May and August of 2018, either in-person or via Skype video call. All interviews were conducted by the first author (a heterosexual man with previous experiences of SPPPU, who was of a similar age to the average participant). In order to support academic rigor, the first author worked in conjunction with the second author to review interview data, codes, and themes, and to ensure neutrality. The data were collected using semi-structured interviews, which ranged from 30 to 75 minutes (with most about 60 minutes). Interview questions asked about the participants' first exposure to pornography, sexual education during childhood, openness with family members and friends about discussing pornography use, frequency, duration, and patterns of use, triggers for use, feelings and emotions after use, reasons for problematic self-perception, and past attempts at reducing or quitting pornography. The

interviews were audio recorded and later transcribed verbatim. Pseudonyms were provided for the participants and all identifying information was changed or removed for the purposes of publication.

Data Analysis

Situated within critical realism, a data-driven or inductive thematic analysis was conducted across the full dataset (Braun & Clarke, 2006; Braun & Clarke, 2012). A data-driven approach means that the themes derived were strongly linked to what the participants said within the interviews, and the researchers did not impose their own thematic categories within which to fit the data. Such an approach is suited to exploratory qualitative research and useful for an in-depth exploration of the data since there was little research and knowledge about the topic. The analysis derived themes from both the semantic level (surface reading of the data) and the latent level (underlying ideas or ideologies that inform the semantic content) when analyzing and interpreting the data. For example, while some of the sub-themes and codes were identified from the explicit surface content, the analysis examines the underlying ideals, conceptualizations, and assumptions that informed the semantic content of the data (Braun & Clarke, 2006). The iterative process of thematic analysis followed the standard six phases of data analysis as outlined by Braun and Clarke (2006, 2012). The first author, in full consultation with the second author, conducted the coding and analysis processes. When reporting the data, basic punctuation is used and the insertion of [...] denotes the removal of unrelated data.

6.4 Results and Discussion

Four main themes were identified across the data: *Secrecy and Silence*, *Losing Control*, *Eschewing Discomfort*, and *Pornography as a Sexual Influencer*.

Secrecy and Silence

All of the men discussed the secretive nature of their pornography use. Men reported keeping their use hidden from close friends, family members, and partners. Indeed, for all but three of the men, these interviews represented the first instances of speaking to anyone about their use. The men provided various reasons for keeping their consumption hidden:

Albert: Sex was taboo in the 80s and 90s. Even in the media it was talked about as a bad thing to do. Yeah, it was something no one talked about [...] you just keep it private. (37, Pākehā, Student)

Zachary: Porn was a source of guilt, really. I was a Christian kid, so the bible really taught that porn was bad. You know, if the eye can offend you, pluck it out. (43, Pākehā, Therapist)

Frank: In my [Chinese] culture we don't talk about it. No, never. (27, Asian, Student)

David: As I started getting into more and more extreme things it became this super-taboo thing I could never talk about. Particularly when it came to anal sex, I'd be aroused at the thought of anal sex, but incredibly embarrassed at anyone finding out that's what I was into. Just very, very private. (29, Pākehā, Professional)

The secretive nature of the men's pornography use covered many dimensions. Albert and Zachary described the social and religious contexts that contributed to keeping their use private. Frank, a university student from China who reveled in the personal freedoms he enjoyed as a student living in dorms at a New Zealand-based University, laughed when asked about whether he spoke to his parents about his pornography use. He declared that pornography was not something anyone from China would openly discuss.

While concerns regarding pornography viewing – in general – and particular stigmatized acts such as anal intercourse may be shifting with the normalization of pornography (Marston & Lewis, 2014), David reported feeling ashamed of the pornographic content he enjoyed. Given the currently 'pornified' sociocultural context (McNair, 2014), where pornography is seen as mainstreamed, these accounts were surprising. They indicated a level of unease and shame with pornography consumption, which positioned pornography as anything but normalized (albeit such claims were

sometimes qualified by referring to religion or Chinese culture). David for example, described anal sex as ‘extreme’ when it comes to pornography consumption. Interestingly, anal sex might now be considered as ‘standard’ or normal, especially when considering trends in pornography that involve more extreme acts (i.e., double or triple penetration, group sex, BDSM). Thus, it is possible that either these cohort of men were seemingly quite conservative or that the normalcy of pornography – or at least the normalcy of some sexual acts such as anal sex – has been overestimated.

In the instances when the men’s friend, partner, or family member discovered their pornography use, the subsequent experience of embarrassment often served to reinforce the secretive nature of viewing. For example, when Michael’s older brother returned a laptop he had borrowed, he looked Michael straight in the eyes and told him sternly to delete his browsing history. There was no other exchange of words, which left Michael feeling unsettled and humiliated. In an effort to avoid situations like those that Michael had, men went out of their way to ensure that their viewing remained private:

Paul: I would watch porn at Internet cafes, just choosing a computer that wasn’t in view of other people. (39, Pākehā, Professional)

Wallace: Sometimes I’ll spray perfume to get rid of the smell. I think I smell after I use porn and I want to get rid of it. (29, Pākehā, Teacher)

In order to keep his viewing hidden from his family, Paul (ironically) resorted to consuming pornography in public spaces. Despite being in a public place, Paul would rub his erect penis against his pants in a specific way that would still allow him to reach orgasm. Paul described his internet café experiences as ‘getting his fix’. Indeed, reflecting on these contexts and situations was one of the factors that made him feel his pornography use had become problematic. Wallace, on the other hand, was worried that people would discover his pornography use by smelling it on him as he thought the smell of his semen would be obvious to those around him. Interestingly, he admitted that he did not actually think other people would be able to detect or notice the smell. Thus, it seems that the smell of semen was a symbolic form of stigma for Wallace, with perfume

representing a way of hiding the associated shame. Lastly, Peter described his long periods of secret viewing in the bathroom:

Peter: Each viewing session would be about 2 or 3 hours, but my son is pretty good, so I'd sometimes leave him to potter around for some time while I viewed. I would be in the toilet [...] If my wife knew I was doing that, she wouldn't be very happy. (40, Pākehā, Did not specify)

In an effort to keep his viewing hidden from his family, Peter neglected his parenting duties while attending to his viewing needs. Peter's account also highlights the related subtheme of participants viewing pornography in inappropriate contexts. Another participant, Daniel, reported feeling tempted to view pornography at work. He would wait until the office was empty before consuming pornography there. Although other researchers have identified inappropriate viewing contexts as a characteristic of problematic pornography use (Twohig & Crosby, 2010), Daniel was the only interviewee to identify the contextual nature of his viewing as problematic. Context, it seems, was a secondary factor to identifying with SPPPU and merely a consequence of the efforts made to keep pornography use hidden.

Research suggests that that for many men who report problems with their pornography use, these problems take place particularly in their intimate and sexual relations / relationships (Daneback, Ross, & Månsson, 2006). For the men in the study in relationships (or discussed past relationships when pornography became problematic), pornography use was perceived as problematic in one of two specific ways. Firstly, some of the men experienced feelings of guilt and shame for preferring pornography to having sex or being intimate with their partner. As an example of the first scenario, towards the end of his relationship, Phillip would choose to watch pornography instead of having sex:

Phillip: I would definitely go downstairs on a number of nights to sleep on the couch and just watch some porn. (29, Asian, Student)

Literature supports the notion that Philip's secretive pornography viewing likely contributed to his deteriorating relationship (Whitty, 2003), even though Phillip did not directly state that pornography was the reason for his diminished need for intimacy with his partner. Indeed, Phillip reported the deterioration of the relationship as prior to his late night pornography excursions downstairs.

Paul's situation with his wife was quite different from Phillip's. Paul was a recovered alcoholic of nearly sixteen years. He volunteered for the study because he felt that pornography was a subsequent addiction he was dealing with. Paul was so embarrassed about his pornography viewing that he had not ever openly talk about it with any friends, family members, or his partner. In an effort to maintain his self-image as a man that does not watch pornography, sometimes he would instead watch women dancing in bikinis on YouTube music videos and reach orgasm by allowing the shower to spray onto his penis in a specific way. By doing this, Paul could feel better about himself because he had not technically watched pornography or directly masturbated. Interestingly, Paul described his relationship with his wife as loving and positive. Nonetheless, despite his wife's attitude towards his pornography viewing being generally playful and accepting, he watched pornography in private in the bathroom during his showers:

Paul: I would say [I would be] looking forward to an instance once a day and having to be sly about it around my wife. So I live with my wife, and it would have to be not too many available options to watch it at home. (39, Pākehā, Professional)

Philip's and Paul's narratives illustrate that the state of the relationship – whether positive or negative – does not necessarily affect whether these men with SPPPU kept their pornography use hidden from a partner. What the men seemed to fear most was the potential consequences (i.e., feelings of shame, guilt, or embarrassment) of their secret consumption being seen by their partner. This fear prevented men from opening up about their use to their partners and might signal an important step for men seeking to intervene with their SPPPU. Indeed, some research suggests that the efficacy demonstrated by

conjoint therapy for men with SPPPU was the result of the couple learning how to communicate about the male partner's pornography use (Sniewski, Farvid, & Carter, 2018). Such improvements to intra-couple communication diminished feelings of shame and guilt experienced by the male partner (Sniewski, Farvid, & Carter, 2018).

Secondly, for some of the other men, viewing pornography – in and of itself – created problems within the relationship. In line with the literature, for these men, discussing pornography use with their partners caused relational distress, deterioration of trust, and lowered self-esteem for the female partner (Bridges et al., 2003). For example, Zachary was a self-proclaimed devout Christian leading up to his first marriage. The personal shame he felt when he watched pornography was directly related to his strong religious beliefs. He hid his pornography use from his wife as long as he could and did not disclose his pornography use until after they got married. Zachary's partner, however, was very distressed, not just to hear about the pornography use, but also that Zachary had waited until they were married to inform her. Attempts at open communication about Zachary's pornography consumption did not work for the couple:

Zachary: She didn't like [my viewing] but we came to the decision that I would tell her when I would use. But that didn't work because I didn't want to share that with her, and it was unbearably shameful. I couldn't share with her and I felt awful about it. During the first year of our marriage, I viewed like 3 or 4 times, but I would beat myself up so much when I craved using it and it wasn't healthy. It created a really toxic feeling and cycle. For both me and my partner. (43, Pākehā, Therapist)

Experiences of shame and guilt resulting from his hidden use compounded Zachary's continued pornography use. These shame-fueled cycles of pornography use described by Zachary were experiences shared by the other men in the study as well. While it is possible for shame and guilt to prompt declines or shifts in behavioral change in general (Allen, Murphy, & Bates, 2017), the experiences of these men more closely aligned with literature which suggests that shame and guilt are positively correlated to

ongoing and reinforced hypersexual behavior such as pornography use (Gilliland, South, Carpenter, & Hardy, 2011).

Regardless of the outlet, when men broke the silence about their pornography use and were met with a lack of acceptance, this scenario serve to reinforce hidden use. Some men talked about seeking professional help in order to address their problematic pornography use. Such attempts at help-seeking had not been productive for the men, and at times even exacerbated feelings of shame. Michael, a university student who used pornography primarily as a coping mechanism for study-related stress, was having issues with erectile dysfunction during sexual encounters with women and sought help from his General Practitioner Doctor (GP):

Michael: When I went to the doctor at 19 [...], he prescribed Viagra and said [my issue] was just performance anxiety. Sometimes it worked, and sometimes it didn't. It was personal research and reading that showed me the issue was porn [...] If I go to the doctor as a young kid and he prescribes me the blue pill, then I feel like no one is really talking about it. He should be asking about my porn use, not giving me Viagra. (23, Middle-Eastern, Student)

As a result of his experience, Michael never went back to that GP and started doing his own research online. He eventually found an article discussing a man approximately his age describing a similar type of sexual dysfunction, which caused him to consider pornography as a potential contributor. After making a concerted effort to lower his pornography use, his erectile dysfunction issues began to improve. He reported that even though his total frequency of masturbation did not reduce, he only watched pornography for about half of those instances. By halving the amount of times he combined masturbation with pornography, Michael said he was able to significantly improve his erectile function during sexual encounters with women.

Phillip, like Michael, sought help for another sexual issue related to his pornography use. In his case, the problem was a noticeably reduced sex drive. When he approached his GP about his issue and its links to his pornography use, the GP reportedly had nothing to offer and instead referred him to a male fertility specialist:

Phillip: I went to a GP and he referred me to specialist who I didn't believe was particularly helpful. They didn't really offer me a solution and weren't really taking me seriously. I ended up paying him for six weeks of testosterone shots, and it was \$100 a shot, and it really didn't do anything. That was their way to treat my sexual dysfunction. I just don't feel the dialogue or situation was adequate. (29, Asian, Student)

Interviewer: [To clarify a previous point you mentioned, is this the experience] that prevented you from seeking help thereafter?

Phillip: Yup.

The GPs and specialists sought by the participants seemed to offer only biomedical solutions, an approach that has been criticised within literature (Tiefer, 1996). Hence, the service and treatment these men were able to receive from their GPs was not only deemed inadequate, but also alienated them from further accessing professional help. Although biomedical responses seem to be the most popular answer for doctors (Potts et al., 2004), a more holistic and client-centered approach is needed as the issues highlighted by men are likely psychological and possibly created by pornography use.

Another participant reported seeing a counselor to discuss his pornography use. Daniel felt he was watching a lot of pornography and perceived himself to be addicted. When he finally did meet with a counselor, Daniel felt that he was dismissive, judgmental, and moralistic when it came to his pornography use. The counselor told him he should not be watching pornography and that it was bad for his mental health:

Daniel: I felt it was dismissive. It's really difficult for me talking about this topic, but it's important to do to work through it. But it was so raw after that. Like wow, I had this problem for so long, and I finally step out to talk about it, and I get shit on. Like, fuck this! It was very hurtful. It felt like he was coming after me from a moral perspective. (27, Pasifika, Student)

Interviewer: Was it this experience that prevented you from seeking help thereafter?

Daniel: Absolutely.

Experiences like those described above are not isolated. Previous research indicates that many therapists and counselors report not having the adequate tools or knowledge to help men with SPPPU (Ayres & Haddock, 2009). In the current study, negative experiences with clinical professionals resulted in additional feelings of shame, continued and reinforced use, and lower likelihood of future help-seeking.

The hidden nature of pornography use typically stemmed from feelings that discussions around sex were taboo from a young age. Men talked about the curiosity, wonder, and excitement associated with their first exposure to pornographic content, but they had no one to talk to about their experience. In many ways, pornography is widely consumed by boys and this is typically considered a normative part of ‘manhood’ (Antevska & Gavey, 2015), but without the proper guidance, advice, or explanation from their parents – and/or sufficient sex education – boys simply do not know how to navigate through this sexually-charged material. For most of the men, sex and pornography were simply taboo subjects that were never adequately broached by parents or sex education. Hence, pornography became a surrogate sex educator (Ševčíková & Daneback, 2014):

David: My parent’s sex education involved sitting in front of a TV and watching a documentary on sex with us, with no conversation or dialogue or questions afterwards. Just not talking about it at all. (29, Pākehā, Professional)

George talked about the open communication he experienced with his parents as a child and teenager. But when the topics of sex and pornography were brought up in the household, George said that his parents were able to talk to him only briefly about sex, and never about pornography specifically. Because of the very open relationship George

had with his parents, this created the feeling that pornography was a private matter and a subject to be avoided, at the very least with his parents:

George: No. Porn no, never. Sex, very briefly as a teenager. But not really. I never felt comfortable talking to my parents about that. And I don't remember my parents ever talking to me about it. Sex was a bit of a taboo topic. It was a non-topic. I was afraid to broach the subject because I was uncomfortable talking about it. A bit scared. And I don't think they ever felt they could broach it with me. They certainly never actively tried. (51, Pākehā, Mentor)

Ironically, in a sex saturated society where sex is 'everywhere', the muted sex-education in social, cultural, and familial contexts of participants all contributed to the men feeling that they had no one to share their experiences with. The social structures that influenced these men the most – and the ones they placed most value on – ignored, stigmatized or condemned pornography. Society may have become more hypersexual, but the environments these men were raised in seemed to be very sexually conservative. Thus, even though we are in a more 'pro sex' and sexualized sociocultural context, there is a lack of direct, frank, and informative sexual education or open communication, thus creating a contradiction for these men. As a result, the participants kept their porn use hidden from adolescence and into adulthood.

Losing Control

All participants reported that their pornography use was outside of their conscious control. All had difficulties curbing, reducing, or ceasing their pornography use when they attempted to reduce or abstain from viewing. David shook his head and smirked as he reflected on his difficulty in abstaining from pornography:

David: It's this funny thing because my brain will start with something like 'you should look at porn', and then my brain will think that 'oh, I shouldn't do that', but then I'll go and look at it anyway. (29, Pākehā, Professional)

David describes an intrapsychic conflict, where he is psychologically pulled in different directions when it comes to his pornography use. For David, and many of the other participants, the temptation to consume pornography consistently won out in this internal ‘tug of war’.

One participant talked about the strong visceral experiences he felt when he became aroused. His temptation and craving to use pornography were so overwhelming that he could not focus on anything else until the urge had been satisfied:

Michael: When I'm aroused, I have to masturbate. I literally have no control over it. It controls my decisions. When I'm aroused, I'm not rational. When I get aroused, I start browsing. And it's a trap I fall into pretty much every time. When I'm aroused I don't give a shit! (23, Middle-Eastern, Student)

The men described almost an internal splitting that occurred for them. This was between a ‘rational self’ that does not want to watch pornography, and the ‘aroused self’ that has no control over pornography use. This ‘arousal imperative’ created a linear narrative and sexual script when it came to the men’s SPPPU. Once the men were aroused, they reported needing masturbatory orgasmic release almost at any cost.

Furthermore, the participants’ behavioral patterning in relation to pornography represents a violation of their autonomy and self-control (Deci & Ryan, 2002). Autonomy, or control over one’s desires and actions, is considered a fundamental psychological need in the contemporary context (Brown, Ryan, & Creswell, 2007). Indeed, literature has shown that the greater the perception of self-control and self-functioning experienced by an individual, the greater the likelihood of perceived happiness (Ramezani & Gholtash, 2015). The participants discussed their perceived lack of control – and thus hindered autonomy – in three different ways.

Firstly, men discussed their lack of willpower and subsequent feelings of psychological ‘weakness’ in relation to their viewing. Albert and Frank reported that their lack of control was a consequence of feeling psychologically weak. David, Paul, and Brent valued their ability to have a sense of mastery over other life domains (e.g., work,

goals, social relations), yet when it came to pornography, they felt powerless to control their consumption. This was highly distressing for these men. For example:

Wallace: It feels really weird saying it out loud, but I'd want to stop being controlled when it came to sexual urges. Having to masturbate in certain situations, or like going to the bathroom to have a shower. I'd prefer it not to have that control over me. I just start to feel aroused and I think 'I guess I have to do it now'. (29, Pākehā, Teacher)

Though not directly communicated by the men, this perceived lack of agency with regards to their pornography use likely represents a fundamental violation of traditional masculine identity. The notions of control and self-mastery are often attributable as masculine traits within the west (Canham, 2009). Hence, men's lack of control over their pornography use was distressing as it not only indicated a lack of personal autonomy, but also violated some of the fundamentals of contemporary manhood. Here, an interesting contradiction is evident. Although watching pornography is considered a masculinized activity – and a means by which some men can 'do' masculinity correctly (Antevska & Gavey, 2015) – compulsive pornography use was experienced in negative terms; as disempowerment and a violation of their masculine identity.

Participants also experienced an undermining of their autonomy and identified a lack of agency when their viewing became an automatic habit. Here, their pornography use had evolved into a compulsion that needed to run its course once the thought of pornography entered their mind or when they became aroused. For these men, the pleasure and sexual stimulation once associated with watching pornographic content had faded, and was replaced with a habituated response pattern. For example:

David: I used to enjoy porn a lot more, where now I feel it's just become just a thing I do, somewhat of a routine that I don't particularly enjoy as much, but I know I need to do it in order to complete the routine. Something I need to follow. I know the outcome, but it doesn't give me the same buzz it used to. There's more of a dissatisfaction and disgust that seeps through the entire experience because it

seems I can't escape the process. But since there's finality to it, a specific end, then I just ride through the porn routine until the end and then continue on with my day. (29, Pākehā, Professional)

David's experience highlights the troubling nature of this habituated pornographic consumption pattern. Not being able to escape the process is linked to a strong affective reaction (i.e., dissatisfaction or disgust), and is positioned as particularly distressing for David. When men cannot escape a process and feel a loss in their sense of control, their wellbeing can suffer (Canham, 2009). Frank, like David, had lost much of the pleasure and stimulation initially associated with pornography use, and described a scenario of pleasureless compulsion:

Frank: It's this compulsive thing. I feel compelled to do it. It feels like I'm not even thinking about it [...] It's habitual. I don't know how to describe it [...] Sometimes when I'm trying really hard to orgasm it feels empty. I feel nothing physically. And then when I finish I wonder why I even did that in the first place [...] because it's not even pleasurable. (27, Asian, Student)

Frank's situation seems to encapsulate the problematic nature and experience for men with SPPPU. As opposed to pornography being a choice motivated by sexual stimulation – as it once was – it had evolved into a compulsive and automatic habit, devoid of pleasure. The subsequent experiences of guilt, shame, and disempowerment were the consequence of the men not being able to stop or control their use despite the desire to do so.

Lastly, men reported that their viewing made them feel like a less motivated, engaged, and energized version of themselves. For example, after watching pornography, Michael would feel completely drained of energy. Any motivation to study or engage in a productive activity waned after watching pornography and masturbating. He described his ability to reengage with life as lack of 'crispness', a self-reported quality Michael described as 'being present, clear, focused, and attentive':

Michael: After I masturbate, I feel depleted. No motivation. I don't feel crisp. I don't want to do anything, just feeling low and depleted. People are talking to you but you can't really answer. And the more I masturbate, the less crisp I feel. I don't think masturbation makes me the best version of myself. (23, Middle-Eastern, Student)

The lack of crispness, as Michael describes it, sounds comparable to the feelings of emptiness reported by Frank. Michael, however, discussed how his pornography use impacted other domains in his life. He reported that watching pornography was expending energy that would have otherwise been expended on sleep, studying, or engaging in social situations with friends. Similarly, Paul, experienced a lack of energy after viewing, but felt his post-pornography fatigue prevented him from progressing in his career and having children with his wife. He lamented that while his peers progressed in their careers jumps, had children, and increased their income, he was stuck:

Paul: I could earn something and be at a better place in life, I'm just sort of stuck in a place of doing nothing, thinking, worrying. I think I don't have a family because potentially because of my masturbating. (39, Pākehā, Professional)

Paul – and indeed many of the men in the study – seemed to identify pornography as the primary roadblock preventing them from becoming better and more productive versions of themselves.

Eschewing Discomfort

Many of the participants talked of using pornography as a way of blunting, escaping, and avoiding uncomfortable or stressful feelings. Pornography represented a temporary escape from experiences perceived as unpleasant or overwhelming. George, for example, talked about how pornography became his primary coping strategy for any and all of the affective discomfort he faced in his life:

George: Fear. Loneliness. Overwhelm. I use porn to relieve those states. In the short-term, it works. In the short term it is a relief and a release [...] And then sometime after release, maybe minutes, maybe hours, it just kind of feels empty and is not a sustainable thing. It's a temporary fix. (51, Pākehā, Mentor)

Similarly, pornography viewing has previously been linked to experiential avoidance, playing a crucial role in the viewing habits of men with SPPPU (Levin, Lillis, & Hayes, 2012). Experiential avoidance can be defined as seeking to reduce the form, frequency, or situational sensitivity of private experiences even when doing so causes additional harm (Levin, Lillis, & Hayes, 2012). Levin, Lee, and Twohig found that viewing pornography to avoid unwanted emotions accounted for both frequent viewing and its negative consequences (Levin, Lee, & Twohig, 2018). Participants seemed particularly reactive to four specific affective states: procrastination, boredom, loneliness, and stress.

Pornography came to the forefront of the participants' mind, or was possibly triggered, during situations that lacked mental or physical stimulation. When there was nothing else to do or when certain tasks were being avoided, pornography was the time-consuming activity of choice. Albert and Wallace describe watching pornography to pass time and alleviate the experience of boredom:

Albert: Most of the time it's boredom. If I'm just sitting at home with nothing to do, then I'll just watch. (37, Pākehā, Student)

Wallace: I guess for me it comes down to boredom [...] It's something to do with my free time. (29, Pākehā, Teacher)

Albert and Wallace described their experience of boredom as an uncomfortable state of agitation in their mind and body. In the absence of applying more positive coping strategies, pornography was the go-to 'quick fix'. An additional consideration in regards to these men's statements around free time leading to habitual pornography use, would be the existence of pre-existing vulnerabilities that have been linked to problematic

pornography use. Such pre-existing vulnerabilities include underlying depression or anxiety disorders (Wood, 2011), deficient self-regulation (Sirianni & Vishwanath, 2016), high levels of neuroticism (Egan & Parmar, 2013), or high levels of narcissism (Kasper, Short, & Milam, 2015). In this sense, pornography use may be a subset or manifestation of other mental health concerns.

In addition to boredom, participants' pornography use was also triggered by experiences of loneliness, isolation, or rejection. Such accounts are consistent with literature suggesting a significant positive relationship between Internet pornography use and loneliness (Yoder, Virden, & Amin, 2005). The men were able to reflect upon the role that loneliness played in their use.

Jason grew up in a conservative home environment in a small town of New Zealand. At the time of this study, Jason self-reported as a virgin and said he had never experienced intimate or sexual contact of any kind with a woman. Any time he approached women, he reported feeling intense visceral discomfort. His immediate assumption was that the woman could feel his anxious energy, which would only serve to intensify his feelings of angst. On the occasions when he did sum up the courage to approach a woman, any subsequent rejection became a significant trigger for his pornography use:

Jason: I think a lot of times I use porn after I get rejected. Like a day after the rejection sinks in. I think most of the time my porn use is driven by my feelings of rejection. (23, Asian, Student)

Jason's rejections triggered feelings of low mood as well. For Jason, pornography use served as an attempt to soothe his experiences of both rejection and depressive feelings. Upon reflecting more deeply on his pornography use and feelings of depression, he realized that when he used pornography to mediate such feelings, his low mood only worsened. Though he still used pornography, Jason made it a point to attempt to abstain when he was feeling particularly low because he knew it would only make his depressed mood worse.

Timothy, like Jason, self-reported as a virgin. For Timothy, his continued failed attempts at relationships, as well as sexual encounters in general, triggered intense feelings of loneliness. For Timothy, pornography soothed the immense loneliness he felt on a daily basis. He lived alone and reported as having no friends:

Timothy: I definitely think it's like a self-soothing thing for me [...] and it's also escapism. Escaping from being a single man, the not having anybody and feelings of loneliness. (35, Pākehā, Professional)

Without substantive social connections, pornography was the only escape available for Timothy. Despite only offering temporary relief and leading to further affective discomfort, the short escape provided by pornography was deemed useful.

Pornography represented the primary and/or only coping strategy for the stresses of daily life for most of the men. David was able to reflect upon his viewing, and how increases in his daily stress would inevitably spark increases in his pornography use:

David: Like a coping mechanism. Usually an increase in my daily life stress will spark an increase in my porn use. (29, Pākehā, Professional)

Like David, Michael knew that his levels of pornography viewing were directly related to his stress levels, which for him came in the form of university exams and assignments. Michael's experience of stress often reached a point when he felt he had no choice but to use pornography. He talked about lying awake at three o'clock in the morning unable to sleep because of the stress and anxiety of an upcoming exam. Pornography was the only way he could get at least a little sleep on those nights:

Michael: It's a coping mechanism and I just want to get rid of the anxiety. Just get it out of my body. I don't care about the consequences, I'll deal with them later. (23, Middle-Eastern, Student)

Regardless of the context, the emotional undercurrent of the men's triggering experiences was that of discomfort. When these affective states become overwhelming and there seemed like no other way of getting rid of them or coping, pornography provided a sure-fire solution, regardless of how temporary.

Pornography as a Sexual influencer

The participants talked about how pornography influenced the various aspects of their sexuality and sexual experiences. Michael discussed how pornography had influenced his sexual behaviors, specifically about the acts he would attempt to recreate with women that he had watched in pornography. He openly discussed the sexual acts he regularly engaged in, and questioned how natural these acts were:

Michael: I sometimes cum on a girl's face, which serves no biological purpose, but I got it from porn. Why not the elbow? Why not the knee? There's a level of disrespect to it. Even though the girl consents, it's still disrespectful. (23, Middle-Eastern, Student)

This desire to orgasm in this specific way was produced as a result of watching pornography since, to Michael, it was pornography that made the face a sexy and acceptable place to ejaculate. Michael relays an interesting conundrum when it comes to pornography inspired sexual acts, consent and sexual congruency. For Michael, ejaculating on a woman's face during sex feels disrespectful, yet it is a practice he engages in. His feelings that it is not quite right for him, as a sex act, are not alleviated by a sexual partner's consent. Here, Michael is able to relay a very complex relationship with pornography, and its impact on his sex life.

Additionally, Michael's situation also aligns with Cognitive Scripts Theory, which posits that the media can play a significant role in providing a heuristic model that outlines acceptable (or unacceptable) behavior, as well as what the outcomes of a particular course of action should be (Wright, 2011). In these instances, pornography provides a heuristic sexual script from which men that consume pornography can model their sexual behavior (Sun et al., 2016). Mainstream pornography has amalgamated

around a substantively homogenous script, which can create significant detrimental consequences for the sexual experiences of men who watch pornography, including requesting particular pornography sex acts of a partner, deliberately conjuring images of pornographic content to maintain arousal, having concerns over sexual performance and body image, and a diminished sense of pleasure and enjoyment derived from sexually intimate behavior with a partner (Sun et al., 2016). The data provided by the participants seems to align with literature, with pornography impacting sexual expectations, sexual preferences, and sexual objectification of women.

Pornography creates narrow and unrealistic expectations of sex (Antevska & Galey, 2015). After years of watching pornography, some of the men began to get uninterested in everyday sex because it did not measure up to the expectations set by pornography:

Frank: I feel like real sex isn't as good because the expectations are too high. The stuff I would expect her to do in bed. Porn is an unrealistic portrayal of a regular sex life. When I got used to unrealistic images, you expect your real sex life to match the intensity and pleasure of porn. But that doesn't happen, and when it doesn't happen, I get a little disappointed. (27, Asian, Student)

George: I think the expectations I have about how whizz, bang, wonderful things should be during sex are not the same in real life [...] And it's harder for me when what I get used is something that's not real, and staged. Porn sets up unrealistic expectations for sex. (51, Pākehā, Mentor)

Frank and George highlight an aspect of pornography that is referred to as 'Pornotopia', a fantasy world where an endless supply of 'lusty, gorgeous, and always orgasmic women' are readily available for male viewing (Salmon, 2012). For these men, pornography created a sexual fantasy world that could not be met in 'reality'. The awareness of such an impact of pornography, however, did not affect consumption. Instead, some men began looking for women that more closely matched their pornographic preferences or who allow the men to recreate what they see in pornography.

When these expectations were not met, some of the men were disappointed and became less sexually aroused:

Albert: Because I've seen so many images and videos of women I find attractive, I find it difficult to be with women that don't match the quality of the women I watch in videos or see in images. My partners don't match up to the behaviors that I watch in the videos [...] When you watch porn very often, I've noticed that women are always dressed very sexy, in sexy high heels and lingerie, and when I don't get that in bed I get less aroused. (37, Pākehā, Student)

Albert started noticing how his pornography viewing began influencing what he found attractive in women. He disclosed later in the interview that he subsequently started expecting – and requesting – these preferences from his partners. When women did not match the unrealistic aesthetic he had watched in pornographic content, his sexual desire for his partner would diminish. For Albert and other participants, regular women simply did not match up to the women created by ‘Pornotopia’. Pornography influenced these men’s sexual preferences, which often led to disappointment with real sex, preference for pornography over sex with real women, or looking for women that more closely resembled – both physically and in terms of sexual behaviors – the pornography ideal.

Participants also discussed how their sexual preferences evolved as a result of their pornography use. This could involve an ‘escalation’ in pornographic preferences:

David: At first it was one person getting progressively naked, then it progressed to couples having sex, and from quite early on, I started narrowing down to heterosexual anal sex. This all happened within a couple years of starting my porn viewing [...] From there, my viewing got more and more extreme. I found that the more believable expressions were those of pain and discomfort, and the videos I viewed started to get more and more violent. Such as, videos that are made to look like rape. What I was going for was the homemade stuff, amateur

style. It looked believable, like a rape was actually happening. (29, Pākehā, Professional)

Literature has suggested that compulsive and/or problematic pornography users often experience a phenomenon where their pornography use escalates and takes the form of greater time spent viewing or seeking out new genres that induce shock, surprise, or even violation of expectations (Wéry & Billieux, 2016). Consistent with literature, David attributed his niche pornographic preferences to pornography. Indeed, the escalation from nudity to realistic looking rape was the primary reason David perceived his use to be problematic. Like David, Daniel also noticed that what he found sexually arousing had evolved after years of watching pornography. Daniel discussed his extensive exposure to pornographic scenes, specifically of penises penetrating vaginas, and subsequently becoming sexually stimulated by the sight of a penis:

Daniel: When you watch enough porn, you begin getting aroused by the sights of penises as well, since they're on the screen so much. Then a penis becomes a conditioned and automatic source of stimulation and arousal. For me it's fascinating just how localized my attraction is to the penis, and nothing else of a man. So like I said, I derive nothing from men, other than the penis. If you copy and paste it onto a woman, then that's excellent. (27, Pasifika, Student)

Over time, as their pornographic preferences evolved, both men sought to explore their preferences in real life. David reenacted some of his pornographic preferences with his partner, specifically anal sex. David reported feeling very relieved when his partner was accepting of sexual desires, which is certainly not always the case in such instances. David did not, however, disclose his preference for rape pornography with his partner. Daniel, like David, also reenacted his pornographic preferences and experimented by engaging in sexual acts with a transgender woman. According to literature pertaining to pornographic content and real-life sexual experiences, however, the cases of both David and Daniel do not necessarily represent the norm. While there is a link between less conventional practices, a significant proportion of individuals have no interest in

reenacting the pornography acts – especially the unconventional acts – they enjoy viewing (Martyński, Okolski, & Dekker, 2019).

Lastly, men reported the impacts pornography had had on their sexual function, something that has only recently been examined within the literature. For example, Park and colleagues (2016) found that Internet pornography viewing might be associated with erectile dysfunction, decreased sexual satisfaction, and diminished sexual libido. Participants in our study reported similar sexual dysfunctions, which they attributed to pornography use. Daniel reflected on his past relationships in which he was not able to get and keep an erection. He associated his erectile dysfunction with his girlfriends' bodies not comparing to what he had become attracted to when watching pornography:

Daniel: My previous two girlfriends, I stopped finding them arousing in a way that wouldn't have happened to someone who wasn't watching porn. I had seen so many naked female bodies, that I knew the particular things that I liked and you just start forming a very clear ideal about what you want in a woman, and real women aren't like that. And my girlfriends didn't have perfect bodies and I think that's fine, but I think that got in the way of finding them arousing. And that caused problems in the relationships. There are times I couldn't sexually perform because I wasn't aroused. (27, Pasifika, Student)

The experiences of these men speak to the level of sexual objectification that can occur for some men as a result of watching pornography. Sex and arousal become things that are stimulated by – or connected to – certain looks, bodies, clothes, or acts rather than a person's personality or the intimate connection between two people. Problematic pornography consumption seems to be creating a model of sex that is disconnected, highly visual, and largely based on objectification. Sex becomes a purely mechanical act triggered by visual stimuli, as opposed to a mutual exploration or expression of intimacy.

6.5 Summary and Conclusions

In this paper, we have explored the different ways men speak about their problematic pornography use. We covered both the origins of their use – primarily in the form of the contextual issues that shaped their initial viewing habits – as well as the individual

subtleties and nuances that trigger present use. Although a private activity, pornography use was shrouded in secrecy and silence, ironically positioning its use as ‘taboo’ in an ostensibly sexualized and pornified socio-cultural context. The two primary reasons for men’s private, hidden, and secretive use were that, firstly, sex and pornography were largely taboo in these men’s lives and, secondly, that opening up about pornography use was hard and often met with rejection or judgment.

Overall, men opening up about something they are struggling with positions them as vulnerable, and this can inherently carry some stigma. We need to make it more socially acceptable for men to seek help for anything, including SPPPU. Indeed, when some of these men did find a safe person or context to talk about their use, they experienced comforting relief. When, however, these attempts at vulnerability were met with judgment, shame or misunderstanding, they withdrew further into shame and secrecy. In the absence of parental guidance and adequate sex education, all of the participants, whether consciously or unconsciously, used pornography not only as a form of sexual education, but also as a model and script for how sex should unfold and what to expect – both physically and in terms of sexual behavior – of their sexual partners.

The main reason men kept their viewing hidden from the world was because of the accompanying experiences of guilt and shame that would inevitably follow most – if not all – viewing sessions. Men reported simply being too ashamed to open up about their use to anyone, which further reinforced the hidden nature of their use. The participants described how the cycle was a patterned behavioral loop. After using pornography, the men reported immediate feelings of a guilt, which would then trigger use in an effort to find temporary solace from such feelings.

As the participants developed and matured into adults, pornography began eroding their sense of autonomy, an important psychological need that contributes to healthy functioning and wellness for individuals. The men experienced a loss of control over their use, which underpinned the core aspect of their SPPPU. The men valued qualities of self-control, willpower, and discipline, and yet pornography completely undermined these traits and their efforts to be optimal versions of themselves. Such an undermining represented a form of disempowerment and even emasculation. Over time, their continued and repetitive use began adversely impacting various aspects of and

experiences of sex. The men perceived that pornography had resulted in having unrealistic expectations when it came to sex and sexuality, the way they viewed women (solely as objects of sex), and lead to diminished sexual function.

For the men interviewed here, pornography evolved from a conscious choice motivated by pleasure-seeking and sexual stimulation to a habitual act, triggered by stress and other experiences of affective discomfort. Affective states commonly avoided by participants were boredom, loneliness, and stress, which would trigger use of pornography in the absence of other coping strategies. For most of the men pornography was the only coping strategy for these uncomfortable experiences as free time or time spent alone with self was often experienced as too uncomfortable to bear. Lastly, it is important to mention that the men's accounts of masturbation as draining did not specifically differentiate between masturbation per se and masturbation with pornography. While beyond the scope of this research, it may be useful for future research to explore this area due to the long-standing cultural discourses of ejaculation as depleting for men, as well as the anecdotal evidence supporting the benefits of semen retention.

The outcomes of this research warrant further investigations aimed at understating how we can better equip men with psychological knowledge and capacity. Further work is needed in utilizing interventions and psychosocial strategies that could offer alternatives to problematic pornographic use; such as productive and meaningful projects, tasks, activities, hobbies, and/or relationships. Alternatively, mindfulness-based practices like meditation could be utilized to help the individual learn how to and practice observing, being with, and non-judgmentally accepting their internal experience so that the uncomfortable experience does not subconsciously trigger use. Finally, this paper highlights the important role of professionals who work with men and supports literature suggesting therapists and clinicians may be unprepared when men disclose their pornography use in sessions. This paper can serve as an important resource for professionals working with men who present with SPPPU.

In this paper we have started to scratch the surface when it comes to men's SPPPU. Much like in the men's accounts, SPPPU itself is a hidden issue that requires greater engagement by researchers, policy makers, clinicians and medical doctors.

Overall, the importance of comprehensive sex education and media literacy education that counters some of the problematic outcomes of hidden SPPPU use cannot be stressed enough. It is time to openly address this issue, before it creates more difficulty and harm.

Chapter 7 - Abstinence or Acceptance? A Case Series Examining the Experiences of Men as they Intervene with Problematic Pornography Use

7.1 Prelude

Literature has shown that men feel they do not have feasible treatment options for their SPPPU; otherwise they would seek professional support. Reported in the published paper below are six cases of men with SPPPU as they progressed through a 12-week meditation intervention in order to gain greater insights into the experiences of men as they intervene with SPPPU. While the primary focus of this paper is on the overall experiences of men as they progressed through an intervention, some of the insights gathered in relation to mindfulness are reported here, though examining the effectiveness of the intervention and its specific details are not within the scope of this paper. The study applied mixed research methods, specifically interviews, daily logging spread sheets, email correspondence and diaries, and guided meditations, which served as a quasi-research method that created the time for participants to possibly engage in self-reflection. Study results suggest that the set and setting of the intervention matters significantly, independent of the specific intervention utilized. The characteristics of the setting should include aspects of accountability for the men's pornography use, as well as a space that allowed for men to break their silence about their pornography use and communicate openly. The daily logging and weekly check-ins triggered reflective processes for the participants that seemed to have provided a conscious break in the pornography consumption cycle, which was previously automatic and perceived to be beyond the control of the participants.

Published works in this chapter:

Sniewski, L. & Farvid, P. (2019). Abstinence or acceptance? A case series examining the experiences of men as they intervene with problematic pornography use. Sexual Addiction & Compulsivity. DOI: 10.1080/10720162.2019.1645058

7.2 Introduction

Self-perceived problematic pornography use (SPPPU) has emerged as an important area of focus in sexual addiction and compulsivity research. SPPPU refers to the degree an individual self-identifies as having a problematic relationship with pornography, feels unable to control his use, and believes that their consumption of pornography negatively impacts on various domains of everyday life (Sniewski, Farvid & Carter, 2018). Men experience their pornography use as problematic for a variety of reasons. These include moral or ethical, social and/or relational, frequency or duration of use, consuming pornography in inappropriate contexts, or consuming such content at the expense of other life responsibilities (Twohig & Crosby, 2010). While some literature has proposed quantified thresholds for problematic pornography use (Cooper, Delmonico, & Burg, 2000; Kafka, 2010; Harper & Hodgins, 2016), frequency of consumption, in and of itself, is not a vital component or aspect of SPPPU (Sniewski, Farvid, & Carter, 2018). Indeed, research suggests that the core issues that most often predict men's self-definition and/or perception of problematic pornography use are the negative symptoms these men experience (Gola, Lewczuk, & Skorko, 2016).

Men with SPPPU believe they are unable to control, regulate, or manage their pornography use (Sniewski & Farvid, 2019) and have experienced numerous failed attempts at reducing their viewing or quitting pornography altogether (Kraus, Martino, & Potenza, 2016). Additionally, these men feel they do not have feasible treatment options; otherwise they would reach out for professional support (Ross, Månsson, & Daneback, 2012). Ironically, the secretive and private nature of the consumption that fuels SPPPU (Sniewski & Farvid, 2019) highlights the importance of these men seeking help. Men who identify with SPPPU, however, face an additional challenge when considering options for help because doctors, therapists, and clinicians generally lack the training required for managing problematic pornography use (Ayres & Haddock, 2009). This lack of adequate training and knowledge exists despite clients regularly disclosing their pornography use in appointments and sessions (Ayres & Haddock, 2009). Without an adequate understanding of men's SPPPU, the possibility for unethical treatment increases, with therapists drawing on inadequate or personal biases and beliefs when attempting to help and intervene with the client's SPPPU (Ayres & Haddock, 2009).

Mindfulness has been identified as one potential intervention and/or tool that may be therapeutically helpful for those with SPPPU (Sniewski, Farvid, & Carter, 2018). Mindfulness has been conceptualized as the state attained when focusing one's attention on the present moment in a particular way (Chisholm & Gall, 2015), namely by acknowledging and accepting all of the thoughts, emotions, and physical body sensations occurring (Kuvaas et al., 2013). In relation to sexual compulsive behaviors such as SPPPU, mindfulness may play an important role in therapy and intervention because of its strong correlation with emotional instability (Kuvaas et al., 2013) and impulse control difficulties (Dvorak et al., 2014), both of which have been shown to be related to compulsive behaviors and consumptions. Indeed, mindfulness-based therapies have shown promise in addressing men's SPPPU (Twohig & Crosby, 2010; Sniewski, Farvid, & Carter, 2018), while Reid and colleagues found mindfulness to be a critical component for successfully treating those seeking help for hypersexual behavior (Reid et al., 2014).

In this paper, we report on six cases of men with SPPPU as they participate in a mindfulness-based intervention in order to gain greater insights into the experiences of men as they intervene with SPPPU. This data is especially important since men with SPPPU do not commonly find their experiences of addressing and/or treating their problematic pornography use helpful (Kraus, Martino, & Potenza, 2016). While the primary focus of this paper is on the general experiences of men as they progress through an intervention for SPPPU, some of the insights gathered in relation to mindfulness are reported here as well. Examining the effectiveness of the mindfulness-based intervention specifically utilized for this study, however, are not within the scope of this paper. In order to achieve this study's intended purpose, short vignettes after the methods section are provided to help contextualize the men's experiences for the benefit of both clinicians and researchers. The vignettes are also used to illustrate the individual circumstances of why these men perceive their pornography use to be problematic, their experiences during the baseline period of the study in which the participant had not yet been provided the mindfulness-based intervention, and participant experiences at the conclusion of the study. Finally, the discussion section of the paper explores the broader thematic interpretations shared by these men. This paper contributes to identifying and discussing the various contextual aspects of what represents successful intervention processes and

outcomes for men with SPPPU, as well as the challenges faced by these men and the researchers and clinicians working with this population.

7.3 Method

Participants

The six cases utilized for this paper represent a subset of a larger cluster of 15 cases as part of a broader study (Sniewski, 2018). These six cases were chosen because the experiences represented a cross section of the data and highlighted important similarities within the data, as well as the diverse contextual factors important for clinical consideration. Participants were recruited via social media, and word of mouth advertising to take part in an intervention study seeking to address their SPPPU.

Table 7.1: Demographic Details of Study Participants

| Pseudonym | Age | Ethnicity | Occupation |
|------------------|------------|------------------|-------------------|
| Preston | 34 | Māori | Did not Specify |
| Patrick | 40 | Pākehā* | Did not Specify |
| Pedro | 35 | Pākehā | Professional |
| Pablo | 29 | Asian | Tertiary Student |
| Perry | 22 | Pākehā | Tertiary Student |
| Peter | 29 | Pākehā | Professional |

All of the participants identified as heterosexual, were aged between 22-40 (M=31.5) and mostly identified as Pākehā (Non-Māori New Zealanders of European descent). Ethical approval was gained from the host university prior to commencing data collection.

Research Methodology and Data Collection

The present research study applied mixed methodology in order to expand the scope and improve the analytic power of the findings (Sandelowski, 2000). Research methods utilized for data collection are outlined below.

Interviews – Pre- and post-study semi-structured interviews were conducted by the first author either in-person or over Skype, recorded, transcribed verbatim, and subsequently analyzed for common and relevant themes between participants (Braun & Clarke, 2012). The data were collected using semi-structured interviews, which ranged from 30 to 75 minutes (with most about 60 minutes). Interview questions asked about the participants’ reasons for problematic self-perception, frequency, duration, and/or patterns of use, triggers for use, feelings and emotions after use, past attempts at reducing or quitting pornography, and experiences and challenges during the intervention. Pseudonyms were provided for the participants and all identifying information was changed or removed for the purposes of publication.

Daily Logging Spreadsheet – Participants were asked to keep a daily electronic log of various aspects of their pornography viewing, including number of viewing sessions per day and total time spent viewing per day. While logging provided important quantitative data relevant for determining the efficacy of the intervention, this paper and report focuses only on how the logging exercise impacted and influenced the participant’s use.

Email Correspondence and Diary – Participants were asked to email the primary researcher at the conclusion of each week with their updated logging spreadsheet. These emails regularly included updates from their personal lives, as well as daily and/or weekly diary reflections of their pornography usage. All journals, reflections, and correspondence during the study was optional, non-compulsory, and provided by the participants without any prompts or requests from the researcher.

Daily Meditation – Participants were provided guided meditations and asked to meditate twice-daily following an initial randomized baseline period in which participants continued life as normal. While the guided meditations were intended to serve as the primary intervention for the study, they were also intended to serve as a quasi-research method since the predetermined time participants spent in silence and stillness each day were intended to provide conditions that support improved self-awareness and self-reflection (Lazar et al, 2005). It was anticipated and hypothesized that the environment

of silence and stillness provided by meditation create an environment for participants that was conducive for reflecting on past and current pornography use, as well as other variables that could be related to pornography viewing.

7.4 Results

Table 7.2: Summary Points for Study Participants

| Participant | Context for Problematic Nature of Use | Experiences during baseline | Experiences and reflections post-intervention |
|--------------------|---|---|--|
| Preston | <ul style="list-style-type: none"> - Frequency & amount of use - Problematic for relationship | <ul style="list-style-type: none"> - Logging useful & helpful for accountability - Logging created increased guilt and shame - Check-ins helpful | <ul style="list-style-type: none"> - Triggered memories of childhood abuse & trauma - Continued check-Ins helpful for Accountability - Significant decreases in frequency & duration of use |
| Patrick | <ul style="list-style-type: none"> - Duration of viewing sessions - Distracts from time with children | <ul style="list-style-type: none"> - Logging useful & helpful for accountability - Ceased all porn use - Check-ins helpful | <ul style="list-style-type: none"> - Continued willpower to abstain mentally exhausting - More time spent on phone - Zero porn use; Not accepting of use |
| Pedro | <ul style="list-style-type: none"> - Substitute for intimacy & connection | <ul style="list-style-type: none"> - Logging useful & helpful for accountability - Check-ins helpful | <ul style="list-style-type: none"> - Exacerbated mental health concerns - Increased dosage of medication for anxiety symptoms - Lowered porn use; meditation helpful/useful |
| Peter | <ul style="list-style-type: none"> - Nature of content consumed - Perceived lack of control | <ul style="list-style-type: none"> - Logging useful & helpful for accountability - Immediate drop in porn use - Communication with others | <ul style="list-style-type: none"> - Reflected on porn use & triggers - Ceased porn use - Positive & productive life changes - Credited meditation for positive changes |
| Perry | <ul style="list-style-type: none"> - Perceived lack of control - Perception of women as sex objects | <ul style="list-style-type: none"> - Logging useful & helpful for accountability - Check-ins helpful | <ul style="list-style-type: none"> - Slightly lower use - Able to dissociate from objectifying thoughts of women - More accepting of use; more engaged socially - Positive & productive life changes |
| Pablo | <ul style="list-style-type: none"> - Perceived lack of control - Time spent ruminating about porn use | <ul style="list-style-type: none"> - Logging useful & helpful for accountability | <ul style="list-style-type: none"> - More engaged with life - Porn frequency slightly reduced - Porn viewing duration significantly reduced - More accepting of use |

Preston (34, Māori) – The Power of Accountability

Preston self-identified with SPPPU because he was concerned with the amount of time he spent watching and ruminating on pornography. To him, pornography had escalated beyond a passionate hobby and reached a level where pornography was the center of his life. He reported watching pornography for multiple hours a day, creating and implementing specific viewing rituals for his viewing sessions (e.g., setting up his room, lighting, and chair in a specific and orderly way before viewing, clearing his browser history after viewing, and cleaning up after his viewing in a similar way), and investing significant amounts of time in maintaining his online persona in a prominent online pornography community on PornHub, the world's largest Internet pornography website. His motivation to seek help reached its peak when his girlfriend began questioning where the ideas for many of the sexual acts they engaged in had originated and correctly guessed it was pornography. Preston had kept his pornography viewing private and hidden from the world, so the fear of his secret life being discovered by his girlfriend led him to volunteer for the study. Preston's pre-study interview represented the first instance he had spoken to anyone about his pornography use. He reported several previous attempts at reducing or quitting pornography, all of which were unsuccessful.

From the onset of the research, Preston reported that the process of daily logging and weekly check-ins were helpful and useful experiences. He reported an appreciation of the weekly check-ins and daily logging because of the accountability and opportunities for self-reflection they provided. Preston reported experiencing feelings of shame just thinking about being required to log his pornography use and sending the results to the researcher. Preston sometimes chose to not watch pornography as a result of these moments of pause and reflection disrupting his viewing patterns. Though optional, Preston also provided the researcher diary entries, which summarized his feelings, experiences, and reflections from the previous week. He described the process of journaling as extremely helpful because he was able to reflect on his use in a way he had not previously experienced. For example, maintaining a diary helped Preston become aware of the level of detail and attention he placed on setting up his bedroom for pornography viewing. He subsequently stopped much of his pornography viewing routine and reported less time spent on both ruminating on and watching pornography.

By the conclusion of the study, Preston self-reported his overall pornography use as significantly reduced, but did not, however, attribute his decreased viewing to meditation. Instead, Preston highlighted the daily logging, weekly journaling, and the presence of an external source of accountability were the most useful components of the intervention design. Lastly, Preston reported experiencing mental and emotional distress during some of the meditation sessions because they brought up childhood memories of sexual abuse that he had previously forgotten. Preston then sought therapeutic help for his distress, while also choosing to continue and complete the study despite the triggering events. Though Preston's long-term intention with his pornography viewing is abstinence, he does not think that it is realistic to stop completely at the moment. He reported feeling satisfied to have significantly reduced his pornography consumption and expressed a desire to find an external source of accountability in the form of a coach, therapist, or counselor to work with moving forward.

Patrick (40, Pākehā) – Attempting Abstinence

Patrick volunteered for the present research because he was concerned with the duration of his pornography viewing sessions, as well as the context in which he viewed. Patrick regularly watched pornography for several hours at a time while leaving his toddler son unattended in the living room to play and/or watch television. If interrupted by his son, Patrick would attend to his child's needs before returning to the bathroom to continue watching pornography until reaching orgasm. Despite several previous failed attempts at quitting, his intention was to quit viewing pornography permanently.

Patrick abstained from viewing pornography throughout the entire study. For Patrick, the pre-study interview served as a catalyst for behavioral change because of the relief he experienced after being allowed to speak openly and honestly about his pornography use for the first time. Following the pre-study interview, Patrick committed to abstaining from pornography in order to take advantage of the high level of motivation he had experienced. As the study progressed, Patrick reported that the combination of logging daily pornography use and weekly check-ins with the researcher provided a level of external accountability that made it easier for him to abstain from pornography viewing. The possibility of disclosing his pornography use to the researcher provided

additional motivation to continue his abstinence since logging and sharing his use would have been too embarrassing.

At the conclusion of the study, Patrick discussed the immense effort and willpower required to maintain abstinence. Indeed, he described abstinence as hard work. Though Patrick was proud of himself for maintaining abstinence throughout the study – this was the longest he had ever quit pornography for – he also expressed worry and concern moving forward because he would once again be without an external source of accountability. Lastly, Patrick noticed that he was spending more time browsing other types of content – such as YouTube and Facebook – in the absence pornography. He noticed that he was spending just as much time browsing non-pornographic content, but without the definitive end and/or release that viewing pornography provided via orgasm and masturbatory ejaculation.

Pedro (35, Pākehā) – A Substitute for Intimacy

Pedro self-reported as being a virgin. Pedro talked about the feelings of shame he experienced with his past attempts at sexual intimacy with women. His most recent potential sexual encounter ended when his fear and anxiety prevented him from getting an erection. He attributed his sexual dysfunction to pornography use. Pedro reported using pornography as a substitute from intimacy and connection, since he lived alone and did not have a partner or any close friends. Despite the feelings of guilt and shame he regularly experienced after viewing pornography, he continued viewing in order to soothe and alleviate what he described as intense feelings of loneliness and depression.

Pedro found both the logging and check-in processes to be helpful and useful. Additionally, Pedro reported that the meditations gave him significant relief from experiences of anxiety and low mood. He meditated regularly and found that the practice helped him stay calm and focused at work, which had previously been a place that triggered feelings of anxiety. During the study, Pedro also began exercising more and – on multiple occasions – chose to exercise rather than watch pornography when he was beginning to feel stressed or tempted to view pornography.

Pedro reported a significant decrease in pornography viewing by the end of the study and an overall improvement in mood and mental health symptoms. Despite

increasing the dosage of one of his anti-anxiety medications during the study due work stress, he said he would continue meditating because of the self-reported benefits of calmness, focus, and relaxation he experienced after each session.

Peter (29, Pākehā) – The Reflective Power of Meditation

Peter was concerned with the type of pornographic content he was consuming. He was attracted to pornography made to resemble acts of rape. The more real and realistically depicted the scene, the more stimulation he reported experiencing when viewing it. Peter felt his specific tastes in pornography were a violation of the moral and ethical standards he held for himself. Additionally, although he felt in control in other domains of his life, he felt pornography was one area where he had absolutely no control. The pre-study interview represented the first time Peter had spoken to anyone about his use and the self-perceived problematic nature he attributed to it.

Peter reported an immediate drop in pornography viewing. He said that after the pre-study interview he experienced a sense of relief for simply having been able to talk about his pornography use in a safe and non-judgmental space. He was then able to converse more comfortably about pornography with his partner and close friends, and believed that those conversations represented the beginning of the end of his pornography habit.

After Peter started meditating, his pornography use ceased altogether. After a few weeks of meditating, he realized that the feelings of calmness, peace, and contentment he experienced after meditation were precisely the feelings he was seeking – and momentarily attaining – after he watched pornography. The increased self-awareness Peter reported made him feel more confident and capable of handling everyday stresses and challenges without feeling like he had to watch pornography to experience relief. He attributed these positive benefits to meditation. His intention at the conclusion of the study was to continue abstaining from pornography because he had now realized he was using pornography to avoid stressful situations instead of dealing with them proactively.

Perry (22, Pākehā) – Greater Self-Acceptance

Perry felt he had no control over his pornography use and that viewing pornography was the only way he could manage and regulate emotions, specifically anger. He reported outbursts at friends and family if he abstained from pornography for too long, which he described as a period of roughly one or two weeks. Additionally, Perry experienced feelings of shame and guilt when meeting women in social contexts because of the sexualized thoughts and sexual objectification he immediately experienced when approaching them.

Perry described the baseline period of the study as helpful because he was able to document his pornography usage for the first time in his life. He talked about being able to see the week's consumption totals (i.e., frequency of viewing or duration of viewing), which, in turn, motivated him to make the intention to lower his pornography viewing the following week. Logging pornography viewing also made Perry more conscious and aware of why he was craving pornography. In one case, he realized that he was reaching for pornography because he was feeling sad and upset, but was attempting to avoid the experience by watching pornography.

By the end of the study Perry reported feeling more accepting of his use, despite the total frequency and duration figures only dropping slightly. He said the entire intervention experience made him feel more mindful and conscious of how, why, and when he used pornography. Instead of being an automatic reaction to stress and something he ruminated on constantly, he now watched pornography when he felt sexually aroused. More importantly, he stopped judging himself for his conscious choice in those moments. Lastly, Perry reported being able to engage in conversations with women without being distracted by unwanted thoughts. Perry credited meditation for his developing capacity to dissociate himself from the sexually objectifying thoughts of women he was ashamed of previously. Though Perry continued to watch pornography, he no longer felt it was problematic and reported spending significantly less time ruminating on pornography and harshly judging himself over it.

Pablo (29, Pākehā) – The End of Rumination

Pablo felt he had little to no control over his pornography use. Pablo spent several hours each day ruminating on pornography, either while actively engaged in watching pornographic content or by thinking about watching pornography at the next possible opportunity when he was busy doing something else. Pablo went to a doctor with concerns about sexual dysfunctions he was experiencing, and though he disclosed concerns about his pornography use to his doctor, Pablo was instead referred to a male fertility specialist where he was given shots of testosterone. Pablo reported the testosterone intervention as having no benefit or usefulness to his sexual dysfunction, and the negative experience prevented him from reaching out for any further help with regards to his pornography use. The pre-study interview was the first time Pablo was able to converse openly with anybody regarding his pornography use.

Pablo made additional lifestyle changes to complement his efforts to lower his pornography use. Within a few weeks of meditating, Pablo was able to reflect on his cigarette smoking and notice the similarities his smoking had with his pornography viewing. He realized that he smoked cigarettes or watched pornography when he felt stressed out or anxious about something in his life. When he started experiencing feelings of calmness and stress reduction that commonly followed his meditation practice, he noticed it was far easier to engage and stay focused on other things.

Pablo felt that the most important change he experienced was his increased capacity for self-acceptance and self-compassion. When the study began, pornography viewing had lost all of its enjoyment and pleasure, and he only watched out of habit and boredom. By the end of the study, Pablo was able to watch pornography with experiencing it in a problematic way. While Pablo's frequency of pornography use had only lowered slightly, his overall duration dropped significantly as he no longer spent significant amounts of time ruminating on pornography or searching for pornographic content.

Summary of Results

While the reasons these men provided for identifying with SPPPU were myriad and unique to their respective life circumstances, the triggers that served as the catalyst for

continued consumption were similar. These triggers often took the form of affective states that were difficult to manage and regulate and viewing pornography served as the mediator for these uncomfortable experiential states even though viewing created additional problematic consequences. All of the men also disclosed the helpfulness of the pre-study interview process. While the intention was solely to gather data for research purposes, these men reported feeling relief after being able to speak openly about their pornography in a non-judgmental space. The pre-study interview also seemed to spark the first instances of self-reflection and self-awareness of pornography consumption. This newly discovered capacity for self-reflexivity was further developed throughout the study. Indeed, participants seemed to use the daily pornography viewing logging spreadsheet as a momentary pause for reflecting on their pornography use, considering alternative responses to their temptation to view pornography, visually assess the amount of pornography viewing, or to set intentions and goals with regards to future viewing.

7.4 Discussion

Acceptance versus Abstinence

The data presented above suggests that the parameters for what constitutes a successful intervention for SPPPU should differ from person to person. With SPPPU, the perceived lack of control over pornography use can often lead to an erosion of self-determination and sense of personal agency (Sniewski & Farvid, 2019). Empowering the individual to determine the therapeutic goals for intervention can thus represent an important step in reestablishing a sense of personal agency and improving self-determination (Deci & Ryan, 2008). Additionally, an individual-driven recovery strategy recognizes that different intervention goals will be relevant and important for different individuals (Sniewski, 2018), especially since these men show that abstinence may not be an appropriate treatment goal. Of the six case series participants, only two successfully abstained from watching pornography, with both experiencing abstinence in dramatically different ways. While Patrick self-reported as watching pornography daily prior to the pre-study interview – sometimes for multiple hours per instance – he abstained from pornography for the duration of the study, including the initial baseline period before he started the guided meditation intervention. At the conclusion of the study, however, he

discussed the process of abstinence as ‘hard work’, and that resisting temptations and urges to use pornography was a continued and ongoing challenge. For Patrick, abstinence was a mental burden that required constant attention and willpower. Indeed, the fact that Patrick noticed and reported that he had replaced his pornography viewing with similar quantities of non-pornographic content viewing may indicate that the psychological mechanisms at the core of the problematic behavior – regardless of the behavior in question – have not been addressed (Sussman & Black, 2008). Abstaining from pornography, in this case, may not represent a long-term strategy that supports healing and recovery if the focus remains solely on the avoidance behavior instead of the underlying mental and affective states that typically trigger problematic use (Sniewski & Farvid, 2019).

Peter, on the other hand, abstained from watching pornography as you progressed through the guided meditation intervention. Peter’s experiences while meditating helped him to reflect on why he was using pornography and the resulting insights made abstaining from pornography very easy and required little effort on his part. Once he realized that the feelings of calmness he was chasing via pornography were available to him at the conclusion of his meditation practice, he preferred to utilize meditation for experiences these positive mental and affective states because they were not accompanied by the shame and guilt he experienced after watching pornography. He reported as having only slight cravings to view pornography, with little to no problem resisting those cravings. These examples suggest that Patrick will likely have a harder time maintaining abstinence – as compared to Peter who seems more at ease with abstinence – because of the energy and willpower he expends in order to abstain from viewing pornography. Thus, abstinence should be viewed contextually as the data suggests that how an individual experiences it differs from person to person.

The results emerging from these men suggest – and confirm findings within the literature (Crosby & Twohig, 2016) – that self-acceptance and acceptance of pornography use may be intervention goals that represent more realistic, practical, and attainable than abstinence. These men had all experienced numerous failed attempts at quitting pornography, revealing that lapsing and relapsing dynamics usually associated with substance dependence (Larimer, Palmer, & Marlatt, 1999) are likely relevant to SPPPU.

Indeed, all of the men experienced shame and an erosion of self-efficacy when they were not able to maintain abstinence. Patrick highlights that the mental effort and sustained willpower that can be required for such drastic behavioral change is often not enough. It may only require one stressful event for Patrick to relapse and fall back into the cycle of problematic pornography use, which would likely result in adverse and negative experiences because of the associations and beliefs he currently has between himself and pornography viewing.

In contrast, Perry and Pablo experienced therapeutic benefits when they starting becoming more accepting of themselves and their pornography use, consistent with mindfulness literature that has shown positive associations between practicing mindfulness with both self-acceptance (Carson & Langer, 2006; Birnie, Speca, & Carlson, 2010) and self-compassion (Baer, Lykins, & Peters, 2012). Consequently, both Perry's and Pablo's pornography use lowered which could be because the accompanying feelings of shame and guilt after watching pornography would not be present to fuel continued use (Levin, Lillis, & Hayes, 2012).

After the study, both Perry and Pablo no longer considered their pornography viewing as problematic because their viewing ceased interfering with other life realms. Rather than pornography representing a compulsive behavior triggered by stress that was no longer a source of sexual pleasure, pornography had changed into a conscious choice that was once again enjoyable. One possible explanation for such a shift and improvement could be related to the decrease in rumination that both Perry and Pablo experienced. Perry's and Pablo's experiences support current research on meditation, which indicates that meditation is an effective tool for decreasing rumination because it softens and interrupts ruminating thought patterns (Hilt & Pollak, 2012). Instead of ruminating on thoughts of pornography throughout the day, they were able to watch pornography more efficiently (i.e., less browsing for perfect content), effectively (i.e., less time spent viewing per session), and mindfully, as their choice was now conscious decision to seek sexual stimulation rather than unconsciously avoiding unwanted experiences.

Therapeutic Setting and Space

One of the primary factors and contributors to SPPPU is the hidden and secretive nature of pornography viewing (Sniewski & Farvid, 2019). When men do not have relationships in their life where they are able to openly speak about their pornography use – and thus feel they must keep it hidden from the world – the accompanying experiences of shame and guilt compound, thus reinforcing continued use (Sniewski, Farvid, & Carter, 2017). Research has shown that the feelings of connectedness, bonding, and being listened to help create an atmosphere of self-acceptance and are negatively correlated with hypersexual and sexually compulsive behavior (Hook et al., 2015). The present study confirms what is common practice in most clinical settings, which is that the therapist, clinician, and/or researcher play a critical role in establishing an environment conducive for therapeutic intervention (Arnow & Stiedtmann, 2014).

The importance of providing a therapeutic and/or intervention setting that allows men to feel they can communicate openly has been shown to be an important factor for men with SPPPU (Sniewski & Farvid, 2019). More importantly, data suggests that clinicians and researchers working with this population may only have a single opportunity to establish such safety (Sniewski & Farvid, 2019). Indeed, a single adverse experience – similar to that of Pablo and his adverse experience with testosterone – is enough to prevent future help seeking. This finding does not necessarily constitute new information, but highlights the need for improving clinical and therapeutic awareness of pornography, as well as the potential implications of problematic and/or compulsive use (Ayres & Haddock, 2009) so that therapeutic interventions can be both appropriate and adequate.

The therapeutic setting can also provide an important and efficacious source of external accountability for men with SPPPU (Arnow & Stiedtmann, 2014). These men talked about the importance of the external accountability and motivation provided by the researcher, specifically the weekly check-in processes that participants were required to do. When the men were late with their required weekly email updates, the primary researcher emailed the participants in order to check-in on their progress – as well as to confirm that no mental health concerns had emerged that required additional consultation or referral – which provided consistency that was greatly appreciated by the men.

Participants reported feeling as though they had a personal coach that was looking over them weekly, which helped stay focused on their intervention intentions and goals.

Mindful Consumption

Mindfulness – and specifically the guided meditation intervention provided to participants – was intended to be the primary vehicle for initiating a more mindful approach to pornography viewing, as well as a tool for managing the affective triggers that often trigger pornography use (Sniewski & Farvid, 2019). Data, however, suggests that there were actually three interventions that triggered a more mindful approach with pornography consumption before participants began meditating: Daily logging of pornography use spreadsheets, pre-study interviews, and weekly check-ins with the researcher. The process of mindfully consuming pornography often commenced during and directly after pre-study interviews. For all of these men except Pedro, the pre-study interview was the first time they had spoken to anyone about their pornography use openly and honestly. Hearing themselves speak gave them their first opportunity to reflect on their pornography use and become more aware of what had previously been a subconscious, automatic behavior. The pre-study interview therefore served as a brief intervention for these men and began the process of increased self-awareness and self-regulation (Vago & Silbersweig, 2012).

The primary tool for gathering quantitative data during the intervention study was the daily logging spreadsheet, which required participants to record their daily pornography use, both in terms of frequency and duration. An unexpected finding was that the logging sheet served as a potent intervention in and of itself. Indeed, all of the participants reported the helpfulness and usefulness of logging pornography use, with some of the participants perceiving the logging process to be more helpful and useful than the guided meditation intervention. Participants reported experiencing an increased level of awareness around the contextual factors that triggered their viewing once they began the logging process. Preston reflected on the intricate routine he engaged in prior to each use, and subsequently realized he used a lot of time simply setting up his room in preparation for viewing sessions. Perry and Peter were able to notice the different affective states that triggered use and reported feeling more capable of managing and

regulating these temptations and cravings to view pornography as they arose. The minor interference, pause, and/or second thought that occurred during the participants' habitual pornography use cycle was sometimes enough to stop the repetitive cycle of pornography viewing from completing itself automatically, and – more importantly – prompted important self-reflective processes instead.

The logging process triggered reflective capacities within participants, though these instances of reflection were experienced in different ways. Preston and Patrick reported thinking about the potential shame and guilt they would feel when sharing their pornography use with the primary researcher. Both of these men sometimes chose not to view pornography because they wanted to avoid those experiences of shame and embarrassment. Perry was motivated to try and reduce his use from week to week since he could now objectively calculate and assess his weekly pornography viewing by utilizing figures provided by the logging spreadsheet. Peter was able to reflect on what – in that moment – was actually triggering his need or desire to watch pornography. When this reflective capacity was triggered, Peter was able to identify the uncomfortable affective state that he was attempting to avoid via pornography viewing. These men show that daily logging and check-in processes represent powerful tools for clinicians and professionals working with men with SPPPU, regardless of the intervention strategy or program implemented alongside them. Mobile apps, like Brainbuddy or Victory, provide mobile platforms that are specifically aimed at providing such accountability processes, and have been used successfully for SPPPU (Hardy, Ruchty, Hull, & Hyde, 2010).

Experiential Allowing

Men who experience SPPPU tend to consume pornography as a form of experiential avoidance (Wetterneck et al., 2012). In this sense, pornography represents a maladaptive coping strategy for unwanted thoughts or negative feelings, even though pornography viewing most often leads to additional harm and unintended negative consequences (Levin, Lillis, & Hayes, 2012). Research indicates that experiential avoidance accounts for both frequent pornography viewing, as well as the negative consequences associated with viewing (Levin, Lee, & Twohig, 2018). As such, any intervention that shifts an individual's coping strategy from one of experiential *avoiding* to one of experiential

allowing should reasonably expect some level of perceived discomfort since the individual will likely experience the affective states (i.e., unwanted thoughts, negative emotions and affective states, or uncomfortable or unpleasant physical body sensations) that had been avoided via pornography use (Sniewski & Farvid, 2019).

The resulting discomfort experiential allowing is a consideration that represents an important risk factor for monitoring since it could lead to substitute behaviors that are either risky, harmful, or dangerous, exacerbated mental health concerns such as feelings of loneliness, anxiety, or depression, or it can trigger memories of abuse or trauma (Sussman & Black, 2008). It can require immense time, patience, and skill as an individual learns to cope with, manage, and regulate the uncomfortable affective triggers that would have otherwise triggered pornography use, so it is important that the adverse consequences of interventions aimed at addressing SPPPU are considered, as SPPPU has been linked to, and correlated with, a variety of co-existing mental health concerns, such as depression or anxiety disorders, impulsivity, compulsivity, deficient self-regulation, high levels of neuroticism (Sniewski, Farvid, & Carter, 2018).

While research has shown that the discomfort associated experiential allowing the uncomfortable states that trigger problematic use can be managed (Bowen & Marlatt, 2009), the experience can require additional therapeutic support. This was the case with both Preston and Pedro. When Preston started meditating, within a few weeks he reported distressing memories of childhood sexual abuse that he had long-forgotten. These memories were troubling and required him to seek additional counseling during the intervention because of the distressing nature of the memories that emerged. Pedro used pornography to mediate feelings of loneliness and anxiety. Even though Pedro reported subjective improvements and benefits associated with his mental and emotional wellbeing after meditating, his mental health deteriorated during the study as a result of excessive work stress, a work-related situation that required an increase to the dosage of his anxiety medication. While both Preston and Pedro chose to remain in the study and continue with the intervention, their situations highlight this risk for clinicians and researchers when working with individuals with self-perceived problematic behaviors.

Clinicians and researchers would be well advised to remain aware of any potential substitute behaviors that emerge when the participant begins abstaining and/or reducing

pornography use (Johnston, 2006). Pablo and Perry reported feeling more at ease and able to engage in productive, social and creative activities – like exercising, going out with friends, finding a new job – with the free time that became available after lowering pornography use. Patrick, however, reported a significant increase in the amount of time he spent browsing the Internet, specifically video content on YouTube. Rather than ruminating and seeking stimulation through pornographic content, Patrick fell into a similar ruminating pattern with non-pornographic Internet content (Arnow & Steidtmann, 2014).

7.5 Conclusion

This paper explored the diverse experiences of men as they worked through their problematic behavior via a mindfulness-based intervention, while paying particular attention to the myriad of contextual factors as they relate to the underlying reasons that men identify with SPPPU and their experiences throughout an intervention aimed at addressing their SPPPU. Study results suggest that the set and setting of the intervention matter significantly, independent of the specific intervention utilized. The characteristics of the setting should include aspects of accountability for pornography use, as well as a non-judgmental space that allows men to break their silence and communicate openly. Additionally, while the primary intervention of the research centered on guided meditations, the data suggests the participants began cultivating mindfulness around their pornography use before they began meditating. The pre-study interview, daily logging spreadsheet, and weekly check-ins triggered reflective processes for the participants that seemed to have provided a conscious break in the pornography consumption cycle, which was previously automatic and perceived to be beyond the control of the participants.

In terms of intervention helpfulness, usefulness, and effectiveness, it is difficult to discern which aspects of the intervention were most involved or important. It is likely that this depends entirely on the individual and – to a somewhat large degree – all of the variables and factors of the intervention design likely contribute towards successful intervention, including the research and/or therapist. Study results also seem to suggest that self-acceptance and acceptance of pornography use could represent intervention goals that are more realistic, practical, and attainable than abstinence. More than likely,

both the meditation practice – as well as the healing space provided by the study design – contributed to the subjective improvements in self-acceptance reported by participants. Finally, as men attempt to abstain from or reduce their pornography use, it would be prudent to monitor substitute behaviors and/or exacerbated mental health concerns as the individual learns how to productively cope with, manage, and regulate the uncomfortable affective triggers that previously triggered pornography use.

The limitations of the study include a very small sample size and using self-report measures. Despite inherent study limitations, the data begins to address a significant research gap in the area of problematic pornography, specifically as it relates to the factors, contexts, and reasons why men do not seek treatment for their problematic use and why they generally do not find treatment options helpful when they do engage with support services. Lastly, therapists, clinicians, and medical professionals working with this population would be advised to take advantage of the logging sheet and daily logging process, as the present study highlights its efficacy and utility.

Chapter 8 – Meditation as an Intervention for Men with Self-Perceived Problematic Pornography Use: A Series of Single Case Studies

8.1 Prelude

At the time of this thesis submission, this paper was submitted to an international academic journal and is currently under peer review. The aim of this paper was to explore the effectiveness of meditation – as well as to examine the subjective experiences – as an intervention and mediator of pornography viewing for adult heterosexual men who identify with SPPPU. Utilizing Single Case Experimental Design (SCED), this study used a multiple baseline design in accordance with the single-case reporting guidelines in behavioural interventions (SCRIBE). Eleven men participated in a randomised multiple-baseline design with one intervention condition: guided meditations, listened to twice daily (morning and evening). Participants were required to log their daily pornography viewing (both in terms of frequency and total time spent viewing) throughout the study, as well as filling out the Problematic Pornography Consumption Scale (PPCS) at intake and post-study. Post-study interviews provided explanatory data for outcome measures and provided a necessary level of contextualisation. Statistical analyses revealed modest results. Interview data helps provide important contexts and triangulation of statistical results. PPCS results indicated that measures significantly improved for six out of eleven participants. The present research represents preliminary steps towards determining the efficacy of meditation as mediator for men with SPPPU.

Submitted works in this chapter:

Sniewski, L., Krageloh, C., Farvid, P., & Carter, P. (Submitted; In Review). Meditation as an intervention for men with self-perceived problematic pornography Use: A Series of Single Case Studies.

8.2 Introduction

Self-Perceived Problematic Porn Use (SPPPU) describes the pattern of behavior of an individual who self-identifies as addicted to pornography because they feel they are unable to regulate their pornography use and that pornography use interferes with everyday life. Men with SPPPU feel their pornography viewing is out of control and have experienced multiple failed attempts at quitting and/or cutting back their use (Kraus, Martino, & Potenza, 2016). Men can experience their pornography use as problematic for a variety of reasons. These include personal or moral/ethical reasons, social and relational reasons, the frequency of use, amount of time spent engaging with pornographic content or material, consuming pornography in inappropriate contexts, or consuming such pornographic material at the expense of other responsibilities (Twohig & Crosby, 2010). Frequency of consumption, in and of itself, is not essential to SPPPU. Instead, core issues that tend to predict the seeking of treatment are the negative symptoms that men experience (Gola, Lewczuk, & Skorko, 2016). The literature also suggests that central to SPPPU is the notion of experiential avoidance (Wetterneck et al, 2012). Accordingly, when men with SPPPU watch pornography, it is often an effort to cope with unwanted thoughts or negative feelings, even though the viewing itself subsequently leads to additional undesirable consequences (Wetterneck et al. 2012).

Mindfulness, on the other hand, can be conceptualized as the opposite of experiential avoidance. The traditional practice of meditation has existed for thousands of years, but the teachings of mindfulness have recently surged in popularity within personal, corporate, and academic landscapes (Shonin, Van Gordon, & Griffiths, 2015). Mindfulness has been defined as consciously and nonjudgmentally paying attention to the present moment (Marcus & Zgierska, 2009). Mindfulness encourages awareness and acceptance of thoughts, feelings and physical body sensations as they arise, and recognition of their constantly changing and impermanent nature. Mindfulness practitioners are taught to *acknowledge, observe and accept* their internal experience rather than to change, suppress, or react to it. This kind of mindful and purposeful control of attention can be developed and trained utilizing techniques such as meditation (Zgierska et al., 2009). As opposed to everyday, habitual mental functioning, meditation can set the conditions for an individual to facilitate a productive, skillful, or mindful

response to any given situation. Mindfulness-based interventions have been utilized across broad realms of health sectors, with evidence supporting its efficacy as a facilitator for behavioral change (Khoury et al., 2013). Indeed, mindfulness may be a critical component of successful therapy among individuals seeking help for hypersexual behavior (Reid et al., 2014), which could mean that the same strategies can be useful and effective for SPPPU.

Meditation is one of the popular ways to practice cultivating mindfulness. The backdrop of meditation – silence and stillness – creates an ideal environment for training attentional skills that can assist in cultivating improved self-regulation and self-management (Guendelman, Medeiros, & Rampes, 2017). Developing and cultivating the mental skill of focus and concentration has been shown to improve cognitive functioning and memory (Mrazek et al., 2013), thus making it easier to sustain voluntary attention (MacLean et al., 2010). Meditation also trains the individual to draw attention away from the past and future during current decisions (Hafenbrack, Kinias, & Barsade, 2014). Additionally, the cultivation of somatic awareness sensitizes practitioners to better detect and regulate when the mind wanders from its somatic focus, which may result in enhanced cognitive regulation and metacognition (Kerr et al., 2013). Enhancement of body sensation awareness skills has been shown to be an important in the treatment of addictive behaviors (Berking et al., 2011). Meditation may thus serve as a practical training ground where individuals with perceived addictions and/or identifying as having problematic behaviors can practice observing their cravings, urges, and unwanted thoughts without reacting to them by using their coping substance or behavior (Marlatt & Chawla, 2007; Bowen et al., 2006). The ability to objectively observe one's own internal experience sets the conditions necessary for the individual to learn productive ways of responding to their internal experience, so that emotional instability and impulse control difficulties can begin to slow down and/or cease the cycle of reactive consumption (Dvorak et al., 2014).

While mindfulness-based therapies have demonstrated efficacy for SPPPU (Sniewski, Farvid, & Carter, 2018), no study has assessed meditation, specifically, as a possible intervention for this population to date. Research in meditation demonstrates its effectiveness in managing various other addictions and compulsive behaviors (Marcus &

Zgierska, 2009), which suggests it can also be used as a vehicle for men with SPPPU as they learn how to cultivate awareness of the uncomfortable affective states which drive their compulsive behaviors and/or substance use (Bowen et al., 2007). This paper aims to investigate the implications and experiences of a guided meditation intervention that tasks participants to practice sitting and objectively observing their internal experience with non-reaction and acceptance. While meditation served as the primary intervention for the study, it was also intended to serve as a quasi-research method as the predetermined time participants spent meditating provided suitable conditions for self-reflection. It was anticipated that meditation would allow participants to reflect on their past and current pornography use – as well as other life situations, circumstances, and variables perceived to be related to their use – thus providing important data to be recorded in post-intervention interviews. This paper contributes towards filling a research gap related to preliminary examinations of meditation as an intervention for men with SPPPU, this populations' subjective experiences with meditation as they attempt to intervene with a problematic behavior, as well as guidance and direction for possible future research. SCRIBE guidelines have been applied to this report for clarity, completeness, accuracy, and transparency (Tate et al., 2016).

8.3 Method

8.3.1 Participants

Twelve self-selected adult heterosexual men (see Table 1 for demographic details) participated in this 12-week mixed-method SCED intervention study. Participants were recruited via advertising, social media, and NZ-based therapists/clinicians who work with the targeted population. Criteria for the participants included being aged 21 or over, identified as a heterosexual male, resided in New Zealand throughout the duration of study, and identified with SPPPU. The twelve participants subsequently chosen for the study were aged between 22-51 (M=32.5), most (n=6) identified as Pākehā (Non-Māori New Zealanders of European decent). Ethical approval was gained from the host university prior to commencing data collection. Prior to commencing the study, each participant signed an informed consent form, with all consenting to treatment. One participant who consented withdrew from the study after his baseline phase finished due

to a self-reported exacerbation of mental health concerns. Thus, 11 participants completed the full 12-week baseline and intervention requirements of the study. Eight (n=8) participants self-reported with a prior history of mental health concerns related to depression, anxiety, or both. The eight participants with pre-existing mental health concerns were asked to contact the primary researcher directly in the event their mental health concerns worsened during the study. Participants with pre-existing or prior mental health concerns were provided with additional email check-ins to ensure participant safety.

Table 8.1: Demographic Details of Study Participants

| Participant ID | Age | Ethnicity | Occupation | Pre-existing Mental Health Concern |
|-----------------------|------------|------------------|-------------------|---|
| IS01 | 35 | Caucasian | Professional | Yes |
| IS02 | 29 | Caucasian | Teacher | No |
| IS03 | 23 | Asian | Tertiary Student | Yes |
| IS04 | 34 | Maori | Did not Specify | Yes |
| IS05 | 40 | Caucasian | Did not Specify | No |
| IS06 | 51 | Caucasian | Mentor | Yes |
| IS07 | 29 | Asian | Professional | Yes |
| IS08 | 27 | Asian | Tertiary Student | Yes |
| IS09 | 22 | Caucasian | Tertiary Student | Yes |
| IS10 | 23 | Middle Eastern | Tertiary Student | Yes |
| IS11 | 23 | Asian | Tertiary Student | No |
| IS12 | 43 | Caucasian | Therapist | No |

8.3.2 Experimental Design and Procedure

Single Case Experimental Design (SCED) methodology is particularly well suited for examining the processes and outcomes of psychological and behavioral interventions (Smith, 2012). A randomized, multiple-baseline design was used to improve the internal validity of results and findings (Smith, 2012). The standard AB design was selected for this research, with two phases: baseline and meditation intervention. Twelve intervention pathways were pre-determined utilizing a random number generator that produced a sequence of twelve numbers, each between two and five, which represented the length of time – in weeks – that a participant would remain in the baseline phase of the study. After

the intervention pathways were generated, the twelve pathways were then randomly assigned into a sequence from one to twelve. Participants were assigned to the intervention pathway in the order in which they joined the study (i.e., first participant to intervention pathway one, third participant to intervention pathway three, etc.). No blinding/masking was used during the study. No procedural changes occurred during the course of the investigation after the start of the study.

Baseline

During the baseline phase of the study, no experimental variables were manipulated. All of the participants were instructed to continue living their life as usual, and the guided meditation tracks – along with the instructions on how to use them – were not provided during this phase. While participants did not meditate during the baseline phase of the study, they did, however, log their pornography use utilizing a logging spreadsheet provided to them prior to the study. The logging spreadsheet tracked the total duration of daily pornography viewing, and – eventually during the intervention phase – daily frequency of meditation sessions. Weekly totals were calculated by summing the daily figures from the previous week. It is important to note that at time of study design, daily pornography logging was not intended to be an intervention, nor was it considered that logging might represent a significant change to live at usual and pornography viewing habits. Subsequent observation and data analysis, however, revealed that daily logging represented a significant change to the ‘life as usual’ requirement for the participants during the baseline phase of the research since the participants had never logged their use in this way prior. The implications and experiences of logging pornography use – as well as participants’ perceptions of logging – are explored in the Discussion section of this paper.

Meditation Intervention

24-48 hours prior to beginning the meditation intervention, participants were provided general instructions regarding the meditation intervention via email, which involved listening to pre-recorded 15-minute guided meditations in the morning and evening. Additionally, basic guidelines were provided for where the participant’s meditation

practice should take place (i.e., quiet room/place in the house where they would be able to meditate uninterrupted and undisturbed), and choosing the appropriate practice posture (i.e., comfortable, upright seated position; either sitting in a chair or sitting cross-legged). Guided meditation tracks were pre-recorded and accessible via SoundCloud, a mainstream and popular music-streaming platform, and available for streaming and listening at any time at <https://soundcloud.com/byog>. All participants reported using their mobile devices as their chosen platform for streaming and listening to the pre-recorded audio tracks during the study.

Users had access to three guided meditation variations – Full Instructions, Guided, and Unguided – that they listened to with their mobile devices or computers. This allowed the user to meditate with detailed instructions when first learning the technique, and subsequently progress to less-guided versions as they became more comfortable and experienced with the meditations. Regardless of variation, the majority of pre-recorded meditations’ runtimes were silent, with short instructions being provided at the beginning and end of the audio track. The beginning of the meditation track instructed participants on how to observe the breath and/or sensations of breathing at the area of the nose as the air passed through the nostrils with each breath. The meditations instructed the participants to simply observe their discursive thoughts and emotions without paying attention to them or trying to avoid, change, or suppress them. The conclusion of each meditation involved a somatic check-in, instructing the participant to rest their attention within the framework of the body and to acknowledge and accept whatever experience may have been present at this time.

Post-Study Interviews

Post-study semi-structured interviews – ranging between 20 to 45 minutes in length (average of 30 minutes) - were conducted either in-person or over Skype. The questions asked during the interviews pertained to the various aspects of the participants’ pornography use, past experience of meditation, perceived impacts of the meditation intervention, and subjective reflections on the intervention process and intervention structure as a whole. The interviews were audio recorded, transcribed verbatim, and

subsequently analyzed alongside quantitative results in order to assist in explaining and contextualizing the quantitative data gathered by the logging sheets and study scales.

8.3.3 Measures

Pornography Use Logging Spreadsheet

Participants were asked to keep a daily log of the total time spent viewing pornography per day. At the end of each week, participants were required to provide the primary researcher with an updated spreadsheet, which documented the weekly totals for the total duration of daily pornography viewing per day throughout the study, and the total number of meditation sessions per day during the intervention phase of the study.

Problematic Pornography Consumption Scale

The Problematic Pornography Consumption Scale (PPCS) is an 18-item self-report scale that has been shown to have high internal consistency and convergent validity, as well as the ability to correlate with measures of psychopathology, such as low self-esteem, depression, and poor attachment (Böthe et al., 2018). Additionally, the PPCS has a strong theoretical basis, as well as strong psychometric properties in terms of factor structure and reliability (Böthe et al., 2018). Participants filled out the PPCS pre- and post-study. A final total of 76 points or more for the 18-item scale indicates possible problematic pornography use.

8.3.4 Data Analyses

Consistent with standard reporting practices for single-case experimental designs, data for each individual is presented in Figure 1 (Barlow et al., 2009). Since visual inspection and analysis of graphs may result in researcher bias and/or misinterpretation (Parker et al., 2007), TAU-U scores were also calculated. TAU-U is an index for analysis of single-case research data that combines non-overlap between phases with trend from within the intervention phase. In addition, it provides the option of controlling undesirable trends during the baseline phase (Parker et al., 2011). Rakap (2015) has reported guidelines for interpreting TAU-U effect size data with 0-0.65 representing questionable effects, 0.66-

0.92 representing an effective intervention; and 0.93 and above representing a very effective intervention.

Applying a mixed methodological technique that employed both qualitative and quantitative methods expanded the scope and improves the analytic power of the findings (Sandelowski, 2000). Post-intervention interviews were recorded in order to assist in explaining and contextualizing the quantitative data gathered by the logging sheets and study scales. The unique lived experiences of each participant were also important because the factors and variables surrounding how and why an individual presents with SPPPU are also highly unique and contextual (Sniewski & Farvid, 2019).

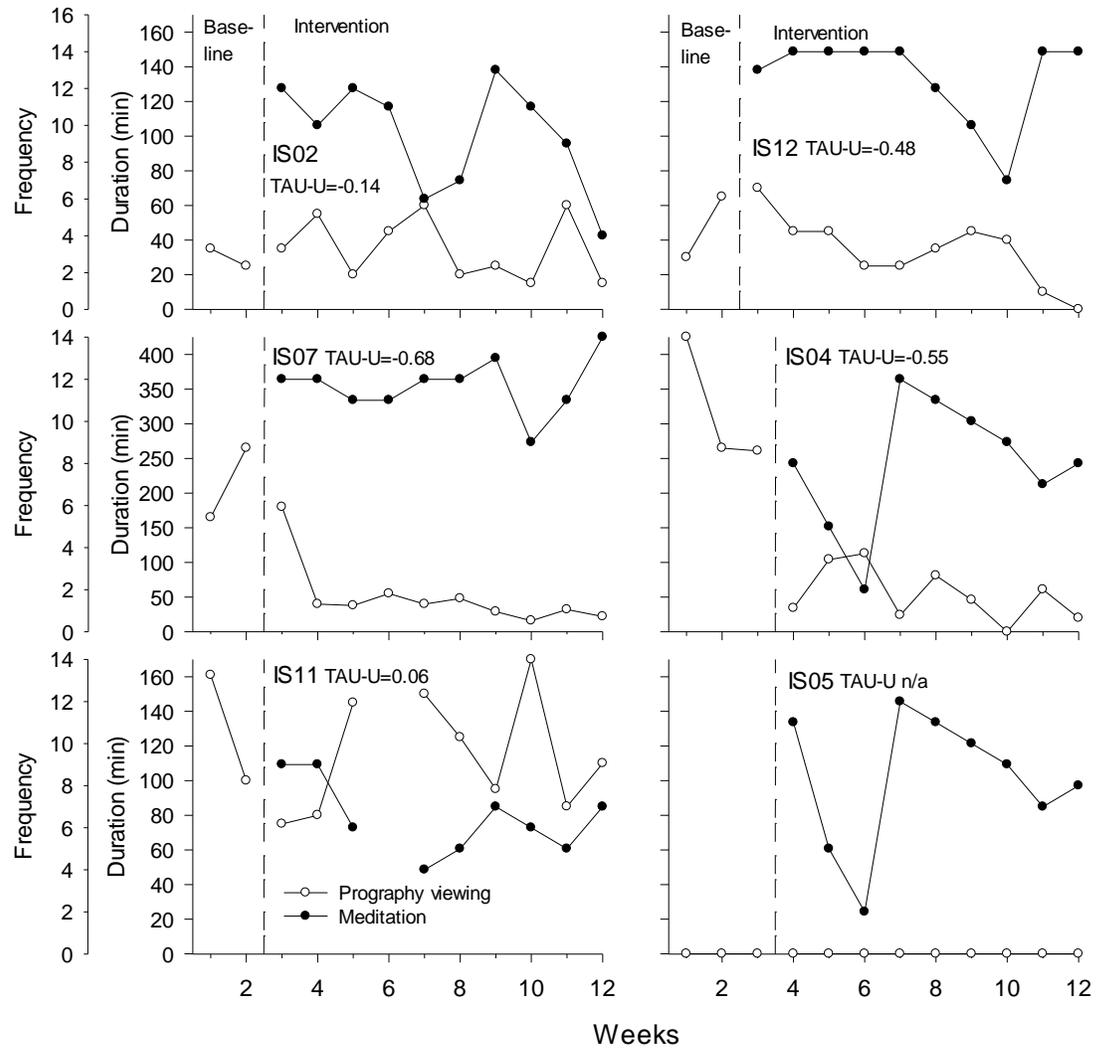
The semi-structured interviews were analyzed based on Interpretative Phenomenological Analysis (IPA) methodology (Smith et al., 2009). IPA is a qualitative approach to research that seeks to lay out investigations of a person's lived experience through the lenses of its three primary theoretical underpinnings (Hammond, 2010). Firstly, phenomenology is a philosophical approach that focuses on the account of lived experience in its own terms rather than one that would have otherwise been prescribed by theoretical frameworks already in existence (Hammond, 2010). The interpretative component of IPA recognises that humans are sense-making organisms. The researcher's task is to make sense of the participant trying to make sense of what is happening to them. Lastly, IPA takes an analytical approach to examining the detailed experiences of each case before moving towards more general claims (Hammond, 2010).

IPA is a useful qualitative methodology for examining matters that are highly personal, complex, ambiguous, and/or emotionally-laden (Smith & Osborn, 2015). Meditation – and the subjective experiences of men as they progress through a meditation intervention – is a prime example of a phenomenon particularly well-suited for IPA. The experiences of participants when they meditate are often times complex psycho-somatic experiences that can be difficult to articulate, especially for those new to meditation (as many of the participants in this research were). Additionally, the perceived benefits resulting from meditation are highly contextual based on the individual, further confirming the appropriateness of IPA. Lastly, with IPA, data across subjects can be analysed and, subsequently, themes may emerge which could prove helpful and useful with moving towards more generalisable claims, patterns, and findings.

Finally, to provide an additional and more rigorous examination of the findings, a reliable change index (RCI) score was calculated for pre/post-scores of the PPCS for each participant (Figure 2). Since test scores will likely vary from one administration to another due to imperfect reliability, the RCI statistic provides an indication of whether change in an individual's score is significantly above and beyond the fluctuations associated with these imprecise measurement tools (Jacobson & Truax, 1991). If the change score exceeds the RCI, then the participant can be said to be 'significantly improved', meaning that the observed change would be expected by chance alone at a probability of less than 5% (Jacobson & Truax, 1991). The RCI has been used to determine clinically significant change in mental health and behavioral medicine outcomes research (Ferguson, Robinson, & Splaine, 2002), making it relevant, applicable, and useful with the present research.

8.4 Results

**Figure 8.1: Duration of pornography viewing, frequency
of meditation sessions, and TAU-U scores**



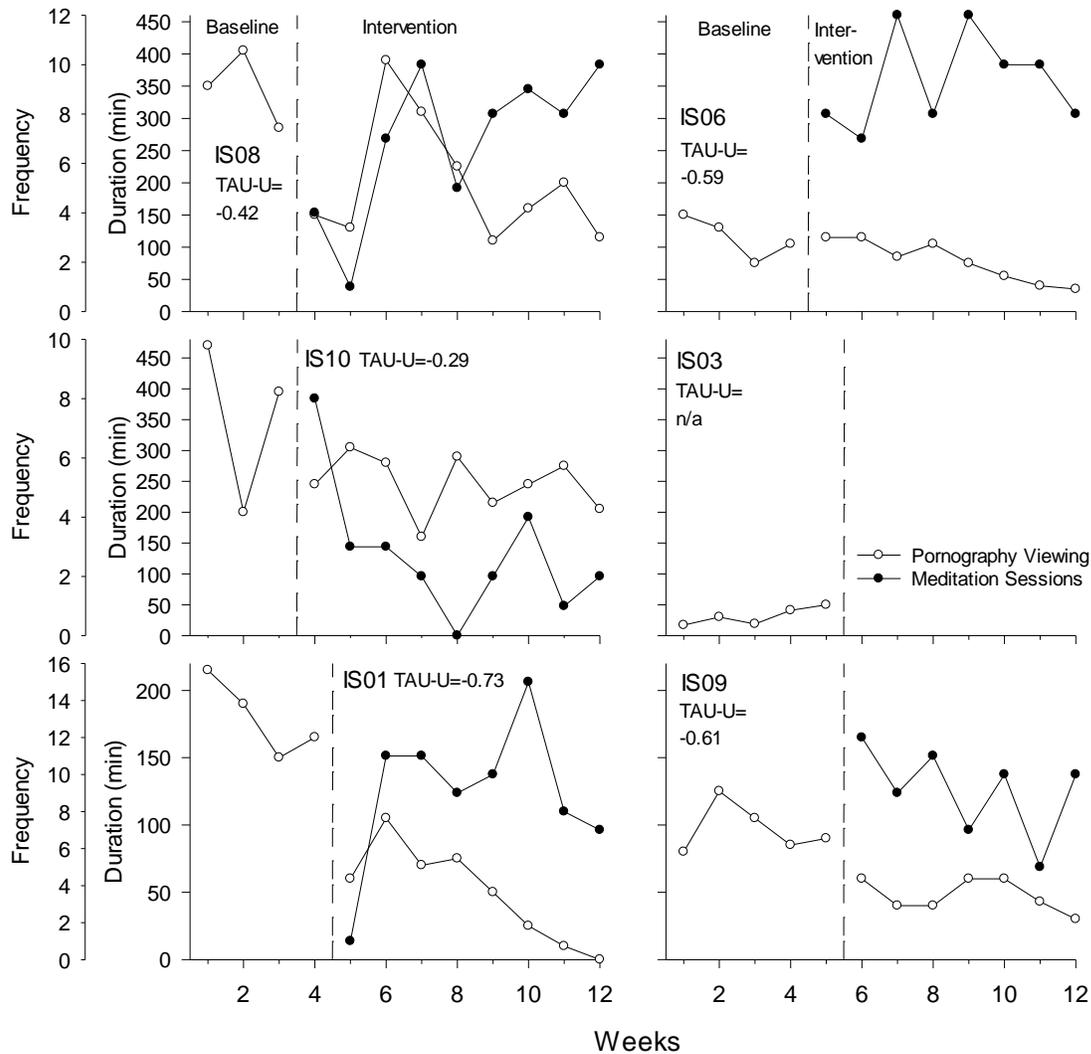


Figure 1 presents data on the duration of pornography viewing, frequency of meditation sessions during the intervention phase of the research, and TAU-U scores for each week. TAU-U analyses were conducted the way described by Parker et al (2011). As visual-inspection of the graphs showed significant trends during the baseline phase of some of the participants, TAU-U was calculated and used as opposed to TAU-nonoverlap so that the baseline trend could be controlled and adjusted for. TAU-U calculations show that TAU-U values are all in the expected direction (except for IS11). However, only results from two participants would indicate meditation as an effective intervention (IS01, IS07) from a statistical standpoint.

Interpretative phenomenological analysis of the semi-structured interviews provides important information regarding the subjective experiences of the participants

and the degree to which they felt their meditation practice contributed to their decreased pornography viewing and/or decreased PPCS scores. Eight out of the eleven participants that completed the study believed that meditation played a significant role in their ability to manage their pornography use, as well as the affective states that were contributing to habitual pornography use. One of the common benefits reported by participants who found meditation helpful was the decrease in mental rumination and the time spent thinking about pornography. While five of these participants found meditation to be a generally pleasant experience (IS01, IS06, IS08, IS09, IS12), the remaining three (IS04, IS05, IS08) meditated regularly but did not find the practice enjoyable and only continued to do so because they felt it was helping. Within the group of participants that enjoyed practicing, the common experience was the “sense of peace and calmness” experienced after each sitting. Indeed, some of the participants reflected on these post-meditation experiences of calmness and compared them to the similar short-lived and fleeting experiences of peace after watching pornography. These participants reported preferring starting their day with a meditation practice instead of pornography because they experienced the same beneficial affective state without the accompanying shame and guilt. One of the participants, IS05, was the only participant to abstain from all pornography use throughout the baseline and intervention phase of the study despite having self-reported multiple weekly pornography viewing sessions lasting as long as 2.5 hours per instance in the weeks and months leading up to the study.

Three participants did not find the meditation practice to be helpful and/or useful during the study (IS02, IS10, IS11). Interestingly, these participants had the lowest meditation compliance, completing an average of 43% of the required guided meditation sittings for their respective intervention pathways. Conversely, the eight participants who did perceive meditation as helpful and beneficial completed an average of 68% of their required sittings. One of the data anomalies for IS11 occurred when he took a vacation with his family, which resulted in a week in which he did not watch pornography or complete any meditation sittings.

Lastly, Figure 2 shows RCI scores, which were used to analyze results from the PPCS data for each participant. Change scores greater than 10.05 represented statistically

significant change for the PPCS. Results indicate that eight out of eleven changed in the expected and hypothesized direction. Of these eight, seven participants (IS01, IS02, IS04, IS05, IS06, IS09, and IS12) significantly improved according to RCI threshold calculations. However, if only participants who meditated at least once per day (>50% meditation compliance) were considered, then the PPCS measures would have significantly changed for seven out of eight participants, or 88%, of the group. Finally, participants IS08, IS10, and IS11 demonstrated change in the opposite of the predicted direction. Of the three participants who demonstrated change in the opposite of the predicted direction, only one (IS11) was significant as per the RCI analyses. One reason for the lack of efficacy could be because the participant meditated less than 50% of the required meditation sessions.

Figure 8.2: Pre- and Post-Intervention Scores and RCI Measures PPCS Scores

| Participant | Pre-Study | Post-Study | RCI Score | Significant Change |
|--------------------|---------------------------------------|-------------------|------------------|---------------------------|
| IS01 | 56 | 20 | 36 | Yes |
| IS02 | 96 | 77 | 19 | Yes |
| IS04 | 58 | 35 | 23 | Yes |
| IS05 | 81 | 21 | 60 | Yes |
| IS06 | 72 | 41 | 31 | Yes |
| IS07 | 67 | 58 | 9 | No |
| IS08 | 61 | 68 | -7 | No |
| IS09 | 76 | 39 | 37 | Yes |
| IS10 | 52 | 55 | -3 | No |
| IS11 | 87 | 102 | -15 | No |
| IS12 | 71 | 60 | 11 | Yes |
| | Mean | 70.64 | 52.36 | |
| | Standard Deviation | 13.70 | | |
| | Cronbach's α | 0.93 | | |
| | RCI | 10.05 | | |

8.5 Discussion

The goal of the present study was to examine the effectiveness of meditation as an intervention for men with SPPPU, as well as to explore the experiences of these men as they engaged in such an intervention. Interview data and PPCS scores provided additional data and important contextual information for the quantitative data. Specifically, we sought to test the principal hypothesis that providing men consistent time for sitting with self and training concentration skills – as a meditation practice provides – would cultivate and develop the capacity to resist the temptations and cravings to use pornography when faced with the uncomfortable affective experiences in everyday life that would have otherwise triggered pornography use (Sniewski & Farvid, 2019).

At first glance, statistical results – in and of themselves – lack robustness and are not supportive of meditation as an intervention for men with SPPPU. The first real problem for statistical analysis occurred during the study design phase of the research, when the randomization techniques were chosen for the intervention pathways. While randomization of the minimum baseline length helped to create a multiple baseline design and improved internal validity of results, the start of the intervention phase should have ideally occurred after the baseline trend scores had stabilized. Had that been the case, adjusting and controlling for the baseline during statistical analysis may not have been necessary and statistical findings may have provided stronger statistical results either in either direction. The fact baseline scores were trending in the expected direction – and thus required statistical compensation – is likely because the recording and logging of pornography use during the baseline phase of the research can be considered an intervention (Sniewski & Farvid, 2019a) as it allowed participants to begin creating an awareness of their own behavior, something they had not previously experienced. Indeed, IS05 remained abstinent throughout the entire study even though he had self-reported a significant frequency and duration of weekly pornography use and credited the increased accountability that he experienced when he was faced with the requirement of logging his pornography use. Contextual factors related to the intervention set and setting (i.e., accountability, open communication within a non-judgmental space, and daily logging of pornography viewing) have been shown to be efficacious brief interventions regardless of the specific intervention in question (Sniewski & Farvid, 2019). As such, the baseline

phase served as a light or brief mindfulness intervention, which then seemed to be intensified with the onset of the intervention for most of the participants. The degree to which meditation was perceived as helpful or useful by the participant – as well as the degree to which meditation impacted the weekly duration of pornography viewing – was largely dosage-dependent, with the participants that meditated regularly experiencing the greatest changes in terms of subjective benefits and reductions in pornography viewing. Lastly, additional evidence supporting the efficacy of meditation as a mediator for problematic pornography use can be found in the significant changes to PPCS scores between intake and post-study.

Some of the participants in this group (IS01, IS04, IS07, IS09, IS12) discussed that even though they continued to view pornography throughout the duration of the study, they reported less ruminating on their behavior. Whereas some of the participants reported spending significant time during the day thinking about pornography (i.e., content they were going to watch, planning when they were going to watch next, browsing through pornographic content, etc.) prior to the study, participants self-reported that the time spent ruminating over pornography decreased significantly or ceased altogether. These participants experienced feeling more accepting – thus less guilty and ashamed – of their use when they did watch pornography because of the significant decreases they experienced in rumination. Since experiences of guilt and shame are related to the continued and reinforced use of pornography (Sniewski, Farvid, & Carter, 2018), the mediation of one of the triggers of problematic and habitual use would likely have been an important catalyst for decreasing overall pornography use. Rather than being preoccupied with thoughts of pornography, participants were able to engage with their everyday life more fully and only used pornography when they felt like it. When some of the participants did consume pornography, they reported spending far less time browsing through pornographic content, which seemed to represent a dramatic shift when compared to the way they were watching pornography previously. One explanation for this phenomenon is that the ruminating over pornography could have been one of the key contributing factors to the participants identifying with SPPPU, even though it was not directly mentioned as an underlying cause. The experience of rumination was experienced by many of the participants. In this sense, pornography represented a

constant disturbance in the background of the participant's mind as they conducted everyday life tasks. Indeed, participants reported ruminating over pornographic within various life contexts (i.e., meeting women, trying to study, preparing for a job interview). Once this pattern of rumination ended, these participants were able to both live their life without the mental distraction of pornography, as well as watch pornography without feeling that it was intruding on their life negatively.

What is difficult to determine, however, is the degree to which meditation influenced the decreased rumination patterns, since aspects of the study design could be forms of mindfulness interventions. Given the association between practicing meditation and decreased rumination (Wiveka et al., 2004), however, it is possible and likely that meditation was a key contributor to the participants' decreased rumination and, thus, contributed to the subsequent decreases in the total time spent viewing pornography seen in the data and results. Additionally, though many of these participants continued to watch pornography, they no longer felt their use was problematic. One explanation – as described above – is that these men were no longer ruminated over their use, which meant they could consume pornography without the accompanying experiences of shame and guilt. A second explanation is supported by literature suggesting that the positive relationship between meditation and self-acceptance (Thompson & Waltz, 2008). Indeed, as these men developed a consistent meditation practice, it is possible that they could have cultivated and increased their self-acceptance in the process, thus contributing to their change in perception towards their pornography use. IS07, IS09, and IS12 were among the participants who reported feeling more acceptance towards their pornography use. Indeed, these participants said that they were able to watch and enjoy pornography again because they were triggered by pleasure or sexual stimulation, rather than simply use it avoid uncomfortable affective states such as stress, loneliness, boredom, depression, or anxiousness. Thus, reported participant experiences – coupled with previous literature – seem to suggest and support the notion that meditation played a role in the mediation of problematic pornography use in three ways: reduction in the experiences of guilt and shame, decrease in rumination patterns (especially those related to pornography viewing), and improvement to perceived self-acceptance.

Interview data helps to provide insights into the reasons why participants perceived meditation to be a helpful tool for intervening with SPPPU. IS07 and IS09 reported feeling a sense of calm and peace after finishing meditation sessions. Within a few sessions they were able to determine that this same feeling of calm and peace is what he sought from pornography, a feeling they both reported feeling after viewing pornography. Upon reflection, they felt they had started down the path out of pornography because they knew they could now experience the same sense of calm they were seeking through meditating – rather than consuming pornography – without the subsequent feelings of shame and guilt. Additionally, two participants (IS06 and IS12) realized mid-study that pornography was actually a coping mechanism for stress. Consistent with literature that discusses experiential avoidance as a common trigger for pornography use (Wetterneck et al, 2012), these men began noticing that stressful situations were the primary triggers for their pornography viewing habits. IS07 even ascertained that his cigarette smoking, too, served the same stress-management purpose, and he subsequently quit his smoking habit during the study as well. As current literature supports the notion of meditation as an effective mediator for stress (Vandana et al., 2011), these men were able to lower their pornography use by learning how to managing their stress – and stressful situations – in a more productive way.

While the majority of the participants found the actual practice of meditating to generally pleasant, IS01, IS04, and IS05 experienced various degrees and levels of distress and discomfort while meditating. How each of the three participants responded to that discomfort is an important discussion. IS05 experienced the environment of stillness and silence as particularly distressing. This participant, however, subsequently made the connection that the meditation was a good way to practice sitting with his discomfort instead of avoiding it, which would have effectively replicated the avoidance strategy that often triggered pornography viewing. Instead, he was able to face his discomfort knowing that practicing ‘being okay’ with this state was an inherent part of learning how to cope with the stress in his everyday life. IS10 and IS11, however, had adverse reactions that highlight important considerations. IS04 reported traumatic memories of childhood sexual abuse being triggered during meditation. After contacting the primary researcher, he decided to receive counseling services alongside the meditation intervention. He did

not, however, withdraw from the study as he felt that addressing his SPPPU was an important thing to do. For IS01, meditation exacerbated feelings of anxiety and low mood. He was already working with mental health professionals prior to the start of the study, and worked with his medical team to increase the dosage of his medication during the study. While it is not known if meditation triggered these three situations, literature does confirm that it is at least possible that meditation could have played a role in triggering or worsening mental health symptoms (Cebolla et al., 2017). While the first participant highlights one of the best possible outcomes for meditation, the second two participants reveal important considerations when determining the appropriateness of meditation. Because men with SPPPU typically present with underlying mental health vulnerabilities and pre-existing co-morbidities (Wood, 2011), it may be important that men who do begin practicing have therapeutic support in the event that an adverse mental health situation arises. Common pre-existing vulnerabilities that have been connected to problematic pornography use include depression or anxiety disorders (Wood, 2011), deficient self-regulation (Sirianni & Vishwanath, 2016), or high levels of neuroticism (Egan & Parmar, 2013). While research has shown mindfulness-based therapies – namely meditation – to be a mediator of all of these (Jain et al., 2014; Hofmann et al., 2010; Oken et al., 2016; Tang, Posner, & Rothbart, 2013), the present study seems to indicate that pre-existing mental health vulnerabilities represent a potential contraindication of engaging in such a practice, despite both of these participants choosing to continue with the study because they experienced the intervention as helpful overall.

8.6 Limitations and Future Research

The present study represents the first study to examine meditation's effectiveness as a mediator of SPPPU. While the overall results from the present study are encouraging, the findings of the present study must be interpreted within the context of its additional limitations. First, the sample size of the present study was small and drawn from one small country, New Zealand. Future studies can improve generalizability of findings by including a more diverse sample. Equally, because there are currently no formal diagnostic criteria for SPPPU, a variety of presentations of SPPPU were intervened with in this study. While SCED research can – under certain circumstances (i.e., highly-controlled and randomized) – compare in rigor to Randomized Control Trials (Dallery,

Cassidy, & Raiff, 2013), more research and replications are needed for such robustness. Additional replications that support the results presented here will make findings more robust and allow for the utilization of additional non-parametric analyses. Second, all participants in the present study were male, thereby inherently preventing the applicability of findings to women. It is critical, however, to note that problematic pornography viewing tends to be more common among men than women (Weinstein et al., 2015). Third, all of the reported outcomes were measured via self-report, which is invariably vulnerable to the influences of demand characteristics, mood-memory effects, and other sources of inaccuracy. Lastly, there were no integrity checks on the data to assure their accuracy.

Another important limitation highlighted by reports from IS10 and IS11 was that the main reason they did not meditate was because they did not particularly resonate with the meditation style, voice, and technique utilized during the study. Both IS10 and IS11 reported a strong dislike of the tone of voice and pace guiding the meditations on the provided tracks, and did not enjoy the style and technique being taught. IS11 also mentioned not enjoying the long periods of silence during the meditation tracks, and found himself falling asleep or getting bored. The strong dislike of the meditations could have been a contributing factor to these participants' lack of engagement and intervention adherence. Future research may be able to personalize the delivery of such a meditation intervention by providing a selection of styles and voices, so that the participant can choose what they particularly resonate with. As long as the overall technique goals and intentions remains the same, it would not represent or warrant an entirely new SCED study population, so comparability and potential for generalizability would not necessarily be sacrificed.

Ultimately, the goal of SCEDs is to achieve internal validity in the preliminary evaluation of treatment mechanisms with less of a focus on external validity, which was optimized and achieved in the present study. Additionally, this study highlights some useful research methods and procedures such as self-monitoring, daily logging, weekly check-ins, and multiple outcome measures that can be utilized in future studies. These research benefits, however, also create a fundamental limitation to the study design that would be difficult to avoid. Since pornography is often viewed in secrecy and men

often do not talk about their use with anyone, then such a logging process would inherently change the baseline phase as ‘life as normal’ would be altered by the logging process. While the guided meditations were intended to be the primary vehicles for initiating a more mindful approach to pornography use and managing the affective triggers that often drive use, it would seem that the logging process cultivated moments of reflection and mindfulness, often times before the participants even began meditating. Mindful reflection began immediately as the baseline phase commenced. Regardless, preliminary efficacy – as visually evidenced by this study’s results– this study is a notable step forward towards addressing an emerging problem that is likely a growing clinical concern.

Chapter 9 – Summary and Integration of Research

9.1 Prelude

The purpose of this chapter is to synthesise the various findings from within the already submitted and/or published chapters within this thesis (Chapters 2, 5, 6, 7, and 8). This integration assists in creating a coherent narrative and story that provides rich and in-depth data regarding men's experiences of SPPPU, as told by these men in their own words. The narrative – and subsequent data – of these men is captured during the various stages of their problematic behavioural cycle, including prior to reaching out for help, during intervention, post-successful intervention, and post-unhelpful intervention. In addition to providing general summaries for the previous chapters, this chapter also includes new relevant data, results, findings, and discussions not included in the published pieces due to reporting constraints such as word count limitations and seeking to ensure clarity and conciseness of published reporting.

9.2 General Summary and Additional Discussion

This project sought to fill a myriad of significant research gaps in current literature related to adult heterosexual men who identify with a problematic relationship with pornography. Prior to the present study, very little qualitative research had examined the experiences and contexts that contributed to SPPPU, its origins, the reasons these men would volunteer for a study aimed at addressing their problematic behaviour, and explorations of past attempts at quitting. Equally absent from literature was information on the various factors to be considered as men intervene with SPPPU, as well as their experiences during intervention and the contexts of what defines a successful intervention. The reason for collecting such data was to help discern why men often do not seek help for their problematic pornography use and why treatment attempts are perceived to be ineffective when they do seek help. How men talk about their problematic pornography use – as well as their experiences with an intervention – are critical pieces of information that can assist researchers and clinicians to better

understand an emerging area of concern. The above mentioned research gaps would assist both researchers and clinicians in a field that is still in its relative infancy, and provide invaluable information that could shape future assessment protocols and diagnostic scales used for determining problematic pornography use.

The primary intervention utilized in the present study for addressing the previously mentioned research gaps was a guided meditation programme. Meditation had been used for a variety of other compulsive and or/addictive behaviours – with generally positive results and success – but the present study represented the first instance in current academic and scientific literature in which meditation – specifically – had been used as an intervention for men with SPPPU, as opposed to another mindfulness-based therapy or programme. Supporting the use of meditation as an intervention for SPPPU was the present research demonstrating meditation successfully being utilised as a mediator of the negative symptoms for many of the co-existing mental health vulnerabilities that men with SPPPU commonly present with. Finally, the unique environment provided by the meditation style and technique developed for the present study – an environment of complete silence and stillness – was intended to provide the conditions necessary for self-reflection. Thus, this consistent time that participants spent with self twice daily allowed meditation to serve as a quasi-research method. It was expected – and confirmed during the research – that the insights gathered and communicated from the men about the specific contexts and factors from their respective experiences would be provide crucial information about SPPPU, as well as how to work with men as they do attempt to intervene with their problematic behaviour.

Contextualisation

The first key finding of the study confirmed the appropriateness of using Single Case Experimental Design as the primary research methodology: contextualization. SPPPU is too complex to be accurately assessed by scales and questionnaires alone. For example, the PCQ predicts the likelihood of relapse following therapy by measuring subjective craving for pornography, while the PPCS can help distinguish between non-problematic and problematic pornography use. Although both scales are scientifically valid and reliable, scores from neither would have categorised the majority of the participants' pornography use as problematic even though they identified themselves as having a

problem for this research. Out of the 15 total participants in the present study (n=3 for pilot study, n=12 for intervention study) who completed the PCQ and PPCS at intake, only 1 participant scored as 'positive' for craving pornography utilising the PCQ, and only 5 scored above the threshold for possible problematic pornography use utilising the PPCS. Instead, the primary reasons that these men provided for their identification with SPPPU was entirely contextual and based on the specific factors in their respective lives. One participant watched porn very rarely but still considered his viewing as extremely problematic because it violated his Christian upbringing. Another participant watched every day and felt that simply reducing his use would be sufficiently helpful. Additionally, participants identified a variety of different reasons as to why they perceived their pornography use to be problematic, including the specific content viewed violated moral values, pornography was their only coping mechanism for loneliness and isolation, pornography was a violation of religious beliefs, feeling unable to control the temptation and urge to watch, incapable of proper intimacy with real women, and neglecting childcare responsibilities in order to view. These first-hand experiences broke through some of the stereotypical myths and expectations around what is perceived as problematic pornography use, which often centres on frequency or duration of pornography usage.

This is precisely why the integration of quantitative results with qualitative interview data was an imperative step to improve the validity and rigour of the present research results. While common in clinical settings, contextualisation – as created by applying mixed methods approaches – assists researchers in understanding SPPPU in a more nuanced manner. One example from the present research is related to men with SPPPU not commonly seeking help for their pornography use and/or speaking about it with someone, whether friend or family member. Indeed, by utilising mixed methods, not only did the present research discern why these men rarely – if ever – speak about their pornography use, but also uncovered and explored the various reasons for this lack of communication. Thus, quantitative measures used in the study (i.e., scales, questionnaires, and logging sheets) were used to assess and analyse the effectiveness of meditation, but the in-depth qualitative data from pre- and post-study interviews provided much-needed layers of context for making sense of data and results. By combining

methods that matched the intention and aim of the study, the present study was able to generate richer data and a much clearer picture of SPPPU within the lives of the respective participants, and certainly data less encumbered by research assumptions.

How Men Talk About SPPPU

By understanding and addressing the notion of contextualisation at the onset of the research, the study was better positioned to address many of the primary research aims. Firstly, data was gathered in order to understand the different ways that men talk about SPPPU, beginning with broader contextual issues and towards the individual subtleties related to their use. Without exception, all of the participants described their pornography use as private and hidden from the world. For many of the participants, the present study represented the first instance that they were able to openly speak about their pornography use. The combination of familial, cultural, religious, and media influences had contributed – to varying degrees among the participants – to making pornography a taboo subject that was too shame-ridden to speak about. In the rare instances when these men did speak about their use, they were more often than not confronted with additional guilt and shame, which not only reinforced continued pornography use, but also reinforced preconceived beliefs about not speaking to others. Sometimes this rejection took the form of a spouse who reacted in a harsh and judgmental manner. At other times, it was medical and clinical professionals were reported by participants as lacking the knowledge necessary to deal with issues related to pornography. In these instances, participants discussed how medical professionals seemed to be unaware of myriad of implications associated with excessive pornography use. Though rare (two out of 15 participants), when these men did find a therapeutic space and context to speak about their pornography use, they experienced relief from the uncomfortable and stressful affective states that were key contributors and triggers for pornography use. Indeed, relief and gratitude were two of the most common expressions of thanks at the close of the pre-study interviews, even though the interview setting was not set up to be a therapeutic space.

Though pornography may have started with a sense of curiosity and excitement, as participants matured into adulthood, pornography seems to have begun eroding their sense of autonomy and agency, one of the critical aspects of masculinity in the

westernised cultures. Participants who identified this lack of agency as the primary reason for perceiving their pornography use to be problematic, valued the qualities of self-control, willpower, and discipline in other aspects of their life, but felt that pornography completely undermined these traits and their efforts to be optimal versions of themselves. Such an undermining represented a form of disempowerment and even emasculation. This perceived lack of control began emerging as pornography stopped being a source of sexual pleasure and evolved into an automatic habit or subconscious process void of pleasure that – when triggered – had to run until completion for the men to be able to return to their lives. When they felt the urge or became aware of the thought, they knew that they would watch pornography whether or not they wanted to or not.

Though the triggers of pornography use may have looked slightly different for each of the participant, the common thread connecting the men was using pornography to buffer against and/or eschew uncomfortable emotions and affective states. For these men, spending time alone with self was far too uncomfortable to bear, so pornography served as an effective coping strategy that worked, albeit only temporarily. Other emotions and affective states that commonly triggered pornography use among the participants were boredom (used pornography as a form of procrastination), loneliness (used pornography as a substitute for connection and intimacy), and stress (used pornography to avoid and distract from stressful situations). For most of the men, pornography was the only coping strategy for such states.

Lastly, many of the participants were able to reflect on their long-term pornography use, and noting that it had influenced various aspects of the sexual lives. The present study suggests that using pornography as a model and sexual script influences expectations of sex and sexual partners (i.e., being overwhelmed by sexualising thoughts when they see or meet women in social settings, or expecting their sexual partners to look and behave like pornography actresses), sexuality and sexual preferences (i.e., feeling ashamed that they cannot maintain a stiff erection for as long as pornography actors, or becoming sexually-stimulated by the sight of a penis because of long-term exposure to watching penises penetrate vaginas in pornographic content), and even impacts sexual function (i.e., unable to maintain erection with partners, or preferring pornography to sex and intimacy with women).

Experiences of Men as they Intervene with SPPPU

At present, all that was known about men's experiences as they intervene with SPPPU is that it did not happen often, and, when it did, it was perceived as ineffective and unhelpful. As such, information that provides explanations as to why men perceive intervention attempts with professionals to be ineffective could assist researchers and clinicians in shaping intervention strategies to be more helpful and useful. The present research represents an important step in understanding the process of intervening with problematic pornography use with men who identify with SPPPU.

The present study confirms that the therapist, clinician, and/or researcher play a critical role in establishing a set and setting that is conducive for therapeutic intervention. The importance of providing a setting in which men can communicate openly and be heard and listened to non-judgmentally cannot be overstated. Data suggests that clinicians and researchers working with this population may only have one opportunity for this, since three of the participants who perceived their first attempts at seeking help to be adverse reported that their adverse experience prevented them from reaching out for help thereafter. This finding is not new information, but it does highlight the need for improving clinical awareness around pornography and the implications of problematic and/or compulsive use. This is especially relevant since the common thread among reports was that participants felt the therapists, counsellors, and doctors they sought help from did not understand their situation, and either ignored or neglected to speak about pornography use directly despite it being brought up as a potential concern for the participants during their respective sessions.

The primary tool for gathering raw data during the intervention study was a daily logging spreadsheet, which required that participants document their daily pornography use, both in terms of frequency and duration. An unexpected finding was that the logging sheet served as a secondary – or soft – intervention. Indeed, not only did all of the participants directly report the helpfulness and usefulness of daily logging, some perceived the logging to be more helpful than meditation, even going as far as saying as the logging was actually the principal intervention in the intervention study. One of the participants reflected on the logging process:

IS09: Just interesting having to consciously log everything. Made me more aware of it. Even that was enough to start reducing it. And it made me competitive with myself.

Ironically, the logging process triggered reflective capacities that were initially hypothesised to result from meditation. These participants, however, showed an improved ability to consume – or abstain from altogether – pornography in a more mindful and reflective way, or abstain from altogether. Participants were often times able to remind themselves of their logging requirement and subsequent obligation to send the data to the researcher thereafter. These moments of reflection were experienced in different ways by participants. For some, the reflection was experienced as potential shame and guilt, since they would have to share their pornography use with the primary researcher, which they reported would have been an embarrassing thing to do. Some of the participants experienced a motivation to try and reduce their use. These participants would look at the previous week's frequency and duration totals and aim to lower their use during that week. The final way this moment of reflection was experienced was as a sort of prompt to reflect on what – in that moment – was actually triggering the participants' need or desire to watch pornography. When this reflective capacity was triggered, the men in the study were able to identify the affective state that was triggering their pornography seeking and, sometimes, even able to refrain from watching pornography in that instance because they knew it was the underlying affective state that needed to be attended to rather than just simply watching pornography as a quick form of affective relief. Overall, the logging process served an important purpose in that it threw the figurative wrench into an otherwise automatic, subconscious, and habitual process. The implications of this finding for clinicians are discussed in one of the following sections.

While meditation was intended to be the primary intervention for the present study, data suggests that there were really four interventions: Guided meditations, daily logging spreadsheets, interviews, and weekly check-ins with the researcher. The guided meditations provided the proactive training and cultivation of mindfulness by requiring participants to practice sitting and observing their arising internal experiences (i.e.,

thoughts, emotions, and body sensations) in a non-reactive, non-judgmental, and accepting way. Daily logging sheets prompted and supported reflective processes that allowed participants to pause and examine their pornography use from different perspectives. Interviews provided many of the participants a chance to openly and honestly talk about their pornography use in a non-judgmental space for the first time in their life. For at least one participant, it was the pre-study interview that prompted subsequent discussions about pornography with his partner and close friends. For this specific participant, the interview process was perceived as the first major step out of pornography use.

The weekly check-in process provided an external source of accountability that the participants reported as both important and helpful. One of the participants even reported being worried that the lack of an external source of accountability would trigger a break from his abstinence once the study concluded. What this summary of interventions emphasises is that the various aspects of the intervention set, setting, and structure – as a whole – all contribute to the success of the intervention. In terms of relative helpfulness, usefulness, and effectiveness of the present intervention study, it is difficult to discern which aspects of the intervention were most involved or most important. This is especially difficult since the participants reported various degrees of helpfulness for each of the intervention components.

Finally, the present study reveals that reduction and/or abstaining from pornography use may not represent the only productive and positive outcome for participants with SPPPU. Some of the participants reported that their experiences with the intervention process were overwhelmingly positive, yet their pornography use – in terms of frequency of use – only lowered slightly. For these participants, self-acceptance and acceptance of their pornography use was a more transformative result. One of the possible reasons for such an improvement in acceptance could be related to the decrease in rumination these participants also experienced. Instead of ruminating over thoughts of pornography throughout the day and within contexts that they did not feel as appropriate, they were able to watch pornography more efficiently (i.e., less browsing for perfect content), effectively (i.e., less time spent viewing per session), and – more importantly – as a conscious choice rooted in sexual stimulation rather than unconscious and habitual

stress avoidance. Meditation, coincidentally, likely played a critical role in decreased rumination patterns as the consistent practice of meditation can assist in softening and interrupting ruminating patterns. The present research suggests that acceptance of self and acceptance of pornography use represent intervention goals that may be more realistic, practical, and attainable than abstinence, depending on the contextual factors involved. In line with the previous discussion on the many soft interventions consequently impacting the study, it is more than likely that the soft interventions contributed to these subjective improvements in self-acceptance, even though a meditation practice has been associated with improved self-compassion and self-acceptance.

One final consideration for men engaging with interventions aimed at addressing their problematic pornography use is the concept *experiential allowing*. Since participants often used pornography as a coping strategy and way of avoidance uncomfortable experiences (i.e., stress, loneliness, boredom), experiential allowing acknowledges the reality that men who wish to reduce their pornography use or abstain altogether will likely – if not certainly – experience the uncomfortable situations which they were avoiding by using pornography. The resulting discomfort is a consideration that is highly important to monitor since it could directly lead to substitute behaviors that are either risky, harmful, or dangerous, exacerbated mental health concerns such as feelings of loneliness, anxiety, or depression, or it can trigger memories of abuse or trauma. It can require immense time, patience, and skill as an individual learns to cope with, manage, and regulate the uncomfortable affective triggers that would have otherwise triggered pornography use, so it is important that the adverse consequences of any intervention are considered, especially with the present study population, as it has been linked to and correlated with a variety of other co-existing mental health concerns.

Meditation as an Intervention for SPPPU

The principal research objective of the present research was to examine the effectiveness of meditation as an intervention for adult heterosexual men who identified with SPPPU, as well as these men's subjective experiences as they engaged in a meditation intervention. The principal hypothesis of the intervention programme was that as men practiced sitting with and objectively observing their internal experience via a consistent

meditation practice, this would improve their capacity and ability to non-reactively be with and observe the triggers that drive pornography use (i.e., affective states such as stress, boredom, loneliness, or temptations and cravings to use pornography). Results from the mixed methods design supported the potential utility for meditation as an effective mediator of problematic pornography use. Important qualitative insights were gathered from interview data, thus providing rich data that helped contextualize results and helped to find the key mechanisms that may be at play when seeking to understand the role that meditation plays in the reduction and abstaining from pornography use.

Statistical TAU-U analyses of the data lacked the clear and convincing evidence that would have been required to support the notion that meditation can be utilized as an effective therapeutic intervention for men with SPPPU. The primary reason that statistical analysis may have been influenced from the start has to do with the role of the pre-study interview, the logging process, and the randomization process utilized to create multiple baselines and intervention pathways for the participants. While randomization of the minimum baseline length helped to create a multiple baseline design and improved internal validity of results, the start of the intervention phase should have ideally occurred after the baseline scores had stabilized. However, when taking into account the role of the soft interventions of the study (i.e., pre-study interview, logging, and weekly check-ins with researcher), results from interviews with study participants, and decreases to post-study PPCS scores greater than the RCI threshold, then results begin to indicate the potential utility of meditation for SPPPU despite lacking convincing statistical evidence.

While the SBC, MAAS, PCQ and PPCS were hypothesized to be intervention-sensitive, only PPCS results were reported in published piece included in Chapter 8. Firstly, when applying the Reliable Change Index thresholds to the PCQ and PPCS, only PPCS scores demonstrated significant change in the expected and hypothesized direction. Other scales utilized during pilot and intervention phases of the present research did not demonstrate intervention-sensitivity. PCQ measures for ten out of the eleven participants changed in the expected direction. Results show that PCQ measures for 10 out of the eleven participants changed in the expected and hypothesized direction. According to RCI, however, PCQ measures improved to a statistically significant degree for only two out of the eleven participants (IS05 and IS07). Interestingly, however, this could be the

result of generally low participant PCQ scores at study intake, which was one of the reasons the results from this scale was not reported on for publication purposes. Indeed, only one participant (IS09) initially scored as ‘positive’ for craving pornography, with his score of 5.0 representing the lowest possible positive score for the PCQ (positive score = 5.0 – 7.0). While PCQ scores were not reported in the publication, they are provided:

Figure 9.1: Pre-/Post-Intervention Data and RCI Measures for PCQ Scores

| Participant | Pre-Study | Post-Study | RCI Score | Significant Change |
|--------------------|---------------------------------------|-------------------|------------------|---------------------------|
| IS01 | 3.08 | 2.4 | 0.68 | No |
| IS02 | 4.42 | 4 | 0.42 | No |
| IS04 | 4.33 | 3.7 | 0.63 | No |
| IS05 | 5 | 1.8 | 3.2 | Yes |
| IS06 | 4.17 | 3.7 | 0.47 | No |
| IS07 | 2.83 | 1.3 | 1.53 | Yes |
| IS08 | 3.25 | 2.8 | 0.45 | No |
| IS09 | 5.42 | 4.6 | 0.82 | No |
| IS10 | 2.25 | 2.8 | -0.55 | No |
| IS11 | 2.83 | 2.7 | 0.13 | No |
| IS12 | 1.92 | 1.3 | 0.62 | No |
| | Mean | 3.59 | 2.83 | |
| | Standard Deviation | 1.14 | | |
| | Cronbach's α | 0.89 | | |
| | RCI | 1.05 | | |

Overall, meditation was found to be a generally pleasant experience for most of the participants, and the subsequent affective experiences post-practice were described as peaceful and calm. Three participants found the intervention, as a whole, to be generally helpful, but credited the majority of the benefits they had experienced to the logging check-in processes as opposed to their meditation practice. While this may certainly be the case due to the efficacy that soft interventions displayed during the study, another possible – and probable – explanation could be that these participants *did* benefit from the meditation sessions even though they reported little to no effect. Evidence that may help explain this result can be found by looking more closely at the participant who abstained from pornography for the entire duration of the study. Even though he reported deriving

little benefit from the meditation practice, both his PCQ and PPCS scores dropped well beyond significant levels from intake to post-study. Consistent meditation could be the reason for such significant improvements and changes to his PCQ and PPUS scores, and would support the principal hypothesis of the study. This shows that the benefits of meditation may arguably be automatic if the participant invests the effort to practice consistently, which this participant did as he meditated 64% of the required meditation sessions. Since the meditation intervention required the men to consistently sit and observe their inner experience, the mere act of consistent practice could have translated into behavioural results regardless of the perceptions and reflections of the participant post-study. Additional evidence supporting this notion can be found when examining the three participants who did not find the meditation practice to be helpful and/or useful during the study. These participants only completing an average of 43% of the required guided meditation sittings for their respective intervention pathways. Meditation may be dosage-dependent, so if one does not practice then the benefits will not be experienced or perceived.

Many of the participants experienced decreases in ruminating about pornography, which – for at least two participants – represented the key difference between categorizing their pornography use as problematic and as an enjoyable activity. Indeed, once ruminating thought patterns had declined, some participants experienced more self-acceptance and began enjoying pornography again without the usual experiences of guilt and shame that accompanied pornography viewing when they considered their viewing as problematic. While it is difficult to ascertain the degree to which meditation caused such shifts in perspective, research does suggest that meditation likely played a role due to the relationships meditation has with decreased rumination (Wiveka et al., 2004) and improvements to perceived self-acceptance (Thompsons & Waltz, 2008). Two of the participants described their experience of this decreased rumination, and subsequent increase in self-acceptance and acceptance of pornography use when asked about how they feel about their pornography use and whether they still consider their use to be problematic:

IS07: Pretty good. It's not an issue at all. Not problematic at all. It's fine. Before it was the time spent watching that troubled me. Just procrastinating. Just leaning on it as a distraction. As a requirement almost to relax and feel peaceful. Whereas as now, I don't plan to watch it, and it doesn't interfere with anything anymore. When I feel like watching, I do and I enjoy it. I've been a lot more focused on other things in my life and not leaning on porn as a crux. Less frequent. It still gives me some relief sometimes, but I don't feel guilty about it or anything. I found my habits of viewing were different. Before I found trouble finding stimulation so I would be browsing a lot more content before becoming aroused. But now it's more normal. I must find a video and go. I think I'm just being more present. It's not a distraction from myself. I fully focused and engaged in the porn. Now I enjoy it more.

IS09: I don't, no. It was a regular thing to do when I felt boredom or anything I didn't want to feel. It was a distraction. And now that doesn't always occur. Sometimes I get sexually aroused, IU use it and I don't fuss about it. I still don't think porn is a good thing though overall, as long as you know it's a fantasy, and not a real thing.

Participants also provided important data that supported the principal hypothesis of the present research study, which was that meditation can cultivate the capacity for men to be able to observe their temptations and cravings to use pornography and respond to them in more productive ways. Two of the participants reflected on the changes they experienced when becoming aware of the thoughts, emotions, and body sensations that typically triggered pornography use:

IS05: The sexual urges I guess to want to look up stuff. When I noticed them, I told myself let's see if I can do it this time. It was really just one temptation at a time. The more time that went on, it became easier because I told myself I didn't want to go back to it. So it got easier each time I resisted.

IS09: In general, the meditations. I became more aware of my feelings. Feelings would come up, and I was able to deal with them differently because of meditation. Like when I would get in arguments and things got heated, I was able to walk away for a bit and come back and deal with it more productively.

What these interview excerpts illustrate that these men had not only began becoming aware of their temptations to view pornography, but also had begun cultivating an improved capacity to respond to these sensations in a more conscious way. Instead of being automatic, they were able to give themselves time and space, thus improving the chances that the subsequent decision was one that supported their autonomy and sense of agency. Additionally, the data suggests that these men were beginning to curiously explore their pornography use, as well as the underlying triggers that they were becoming increasingly aware of. This seems to support the notion that meditation did serve as a quasi-research method. The participants were not given any conceptual knowledge as to what the benefits of their meditation practice would be, nor any expectations of what they would experience. Instead, it was hypothesized that the practice of meditation would reveal that was relevant, important, and necessary to that respective participant. It is interesting that the participants reflected on their use in very unique ways, but all of which were significant when taken into context of their respective viewing patterns. Some data further suggesting meditation as a powerful catalyst for self-reflection:

IS01: I was always tempted when I had the opportunity to watch porn. I thought about it twice, and it wasn't so automatic as it was prior. It helped me to focus on the usage. Basically when I had the urge, I tried to do something else. The study has really helped me to see how much I was using it when I was stressed.

IS02: I feel like it was more of a habit before. But more and more I kind of became aware beforehand that I'm making a decision about watching it or not. I became more aware of the cravings and urges to use. And then whether I watched it or not, was a different story.

Though literature suggests that stress is often a common trigger for pornography use, it is a much more meaningful realisation when the participant achieves this insight as a result of their investment in their practice, and thus an investment in themselves. This reflection can be considered wisdom, whereas had he learned this in a book or from the concepts provided to him during the study, it would have simply been more information.

Finally, one contraindication – or at the very least an important consideration – that emerged from this preliminary study is the potential impact of meditation on participants with pre-existing mental health concerns and vulnerabilities. One of the common responses provided by participants was the discomfort and distress experienced during some of the meditation sessions. The intention of the meditation practice was for these men to practice observing these states of distress without reacting to them, so that their capacity to face such distress in everyday life would be improved. When participants without any pre-existing vulnerabilities (i.e., past history of diagnosed mental illness, mental health concerns, or substance dependence) experiencing such states, they reported being able to work through their discomfort, with one participant even realising himself that sitting with the distress without avoiding it was the principal aim of the practice, which motivated him to continue practicing. Those participants who reported as having pre-existing mental health concerns at study intake, however, experienced exacerbated mental health concerns that require further discussion.

While one participant did withdraw from the present research study, he left the study after the baseline phase of the research and before he had started the guided meditation intervention. Of the remaining participants, two participants with prior mental health history required additional contact and support during the study due to exacerbated mental health symptoms. One of the participants reported feeling immense distress when he began recalling memories of past sexual abuse during his meditation session:

IS04: It brought up feelings and past experiences of sexual abuse from my childhood. It really rattled the cage. Like back to when I was abused. Anger started coming out.

When IS04 first experienced these distressing memories, he immediately contacted the primary researcher. He was provided information regarding complimentary therapeutic support provided by the host university, but subsequently chose to go to a local counsellor to talk about the memories that had resurfaced. Despite the distressing nature of the situation, he chose to continue on with both the intervention, as well as the meditations, because he felt addressing his pornography use was important. Similarly, IS01 reported exacerbated feelings of anxiety and depression, which surfaced after the first few sessions of meditations. Despite increasing the dosage of his anxiety medication during the study, IS01 reflected positively on his experiences with meditation:

IS01: The meditations have been really good for me. I've been really struggling with my mental health at the moment. I think meditation has been, quite good to focus me and calm me down as well [...] I am gonna keep trying to do it. What I started doing was getting to work, finding a room and meditating. I wanna keep doing that to try and help me feel calm at work. Generally, it's helped my mental health, which is a key part and component of my [pornography] usage.

Both IS04 and IS01 highlight two important things with relation to potential contraindications and/or considerations of meditation as an intervention for men with SPPPU. Firstly, is that because pre-existing co-morbidities are likely present among the present study population, there is a significant likelihood that mental health symptoms may be exacerbated as a result of a meditation practice. Even those without mental health concerns can sometimes experience distress, so men with mental health vulnerabilities should proceed with additional care and caution. Secondly, this research supports that only the participant, himself, can determine if they should go on or not, when triggered by these vulnerabilities. Exacerbation of mental health symptoms does not necessarily mean the failure of an intervention or a cause of significant concern. Both IS04 and IS01 experienced what would be considered significant mental health distress, and yet were both able to conclude the study and perceive meditation to be a primary tool in their intervention success.

Concentration Meditation versus Conscious Breathing

One of the polarising aspects of the present study was vast differences in subjective experience as they related to the morning meditation practice. The meditation technique utilised during the study consisted of two distinct meditation methods. The morning practice was a conscious breathing practice, while the evening practice was a concentration exercise. The main difference between the two practices was that the morning meditation practice required a more active and conscious breathing process that prompted participants to take deep conscious inhales throughout the duration of the meditation, while the evening meditation required no conscious effort. While all of the participants reported generally positive information regarding the evening meditation and the sense of calm they experienced after practicing, the morning practice was avoided altogether by some of the participants. The morning practice also involved breath holding, which could have further been the cause of the distress experienced by participants. Some of the challenges and difficulties reported by participants included:

PS01: It nearly felt faint. Tingling sensation. It made it feel a bit uncomfortable, like a feeling I might pass out. I know where it could go to, but it never escalated. Whereas I'll breathe out and hold it until I start shaking. I know the feeling of my body when it requires oxygen. Just the discomfort. I'd hate to suffocate, like why do I have to deal with that feeling every day.

IS01: I struggled with the morning meditations because it was difficult. But once I did it a few times, I started to realize the benefits of it. But yeah, the continuous breathing was a big challenge, but I ended up enjoying it after I did it a few times. The first couple of times I got a little bit light-headed.

IS09: Yeah, but I won't do the morning one. That one made feel sick and gassy. I have gastro issue. I would also feel fear, and then by the end of the first week it was fine. [...] The morning meditation, by the end of it, I would be sexually aroused. Not all the time, but most of the time.

IS10: They were quite intense. They were quite anxiety inducing. 15 minutes was quite long. After I finished, there was some relief, but definitely anxiety inducing trying to start them as I knew they were intense and challenging. Just thinking about meditations was something I pushed away because I had school work to deal with. They were too intense. They weren't as relaxing and mindful, as they were uncomfortable and stressful. The morning ones, especially.

Even when providing the participants with the pre-intervention precaution that the morning meditation may be experienced as challenging and uncomfortable, many of the participants could not get beyond the initial discomfort of the practice. Many of the other participants, however, described the positive experiences they felt after finishing the morning breathing sessions:

PS02: The morning exercise I found changed how I was getting up in the morning. It used to be that my mind would wake up racing and my body would be very slow to energise and catch up. After that exercise my mind was less racing and my body much more energized. I don't like getting up in the morning, but it was much easier after that particular exercise [...] I felt I had quite a still – and I use the term Zen – kind of space. It wasn't something I was expecting to feel.

IS05: Also I found the breath work useful and helpful - I did not do enough of the evening meditation to really be able to contrast them with each other, but the morning meditation were helpful to get me into my body.

IS06: Morning [was my preferred meditation] because I wake up in a stressed state most mornings, so having something good to focus on rather than habitual negative thinking was great. Also, I really like the breath work - having done breath work in the past, but lost the habit for many years, I was way pleased to be reintroduced to it.

IS07: Using the meditations as part of a routine was really nice. I would wake up, have something to eat, and then do the meditation. It was really starting my day in a more positive and productive way. The morning set me up well, and the night ones helped me get to sleep. I feel a lot more present. Started the day a lot more conscious. And everything sort of stemmed from that. [...] Meditation was tough for me in the past, but the focus on the breathing made it really easy to get into my body. Just took a couple of sessions.

An important consideration for the present research is that it was the morning breathing sessions that more closely replicated stressful triggers that might trigger pornography use since the morning meditations were the exercises that were experienced as distressing, anxiety-inducing, and sexually-arousing. It is interesting that only a small number of participants reflected on the connection between these states experienced in meditation and the states experienced in everyday life. This also means that future research could separate the two meditation practices provided in the present study to examine whether the more stress-inducing morning meditations contributed more to efficacy than the calm-inducing evening ones. An analysis of the comparative advantages of the two practices would be one logical way forward for future research.

Chapter 10 – Conclusion

10.1 Overall Conclusion

Overall, the present study shows preliminary results on meditation as a potential mediator for men with SPPPU that are both promising and something to build upon. While the guided meditations were intended to be the primary vehicles for initiating a more mindful approach to pornography use and managing the affective triggers that often drive use, it would seem that the logging process cultivated moments of reflection and mindfulness, often times before the participants even began meditating. Mindful reflection began immediately as the baseline phase commenced. Regardless, preliminary efficacy – as visually evidenced by this study’s results – this study is a notable step forward towards addressing an emerging problem that continues to be an area of growing clinical concern.

More importantly, the present study has begun exploring previously unknown qualitative aspects of male experiences of SPPPU, as well as their experiences as they intervene with their pornography use. One of the key highlights of the research is that men opening up about something they are struggling with positions them as vulnerable and this inherently carries stigma. This is certainly the case for these participants’ pornography use, which is why we need to make it more socially acceptable for men to break their silence about not only pornography use, but also mental health concerns in general.

The layer of stigma associated with pornography only adds additional complexity to this situation. While greater self-acceptance and acceptance of pornography – specifically as this relates to a reduction in the experience of shame – seems to have emerged as one of the key factors in both reduction in overall pornography use, as well as mediating the perception of pornography use as problematic, it is important to highlight the nuances of this finding. While shame may be linked to pornography use and may act as a significant trigger for use, men still need to be critically aware and reflect on their pornography use. Specifically, this means assessing if the content they choose to watch is ethical, where their desires to view pornography come from, how much pornography viewing is acceptable. Ridding oneself of shame and promoting greater self-acceptance of

self should not be interpreted as promoting uncritical examinations of pornography use. While such explorations are outside of the scope of the present study, people and society should have a critical engagement with pornography beyond an individualistic level.

Overall, the importance of comprehensive sex education and media literacy education that counters some of the problematic outcomes of hidden SPPPU use cannot be stressed enough. It is time to openly address this issue, before it creates more difficulty and harm. It is recommended and encouraged that therapists and clinicians take responsibility for change by acknowledging the seriousness of SPPPC within their own practice, as well as conduct thorough assessments of porn consumption so that potentially problematic consumption can be identified and managed.

10.2 Limitations

Two of the key study limitations were the potentially small cohort used for the research, as well as the lack of reported follow-up and post-study participant data. Firstly, with regards to the small cohort used for the research, three participants were included in the pilot-study phase of the research, while twelve additional men participated in the main study. Fewer participants are generally required for SCED research to satisfy requirements for rigour when compared to other group-type study designs such as randomised control trials. Despite this – and coupled with the lack of definitive conclusions reached by this study – more subjects and study replications are necessary for generalisability. However, given the unique nature of male SPPPU (e.g., masculine norms making it difficult to reach out for help, pornography socially and culturally stigmatised), it was anticipated that recruitment for this extremely sensitive subject would be challenging. This was certainly the case, and in anticipation of this – and also in order to deliver the scope and depth necessary for doctoral-level work – in-depth qualitative explorations were utilised to complement quantitative methods, thus created a robust study design and output necessary for a PhD regardless and despite what some researchers might consider a smaller cohort size.

The second key limitation has to do with the lack of reporting follow up data, as no follow up data was provided or reported within this thesis. Follow ups with participants, however, occurred at one- and three-months post-study. Participants completed and returned all of the study questionnaires they had filled out during the

study, as well as answers to the follow questions: 1) *About how often and how much are you currently watching pornography?* 2) *Do you still think your pornography use is problematic?* 3) *Are you still meditating? If so, which ones and how long/often?* 4) *Anything you'd like to share or add that you feel might be helpful for the study or for me to know?* The main reason that this data was not included in this thesis was because, firstly, findings on meditation and its effectiveness as an intervention for SPPPU were not sufficiently compelling due to weak statistical evidence and the influence of poorly-controlled soft interventions. Secondly, as the main focus of the thesis shifted to be more qualitative in context and content, the post-study follow ups would have benefited from additional semi-structured interviews that would have provided an additional layer of in-depth data regarding transitions of men as they move away from SPPPU. As such, future research would surely benefit from in-depth post-study follow ups. In light of the above, follow up data was not included as it did not significantly or materially add or detract from the main arguments, discussions, and conclusions of the thesis.

The present study represented the preliminary step in examining the effectiveness of meditation as an intervention for men with SPPPU. Results of this study must be viewed and considered within the context of the limitations in addition to those described in detail above. Firstly, one of the inherent limitations of the research was the title suggesting and inferring that the meditation practice was to be utilised as a tool for addressing problematic pornography use. This inference can lead to a participant assuming that meditation should be directly linked to their pornography use, and in the event that pornography viewing does not reduce, then it is because meditation is ineffective. This potential thought process and rationale is the direct opposite of what the practice of meditation – at least in the way proposed in the present study – really is. Meditation is a practice of objectively observing the passing moment (often with a focus on the breath or a part of the body), without trying to change, control, or adjust anything about the experience. With the present study, there was an inherent risk that a participant may be motivated to try meditating because he linked meditation to lowered pornography use. One consequence of this inaccurate mental link would be a continued rumination on pornography, even during the actual practice of meditation, which is precisely what occurred with one of the participants during the pilot study.

This is likely one of the unavoidable characteristics of the study, unless a myriad of study volunteers were gathered via study promotion without pornography viewing being directly stated as one of the inclusion requirements. This would likely require many more potential participants to express interest and volunteer in the study, but could be accomplished with a screening questionnaire that explores various aspects of the participant's life, one of which would be pornography use. This potential study design could essentially blind the participant in terms of knowing which variables were being tracked or assessed for the study.

Several other limitations that require mention and discussion. Firstly, the sample size of the present study was small and drawn from a single country, New Zealand. Additionally, most of the participants were Pākehā. Inherent in SCED research in order to establish generalizability is the requirement for many replications from multiple research teams. Future research teams can help improve generalizability of these findings by including a more diverse sample. Equally, because there are currently no formal diagnostic criteria for SPPPU, a variety of presentations of SPPPU were intervened with in this study. While SCED research can – under certain circumstances (i.e., highly-controlled and randomized) – compare in rigor to Randomized Control Trials, additional studies and replications are required to determine such rigour and robustness. Secondly, all of the reported outcomes were measured via self-report, which is invariably vulnerable to the influences of demand characteristics, mood-memory effects, and other sources of inaccuracy. Lastly, there were no integrity checks on data to assure accuracy.

10.3 Key Implications for Clinicians & Researchers

The present study highlights the continued need for increased and improved knowledge of SPPPU among therapists, counsellors, and other professionals. Participant data showed that the lack of up-to-date knowledge could lead to adverse and negative experiences. Not only did these participants experience additional shame when they felt misunderstood by the professional they sought for help, the ineffectiveness of the help prevented these participants from seeking help in the future. This preliminary study suggests that meditation may be a promising intervention for men with SPPPU, and that clinicians – more than most – are uniquely positioned to utilise such an intervention as a adjunct to

other therapies since clinicians are able to assess for – and address – underlying mental health vulnerabilities. Additionally, should meditation trigger experiences that are particularly distressing, the clinician is in an advantageous position to assess and support such instances. Finally, clinicians are encouraged to explore utilising a logging system alongside their therapeutic approaches since the present study highlights the effectiveness of logging as a complementary intervention with a low risk of adverse side effects.

Researchers working within the field of pornography would be benefitted from understanding the inherent complexity of SPPPU, which has shown demands a contextualisation of data. The nuances and subtleties of each participant means that reducing use or abstaining from pornography may not be the best solution, or even represent successful research. As such, for men with SPPPU, this research shows that pornography may not be the problem at all. After intervention – as evidenced by the present study – a participant may consider pornography to be their passionate hobby and no longer perceive their use to be problematic. Contextualisation will require researchers to gather qualitative data in order to explain scales and other quantitative results in pornography research, especially since frequency of use may not be an important measure of either problematic use or successful intervention. Pornography researchers may also be interested in exploring and expanding the conceptualisation of SPPPU. While the present research helped to uncover some of the reasons men identified their use as problematic, little is known about the moment or circumstances that such behaviours or reasons shifted from being perceived as normal to problematic (i.e., Was reading and reflecting upon the recruiting advertisement the catalyst for such a perception? Was the recruiting advertisement a soft intervention? What are the factors that contribute to men coming forward to speak about and intervene with their pornography use?). Answers to these questions would improve the validity of the concept of SPPPU.

Mindfulness and meditation researchers might be interested in exploring why scales that has been shown through literature to be meditation-sensitive were not so with the participants in this study. All four of the study scales that showed no response to the intervention (PSS, SF-SCS, SBC, and MAAS), have been shown to be sensitive to meditation in previous studies. Future researchers could investigate further into the unique aspects of the present study population and their seeming lack of scale sensitivity.

For researchers interested in developing and expanding the present study with the eventual goal of generalizability, more replications (with a broader range of demographics) will be required. Because of their rigour and success rate in identifying evidence-based practices, some researchers have argued that highly controlled SCEDs should be considered on par with group designs if enough replications across research teams exist (Smith, 2012). As such, this means that the present study lacks the sufficient evidence for generalizability. Finally, researchers who are interested in meditation, but not completely drawn towards or convinced by SCED designs utilised in the present study, a more traditional experimental design – such as a randomised control trial (RCT) – could provide an effective research pathway moving forward. With an RCT, many of the unknowns left at the conclusion of this preliminary study could be addressed, which could be accomplished by using daily logging as a control group, and/or breathing exercises as a third group within a RCT design.

10.4 Key Contributions, New Research Questions and Next Steps

Based on the previous chapters and general summary of this thesis, several contributions and findings have emerged from the present study. The final section of this project highlights critical findings, identifies key beneficiaries associated with the finding, lists research questions that arise as a result, and proposes next steps that could potentially be used to address the new research questions:

1) Meditation a Catalyst for Behavioural Change

The present study reaches optimistic but inconclusive results with regards to the principal research hypothesis that consistent practice of meditation – sitting with self and observing internal experience with non-judgment and acceptance – can help cultivate the capacity to experience uncomfortable affective situations without reacting by watching pornography. While both visually evidenced with graphical representations of daily pornography use and qualitative data gathered from interviews suggest positive results, statistical analysis and flaws during the study design phase do not support the principal hypothesis. As such, future research could reach more definitive and robust conclusions.

Important research question that emerge as a result are:

- Can the present intervention and meditation programme be applied to other problematic behaviours, such as gambling?
- What are the comparative advantages of the concentration meditation and breathing exercise utilised in the present study?

Potential next steps include:

- Increasing generalizability of preliminary results can be accomplished with additional replications and new research teams.
- SCED methodology or Randomised Control Trials (RCT) can be used to assess meditation as an intervention for other problematic behaviours. RCTs may be advantageous designs for isolating and controlling for confounding variables.
- Can utilise SCED or RCT methodologies to create study designs that address the comparative advantages and experiences of meditation and breathwork exercises.

2) Unexpected Impacts of Soft Interventions

One of the unexpected – but most significant results – was the impact of soft interventions on participants. While altering study design may impact generalizability of SCED findings, future study designs could begin to discern how significant the soft interventions (i.e., pre-study interviews, logging sheets, weekly check-ins) were during this preliminary study. All of the following study design modifications would isolate meditation, so that findings could be attributable at a higher degree to meditation.

Important research question that emerge as a result are:

- How to isolate confounding variables from meditational impacts of intervention?
- What are the comparative advantages of the concentration meditation and breathing exercise utilised in the present study?

Potential next steps include:

- If SCED methodology is used in future research, future designs could be adjusted to isolate meditation.
 - Pre-study interviews could be removed entirely and post-study interviews would be sufficient in capturing information and data relevant to the effectiveness and subjective experiences of meditation.
 - Logging sheets could be used at intake and post-study as a data capturing technique instead of being utilised throughout the study. Comparing logging data between intake and post-study could still provide important efficacy measurements without playing a role as an intervention.
 - Researcher check-ins could be removed entirely, especially since the primary function of the weekly check-in was to request updated logging spreadsheets. By removing contact with the researcher, this further isolates meditation as the predominant catalyst for any documented behavioural change.
- RCTs can utilise daily logging as a control group characteristic, which would be better suited for isolated the effects and impacts of meditation.
- Both SCED and RCT research could separate and isolate the concentration meditation and conscious breathing exercises in order to investigate the core mechanisms of action that are most effective.
- Future research can account for logging process influence during the baseline phase of the research by allowing the baseline phase to be extended until the baseline stabilizes, thus making it easier to analyse the intervention phase and determine efficacy.

3) Movement from Rejection/Shame towards Awareness and Acceptance

The present research reveals that an individual can move from the experience of rejection and shame, and towards the experience of awareness and acceptance with regards to their pornography use without abstaining from it altogether. This could be influenced by meditation, the soft interventions, or a combination of the two. Two themes emerged

from participants and likely play a role as well. Rumination – and thus, duration of pornography use – may play a crucial role in this phenomenon as well. Secondly, the perceived locus of control likely contributes as well since participants reported feeling that their pornography use had become a choice again rather than a habitual reaction.

Important research question that emerge as a result are:

- Are themes of rumination and internal locus of control generalizable? Is data sufficiently saturated?

Potential next steps include:

- Future replications will help determine data saturation.
- Both RCTs and SCED replications can further explore the relationships between soft interventions, meditation, duration of pornography use, rumination, self-awareness and acceptance.

4) Pornography as an Influencer

Participants confirmed many anecdotal accounts of the impacts of problematic pornography use have on sexual preferences, sexual expectations, and sexual functions. Future research can explore whether these influences change in the opposite direction after successful intervention.

Important research question that emerge as a result are:

- Does the type of content preferred/viewed change during the intervention?
- Do those participants with partners experience increased intimacy within the relationship as a result of the intervention? What factors are at play?

Potential next steps include:

- Address intimacy within relationships at intake and post-study.
- Utilise questionnaires at intake and post-study that document the types of pornography preferred and viewed by participants.

5) Heterosexual versus Homosexual Pornography Consumption

While some research would suggest that sexuality and pornography use is very similar between heterosexual and homosexual men, the researcher identifies as a heterosexual man, meaning that potential ethical concerns could have arose when doing research with homosexual men. Additionally, selecting a niched and specific study population follows the established norms of present academic and scientific literature.

Important research question that emerge as a result are:

- How is SPPPU experienced similarly and/or differently between heterosexual and homosexual men?

Potential next steps include:

- Expand study population to include homosexual men.

Post-Script

Prelude

One of the most fulfilling aspects of this PhD research project was being able to sit down with men, spending time with them as I learn about the multi-faceted nature and complexities of what problematic behaviours are really about when you look beneath the surface level of the behavioural choice. The skills and knowledge that have been gained during the last three years of academic research and professional projects have provided me with a deeper understanding of the broad contexts within which addictive behaviours manifest and present. Additionally, this in-depth and multi-faceted PhD research has improved my ability to intervene and help individuals with problematic behaviours, as well as to consider the affective states and life contexts that often trigger and reinforce continued use. More importantly, it helped me understand who gets to decide what a successful intervention really looks like. The topic of pornography has served as an effective bridge between the addictive consumption (in this case pornography) and the variables beneath the surface that drive the compulsive consumption cycle. With the knowledge and experience I've gained during my PgDip in Drug and Alcohol Studies at the University of Auckland, as well as my PhD at the Auckland University of Technology, I will be continuing my commitment to work with men by staying involved with the Essentially Men Education Trust, a non-profit in Auckland. As a result of this research I've also committed to continuing my academic career and professional development as a psychologist by starting down the pathway towards a PgDip in Counselling Psychology and registration with the New Zealand Board of Psychology as a psychologist. In the following article, which is currently in press with *Psychology Aotearoa*, I discuss how this path became my personal and professional calling.

Published works in this chapter:

Sniewski, L. (In Press). Breaking isolation. Men, too, need connection & support.

Psychology Aotearoa.

Breaking isolation: Men, too, need support and connection

When Chief Coroner Judge Deborah Marshall released the most recent suicide statistics in New Zealand, the sobering reality of the current mental health crisis sent shockwaves through the world. Annual statistics reported 685 suicide deaths in New Zealand in the most recent reporting year, the highest since official records began in 2007 (Henry, 2019). Suicide deaths have increased each of the last four years, that the suicide rate now stands at 13.93 per 100,000 people, and that the rates of suicide among Māori and Pasifika have risen dramatically (Henry, 2019). Given that suicide rates are a sign of the mental health and social wellbeing of the population, these alarming statistics emphasize that suicide may represent the most serious health and social issue New Zealand currently faces. For me, the findings and statistics confirmed a call to action that I sought to answer when I began my doctoral research at AUT in 2017.

While the staggering nature of these suicide statistics is alarming, what has captured the attention of health authorities is the extent to which suicide has disproportionately impacted men, specifically young men. In New Zealand, suicide rates for men are more than twice as high as for women (Henry, 2019). Indeed, men of all age groups made up 68% of suicides (Bateman, 2019). The bigger concern, however, is how suicide is impacting the young men of New Zealand. Of the 685 suicide deaths last year, 112 were men between the ages of 15 and 24 (Bateman, 2019). Among the long list of 41 OECD and EU countries, New Zealand has the highest youth suicide rate in the developed world (Illmer, 2017). The rate of 15.6 suicides per 100,000 people is twice as high as the United States rate and almost five times that of Britain (Illmer, 2017). While the reasons and explanations are likely complex, contextual and multi-faceted, research suggests there is one variable in particular that could be largely responsible for these staggering male suicide statistics: Loneliness, and isolation that proceeds it (Calati et al., 2019).

The long-standing mainstream culture and narrative around masculinity in New Zealand calls for emotional stoicism (Illmer, 2017). What it means to 'be a man' has not left the necessary space for boys and young men to express and open about their emotionality or psychological distress. Growing up, boys are given clear messages to be 'strong', 'tough', and never cry or show emotion. Hence, accessing mental health support

resources goes against the ingrained cultural expectations of masculinity. As a result, men generally put off getting help for problems, especially when the issue is related to mental health. Instead, they exacerbate the debilitating effects of depression and anxiety by isolating themselves from the world and meaningful connections that could help them work through their emotional distress.

Luckily, there has been recent upsurge of academic interest and activism around the subject of male mental health, due in large part to the media spotlight and high-profile figures who have been vocal and vulnerable about their own struggles and experiences with depression and anxiety. Here in New Zealand, many of the male icons who have been put on the highest pedestal of traditional ‘tough bloke’ masculinity have displayed incredible strength and come forward with their stories of personal struggles and suffering through mental health challenges. John Kerwin and Mike King are two prime examples. These brave men – and many others – are helping to fight the stigma of male vulnerability, and communicating that the core principle of being emotionally vulnerable firmly belongs in the framework of modern masculinity.

My own interest in men’s mental health has stemmed directly from the doctoral research I have been working on over the last three years at the Auckland University of Technology. My PhD research focused on examining meditation as an intervention for men with self-perceived problematic pornography use. I could have probably picked any addictive substance or behaviour and been able to complete the degree requirements simply because of the utility and efficacy that meditation has shown within other addiction-related and mental health contexts (Sniewski, 2018; Reid et al., 2014; Zgierska et al., 2009).

My interests, though, were less about adding to the already massive mountain of evidence in support of meditation and more about examining the many layers and contexts of pornography use, especially given the widespread consumption of pornography in New Zealand. PornHub – the most popular free pornography website – has over 58 million visits per day, with New Zealanders – on a per capita basis – representing the fifth most regular visitors worldwide (“Kiwi Porn Habits Revealed,” 2016). So while one of the primary research aims of the study was to assess whether meditation could be used as a tool for men attempting to quit or reduce their pornography

viewing, the study was designed in such a way that it brought to light other – and arguably more significant – findings related to the contexts that contribute to the participant’s self-perceived problematic pornography use, its origins, the reasons these men came coming forward to take part in the intervention, and an exploration of past attempts at quitting.

Anyone could have guessed – and this certainly did not constitute ground-breaking research – that participants did not talk about their pornography viewing and masturbation habits with others. Men watch pornography in isolation and tend to not want to talk about it (Sniewski & Farvid, 2019). Not only does opening up about personal struggles position a man as vulnerable, the added layer of stigma associated with pornography only serves to reinforces hidden and anonymous pornography use (Sniewski & Farvid, 2019). The combination of inadequate sex education, cultural stigma surrounding pornography, and the inability of parents to talk about sex and pornography in productive ways has made pornography a very difficult topic to discuss with others (Sniewski & Farvid, 2019). The most significant takeaways from our research, however, emerged from the investigation of why these men were watching pornography and the reasons they provided for perceiving their viewing to be problematic (Sniewski & Farvid, 2019).

When the men in the study consumed pornography, it served as a form of experiential avoidance. It was in an effort to cope with and manage unwanted thoughts or memories, negative feelings, or uncomfortable physical sensations, even if the coping strategy created additional harm and negative consequences (Wetterneck et al, 2012). For these research participants, pornography evolved from a conscious choice motivated by pleasure-seeking and sexual stimulation into a habitual act, triggered by the need to avoid stress and other uncomfortable emotional states (Sniewski, Farvid, & Carter, 2018). When life and circumstances became too distressing or challenging, instead of seeking professional help or talking to someone, they reached for pornography. In the absence of other coping mechanisms, pornography provided the most reliable – although short-lived and fleeting – solution to coping with the emotional states that they had been raised to believe they should not talk about, let alone feel.

All of the participants reported feelings of shame and guilt after viewing pornography. The temporary relief from affective discomfort that pornography provided only served to reinforce continued use and continued isolation (Sniewski & Farvid, 2019). The downward spiral can be quick and fast when you cannot talk about the pain and discomfort underlying pornography use, and you cannot talk about the developing pornography problem since pornography itself is shame-ridden and stigmatised. And this is precisely how and why addiction begins to erode a person's life. When someone becomes isolated and alone, they need connection to heal. Pornography – and the stimulus that it provides – attempts to provide this sense of connection and relief, but falls well short of anything meaningful and substantive. If isolation and disconnect is at the root of the addictive cycle, then surely the answer is breaking isolation and finding meaningful, authentic connection.

It became evident why many of the participants' pornography viewing began decreasing during the baseline phase of the research, before they had even started the meditation intervention designed for the study. Pornography, as it turns out, was an incredibly effective topic, which helped men to not only talk about a deeply shameful topic (i.e., pornography), but also to open up about deeper mental and emotional issues beneath the surface of their pornography use. Indeed, many of the participants were able to reflect upon and begin to break the subconscious behavioural patterns associated with their pornography use long before they sat down, closed their eyes, and observed their breathing. The walls of their self- and culturally-imposed isolation began breaking down from the moment they emailed me to participate in the study. Participants started to see first-hand that they only used pornography to avoid uncomfortable emotional states and felt empowered to act on these new insights into their behaviour.

Men – especially young men, as many of the participants were university students – need support for their mental health, but instead turn to pornography because they feel isolated, alone, and feel too ashamed to turn to anyone for help. This study provided the framework for that kind of support to be provided, even though that was not the original intention of the study. Indeed, the study represented the first instance that many of these men had spoken openly and honestly about their pornography use without being judged or shamed for it (Sniewski, 2018a). Just being able to talk about their pornography use, as

well as the emotional contexts that triggered use, effectively started to break the automatic behavioural cycle. Instead of suffering in isolation and habitually avoiding the uncomfortable emotional states that were perceived as too heavy of a burden, these men were given a safe space to be vulnerable and communicate without being judged, told to stop complaining and grow up, told to ‘toughen up’, or take a ‘concrete pill’. In fact, many of the men made it a point to mention the immense relief they felt after being able to talk about their pornography use during their pre-study interviews (Sniewski & Farvid, 2019). It became abundantly clear that these men started to break their ritualistic pornography viewing habits because they were breaking the isolation that had, in essence, served as the incubator for the habit to become largely subconscious and habitual.

Since being involved with the Auckland-based men’s group, Men Being Real – first as a participant and now as a member of the Board of Trustees – I have come to witness first-hand how important it is for men to be vulnerable and share their struggles in a non-judgmental space. Within men’s groups and over the course of weekend workshops run by Men Being Real, men are supported in taking caring of themselves mentally and emotionally by being provided a platform to talk openly about their inner worlds. Since my involvement, it is clear that most men are starving for this type of brotherhood, as they feel isolated, alone, and lost in their struggles. For some – and arguably many – pornography is just one of the ways to perpetuate this isolated struggle.

We need this kind of men’s work because it is helping to rewrite the guidebook of what it means to be a man in New Zealand. More importantly, men’s work supports men in becoming better fathers, and we certainly need to teach our boys and young men that they do not have to isolate themselves and get stuck in the same self-destructive patterns as too many men before them. As men learn to tap into their own emotional well of wisdom, they can – in turn – provide a safe place for their children’s emotional expression and communication. Talking about feelings is coachable and teachable. Instead of telling our boys to stifle their feelings, bottle up emotions and embrace the stereotypical ‘stoic male’, our boys need to be allowed to express and understand their emotions, otherwise they put their mental, physical, and emotional health at risk. Boys need empathy and engagement, just like everyone else. If they do not get this type of nurturing, then the result is isolated boys who become isolated men – suffering from

anxiety, depression, and loneliness. The current mental health and suicide crisis in New Zealand is one of the consequences of ignoring the issue for too long.

Through my own commitment to inner work that has included years of therapy, mindfulness practice, and men's group work, I realised shortly after my arrival in New Zealand four years ago that my calling was to help other men within the contexts of emotional intelligence and vulnerability. That journey started with my postgraduate diploma in drug and Alcohol Studies, progressed to my PhD research, and now is moving gradually towards registration with the New Zealand Psychologist's Board. Men need help and support, too. I am just answering that calling. The skills and knowledge that have been gained during these last four years of academic and professional ventures have provided me with a deeper understanding of the broad contexts within which problematic and addictive behaviours manifest. The men in my research did not need instructions on how to quit pornography or to learn about the consequences of viewing too much pornography. What they needed was empathy, acceptance, and non-judgmental listening. The pornography viewing naturally began falling away when they received what they needed most: connection. Pornography was merely a Band-Aid solution for the core problem, which was the experiences of depression, anxiety, and stress being compounded by isolation and loneliness.

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Appendices

Appendix 1: Ethics Approval



AUTEC Secretariat

Auckland University of Technology
D-88, WU406 Level 4 WU Building City Campus
T: 64 9 219 999 ext. 3316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

AUT

10 April 2018

Pani Farvid
Faculty of Health and Environmental Sciences

Dear Pani

Re: Ethics Application: **18/81 Facilitating change through stillness: Examining the effectiveness and experiences of mindfulness meditation as an intervention for adult heterosexual men with self-perceived problematic pornography use (SPPPU)**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 10 April 2021.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title in all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: lukesniewski@gmail.com; Philip Carter; Rita Csako

Appendix 2: Recruitment Advertisement



AUT
UNIVERSITY

RESEARCH PARTICIPANTS NEEDED

Men with Self-Perceived Problematic Pornography Use

- Do you identify as a heterosexual male?
 - Do you feel like you have a problematic relationship with porn?
 - Are you aged 21 or over?
 - Do you live in New Zealand?

If you answered **yes** to all of these questions, we would like to invite you to take part in a 12-week mindfulness meditation intervention study:

EXAMINING THE EXPERIENCES AND EFFECTIVENESS OF MINDFULNESS MEDITATION AS AN INTERVENTION FOR ADULT HETEROSEXUAL MEN WITH SELF-PERCEIVED PROBLEMATIC PORNOGRAPHY USE

For more information, please contact me:
email: lukesniewski@gmail.com phone: 020 410 30657

Project supervisor: Dr Pani Farvid, pani.farvid@aut.ac.nz, 09 921 999 ext 7326
This research was ethically approved by AUTEK (application #18/81)

Appendix 3: Participant Information Sheet

Participant Information Sheet

Date Information Sheet Produced: 6 February 2018

Facilitating Change Through Stillness: Examining the Experiences and Effectiveness of Mindfulness Meditation as an Intervention for Adult Heterosexual Men with Self-Perceived Problematic Pornography Use

An Invitation

Kia ora, you are invited to take part in the research project I am doing as part of my Doctor of Philosophy (PhD in Psychology) qualification at AUT. My name is Luke Sniewski, and I'm a 33-year old Polish-American, now living in New Zealand. My research focuses on examining the experiences adult heterosexual men as they participate in a mindfulness meditation intervention aimed at addressing their Self-Perceived Problematic Pornography Use (SPPPU).

One of the components of the research will be investigating *how* men talk about their problematic use, which will be of significant value to clinicians and professionals working in the field. Participation in this 12-week intervention study project is entirely voluntary, and you are able to withdraw from the study during any stage prior to the end of the post-study follow up and/or interview. If you are participating in the pilot study of this research, you will be clearly notified and informed ahead of time that you are participating in the pilot study of this research. After receiving this invitation to participate, you will have a maximum of two weeks to consider whether you wish to participate.

What is the purpose of this research?

This research aims to explore how men talk about their problematic use, as well as their experiences of going through an intervention for this problematic use. It will offer you an opportunity to discuss a topic that is often not discussed. What you share will assist clinicians, as well as helping to shape future research in this emerging field. Additionally, your experiences will also help determine the experiences and efficacy of mindfulness meditation as an intervention for SPPPU. Your participation and insights will also provide invaluable and novel information regarding the utility meditation. This research will also be part of my PhD thesis.

How was I identified and why am I being invited to participate in this research?

You have been invited to the participation selection process because you have responded to an advertisement or heard about my research through word of mouth and subsequently contacted me. You were also identified because you fit the initial inclusion criteria for this research as you identify as a heterosexual man, aged 20 or above, and live in New Zealand.

How do I agree to participate in this research?

You have one week after reading this form to decide whether you would like to be participate in this study. If so, please fill out and email me the attached Participant Screening Questionnaire. Thereafter, we can arrange a time for the pre-study interview. Before the interview begins, I will send you a Consent Form that you will need to agree to, complete, and sign prior to participation in this research project. Your participation in this research is voluntary (it is your choice) and whether or not you are chosen to participate will neither advantage nor disadvantage you. Most importantly, if you are selected, you are able to withdraw from the study at any time. If you choose to withdraw from the study, you will be offered the choice between having any data that is identifiable as belonging to you removed, and allowing it to be used for the study. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

This research will involve you learning and implementing a mindfulness meditation technique over the course of 12 consecutive weeks. You will be asked to meditate twice daily (morning upon waking and evening/night before going to sleep) for 15-minutes. Guided meditation tracks will be provided for you to listen to during the duration of the study. You will also be asked to participate in three forms of data collection.

1) INTERVIEWS – This research will involve you meeting with me, either at one of the AUT campuses if you live in Auckland or via Skype if meeting in person is not possible for 3 interviews (pre-interventions, mid-interventions and post-intervention). These interviews are informal and will cover your experiences of SPPPU before and after the study. The interviews will be audio recorded. The interview will be transcribed and all participant data will be analysed for use in my thesis. My research may also be discussed at conferences and turned into a journal paper and/or a book. Interviews will last approximately 30-60 minutes, and will occur at three different points during the 12 week intervention.

2) QUESTIONNAIRES – This research will involve you filling out questionnaires at six different points of the research; four times during the study and twice after the conclusion of the study. These scales will take approximately 10-15 minutes to fill out and are related to research. The last two occurrences of filling out questionnaires will take place 1 month and 3 months after the 12-week intervention study has completed. This post-intervention data is invaluable to the research and represents a very minimal investment of your time.

3) DAILY PORN USE LOG – This research will involve you logging two important pieces of data each day: how many times you watched porn and how many times you masturbated until orgasm. This will be logged either on paper, or with an electronic spreadsheet, whichever you prefer. Whatever method of tracking you choose, you will email me the log once weekly, at the conclusion of the week.

4) DIARY (Optional) – If you wish to journal your experiences throughout this study, you are encouraged to do so as the insights will be very beneficial. Keeping a diary, however, is not mandatory, as I do not want you to think you have to write something everyday or all the time. Any additional information regarding your experiences, challenges, etc provided via a diary will be useful, so if you feel inclined to keep one, please do so.

What are the discomforts and risks?

I do not anticipate any risks to you. Your identity will be confidential, you can choose your own pseudonym if you'd like and all identifying information will be changed or deleted. There is a possibility that discussing topics surrounding your pornography use can cause some discomfort and/or embarrassment. Additionally, sometimes it can also be uncomfortable for an individual to disengage and cease behaviours, such as pornography consumption. If you are uncomfortable during the interviews, you can let me know and we can change the topic we are discussing. You can also let me know if there are any questions that you do not want to answer. Lastly, when some people cease a behaviour they believe to be problematic, sometimes they substitute that behaviour with another behaviour that can be as, or more, problematic or dangerous (i.e., smoking, drinking, seeking to find real people to act out the sexual fantasies that would have otherwise been viewed with pornography). In other words, if and when pornography use decreases, it is important to be aware of what activities emerge in its place. I will follow up with you on this matter myself, but please notify me if you find this to be the case for you during this research as soon as you become aware of it.

AUT Health Counselling and Wellbeing is able to offer three free sessions of confidential counselling support for adult participants in an AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research, and are not for other general counselling needs. To access these services, you will need to:

- drop into our centres at WB219 or AS104 or phone 921 9992 City Campus or 921 9998 North Shore campus to make an appointment. Appointments for South Campus can be made by calling 921 9992
- let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet

You can find out more information about AUT counsellors and counselling on <http://www.aut.ac.nz/being-a-student/current-postgraduates/your-health-and-wellbeing/counselling>.

What are the benefits?

You would benefit by sharing your experiences, and reflecting on a part of your life. Your interview and data will help contribute to research that could provide more help and support to other men with SPPPU. Most importantly, you may reduce your pornography use or positively alter the problematic relationship you have with pornography.

How will my privacy be protected?

Your identity and information is entirely confidential, accessible only to myself and my supervisors (Drs Pani Farvid, Phil Carter, and Rita Csako). The research will utilise a third party, offshore service to transcribe interviews. All interview material will be kept confidential (both by the research team and the third party service, which has a confidentiality agreement within their service terms and condition). A pseudonym will be given to you, or you can choose one yourself. Any identifying information you mention in interviews will be changed or deleted in written transcripts and when presented in my PhD or publications.

What are the costs of participating in this research?

The cost of traveling to the interview location if you choose to do an in-person interview. I will try to conduct the interview in a suitable and accessible location for you. One to two hours of your time will be needed to conduct each interview. The guided meditations are provided to you free of charge.

What opportunity do I have to consider this invitation?

You have two weeks to decide whether you would like to participate in this research, you can notify me at any time during that week period if you would like to or would not like to participate, but the first step to accepting the invitation is filling out the attached Participant Screening Questionnaire and sending it back to me. If I have not heard back from you after 2 weeks, I will send you an email.

Will I receive feedback on the results of this research?

If you would like a copy of a summary of the research findings, you may indicate this on the consent form and it will be emailed to you at the conclusion of my research project.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Pani Farvid, pani.farvid@aut.ac.nz, ph: 09 921 9999 ext 7326. Concerns regarding the conduct of the research: Kate O'Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team and support services as follows:

Primary Researcher Luke Sniewski - by email: lukesniewski@gmail.com

Project Supervisor Dr. Pani Farvid – by email: pani.farvid@aut.ac.nz; ph: 099219999 ext 7326

Support Services

AUT Counselling - <https://goo.gl/BUwLqB>; ph: 09 921 9292

SAFE Network NZ - www.safenetwork.org.nz, ph: 09 377 9898; em: help@safenetwork.org.nz

SHM Therapy - www.shm4u.com, em: rita@shm4u.com

Appendix 4: Participant Consent Form

Consent Form

Project title: Facilitating Change Through Stillness: Examining the Experiences and Effectiveness of Mindfulness Meditation as an Intervention for Adult Heterosexual Men with Self-Perceived Problematic Pornography Use

Project Supervisor: Dr Pani Farvid Researcher: Luke Sniewski

- I have read and understood the information provided about this research project in the Participant Information Sheet dated 06 February 2018.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that the interview will also be audio-recorded and transcribed.
- I understand that I will be filling out scales and questionnaires at various points during this research.
- I understand that notes that I will be logging both my daily pornography usage, as well as instances of masturbation until orgasm.
- I understand that I will be asked to meditate, twice daily, during this study.
- I understand that notes will be taken during the interviews and that the interview will also be audio-recorded and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research and to participate in a mindfulness meditation programme for this research project.
- I agree to inform the researcher if any behaviours, habits, or substances emerge as a substitute to pornography use immediately.
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant's Signature _____

Participant's Name: _____ Date : _____

Appendix 5: Participant Screening Questionnaire

Project title: *Change Through Stillness: Examining the Experiences of Adult Heterosexual Men as they use Meditation as an Intervention for Problematic Pornography Use*
Project Supervisor: *Dr. Pani Farvid* Researcher: *Luke Sniewski*

Please fill this form out and return it to Luke Sniewski to formally declare you wish to participate in this research project. You will be notified if you are selected by the primary researcher within 72 hours.

What is your age?

- 20 – 29 30 – 39 40 – 49 50+

Which of the following ethnicities do you most identify with? (Please select only one)

- Pākehā/NZ European Māori Pasifika Asian Other: _____

Which of the following types of pornography do you regularly consume? (Check all that apply)

- Traditional (Male and Female) Girl-on-Girl Man-on-Man Hentai
Transgender Porn BDSM Threesome Group Sex or Gangbang Violent or Abusive Porn
 Other: _____

In general, how many times do you watch porn daily?

- 1 2 3 4 5 6+

On average, how long is each pornography viewing session?

- 5 – 15min 15 – 30min 30 – 60min 1 – 1.5hrs 1.5 - 2 hrs 2 hrs+

On average, how many times per day do you masturbate until you orgasm?

- 1 2 3 4 5 6+

Which areas of your life does pornography impact problematically?

- Work Family Intimate Relationships Friendships
Religious/Moral/Ethical Financial Sexual Other: _____

Have you ever been diagnosed with or sought medical help for substance dependence or substance abuse concerns?

- No Yes

Have you ever been diagnosed with or sought medical help for mental health concerns?

- No Yes

Objectionable Material and Child Pornography

Objectionable material and child pornography are banned and illegal in New Zealand. It is important for participants to learn and understand more about objectionable, restricted, and banned material in New Zealand. Visit the Department of Internal Affairs website to read more about the Films, Videos and Publications Classification Act 1993 (<https://goo.gl/vGu3sm>) and the Crimes Amendment Act 2005 (<https://goo.gl/kDD8Ma>)

By signing and submitting this form back to the primary researcher, you are also agreeing to the following declaration:

“I do not, and will not, intentionally watch any form of pornography that is deemed illegal (i.e., child pornography, bestiality, urination, defecation, etc.) during the duration of this study.

Participant’s Signature _____

Participant’s Name: _____ Date : _____

Appendix 6: Sample Interview Questions

Indicative Areas for Discussion

PRE-STUDY INTERVIEW

General Questions

- Name, age, where from, current relationship status, highest level of education, what they do
- Follow up, expansion upon any significant details revealed with Participant Screening Questionnaire

History of Pornography Use

- How old were you when you first viewed pornography?
- Why did you first start viewing porn?
- How did porn effect your life?

Current Pornography Use

- Why do you use pornography?
- How often do you watch porn?
- How long, on average, is each pornography viewing session?
- How long do you spend watching porn per week?
- Can you explain the situation and circumstances right before you start viewing pornography?
- What happens after your viewing sessions?
- How do you experience cravings and temptations to use porn?
- Do you record the date and time spent viewing porn?
- Do you talk to anyone about your viewing?
- Did any events, situations, or circumstances in you past trigger use?

Problematic Pornography Use

- How do you feel about your pornography use?
- Why do you perceive your pornography consumption to be problematic?
- Do you watch porn when you experience unpleasant emotions or feelings?
- If you use pornography, or used it in the past, why have you used it?
- How many times have you attempted to cut back or quit using porn?
- What methods have you used to try reducing or stopping use?
- Have you sought professional help for your pornography use?
- Have you ever thought about seeking help for your use?
- Why were previous attempts at stopping or reduce unsuccessful?
- How do you feel immediately after using porn?

- How do your family, friends, and those close to you perceive your use?
- Does porn interfere with other aspects of your life?
- Do you have any problems with normal sexual function?
- Do you feel you sacrifice other things in order to view porn?
- Do you feel you have control of your pornography viewing?
- Do you try setting limits on your porn viewing?

POST-STUDY INTERVIEW

Problematic Pornography Use

- What, if anything, has changed about your use?
- How do you feel about your pornography use?
- Do you still perceive your pornography consumption to be problematic? Why?
- Why do you feel your pornography viewing increased/decreased/stayed the same?
- Have your rituals or routines around pornography viewing changed as a result of the intervention?
- What did you do with the extra time that would have otherwise been spent viewing porn?
- How do you feel about your ability to manage your pornography viewing moving forward?

Intervention Experiences & Efficacy

- What challenges did you face during the study in relation to your pornography use? How did you address those challenges?
- What did you consider helpful about the intervention? Why?
- What did not work particularly well for you in relation to the intervention?
- Did you learn anything about your pornography use that helped you?
- What was the hardest part of the intervention? Why?
- Did you learn anything about yourself during this intervention that will help you moving forward?
- Will you continue meditating? Why or why not?
- Did you prefer the morning or evening meditations more? Why?
- Did you find the morning or evening meditations to more helpful?
- Did you follow the intervention as planned, or did you make modifications to it? If so, what were your modifications?

Appendix 7: Sample of Daily Logging Spreadsheet

| Week 1 | | | | | | | | | |
|--------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|------------|
| | <i>EXAMPLE</i> | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Week Total |
| Morning Meditation | <i>1 = Yes</i> | | | | | | | | 0 |
| Evening Meditation | <i>0 = No</i> | | | | | | | | 0 |
| Viewing Sessions | <i>5</i> | | | | | | | | 0 |
| # of Orgasms | <i>3</i> | | | | | | | | 0 |
| Total Minutes of Viewing | <i>60</i> | | | | | | | | 0 |

| Week 2 | | | | | | | | | |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|------------|
| | <i>EXAMPLE</i> | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Week Total |
| Morning Meditation | <i>1 = Yes</i> | | | | | | | | 0 |
| Evening Meditation | <i>0 = No</i> | | | | | | | | 0 |
| Viewing Sessions | <i>5</i> | | | | | | | | 0 |
| # of Orgasms | <i>3</i> | | | | | | | | 0 |
| Total Duration of Viewing | <i>60</i> | | | | | | | | 0 |

| Week 3 | | | | | | | | | |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|------------|
| | <i>EXAMPLE</i> | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Week Total |
| Morning Meditation | <i>1 = Yes</i> | | | | | | | | 0 |
| Evening Meditation | <i>0 = No</i> | | | | | | | | 0 |
| Viewing Sessions | <i>5</i> | | | | | | | | 0 |
| # of Orgasms | <i>3</i> | | | | | | | | 0 |
| Total Duration of Viewing | <i>60</i> | | | | | | | | 0 |

| Week 4 | | | | | | | | | |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|------------|
| | <i>EXAMPLE</i> | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 | Day 7 | Week Total |
| Morning Meditation | <i>1 = Yes</i> | | | | | | | | 0 |
| Evening Meditation | <i>0 = No</i> | | | | | | | | 0 |
| Viewing Sessions | <i>5</i> | | | | | | | | 0 |
| # of Orgasms | <i>3</i> | | | | | | | | 0 |
| Total Duration of Viewing | <i>60</i> | | | | | | | | 0 |

Appendix 8: Study Questionnaires

PARTICIPANT ID: _____ DATE: _____

STUDY PERIOD:

Pre Study / Pre-Intervention / Post Study / 1-month

Follow up / 3-month follow up

| | Not at all | A little bit | Some of the Time | Most of the Time | All of the Time |
|---|------------|--------------|---------------------|---------------------|--------------------|
| If there is tension in my body, I am aware of the tension | 0 | 1 | 2 | 3 | 4 |
| It is difficult for me to identify my emotions ^(SEP) | 0 | 1 | 2 | 3 | 4 |
| I notice my emotional response to caring touch | 0 | 1 | 2 | 3 | 4 |
| I notice that my breathing becomes shallow when I am nervous | 0 | 1 | 2 | 3 | 4 |
| My body feels frozen, as though numb, during uncomfortable situations | 0 | 1 | 2 | 3 | 4 |
| I notice how my body changes when I am angry | 0 | 1 | 2 | 3 | 4 |
| I feel like I am looking at my body from outside of my body | 0 | 1 | 2 | 3 | 4 |
| I am aware of internal sensation during sexual activity | 0 | 1 | 2 | 3 | 4 |
| I can feel my breath travel through my body when I exhale deeply | 0 | 1 | 2 | 3 | 4 |
| I feel separated from my body | 0 | 1 | 2 | 3 | 4 |
| It is hard for me to express certain emotions | 0 | 1 | 2 | 3 | 4 |
| I take cues from my body to help me understand how I feel | 0 | 1 | 2 | 3 | 4 |
| When I am physically uncomfortable, I think about what may have caused it | 0 | 1 | 2 | 3 | 4 |
| I listen for information from my body about my emotional state | 0 | 1 | 2 | 3 | 4 |
| When I am stressed, I notice the stress in my body | 0 | 1 | 2 | 3 | 4 |
| I distract myself from feelings of physical discomfort | 0 | 1 | 2 | 3 | 4 |
| When I am tense, I take note of where the tension is located in my body | 0 | 1 | 2 | 3 | 4 |

| | | | | | |
|--|---|---|---|---|---|
| I notice that my body feels different after a peaceful experience | 0 | 1 | 2 | 3 | 4 |
| I feel separated from my body when I am engaged in sexual activity | 0 | 1 | 2 | 3 | 4 |
| It is difficult for me to pay attention to my emotions | 0 | 1 | 2 | 3 | 4 |

| | Almost Always | Very Frequently | Somewhat Frequently | Somewhat Infrequently | Very Infrequently | Almost Never |
|--|---------------|-----------------|---------------------|-----------------------|-------------------|--------------|
| I could be experiencing some emotion and not be conscious of it until some time later. | 1 | 2 | 3 | 4 | 5 | 6 |
| I break or spill things because of carelessness, not paying attention, or thinking of something else. | 1 | 2 | 3 | 4 | 5 | 6 |
| I find it difficult to stay focused on what's happening in the present. | 1 | 2 | 3 | 4 | 5 | 6 |
| I tend to walk quickly to get where I'm going without paying attention to what I experience along the way. | 1 | 2 | 3 | 4 | 5 | 6 |
| I tend not to notice feelings of physical tension or discomfort until they really grab my attention. | 1 | 2 | 3 | 4 | 5 | 6 |
| I forget a person's name almost as soon as I've been told it for the first time. | 1 | 2 | 3 | 4 | 5 | 6 |
| It seems I am "running on automatic," without much awareness of what I'm doing. | 1 | 2 | 3 | 4 | 5 | 6 |
| I rush through activities without being really attentive to them. | 1 | 2 | 3 | 4 | 5 | 6 |
| I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there. | 1 | 2 | 3 | 4 | 5 | 6 |
| I do jobs or tasks automatically, without being aware of what I'm doing. | 1 | 2 | 3 | 4 | 5 | 6 |
| I find myself listening to someone with one ear, doing something else at the same time. | 1 | 2 | 3 | 4 | 5 | 6 |
| I drive places on 'automatic pilot' and then wonder why I went there. | 1 | 2 | 3 | 4 | 5 | 6 |
| I find myself preoccupied with the future or the past. | 1 | 2 | 3 | 4 | 5 | 6 |
| I find myself doing things without paying attention. | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | |
|--|---|---|---|---|---|---|
| I snack without being aware that I'm eating. | 1 | 2 | 3 | 4 | 5 | 6 |
|--|---|---|---|---|---|---|

| | Disagree Completely | Disagree Somewhat | Disagree a Little | Neither Agree or Disagree | Agree a Little | Agree Somewhat | Agree Completely |
|---|---------------------|-------------------|-------------------|---------------------------|----------------|----------------|------------------|
| The thought of watching pornography makes me sexually aroused. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I would feel less bored if I watched pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I will watch pornography as soon as I get the chance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I were watching pornography this minute, I would feel energized. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I watched pornography right now, I would have difficulty stopping. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I have an urge to watch pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If I were watching pornography this minute, I would feel happier. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| If the situation allowed, I would watch pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Right now, I am making plans to watch pornography. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I would feel less stressed if I watched pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| My heart would beat faster if I were watching pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I want to watch pornography right now. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| OVER THE LAST MONTH... | Never | Rarely | Occasionally | Sometimes | Often | Very Often | All the Time |
|--|-------|--------|--------------|-----------|-------|------------|--------------|
| I felt that porn is an important part of my life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I used porn to restore the tranquility of my feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I felt porn caused problems in my sexual life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I felt that I had to watch more and more porn for satisfaction | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | |
|--|---|---|---|---|---|---|---|
| I unsuccessfully tried to reduce the amount of porn I watch | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I became stressed when something prevented me from watching porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I thought about how good it would be to watch porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Watching porn got rid of my negative feelings | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Watching porn prevented me from bringing out the best in me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I felt that I needed more and more porn in order to satisfy my needs | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| When I vowed not to watch porn anymore, I could only do it for a short period of time | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I became agitated when I was unable to watch porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I continually planned when to watch porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I released my tension by watching porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I neglected other leisure activities as a result of watching porn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I gradually watched more “extreme” porn, because the porn I watched before was less satisfying | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I resisted watching porn for only a little while before I relapsed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I missed porn greatly when I didn’t watch it for a while | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix 9: Published Articles

1. *The assessment and treatment of adult heterosexual men with self-perceived problematic pornography use: A review*
<https://doi.org/10.1016/j.addbeh.2017.10.010>
2. *Mindfulness meditation as a catalyst for behavioural change*
<https://www.psychology.org.nz/wp-content/uploads/Psychology-Aotearoa-May-18-for-email.pdf>
3. *The problem with problematic pornography use: A researcher's reflection*
<https://www.psychology.org.nz/wp-content/uploads/2018-November-PsychAo-for-email.pdf>
4. *Hidden in shame: Heterosexual men's experiences of self-perceived problematic pornography use*
<https://psycnet.apa.org/doi/10.1037/men0000232>
5. *Abstinence or Acceptance? A Case Series of Men's Experiences with an Intervention Addressing Self-Perceived Problematic Pornography Use*
<https://doi.org/10.1080/10720162.2019.1645058>