Understanding Relapse in Self-Perceived Problematic Pornography Users

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Understanding Relapse in Self-Perceived
Problematic Pornography Users

Erin L. Rackham

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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This study explored reasons for relapse among a sample of 938 self-identified problematic pornography users. A combination of numeric content analysis and qualitative coding of responses to an open-ended question about pornography relapse revealed six main categories of reasons for relapse. The mental, emotional, and relational categories were then analyzed in detail, and this analysis revealed significant overlap of responses from the emotional and relational categories. Hence, a new category of relational-emotional reasons for relapse was created and analyzed. The findings from this study highlight the complex interactions of different types of factors driving relapse in self-perceived problematic pornography users and future research and clinical applications are discussed.

Keywords: pornography, relapse, SPPPU, relapse prevention
This dissertation would never have been possible without the many helping hands pulling me along (and sometimes literally carrying me) these past 5 years. We all expected a project of this scope to be difficult and time-consuming, but none of us were truly prepared for the immense mental, physical, and emotional struggles it would be produced in spite of.

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Understanding Relapse in Self-Perceived Problematic Pornography Users

Almost all addiction recovery models address relapse prevention at some point in the recovery process (Grant et al., 2010). In fact, some researchers argue that “the fundamental issue with addiction is that of relapse, which can be defined as drug-seeking or the making of the addictive choice, even after a period of abstinence” (Redish et al., 2008, p. 432). Perhaps this is because by definition, total abstinence from a substance or addictive behavior cannot occur until you can reliably prevent relapse. Relapse occurs partially as a result of unsuccessful attempts to implement new coping skills in place of maladaptive patterns that contribute to addictive cycles (Grant et al., 2010). Accordingly, treatment options “for both behavioral addictions and substance use disorders often rely on a relapse prevention model that encourages abstinence by identifying patterns of abuse, avoiding or coping with high risk situations, and making lifestyle changes that reinforce healthier behaviors” (p. 236). But these treatment models beg the question, what are people actually trying to cope with in the first place? What specific experiences keep leading to relapse unless coped with effectively?

Redish and colleagues (2008) hypothesize that “multiple vulnerabilities can cause a relapse to the addictive choice, but the pathway to that relapse may be different, depending on the vulnerability involved. Therefore, prevention of relapse will…depend on treating the vulnerabilities involved” (Redish et al., 2008, p. 432). In other words, if someone needs to cope with certain triggers in order to avoid relapse, clinicians need to understand what exactly those triggers are if they want to intervene effectively. Without knowing what someone is specifically trying to cope with, how can we help them cope with it in new ways? Redish and colleagues go on to argue that “treatment should first entail the identification of which vulnerabilities have
been triggered within the individual, and then treatment should be addressed to the specific constellation of vulnerabilities into which the addicted patient has fallen” (p. 433).

While researchers and clinicians have debated amongst themselves for over 20 years now about how to officially classify different types of internet pornography use (Doran & Price, 2014), over 600,000 people have taken to the NoFap subreddit to share their personal stories and find help overcoming their self-perceived “pornography addiction”, “compulsive pornography use”, or “problematic pornography use” (r/NoFap, 2020a). Not all 600,000 people who participate in NoFap identify as “addicted”, but most people join looking for help abstaining from problematic pornography use, masturbation, and/or orgasm (“PMO”, as they call it). As such, pornography relapse prevention is a high priority for this group—even though they acknowledge that researchers have yet to declare “pornography addiction” an official medical diagnosis (Duffy et al., 2016).

Some researchers argue that there are healthy ways of using internet pornography and that its use should not be pathologized as a disorder—a view congruent with the Diagnostic and Statistical Manual for Mental Disorders: DSM 5, which does not mention hypersexuality or internet sexual addictions in its most recent edition (5th ed.; DSM–5; American Psychiatric Association, 2013; Young, 2008; Zitzman & Butler, 2005). Others have found that pornography use has the potential to present like a full-fledged behavioral addiction—causing many of the same problems for its users as other behavioral addictions do (e.g., depression, anxiety, isolation, hopelessness, impulse control) (Gilliland et al., 2011; Griffiths, 2012; Steelman, 2011; Young, 2008), including distress to relationships (Ford et al., 2012; Willoughby et al., 2016; Zitzman & Butler, 2005). In fact, the World Health Organization’s (2019) International Statistical Classification of Diseases and Related Health Problems (11th ed.; ICD-11) recently added a
code for compulsive sexual behavior disorder, defined as: “a persistent pattern of failure to control intense, repetitive sexual impulses or urges resulting in repetitive sexual behavior” (6C72), that could arguably include compulsive pornography use.

Since much of the research on pornography use has focused on simply establishing whether it has positive or negative effects on various outcomes—essential foundational research—the field does not yet have an in-depth understanding of the more clinical aspects of SPPPU, including relapse prevention (Sniewski et al., 2018). While some studies show positive effects of pornography and should not be ignored (Kohut et al., 2017) many studies over the past 20 years have also found robust evidence that problematic pornography use can be harmful to individuals and relationships (Griffiths, 2012). These harmful effects range from personal issues (depression, anxiety, shame, feeling out of control, lost productivity) (Grubbs et al., 2015; Steelman, 2011; Young, 2008), to relational issues (partners feeling betrayed and struggling with PTSD-like symptoms, marriages disrupted, families split up) (Doran & Price, 2014; Weiss, 2012; Zitzman & Butler, 2005), to even professional issues (inappropriate viewing at work, missing work, losing track of time, being fired as a secondary consequence) (Schneider, 2000).

Therefore, even without total consensus in the field on definitions, diagnoses, and theories about pornography use, it is clear that there are people who experience significant distress when their pornography use feels problematic, compulsive, or addictive (Griffiths, 2012). Unfortunately, clinicians have almost no evidence-based treatment options to rely on when clients ask for help preventing relapse of SPPPU (Ayres & Haddock, 2009; Sniewski et al., 2018).

This qualitative study attempts to lessen this gap between research and practice by exploring reasons for relapse in a group of self-perceived problematic pornography users from
the NoFap subreddit who participated in a NoFap challenge “in which participants abstain from pornography and masturbation for a period of time” (r/NoFap, 2020b).

To effectively treat the clinical population looking for help with SPPPU, an accurate understanding of their experience is necessary—including their experience of relapse (Kohut et al., 2017). The current sample’s desire to prevent PMO relapse is comparable to the goal of people trying to prevent SPPPU relapse, including those seeking clinical help (Sniewski et al., 2018). Qualitatively exploring the specific factors that led to relapse of PMO in this sample provides increased understanding of part of the overall process of relapse prevention for people trying to reduce their problematic pornography use. Therefore, this study uses participants’ own descriptions of their experience with recent PMO relapse to answer the research question—what factors lead to relapse of self-perceived problematic pornography use?

**Literature Review**

It should be noted that the NoFap users in this study considered pornography use, masturbation, and/or orgasm (“PMO”, as they referred to it) outside of a relationship a relapse. In contrast, most current pornography research separates pornography from masturbation and orgasm (Zimmer & Imhoff, 2020), and the field has not reached a consensus on how the three interact with one another. Even with some confusion about these concepts, we should examine current research to ensure that studying relapse prevention—and the underlying reasons driving relapse, specifically—is an appropriate next step given the field’s current understanding of self-perceived problematic pornography use (SPPPU).

**Labeling Self-Perceived Problematic Pornography Use**

Treating self-perceived problematic pornography use (SPPPU) is difficult, as the field has yet to establish a definition of what constitutes “problematic pornography use” or establish if a
“pornography addiction” is possible (Doran & Price, 2014; Döring, 2009; Duffy et al., 2016). Much of the current literature is conducted using samples who have self-labeled themselves as problematic pornography users or addicts. This presents a challenge to the validity of the research as each individual or system is likely to have a different personal threshold for how frequent and intense their pornography use is before it becomes a problem for them (Edwards, 2012; Willoughby, 2019). Additionally, more research needs to be conducted with samples who do not view their pornography use as problematic, so that the field can understand what differentiates these two groups and conduct more unbiased research than we currently have access to (Weinberg et al., 2010).

The above-mentioned challenges notwithstanding, there is clearly a group of people who view their pornography use as problematic and want help changing it (Griffiths, 2012). Even without perfect labels for the different levels of SPPPU, understanding the factors driving what this group considers a “relapse” is important if we want to help them prevent relapse (Matto, 2005). As such, while acknowledging the ambiguity in the academic conversation surrounding SPPPU, I still find Fall and Howard’s (2015) three-tiered approach to labeling pornography use helpful in framing the conversation around the need for SPPPU relapse prevention. When assessing the positive or negative impact of pornography on a system, Fall and Howard define the usage as falling into three broad categories. The first category is healthy pornography use and is defined by accessing pornography for stress-relief that does not interfere with other life tasks. This category also includes pornography used in a relationship where it creates shared intimacy, rather than distance (Weinberg et al., 2010). The second category occurs when the pornography begins to be problematic. Users generally try to decrease the time they spend viewing pornography at this level. The third category is addictive usage, which occurs when an individual
radically increases their time spent on pornography, the use causes many problems in different areas of life, and there is a sense of loss of control over the issue (Grubbs et al., 2015).

**Healthy Pornography Use**

As mentioned above, there is much debate about whether there can ever truly be a “healthy level” of pornography use—due in part to a smaller amount of research conducted with participants who view pornography use as healthy than with those who do not (Kohut et al., 2017). What little research has been done on the possible positive effects of pornography, however, reveals a few rarely discussed themes surrounding pornography use (Hare et al., 2014). For example, some scholars have studied the impact of pornography on young populations and found that the sexual education young people receive from pornography provides a more liberal and acceptance-based foundation for developing their sexuality, in contrast to the shame-based foundation that often comes from more conservative sources of information (Weinberg et al., 2010). Additionally, others have posited that the anonymity and accessibility of online pornography provides a safe environment for individuals and couples to explore vulnerable and scary topics surrounding physical intimacy and sex (Young, 2008). Many of the qualitative studies on this topic give examples of people who have struggled to reconcile who they feel they are with what their sexual preferences are because the two seem to have no way to coexist (Kohut et al., 2017; Weinberg et al., 2010). People in these circumstances are now able to access online chat rooms, groups, or pornographic material that gives them the freedom to explore non-normative sexual preferences free of shame and judgment (e.g., BDSM, fetishes, different gender-oriented sex, etc.; Young, 2008). One such example is a 51-year old woman who states:

My whole world changed when I discovered chat rooms…Since high school, I always wanted to be dominated by a man, but I hid my desires because I feared that I would lose
the respect of the men I dated…For the first time in my life, I can act upon fantasies I kept bottled up inside of me… (p. 23).

This woman goes on to discuss how her online sexual experiences have caused difficulty in her marriage, but connecting with others who shared similar fantasies, experiencing shame-reduction around her sexual arousal template, and finding a new feeling of self-congruence was not an insignificant or unique experience (Young, 2008).

Traditionally, pornography has also been suggested as an intervention to help couples gather ideas to spice up a dull and boring sex life (Meana & Stiner, 2014). Meana and Stiner suggest the use of erotica to help build desire (except in cases where pornography is one of the underlying reasons for the sexual dysfunction) in men and women struggling with a low sexual desire disorder. Their theory posits that for relationships and marriages that are stable, secure, and longer than about 10 years, the sexual relationship tends to become a low priority and couples will sometimes forget to think about sexual intimacy with their partner throughout the day, so an erotic sexual stimulus may trigger the missing sexual response cycle.

In a more recent and extensive qualitative study, Kohut and colleagues (2017) interviewed 430 men and women in relationships and found that the majority of participants reported “no negative impacts” of pornography use (621 references) and a significant number of participants referred to pornography as a positive source of information about sex (353 references) or sexual experimentation (343 references). In contrast, very few participants stated “no positive impacts” when referring to pornography use in their relationships (34 references), although some reported a decreased interest in sex (103 references) or personal insecurity (103 references) (p. 590). There were 66 themes total identified from the coding analysis—each
represented by anywhere from 5 to 621 references. But the general findings were that pornography was viewed significantly more positively than negatively among the sample.

While the research support for healthy pornography use is more sparse than for harmful pornography use, it is important to acknowledge both sides of this issue and understand that for some people, pornography use is considered a part of healthy sexuality and never requires any treatment from a mental health professional (Hare et al., 2014).

**Problematic Pornography Use**

Since SPPPU remains a subjective issue and definitions differ from person to person (Willoughby et al., 2016), multiple assessments for pornography use have surfaced in the past few years assessing—among other things—frequency, feeling of control over use, pornography use interfering with aspects of life, and personal perception of “addiction” to pornography or not (e.g., Compulsive Pornography Consumption Scale, Noor et al., 2015; Cyber Pornography Use Inventory, Grubbs et al., 2015; Pornography Passion Scale, Rosenberg & Kraus, 2014; The Pornography Craving Questionnaire, Kraus & Rosenberg, 2014; Problematic Pornography Use Scale, Kor et al., 2014). These assessments may give clinicians a mechanism to determine what exactly SPPPU looks like for people who use that label in therapy (e.g., hours-long pornography binges every day, viewing pornography once a week, viewing pornography once every few months, etc.). The issue is further complicated, however, by the fact that clients with sexual addictions tend to have high rates of denial and a distorted sense of reality, which the clinician must be aware of to be able to genuinely assess the impact pornography has on their life—in addition to their self-report (Carnes & Adams, 2002).

When a partner enters the therapy system, clinicians are given another source of information about how the pornography use impacts a client’s relationship (Zitzman & Butler,
2005). Past research has shown that spouses often perceive pornography use as infidelity—particularly when they discover the use rather than it being disclosed to them (Hall, 2016; Schneider et al., 2012; Young et al., 2000). There is still some disagreement among clinicians and researchers about this because there has not been enough conclusive evidence regarding the impact on partners in couples where pornography is viewed as normative and healthy (Kohut et al., 2017). Future research could focus on this population of healthy users to help the field understand if attitudes toward pornography use change how it impacts partners and relationships (Willoughby et al., 2016). Currently, however, it is helpful for clinicians to understand that when a couple comes to therapy wanting help with the issue of pornography, the hurt partner is sometimes experiencing relational trauma similar to discovering an ongoing affair in their partner and the systemic dynamics may need to be treated as such (Schneider et al., 2012).

**Addictive Pornography Use**

There is a distinct difference in the research between occasional problematic use and pornography use that feels out of control for individuals and couples (Grubbs et al., 2015; Young, 2008). As mentioned previously, problematic use is the beginning stage of users wanting to decrease amount of time spent on pornography as their use may begin to get in the way of an area or two of their life (Fall & Howard, 2015). Out of control usage, on the other hand, has usually achieved a level of unmanageability often seen with addictions, and serious consequences are at stake—such as holding on to marriage relationships, jobs, and families (Schneider, 2000; Young, 2008). Although the field has yet to officially agree on the neurological support for using the term “addiction” in conjunction with pornography use, the symptoms at this level can be similar to other behavioral addictions (e.g., impaired daily functioning, tolerance, inability to terminate addiction) (Griffiths, 2012). In this phase of
pornography use, clients often present with uncontrolled cravings, excessive use, difficulty maintaining relationships or jobs, and sometimes perceived sexual dysfunction as a secondary symptom (Beveridge, 2015).

**Impacts of Self-Perceived Problematic Pornography Use**

In the ongoing debate about the positive or negative consequences of pornography use, multiple studies have worked to establish the effects of pornography on children, adults, families, and society to glean a better objective understanding of the impact of pornography use today (Mitchell et al., 2007; Peter & Valkenburg, 2008a).

**Impact on Children and Adolescents**

Research suggests that the average age of exposure to internet pornography for children is around 8 years old, and most likely younger, considering how much the amount of sexually explicit content in our media has grown in the 13 years since this statistic was collected (Mitchell et al., 2007). In a longitudinal study testing 12–15 year olds’ exposure to pornography and consequent sexual behaviors and attitudes (measurements taken 2 years apart), Brown and L’Engle (2009) found that increased exposure to pornography was linked to less progressive gender role attitudes, more permissive sexual norms, sexual harassment perpetration, and having oral sex and intercourse two years after first exposure (average age 13.6 years). Overall, at the young ages of 15 and 16 (9th and 10th grade), teenage boys reported themselves as perpetuating sexually aggressive and harassing behaviors towards teenage girls with a major predictor being pornography use two years prior. They specifically reported that they had engaged in activities such as having “touched or brushed up against a schoolmate in a sexual way”, “cornered a schoolmate in a sexual way”, or “called a schoolmate a sexually offensive name” (p. 137). However, it did not appear to be only males who engaged in risky sexual behaviors after being
exposed to pornography. Females who were exposed early to pornography were also found to subscribe to more traditional gender roles, which has been linked to less use of contraception at first intercourse, thus putting them more at risk for sexually transmitted diseases and early pregnancy (Varga, 2003). Other studies have shown that online pornography use among adolescents is correlated with sexual insecurity and negative attitudes toward marriage, family, and monogamy (Lam & Chan, 2007; Lo & Wei, 2005; Peter & Valkenburg, 2008b). It should be noted that no studies to date have been able to determine causality for any of the above relationships as the study designs typically employed a stimulus-response model or a cross-sectional design. Longitudinal studies that assess for other possible confounding bio-psycho-social-spiritual factors are still needed in this area (Hare et al., 2014).

More recent research has suggested that while we know a moderate amount about how early pornography use impacts sexual behaviors and attitudes, there is a dearth of literature about how pornography use impacts other areas of adolescents’ lives (Owens et al., 2012). One recent study, however, explored the relationship between pornography and academic performance using a two-wave longitudinal design among Belgian adolescents (Beyens et al., 2015). It found that the more pornography boys viewed at Time 1, the poorer their school grades were 6 months later at Time 2—even after controlling for academic performance at Time 1. This study provides an example of just one non-sexual impact that pornography use can have in adolescents’ lives and should be regarded as the beginning of exploring non-sexual impacts further.

Impact on Adults and Families

The research on the impact of pornography on adults is much more robust, which allows us to potentially understand the long-term negative effects of pornography use on functionality and overall health (Wright et al., 2017). Many studies on this topic have been qualitative and,
consequently, provide poignant descriptions of the effects of pornography in the lives of those involved (Hare et al., 2014; Kohut et al., 2017; Young, 2008). People report losing their jobs due to being distracted at work, spending hours on the internet behind closed doors at the office, being late to work due to losing track of time during a session on the internet at home, and more (Schneider, 2000). The repercussions of decreased work productivity for society as a whole while work pornography use increases include financial costs of employers paying employees for wasted time, firing and rehiring costs, and more missed days of work. But even more troubling than the financial costs to companies are the costs to families. Many of these painful stories include phrases like “possible loss of our home” and “possible even divorce with all its problems for the children” (Schneider, 2000, p. 260).

Families and relationships often pay more than just a financial price when someone loses their job over pornography use (Wright et al., 2017). Research has repeatedly shown that problematic pornography use in a marriage leads to lower marital satisfaction and struggles in the sexual relationship, in particular (Doran & Price, 2014; Schneider, 2000; Weiss, 2012; Zitzman & Butler, 2005). In fact, in a study conducted in 2014 (Doran & Price), men who reported using pornography within the last month had 40% higher odds of being divorced than men who did not report having used pornography in the last month. Pornography users also had 108% higher odds of having had an extramarital affair and reported being less happy in their marriage and life overall. Women in the study reported the same effects, but with slightly smaller magnitudes. These statistics are alarming when we consider the negative effects extramarital affairs can have on a marriage, as well as how destabilizing divorce can be for couples and families (Amato, 2000).
Additionally, some pornography users report that once they are exposed to the easy-access, always-changing, intense exploration of the pornography world, they struggle to feel sexually satisfied with their real-life partner (Schneider, 2000). Qualitative studies report phrases such as, “lost interest in sex with my wife” (Schneider, 2000, p. 260), “using and objectifying my wife” (p. 260), “drains my libido” (p. 259), and “interferes with my responding/initiating sexual relations” (p. 259). Additionally, informal studies and communities on the internet such as Reddit’s NoFap support group report “porn-induced erectile dysfunction” (PIED) being one of the most common negative side effects of a pornography addiction (Zimmer & Imhoff, 2020).

Overall Impact

While acknowledging that there is a population that views pornography as normal, healthy, and even helpful in relationships (Kohut et al., 2017), understanding that the majority of our research highlights the problematic effects of pornography use on children, adults, families, and society as a whole may help clinicians feel that there is some foundation to stand on when determining how to proceed in treatment (Newstrom & Harris, 2016). While more research is needed to support healthy pornography use in relationships, especially when considering that the majority of current samples are self-perceived problematic pornography users, plenty of research has repeatedly shown the negative effects SPPPU has on marriages and families as well as personal daily functioning (Beyens et al., 2015; Freeman-Longo, 2000; Willoughby & Leonhardt, 2020; Zitzman & Butler, 2005). Additionally, although not all couples experience it this way, some partners feel betrayed at the time of discovery of their partner’s pornography use, and pornography has been shown to escalate and become problematic when it reaches the level of out of control consumption (Egan & Parmar, 2013; Flood, 2009; Hald & Malamuth, 2008; Stack et al., 2004).
Clinical Evidence Base

Unfortunately, while there is a growing base of literature exploring the impact of pornography on our society and we are closer to understanding the harms pornography can have on those who view their use as problematic, we still have minimal clinical research supporting specific treatment protocols, including relapse prevention strategies, for SPPPU (Sniewski et al., 2018). Nowhere has this been more obvious than in the study conducted by Ayres and Haddock (2009) when they sent 300 questionnaires with a hypothetical case question involving a spouse’s pornography use to therapists who were current members of the American Association of Marriage and Family Therapy (AAMFT) about how they would proceed in treatment. They received 99 qualitative responses indicating that the majority of therapists had received no training in how to handle pornography, even though over 76% had seen clients within the last year dealing with pornography problems. The findings further revealed that there was no clear majority consensus of how to deal with the pornography in the hypothetical case. Some therapists ignored it completely, while others dealt with it as the main issue, and still others addressed it, but not as a problem. While one could argue that there would be variance in therapist’s approaches to many different clinical issues if presented with this same case question, it would be rare to find a therapist who did not at least acknowledge that depression or anxiety were a problem needing to be clinically addressed. This study, on the other hand, highlighted the confusion practitioners often feel about what to do with pornography in therapy—beginning with whether to even consider it a problem or not (Ayres & Haddock, 2009).

Attempting to address this absence of evidence-based interventions for SPPPU, a few experimental treatments have been implemented and studied with small samples, but they have yet to be consistently replicated or adopted as standard practice by the field (Sniewski et al.,
One promising study conducted by Crosby and Twohig (2016) was a randomized controlled trial of Acceptance and Commitment Therapy (ACT) for SPPPU. They compared a 12-session individual protocol of ACT to a waitlist control condition and found a 93% reduction in use in the ACT group compared to a 21% reduction in the waitlist. The study maintained moderate results at the 3-month follow-up. This was the second study (after their first study in 2010 using a similar protocol) (Twohig & Crosby, 2010) to use an evidence-based treatment with SPPPU specifically, and the results were promising, but there were some important limitations. The sample was all male and all but one participant were members of the Church of Jesus Christ of Latter-day Saints. This homogeneity brings into question the generalizability of the results, but at least for this sample, there seems to be some evidence that shifting the focus from avoiding urges and cravings to managing behaviors can be productive in recovery. Additionally, these results could possibly be generalizable to others who belong to traditionally conservative religions.

Another study conducted by Hardy and colleagues (2010) tested the efficacy of an online recovery program titled Candeo with a sample of 138 participants. In a cross-sectional design, participants who had been in Candeo for at least 4 weeks were asked about their perception of the effectiveness of Candeo as compared to previous treatments they had tried. The participants reported that Candeo was the most effective treatment they had tried and that their pornography use had significantly decreased since beginning the program. Even with such promising results, this study’s limitations must also be acknowledged. The sample was mostly homogenous with 97% being male and 83% being white. This was also a self-report retrospective measure, where the potential for bias and inaccurate reporting of reality is strong—particularly in a population with sexual addictions whose potential for denial is high (Carnes & Adams, 2002). And finally,
the study was funded and co-authored by the owners of Candeo, a reality that introduces conflicts of interest and may decrease trust in the findings (Hardy et al., 2010, p. 247). The general finding that an online program may be helpful in recovery, however, is still useful information to the field—especially today when the internet is so accessible and convenient.

One final effective intervention seems to be couples therapy, based on a study conducted in 2005 with 6 couples in treatment (Zitzman & Butler). The therapists used different models of therapy (CBT, EFT, eclectic), and all the couples reported an increase in marital trust, mutual softening, and marital enhancement—although reduction in pornography use was never specifically reported. While couples therapy may have helped enhance marital satisfaction with these couples, it is unclear exactly what created this change, (the authors suggest it was psychoeducation and reframing of the pornography use, to some extent) and there has been no formalization of treatment protocol since.

Overall, while there have been a few promising trials of treatments for SPPPU, as Sniewski and colleagues (2018) observe in a comprehensive review of clinical trials with SPPPU, “the majority of research methods in this field thus far are scattered, unverifiable, and not replicable” (p. 222). Our clinical research has not been able to keep up with the rapid rise of SPPPU in our society and our understanding of the issue has fallen behind the rising need for treatment (Crosby & Twohig, 2016). While more research is being published with every passing year, there is still a significant lack of understanding regarding the factors driving SPPPU relapse, and little support for any specific SPPPU relapse prevention strategies for individuals or couples (Crosby & Twohig, 2016). Current research provides support for the potential negative effects SPPPU has on society and families, and the next step for the field is to understand how to help people heal and move forward with their lives in the face of these negative consequences.
(Gola & Potenza, 2016). Additionally, more knowledge about people who experience no negative consequences from their pornography use could help clinicians understand what factors are important to focus on in treatment to keep pornography use in the healthy range (Kohut et al., 2017).

To be able to treat SPPPU effectively, the field needs a better understanding of how people experience the different aspects of SPPPU (Harris et al., 2011)—including relapse (Redish et al., 2008). No research to date has studied the triggers and predictors of SPPPU relapse and understanding these driving factors will help in creating evidence-based relapse prevention strategies for clinicians to use. This study proposes to increase the field’s understanding of relapse in SPPPU by focusing on the crucial few moments right before relapse in this highly specific sample of self-perceived problematic pornography users.

**Theories of Relapse**

Over the past several decades, researchers and clinicians have proposed multiple theories of what leads to relapse in addictions and the best way to prevent it (Witkiewitz & Marlatt, 2004). Most of the research has been conducted with substance abuse or alcohol addictions, but a few more recent theories have expanded to include behavioral addictions as well (Matto, 2005). While discussing every existing theory of relapse is outside the scope of this paper, a brief overview of the current proposed theories of relapse in behavioral addictions helps highlight the need for the current study as the next step in understanding the experience of SPPPU relapse.

**General Relapse**

One of the most influential theories of relapse was born out of Marlatt and Gordon’s (1985) initial categorization of different predictors of relapse—called their Taxonomy of Relapse. This three-tiered taxonomy identified two main categories of factors leading to relapse:
1) intrapersonal-environmental determinants, and 2) interpersonal determinants, with each category further divided into multiple subcategories. While Marlatt and Gordon cautioned against viewing the categories and subcategories as single precipitants of relapse, their general contribution to the field was the idea that clinicians could identify specific risky situations ahead of time for clients trying to stay sober. Guided by social-cognitive psychology, Marlatt and Gordon believed that practicing coping skills and enhancing self-esteem could prevent relapse in risky situations.

More recent relapse theories often specifically identify some combination of cognitive, behavioral, biological, affective, and systemic factors. Many of these newer theories are based on Marlatt and Gordon’s original model but have revised aspects of their approach (Lim et al., 2018; Witkiewitz & Marlatt, 2004). The earliest example (and possibly most impactful) of these revisions can be seen with the Stages of Change model proposed by four prominent researchers (including Marlatt) who combined what they each knew about relapse in alcoholism, smoking, and obesity (Brownell et al., 1986). In their work with relapse prevention, the authors identified three common approaches to facilitating long-term maintenance: 1) extending treatment with “booster sessions” reiterating the same material from previous therapy sessions, 2) adding more components to a treatment package, and 3) a lifelong model of treatment (p. 772).

In place of these three standard approaches, the four researchers proposed a new model for relapse prevention based on three general stages of treatment: 1) motivation and commitment, 2) initial change, and 3) maintenance. They argued that relapse could occur in any one of these stages and treatment needed to reflect this (Brownell et al., 1986). This was the beginning of the field shifting treatment focus to include maintenance as a form of relapse prevention at the beginning of treatment—rather than reacting only after a client relapsed. They believed three
components were important to maintenance success: 1) continued monitoring, 2) social support, and 3) general life-style change. The studies informing their conclusions showed promising results when recovery programs actively included “relapse prevention” as a component of their model and helped clients learn cognitive adaptive skills, practice emotional regulation techniques, build social networks of support, and replace the addiction with a healthy positive behavior in their life.

Another revision came in the form of the Process Model of Addiction and Recovery—a continuation of Marlatt and Gordon’s original cognitive-behavioral model of relapse (Harris, 1995; Harris et al., 2011). According to the Process Model of Addiction and Recovery, “substance abuse and dependence occurs when pain is present in a system that does not have enough protective factors allowing effective coping mechanisms to build resilience” (Harris et al., 2011, p. 268). The model identifies two cycles of addiction and recovery: 1) the compulsive cycle (lack of resilience), and 2) the coping cycle (resilience). These cycles of addiction and recovery are learned and supported by dynamics of the family or larger system. According to this model, identifying the original source of pain and finding supportive systems is key to maintaining relapse resilience through repeated cycles of successful coping. Harris specifically identifies “relapse resilience” as different from “relapse prevention” (p. 270)—originally conceptualized by Marlatt and Gordon (1985). Prevention occurs in treatment early on, while resiliency is implemented in recovery and maintained throughout the rest of life.

Similarly, Redish and colleagues’ (2008) Unified Framework for Decision-Making hypothesizes that people have certain vulnerabilities that leave them susceptible to the poor decision-making that accompanies addiction. Some of these vulnerabilities are cognitive and behavioral in nature, but others may be the result of changes in the brain that substances and
possibly compulsive behaviors can cause. They suggest that different addictive drugs and behaviors access different vulnerability systems because they have unique physiological effects. This may partially explain why some people become addicted while others never lose control of their usage—not everyone has the same vulnerabilities that lead to addiction with certain substances or behaviors. In addressing relapse prevention, specifically, Redish and colleagues recommend acknowledging that the reasons for relapse may be different from person to person depending on their specific vulnerabilities involved. They call for more research to be done on behavioral addictions as they might represent a different pathway to relapse than substance use disorders, and “treatment of each vulnerability requires a regimen specifically designed to address that vulnerability” (p. 433).

And finally, perhaps the most all-encompassing theory of addiction and relapse comes in the form of Griffiths’ (2005) Components Model of Addiction, created within a biopsychosocial framework. The Components Model of Addiction includes five common components of all addictions: 1) salience, 2) mood modification, 3) tolerance, 4) withdrawal, and 5) conflict and relapse. Griffiths posits that addictions are difficult to completely understand because they are the product of interactions between many different factors in someone’s life. Biological and genetic predispositions, psychological attributes, social environment, and the nature of the activity itself are all important to consider when treating an addiction. He states that “addiction is a multifaceted behavior that is strongly influenced by contextual factors that cannot be encompassed by any single theoretical perspective” (p. 195). His suggestion for future addiction research is that a theory must:

1) Synthesize pharmacological, cultural, situational and personality factors, 2) account for the varying nature of addiction across cultures, individuals, and time, 3) account for
commonalities between all addictions and 4) be faithful to lived human experience (p. 196).

In light of this complexity, he suggests that “an eclectic approach to the studying of addictive behavior appears to be the most pragmatic way forward in the field” (p. 191).

**Relapse in SPPPU**

While addiction researchers have created multiple theories of relapse prevention for substance use disorders, and even a few for behavioral addictions, we have yet to see a comprehensive theory of relapse prevention for SPPPU (Harris et al., 2011). Perhaps this is because the field has been preoccupied with the task of establishing pornography as a legitimate addictive behavior (Duffy et al., 2016), but substantial evidence now supports the idea that SPPPU may mimic similar mechanisms seen in substance use disorders and other established behavioral addictions (Gola et al., 2017; Grant et al., 2010; Leeman & Potenza, 2013; Love et al., 2015).

As such, there are now two relatively new addiction models addressing SPPPU—the Metacognitive Model (Allen et al., 2017) and the I-PACE Model (Brand et al., 2016b)—but only the Metacognitive Model specifically identifies a possible mechanism of SPPPU relapse. It posits that metacognitions (essentially “thinking about thinking”) are central to the problematic perseveration and dysregulated desire-thinking that lead to addictive behaviors (Allen et al., 2017). For example, “I need to think about pornography to distract myself from painful emotions” or “If I start thinking about pornography I cannot stop” are thoughts that lead to unwanted behaviors if not shifted immediately (p. 66). Allen and colleagues conclude that therapeutic interventions that increase control of attention and metacognitions about desire-thinking may be helpful in preventing relapse.
As many other models of relapse articulate, however, it is likely that more than just cognitions are involved in SPPPU relapse as addictions seem to encompass a wide array of factors all interacting with one another at any given moment (Griffiths, 2005; Redish et al., 2008; Witkiewitz & Marlatt, 2004).

A more comprehensive theory of SPPPU—not necessarily relapse—is the Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors (originally created for internet-use disorders) (Brand et al., 2016b; Brand et al., 2019). Similar to the systemic thinking of Griffiths’ Components Model of Addiction (Griffiths, 2005), the I-PACE model argues that addictive behaviors develop from interactions between predisposing variables, affective and cognitive responses to specific stimuli, and executive functions, such as inhibitory control and decision-making (Brand et al., 2019). It identifies two different processes—one for early stages of addiction, and another for the later stages. While the model is not specifically focused on mechanisms driving relapse, it is the most comprehensive, evidence-based, standardized model for pornography research to date (Carnes & Love, 2017). Using a standardized approach across research settings to identify the commonalities and differences in types of addictive behaviors could help improve the overall quality of addiction research—including SPPPU relapse-specific research (Brand et al., 2019). In regard to specific addictions, each component of the model becomes an area to be researched more deeply using multiple methods and approaches (neurological, physiological, psychological, relational, qualitative, quantitative) in order to clarify our understanding and effectiveness of treatment and relapse prevention for specific addictions.

The P (person) in the I-PACE model represents core characteristics of a person that may predispose them to a certain addiction. For example, evidence has shown that early childhood
experiences, attachment, depression and anxiety, high impulsivity, etc. have been correlated with addictive behaviors (Brand et al., 2019). The A, C, and E (affect, cognition, and execution) in the model represent the affective and cognitive responses a person experiences when presented with internal or external triggers, that then lead to a decision to engage in a specific behavior. This decision may be driven by two interactive systems: an impulsive/reactive system, and a reflective/deliberative system. Increasing neurobiological research has found neural correlates related to decision-making in addictive behaviors and substance abuse, but the research specific to pornography is sparse (Brand et al., 2016a; Gola et al., 2017; Klucken et al., 2016; Kraus et al., 2016; Schmidt et al., 2017; Stark et al., 2017; Voon et al., 2014).

Factors Driving SPPPU Relapse

In an attempt to dig deeper on the issue of SPPPU relapse, some researchers have tried to identify possible triggering situations for people struggling with pornography use, such as in the development of the Pornography Use-Avoidance Self-Efficacy Scale (Kraus et al., 2017). The “triggering situations” included in the scale, however, come from just one therapist’s ideas based on his clinical work with SPPPU (p. 357). Additionally, the research to evaluate the efficacy of this measure was conducted well after, or even before, a relapse had occurred. Participants tried to guess how they would respond in certain future situations. While this kind of measure is standard in the field of addictions due to reasonable research constraints, in the moment data about a relapse is likely to facilitate a more accurate reporting of which situations (and responses to these situations) actually lead to relapse—rather than which hypothetical curated situations might lead to hypothetical relapses.

The current study takes Griffiths’ (2005) words to heart when he proposes that a theory of addiction must:
1) Synthesize pharmacological, cultural, situational and personality factors, 2) account for the varying nature of addiction across cultures, individuals, and time, 3) account for commonalities between all addictions and 4) be faithful to lived human experience (p. 196).

His suggestion of using an eclectic approach to further study different addictions supports the notion that a qualitative study based in the “lived human experience” of people trying to prevent PMO relapse could provide a clearer picture of the experience of relapse for others trying to prevent SPPPU relapse.

Overall, although there is ample evidence to support the need for evidence based SPPPU relapse prevention strategies (Griffiths, 2012; Sniewski et al., 2018), the field lacks a comprehensive theory of relapse specific to SPPPU (Harris et al., 2011). Without a clear understanding of what leads to relapse in SPPPU, effective treatment protocols are difficult to create and implement because, as mentioned before, without knowing what someone is trying to cope with, how can we help them cope in a different way (Redish et al., 2008)? Brand and colleagues (2019) argue that different psychological processes underly different problematic behaviors and addictions. In light of this, they have called for future research to “define more precisely the factors underlying the temporal progression of motivations for people to engage excessively in specific behaviors” (p. 6). The current study explores these underlying factors driving SPPPU relapse by asking self-perceived problematic pornography users to add their voice to the conversation with their report of their “in the moment” experience with relapse.

**Methods**

The purpose of this qualitative study is to discover the factors immediately preceding pornography relapse for users of the subreddit NoFap (an online community of people trying to
eliminate pornography from their lives). During this study, a group of NoFap users (r/NoFap, 2020a) participated in a challenge where they kept track of how many days they abstained from pornography, masturbation, and orgasm outside of a healthy (self-described) relationship.

Guided by a flexible grounded theory research approach (Charmaz, 2006; May, 1986; Strauss & Corbin, 1998), data for this study were collected in 2015 using a survey with broad open-ended questions administered to the NoFap community online. Responses to the short-answer survey question, “What do you believe caused your failure to continue to abstain from pornography and masturbation?” were then analyzed, synthesized, and presented below to reveal the most common reasons for PMO relapse in this group.

Participants

As is standard with qualitative research, intensity purposeful sampling (Patton, 1990) was used in this study, which means that my inquiry was focused on a group of people who all share the same phenomenon in common and manifest it intensely. Creswell (2014) defines it as “a homogeneous sample, individuals who have commonly experienced the action or process” (p. 154). In this case, the NoFap users are more passionate than the average population about remaining abstinent from PMO. For example, on their website they describe their firm position on pornography use when they write:

The unprecedented availability of pornography in the era of the Internet has resulted in an undeniable problem, one that is destructive to individuals and, consequently, society as a whole. This problem has come to be called “porn addiction” by many, including those of us in the community here at NoFap®…Until the scientific community fully validates or corrects the claims made by our users, we acknowledge that our claims are not popularly held. (NoFap, 2020, para. 2)
These intensely committed NoFap users provide a rich pool of information about people trying to overcome this self-described “porn addiction”. While their strong stance might make the findings of the current study less generalizable to the public, it helps us understand others trying to eliminate pornography use from their lives—including potential clinical populations. Additionally, while the levels of pornography use by the participants in this sample were not specifically defined, NoFap users as a whole seem to fall within the problematic to addictive pornography use ranges, as defined by Fall and Howard (2015). As such, this subsample most likely participates in these same levels of use.

The majority of the participants in this sample were not receiving professional help, and as such, should not be considered a clinical sample. Additionally, 10% of participants did not specify their gender, and the remaining 90% all identified themselves as male. The participants’ ages ranged from 12–48 years old, with a mean age of 22 years, and the majority of participants were not religious. With almost solely men in the sample, the interpretations of these findings should be considered applicable to the male population trying to stop their problematic pornography use.

These participants are specifically motivated to attain abstinence from PMO outside of what they perceive to be healthy, consensual relationships (r/NoFap, 2020a). They use common addiction language (relapse, cravings, abstinence, etc.) in their survey responses as well as when encouraging each other to stay abstinent from PMO in their public posts, and the language of this report’s findings reflects the descriptions of their experiences accordingly. As mentioned above, relapse was defined by this specific NoFap challenge’s rules as relapse of PMO (either pornography use, masturbation, and/or orgasm) after at least one day of abstinence—a definition that may not be considered a full relapse according to some addiction models (Polivy & Herman,
but is how it was self-defined by the participants in this study. Only 5 of 938 (.5%) participants reported a relapse that did not include pornography, so the group’s collective experience of relapse is arguably comparable to more general SPPPU relapse—which rarely specifies masturbation or orgasm involvement (Allen et al., 2017).

Measures

Two Qualtrics surveys were embedded directly into the NoFap subreddit, and the current study analyzed 938 participant’s responses to the open-ended question from the second survey, “What do you believe caused your failure to continue to abstain from pornography and masturbation?”

The initial Qualtrics survey included both multiple choice and short answer questions to assess for basic demographics, pornography in a romantic relationship (if they were in one), details of pornography use and “recovery”, obsessive and compulsive symptoms, guilt vs. shame, emotional regulation, family-of-origin experiences, barriers to seeking professional help, self-image perception, coping skills that help with cravings, as well as previous attempts to stop viewing pornography and their beliefs about why these attempts were unsuccessful. See Appendix A for full survey.

The second survey was to be taken in the event of a relapse and appeared on screen as soon as a participant reported their relapse on the NoFap subreddit. This survey consisted of mostly short answer response questions regarding the participant’s experience of relapse. Some sample questions include “What time of day did you relapse?”, “How many hours of sleep have you gotten in the last 24 hours?”, and “How balanced/healthy would you rate your diet in the last 24 hours?”. See Appendix B for full survey.
Procedures

Theoretical Perspective

Although I did not fully employ classic grounded theory (Strauss & Corbin, 1990), I incorporated elements of it throughout this study’s design and analysis—relying heavily on Charmaz’s (2006) less structured approach. Charmaz (2006) advocates for an adaptable approach to grounded theory methods when she defines them as “systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories ‘grounded’ in the data themselves” (p. 2). While the current study does not aim to present a new comprehensive theory of the process of pornography relapse, analysis of these participants’ experiences was a first attempt to break the process of relapse into smaller parts that could be studied in depth—starting with their descriptions of the moments just before a pornography relapse.

Charmaz’s (2006) approach to grounded theory research informed my attempt to qualitatively study a process, collect and systematically code data, and synthesize the findings from the participants’ experiences to gain new understanding of the process of pornography relapse. Rather than conducting a small sample of in-depth interviews, as is typical of classic grounded theory research (Strauss & Corbin, 1998), I collected data through a broad open-ended online survey. While this resulted in data that were plentiful and broad, rather than narrow and deep, as is typical of many qualitative studies, Charmaz (2006) argues that collecting anonymous elicited text from participants like this “can foster frank disclosures that a person might not wish to make to an interviewer” (p. 36)—a phenomenon I believe occurred in this study. Analyzing and synthesizing this broad data required a Numeric Content Analysis (Marks, 2015)—a technique not used in most grounded theory studies, but appropriate when analyzing so many responses to the same question.
**Analysis**

Marks’ “Quad-Squad Approach to Qualitative Research” (2015) naturally combines the overarching grounded theory goal of “analyzing qualitative data to construct theories ‘grounded’ in the data themselves” (Charmaz, 2006), with a pragmatic, systematic research design and execution. The analysis of this study followed a modified version of Marks’ four phases of qualitative research:

1) Phase One: Developing the interview protocol and defining the sample
2) Phase Two: Data collection and coding
3) Phase Three: Caching the representative quotes and stories for each core theme
4) Phase Four: Presenting a consolidated synthesis of the main themes and overall experience of the participants.

Using this standardized approach to qualitative data analysis creates a physical data “audit trail”, as recommended by Patton (2002), and improves the rigor of the data analysis, as at each phase other researchers’ input serves as a check on the reliability and validity of the process.

**Phase One: Developing the Interview Protocol and Defining the Sample.** Phase one of my study diverged from Marks’ outline in that I did not conduct in-person interviews. Instead, phase one in this study consisted of speaking with a moderator of the NoFap subreddit and identifying a group of their users willing to participate in a research study. The NoFap group is unique because they actively call for researchers to study their experiences with no request for remuneration since, as stated above, they want the scientific community to either validate or correct their perception of pornography addiction. I conducted a literature review on pornography use and abuse and consulted with an experienced researcher to formulate multiple research questions about the process of pornography addiction and recovery—including relapse.
I created an initial Qualtrics survey and asked the researcher mentioned above to scrutinize the items to reduce bias in the questions and improve the overall quality. After multiple revisions, the questionnaire was finalized and sent to the moderators of NoFap for their feedback.

Using the same process used to create the first survey, I also created a second more open-ended survey to be taken in the event of a relapse. The users would report when they relapsed on the NoFap subreddit at which time this second survey would pop up to ask them for details about their experience leading up to and during their relapse.

The study received exempt status from the Institutional Review Board for Human Subjects at Brigham Young University as the data collected were all anonymous and could not be traced backed to individuals.

**Phase Two: Data Collection and Coding.** Rather than conducting pilot interviews and revising my interview protocol based on feedback—as this was an online questionnaire—I sent the questionnaires to the moderator of the NoFap group and solicited feedback from him about the questions. He suggested a few alterations to the questions he thought might be problematic (ex: suggested we change the wording in a few of our questions to sound less clinical, expressed concern about certain items that may be triggering to participants, asked for a topic to be included that we had not covered, etc.) and we worked together to modify the questionnaires until he felt confident that they addressed the concerns of his community and I felt confident they were methodologically sound.

Once the first survey was made available on the NoFap subreddit as a voluntary opportunity to participate in a research study, the response was overwhelming. I received 2,831 unique responses (86% completion rate) in less than a week of the survey being posted. The surveys took an average of 10-15 minutes to complete and the answers seemed thoughtful and
vulnerable, while remaining anonymous. Participants received no compensation for their time or participation.

When the second, fully open-ended survey was embedded into the site, I received 1,182 responses over the span of 3 months, with a 91% completion rate and 938 responses to the question of interest for this study: “What do you believe caused your failure to continue to abstain from pornography and masturbation?”. This survey question did not initially include masturbation, but the moderator and I discussed the concept of PMO as understood by NoFap users, and it seemed appropriate to include it since the participants themselves considered it a relapse even if they masturbated with no pornography use. Additionally, I acknowledge that the term “failure” might evoke negative reactions to those familiar with the addictions literature, but the NoFap group uses the colloquialism “failure” when discussing relapse and I wanted the survey to be as concordant with the group’s experience as possible, so after consulting with the moderator of the group, I agreed to use their common language in my phrasing of the question—despite my personal reservations about referring to relapse as a failure.

The second half of phase two began with open coding the answers to the question “What do you believe caused your failure to continue to abstain from pornography and masturbation?”. Open coding is essentially reading through written responses and recording brief conceptual descriptions of what you are reading (Strauss & Corbin, 1998). I completed the first round of

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1 Before beginning the second half of phase two (coding the data), I received feedback from experts in pornography research and qualitative research methods about possibly including another question from the second survey in my data analysis, “What has been the most helpful strategy for you in continuing to abstain from pornography and masturbation?”, to be sure my findings would substantially contribute to the field. In response to this feedback, I coded the responses to both questions, and when I had completed two rounds of coding the data for each question, I created and presented comprehensive codebooks for both questions to two outside researchers for feedback about how to proceed. The amount of data in just one question was staggering—let alone two—and all of us agreed there was plenty to work with in terms of richness in the first question alone, and I could present the findings from the second question’s data in a future study. See Appendix C and D for both codebooks.
open coding by reading through each of the 938 responses individually and assigning a conceptual description or “code” to each concept that appeared. If a response included multiple concepts in a single answer, separate references were created for each code. For example, if a response read, “I had some back pain and I was lonely”, the first reference—“I had some back pain”—might be coded as physical pain, while the second reference—“I was lonely”—might be coded as lonely. After completing the first round of coding using this pattern, the final count of coded references came to 999, from the 938 individual responses. I used a software program (Nvivo 12) to keep track of the coding process.

Next, in a second round of coding I completed a Numeric Content Analysis (NCA) of all of the open coding concepts, which revealed how many of the 999 references each code included. After consolidating codes with few references into conceptually similar codes with more references, the NCA identified 43 main codes. At this point, I created a “codebook” and presented it to two experienced researchers for their feedback on how accurately I was representing the data. We met together and all agreed that the codes represented the data accurately, and that I should move forward with the next rounds of coding.

In accordance with Marks’ (2015) approach, the next round of data analysis included reviewing the 43 codes and grouping similar concepts together to create six main categories—each with multiple subcategories and groups. At this point I again presented the six main categories to an experienced qualitative researcher and he agreed that they seemed representative of the sample’s overall experience.

**Phase Three: Caching the Representative Quotes and Stories for Each Core Theme.**

Having systematically established the six main categories from the data at this point, I revisited the original responses and selected excerpts that represented each category (including their
subcategories and groups) which were cut and pasted into separate files. I focused on one category at a time and worked my way through each response, gleaning all the representative quotes from each category before moving on to the next. At the end of this process, each category had its own file of quotes, stories, and counterexamples that captured the essence of the participants’ experience.

**Phase Four: Presenting a Consolidated Synthesis of the Main Themes and Overall Experience of the Participants.** In consultation with the two researchers mentioned above, I choose three of the main categories to focus on in this study (Mental, Emotional, & Relational), which covered 612 of the 999 total references. For each of these three categories, I reviewed their files of excerpts to glean the overall meaning, why’s, how’s, processes, and recurring patterns of each theme in its relation to the original question: “What do you believe caused your failure to continue to abstain from pornography and masturbation?” I also identified what Marks (2015) refers to as “gems”, which are quotes from participants that are especially poignant or representative for use in the final report.

Finally, I synthesized and presented my findings from the NCA, as well as presented the quotes and gems from each category in a way that I hope represents the participants’ experiences and highlights the most important discoveries about why certain factors led to relapse in this group. The findings include figures, diagrams, tables, direct quotes, and descriptions, in an attempt to synthesize the findings from such a large amount of data.

**Reflexivity**

Although none of us is completely untouched by pornography in today’s culture, I acknowledge that my own personal experiences with it may have impacted my perspective more than some as I coded and analyzed the experiences of these participants. Having been born and
raised in a conservatively religious home, pornography was considered extremely damaging and something to be avoided at all costs. Shame was an intensely prevailing emotion surrounding the concept. While I have not been personally affected deeply by anyone’s pornography use in my life, it would be unfair to claim that I have been able to completely ignore my unconscious (and conscious) biases about the negative impacts of pornography. I have attempted to balance this bias with exposure to the research on the positive effects of pornography in certain populations and relationships. And I sought out feedback from colleagues and mentors at multiple points during the process to check that my biases were not causing me to misconstrue the participant’s experiences. I wanted to provide an accurate representation of this phenomenon—not muddy the waters any further in an already murky area of research.

Additionally, as an emotionally focused clinician and researcher, I am inclined to assume that the underlying processes for any addiction involve unresolved painful emotions and/or traumatic life experiences. I am aware that as I coded the responses, I was naturally drawn toward any mention of emotions as a driving factor for relapse. I also have a strong belief that the ultimate theory of treatment for pornography addiction will involve some level of emotional regulation or processing, so I tried to intentionally step outside this mental model to address other possible explanations for relapse. That being said, I feel I was very intentional about giving other factors an equal amount of consideration and analysis—in order to honor the participants’ experience, as well as discover the complete essence of the phenomenon. I sought outside influence in order to check my biases about emotional focus as well. Again, my intent was to clarify the muddy waters of pornography research—not add to the confusion.
Findings

Figure 1

Main Categories of Reasons for Relapse

![Pie chart showing the distribution of reasons for relapse]

Note. n=938, coded references (r)=999.

In the open coding phase of the data, six main categories emerged of participants’ reported reasons for relapse: emotional (r=267, 27%), mental (r=230, 23%), physical (r=157, 16%), exposure to provocative content (r=155, 16%), relational (r=115, 11%), and an other category (r=75, 7%) for those responses that did not fit into any of the previous categories but could not theoretically be combined into one construct together (see Figure 1). Additionally, a significant subset of individuals from this study repeatedly identified their painful emotions in connection with the relationships in their lives. In the final rounds of coding, these references
emerged as a new combined category of relational-emotional reasons for relapse (r=80, 8%). See Figure 2.

**Figure 2**

*Approximate Visual Depiction of Overlap of Responses Between Emotional, Mental, and Relational Categories*

As this data included individual responses from 938 unique participants, the responses varied widely and covered a broad range of possible explanations for relapsing back into pornography. Because some references were coded into more than one category (ex: the participant mentioned both mental and emotional reasons in one response), the total number of coded references was 999 when all rounds of coding were complete. Accordingly, percentages presented by category are based on the total number of references (r=999), rather than the total number of participants (n=938). Due to time and space limitations, this report focuses in depth on the three categories requiring the closest analysis—mental, emotional, and relational reasons.
for relapse (See Appendix E). The findings from the categories of physical reasons and exposure to provocative content were straightforward and simple, and as such, did not merit the same level of analysis as the mental, emotional, and relational categories. Brief overviews of the physical and exposure categories are presented before the in-depth analysis of the three more complex categories.
Physical Reasons for Relapse

Figure 3

Second-Round Coded Subcategories of Physical Reasons Given for Relapse

Note. n=938, r=157

The responses indicated that 157 participants attributed their relapse to some sort of physical factor—representing 16% of the 999 total coded references. These 157 responses included four subcategories: urges (r=72, 46%), tired (r=46, 29%), lack of exercise (r=20, 13%), and substance use (r=18, 11%) (see Figure 3).

Urges (r=72)

Making up 46% of the references in the physical category, 72 responses identified physical urges as a factor leading up to their relapse. These 72 responses included descriptions
like “The urges came and I gave in. I started looking at porn which pretty much means I will relapse”, “Hormonal urges”, and “I don’t know! I just have urges!”

Tired (r=46)

Some participants (r=46) specifically identified feeling tired—representing 29% of the physical category. These responses were straightforward and relatively uniform, with descriptions like “Not going to bed early enough”, “too little sleep”, and “I had a very tiring week before and I didn’t have (or thought I didn’t have) the strength to hold on.”

Lack of Exercise (r=20, 13%)

Only 20 participants highlighted exercise as their reason for relapse, making up 13% of the physical category of responses. Many reported being unable to exercise, like “My inability to exercise; I have pilonidal sinus”, or “I have been sick and haven’t felt good enough to go outside or to exercise, and I felt pretty depressed and lonely as well.” Others simply mentioned not exercising enough: “Not properly eating healthy and exercising sure helped”, “I need to exercise more because I relapsed late at night when I couldn’t fall asleep”, and “didn’t exercise as much as usual.”

Substance Use (r=18, 11%)

The final subcategory of physical reasons for relapse included 18 participants’ descriptions of substance use, representing 11% of the physical category. The majority of these participants mentioned alcohol like the following participants who wrote, “alcohol consumption lowering my inhibitions”, “had a few drinks of alcohol!!”, or “Being drunk. Not giving a f*** because I am drunk.” A few others mentioned things like “MDMA”, “My diminished self-control under the influence of marijuana”, and just “drugs”.
Physical Summary

Overall, the physical category of reasons for relapse was clear and straightforward, with four main constructs mentioned—urges, tired, lack of exercise, and substance use. Since the largest number of this group reported struggling with physical urges, it may be useful for researchers and clinicians to explore effective strategies for how to handle something like a physical urge that is perceived as being out of one’s control. The other three main categories seem simple enough to address with clients—as sleep, exercise, and substance use can often be addressed with simple cognitive and behavioral interventions.
Exposure to Provocative Content

Figure 4

Second-Round Coded Subcategories of Exposure to Provocative Content

Note. n=938, r=155

155 of the responses indicated that the participant had been exposed to some sort of provocative content just prior to their relapse—representing 16% of the 999 total coded references. These 16% of total responses included three subcategories of types of exposure: unspecified trigger (r=57, 37%), intentional exposure (r=60, 39%), and accidental exposure (r=38, 24%) (see Figure 4).

Unspecified Trigger (r=57)

Representing 37% of the exposure category, 57 respondents identified exposure to provocative content, but did not specify whether it was intentional or not. These descriptions included “Provocative imaged and lack of self-control”, “pornographic images and being horny”,

Intentional Exposure

Accidental Exposure

Unspecified Trigger
and “I saw a photo of a celebrity crush, and then proceeded to look at increasingly more provocative images until masturbation.”

**Intentional Exposure (r=60)**

Making up 39% of the exposure category, 60 participants intentionally exposed themselves to provocative content. One version of this phenomenon was called peeking, which one participant described as “peeking: search for revealing photos online and slowly escalating to watching porn and masturbating.” Another component to intentional exposure included what the group calls edging, which is essentially masturbating without orgasming. This process was described as “Feeling sexual urges, which led to edging, which led to viewing pornographic material, which led to my failure.” One poignant representative description was “I thought a simple video wouldn’t do much until I had 10 tabs and my penis in my hands.”

**Accidental Exposure (r=38)**

Those who mentioned accidental exposure to provocative content made up 24% of the exposure category, with 38 responses. Many mentioned Instagram specifically when they wrote, “I was triggered by an image on Instagram”, “I saw a hot chick on Instagram and checked out her page…”, and “Going onto Instagram before going to sleep”. Others described more general triggers with responses like, “Exposure to provocative content on videogames”, “I saw a nude picture on accident and it went downhill from there”, and “Triggers. Everything in society is so sexual I relapsed when I was flipping channels and saw a music video.”

**Exposure to Provocative Content Summary**

The respondents who mentioned exposure to provocative content as one of their reasons for relapse further identified three types of exposure: unspecified trigger (r=57, 37%), intentional exposure (r=60, 39%), and accidental exposure (r=38, 24%). When clinicians and researchers
explore triggers or exposure to provocative content, it may be useful to differentiate between accidental and intentional exposure, as the two processes may have clinically relevant differences. Similar to the physical reasons for relapse mentioned previously, exposure to provocative content seems to be a category requiring straightforward behavioral or structural clinical intervention, but identifying if a client is stumbling upon triggers accidentally or seeking them out intentionally could affect how to intervene most effectively.
Mental Reasons for Relapse

Figure 5

Second-Round Coded Subcategories of Mental Reasons Given for Relapse

Note. n=938, r=230

The responses indicated that 230 participants attributed their relapse to some sort of mental factor—representing 23% of the 999 total coded references. These 230 responses were then coded in a second round and four subcategories of mental reasons emerged from the data: willpower (r=69, 30%), motivation (r=47, 20%), thoughts (r=68, 30%), and weakness (r=46, 20%) (see Figure 5).

Willpower (r=69)

Making up 30% of the references in the mental category, 69 responses identified a “lack of willpower” as the mental factor leading up to their relapse. The construct of willpower was difficult to separate from another mental subcategory—motivation—as they both embodied
similar experiences in this sample. I report on them separately, however, in order to represent the language used in the data accurately, and because both groups were sizeable in number.

Willpower, as described in the responses, embodied the idea that the participants believed they should be able to will themselves to, as one participant put it, “stop looking at this crap”. Another participant expounded on this idea by describing the problem as, “My inability to have any restraint. If I get the idea in my head I don't know why but I end up doing it.” Other responses described a “lack of self-discipline”, “lack of self-control”, and of course, “lack of willpower”. In fact, 20 references identified problematic “willpower” alone, which stood out in this data where very few responses identified only a single trigger.

There was a tone of self-defeat in the responses here, almost suggesting that the participants were disappointed to report low willpower as their reason for relapse. For example: “Lack of willpower. I became lax and instead of heading to NoFap or looking for something to do, I went along with it, even knowing that there was nothing good that would come from it.” Or: “I ran out of will power. Funny thing is, I knew that will power wasn't [the] thing I should have been relying on.” and “I lost the will, I wanted to feel that sexual high again.” These participants wrote about losing their willpower as if it was something they did not have much control over. The very fact that they could “lose it”, when they wanted to “keep it” made it seem as if they felt that “willpower” was an elusive commodity they did not know how to secure or maintain.

On the other hand, some respondents referred to willpower as a way of holding themselves accountable for making intentional choices about their life. For example, “Lack of willpower. Not willing to truly accept the challenge and the issues that face me.” and “Not
having the will power to improve my life.” Others also included “Poor willpower, and making up excuses” and “The heart was not willing.”

**Willpower Summary**

Overall, willpower seemed to be a construct with an external locus of control, and it was accompanied by a sense of defeat or disappointment in the participants’ responses. It was unique in the data because it appeared 20 times by itself—more than any other single response in the 938 total responses. The absolute definition of willpower for this group was unclear from this data, but seemed to be something along the lines of making the conscious choice to not relapse. At least one participant articulated that they did not feel that this was a sustainable relapse prevention strategy (“will power wasn’t the thing I should have been relying on”), but no alternative strategies were laid out in the responses.

**Motivation (r=47)**

Motivation appeared less than willpower in the data, covering 20% of the mental category with 47 responses, but it embodied a similar theoretical construct. The idea that one could choose to relapse or not was also central to these responses, but their “choice” to relapse was driven by different factors than for those included in the willpower subcategory. 15 participants mentioned “lack of motivation” alone, with responses like “lack of motivation to continue”, “I forgot my motivation”, and “A moment of lacking motivation”. Three other specific causes of losing motivation for relapse emerged in this subcategory as well: no benefits to abstinence, rationalization, and “I like porn.”

**No Benefits to Abstinence (r=9)**. Multiple participants addressed the feeling of not having sufficient reason to continue trying to abstain from PMO (porn, masturbation, and/or orgasm). For example, “I feel that I lost my purpose of continuing the streak. I forgot my original
goal of why I started in the first place.” and “Lack of scientific proof (a real scientific article) to the benefits of (abstaining).” Another described a “continued disbelief that viewing porn is actually a problem and a lack of tenacity to abstain”. One dynamic that may have contributed to this lost sense of purpose might be that members of the NoFap group often publicly share their success stories and personal experiences of what they perceive the benefits to be from abstaining from PMO. It is possible that these stories might then be discouraging for people who successfully abstain, but do not see life-altering changes immediately, like the following participant:

Even though it did good things for me, I felt like there is no point in doing this because my life isn't going to get better. I know that's not true, but sometimes it is just difficult to be happy about where I am and how I am living life. I know I can change it, but I don't believe I am ever going to do that.

The NoFap group regularly discusses seeing the benefits of abstinence in multiple areas of their lives (improved physical, emotional, mental health, etc.), and these benefits may not be felt by some participants.

**Rationalization (r=14).** In addition to the group of participants who genuinely questioned the benefits of abstaining, there was another group who labeled their motivation issues as “rationalizing it as not being a big deal”, or “justification.” For example:

Justification. After several days of abstaining it usually becomes easier for a few more days then the urges come back again even stronger. Your mind does everything in its power to justify PMO. Things like, "lots of people do it" or "one more time won't hurt". For the past few days it was the only thing on my mind then it finally succeeded justifying it and caused a relapse.
These participants differed from the previous group who seriously questioned the benefits of abstinence because the rationalizing group stayed committed to the idea that abstaining from PMO was a worthy effort, they just struggled in the moment to keep sight of their larger goal. One participant described the phenomenon when they wrote:

I believe lack of drive, motivation, and reason caused my failure. I found that I'd always remember the pleasure from the PMO, but usually I wouldn't remember the relapses very well, which could be a factor too.

Continual desensitization to the idea of PMO drove the majority of these respondents’ slip into relapse. Other examples of this pattern of gradual rationalization included the following responses: “I allowed myself to forget its importance and stopped caring enough to carefully control what I thought and saw”, “began caring less and less as time went on”, “The rationalization I give to my mind that God is merciful and he would forgive any sin”, and “Convincing myself it was okay to look at more and more provocative material.”

In a related, but slightly different, process, one participant described their gradual loss of motivation:

The lack of the feeling that I could do it. When you start, you have motivation and a feeling of belonging especially with a group like NoFap. With the first relapse, you feel like it's not a problem and you can keep doing it. However, relapses occur time and time again and you eventually let it become a habit. This breaks you and you don't have the motivation or the belief that you can continue.

This participant’s loss of motivation came more from a low confidence that they could successfully abstain than from a conscious rationalization that relapsing was fine.
The last phenomenon in the rationalization group was the feeling that their brain was driving their actions without their permission. Some participants articulated this when they wrote, “My mind. It blamed some back pain (i experience side effects on a medication i take) for it, but that's just an excuse” and “I let my mind rationalize my desires to give in, and I gave in.” Similarly, others highlighted feeling like their minds were separate entities from themselves: “If only I knew what it was I'd stop it. Was just a sudden urge and I kept telling my brain please stop but it got the better of me.” Or “The fact that my brain convinced me that it was ok to look at provocative material which eventually led me to brainlessly searching out porn.” One participant wrote, “I had an urge to watch pornography, and my brain decided it was a good idea. It was rather silly.”

“I like porn.” (r=9). The final group of participants who relapsed due to low motivation included those who responded with statements such as, “I like (PMO) too much” or “simply wanting to relapse”. It was unclear whether these participants’ experiences mirrored the first group who lost motivation because they questioned the benefits, or if they more closely mirrored the second group who momentarily lost their way, while still maintaining their overall goal. Others in this group described their experiences as “I did not give 100% for this” and “I don’t feel dedicated currently.” Since we do not have clarity on these participants’ specific reasons for wanting to abstain in the first place, it is impossible to know what shifted their perspective (or blocked their perspective momentarily), but this might be a helpful follow-up question in the future to understand the process of their decision-making in more detail.

**Motivation Summary**

The group of respondents included in the motivation subcategory of the mental category identified at least three different groups of motivation issues: doubting the benefits of abstaining
from PMO (either because of a lack of progress, or simply because they did not have enough convincing evidence of the benefits), maintaining the desire to abstain, but gradually rationalizing relapse as acceptable, and a choice to relapse due to an unspecified lack of motivation or because of the perceived benefits of PMO. These seemed to be three different processes of a breakdown of motivation that all contributed to different types of relapses. The field could benefit from understanding these processes more clearly in order to identify the breakdown points for those who truly want to remain abstinent, and also to assist in the decision-making process for those who decide that abstinence is not the right choice for them.

**Thoughts (r=68)**

Specific references to thoughts represented 30% of the mental responses, with 68 references making up the thoughts subcategory. Unspecified responses like “my mind” or “Could not stabilize mind” appeared 8 times. Two other main groups emerged as different types of thoughts that led to relapse: provocative thoughts and rumination.

**Provocative Thoughts (r=46).** Unsurprisingly, the majority of thought processes identified could be considered “triggering thoughts”—meaning they included some type of sexual stimulus. The four types of provocative thoughts mentioned included sexual fantasies and dreams, relational thoughts, memories, and an out-of-control brain.

**Sexual Fantasies and Dreams.** Sexual fantasies and dreams appeared frequently in the data, with straightforward responses like “Having dreams about sex” and “Fantasizing in the morning”. Other references to fantasies mentioned multiple cognitive experiences, including “Irrational thoughts/bargaining, giving into sexual memories & fantasies” and “excitement to do new things (sexually), touching, watching soft porn, indulging in fantasies, then it gets more intense.” Some of the responses discussing dreams specified the physical urges their sexual
dreams created for them. For example, “Boredom and mental urges while sleeping (dreaming). Woke up with a physical urge and didn't have anything to do in the morning, so time to kill.” One teenager noted, “Being a teenager and whatnot, my hormones got the better of me. After night after night of near-wet dreams, it simply wasn't worth it anymore.” Others wrote about sexual dreams as if they decreased their window of tolerance for resisting other triggers, like when one participant wrote:

The night before, I had a dream involving sexy naked women. (not a wet dream, I woke up before it got there). Then I saw a provocative image by accident, and (intentionally) saw more and more provocative images and words until it was porn. And lastly, there was a group who were unclear about if having a wet dream meant they had technically relapsed or not. One respondent wrote, “A wet dream made me feel as If I have lost the progress. Was not able to find information if I lost it or no.” While this was only reported in a few participants, the phenomenon of having an unclear understanding of what constitutes healthy versus unhealthy sexuality seems important and relevant—particularly for a younger demographic of teenagers trying to stop PMO. This would be helpful information to clarify and disseminate to the wider public in addition to the clinical population.

**Relational Thoughts.** In addition to dreams and fantasies, another group of participants referenced provocative thoughts from specific relationships or previous sexual experiences. The most straightforward responses included, “Thinking of my girlfriend”, “imagery from past relationships”, and “I was thinking about the last time I had sex with my ex-girlfriend and wanted to have an orgasm.” In a more real-time experience, one participant wrote:
i talked to a girl in a vulnerable situation, i didn’t do anything with her but the possibilities that came to mind led me to relapse by watching porn, though not for hours as i used to, but within about fifteen minutes.

Another participant identified the struggle with their current partner:

Sexual desires put there by a real-life partner…these desires kind of lingered in the back of my head when I only got a portion of what I wanted and it came back up later during the day. Then having access to porn and having lived a regular life of Porn Masturbation and Orgasam, I went back to it and "PMO'd".

Interestingly, the participants who identified relational triggers never blamed their partner for contributing to the thoughts. They all neutrally identified the sexual trigger without expressing any frustration toward the other person. This surprised me as I would have expected some frustration toward the person who “planted the seed” of thought in their mind. Perhaps the culture of NoFap influenced the respondents since they encourage each other to take responsibility for their choices and hold themselves accountable.

**Memories.** A few participants also mentioned memories of past images. One described the phenomenon as follows:

I personally believe that any sexual images I see even for a millisecond becomes engraved into my consciousness. It is stored in the unconscious mind and then it pops up and causes a trigger for me.

Others echoed similar sentiments when they wrote, “Arousal due to memory of images” and “i remembered something and then i relapsed.” Like the group whose relational triggers led to physical urges, one participant wrote, “Flashbacks and a lack of sleep. Waking up in the middle of the night and feeling a big physical urge was problematic.”
The fact that the stimulus in pornography is something that can be retrieved at will in someone’s mind even after they have chosen to stop viewing it makes pornography a uniquely difficult addiction to break. The field does not have an answer to this problem, but it is clearly an important part of the puzzle in pornography relapse prevention and merits further study.

*Brain Out of Control.* The final group of provocative thoughts included those who described losing control of their thoughts or their brain making choices without their consent. For example, one participant wrote:

> Lack of control over thoughts. And a large part is I believed that PMO was the best thing to relax myself and gratify myself. It is wired into my brain to be the highest form of pleasure right now, even though after orgasm I know it is a lie. It just seemed better to give in than to keep fighting at the time.

Two others described their relapse in terms of “Failing to control my own thoughts” and “Entertaining thoughts that shouldn't be there, thinking ‘Just this once will be alright’.” Similarly, another respondent wrote, “It built up from within, I let myself lose control slowly letting my mind wander.” They described the need to constantly keep their brain under control or else it would inevitably wander to pornography. It sounded like these participants experienced their thoughts as something outside of their control and beyond their capacity to rein in. For example: “My brain takes full control and just says screw it you can fap it doesn't matter. I lose partial control of myself.” Another participant described the externalized thought process in steps:

> Well, my brain thought of something that I would enjoy masturbating to, and decided that was going to happen, and it did. I was away from home on thanksgiving and thought about it, left a couple hours later, came home and immediately started doing a marathon
three-hour session. It's been going on too long to be simply diet and exercise, even when I was on top of those I still relapsed regularly. I think staring at electronic screens all the time might have something to do with it, since I am so accustomed to sexual stimulation while looking at them. Besides that I don't know, it's so routine for after a decade of getting that dopamine release constantly I'm sure it was my reptile brain throwing a hissy fit that it needed its fix and my brain manipulated my thoughts accordingly.

This participant’s experience highlighted that the thought process leading up to relapse sometimes felt out of people’s conscious control. Some of these participants felt like their brains had the power to sabotage them when they were trying to stay abstinent. Another described this when they wrote:

My mind went on auto-pilot. First I googled images. Then watched something on TV, which was provocative. Then I couldn't resist the urge, and searched for PMO videos online.

The sense that these participants’ PMO was out of their control and in the hands of their brains may help explain a sense of the hopelessness that will be discussed in the category of emotional reasons for relapse. It would be discouraging to feel that you had no control over intrusive triggering thoughts or the subsequent steps leading to relapse.

Rumination (r=14). Similar to the feeling that the brain thinks for itself and can sabotage the goal of abstinence, the other main group of thoughts mentioned in the sample was rumination—meaning recurring unwanted thoughts that would not go away. One participant described rumination as follows, “Was literally all I could think about today, couldn't hardly get anything done.” This was a relatively straightforward construct, as many others described “continual thoughts about pmo while being alone”, “continuous thoughts of women”, and “The
recurring thoughts that continued through the last few days.” Another three participants described “Thinking about porn all the time. Getting horny”, “I couldn’t take my mind off it”, and “Started with some random pics i found a day before. My brain did not stop producing more and more thoughts due to the 4th and 5th day of no PMO.”

Perhaps for some it was as simple as the following participant’s metaphor: “Thinking about not doing it all the time. It was like when someone says don’t think about a grey elephant and that is exactly what you do.” Focusing so hard on trying to avoid something can sometimes bring that “something” to the foreground more than it would be otherwise. Indeed, in response to other questions in the survey asking about strategies for success, some participants suggested trying to live life normally without thinking much about the NoFap War because it could cause intrusive recurring thoughts.

It was not always clear what triggered rumination for this group. One participant postulated: “I kept thinking about it. Hard to shake the thoughts. I could have exercised more. I also binged right before the start of the war.” And another suggested: “I saw some hot girls’ images accidentally and the thought kept coming back to my mind until i watched porn and relapsed.” It could be helpful for future research to identify potential causes of rumination so clinicians and individuals can attempt to prevent an intrusive thought from becoming an intrusive recurring thought.

Thoughts Summary

The types of thought processes articulated in this group of respondents naturally separated into two main groups: provocative thoughts and rumination. Provocative thoughts were defined as thoughts that triggered a sexual response of some sort. There were multiple types of provocative thoughts: sexual fantasies and dreams, relational triggering thoughts, memories of
images or sexual experiences, and feeling that the brain was out of control. Rumination was defined as intrusive recurring thoughts that would not go away, and it was unclear what led to rumination or why some experienced it while others’ thoughts were more fleeting.

Weakness (r=46)

Weakness was linked to relapse in 46 responses, which made up 20% of the references in the mental category. The construct of weakness as reported by this group emerged from responses like “mental fortitude was weakened”, “weak-minded”, and “overall weak mentality”. Unsurprisingly, this group was particularly harsh on themselves about relapsing. Even the responses that did not specifically include the word “weak” often described a sense of failure after relapsing. For example, one participant talked about themselves as follows: “I couldn't control myself. Lots of external pressure. Feeling awful right now.” Another described their perception of failure when they wrote: “My brain tried to trick me into thinking I'd already failed from an image that I saw.”

Other participants highlighted their own personal weakness. Some focused on their physical weakness, as in the following response, “I was too weak to continue resisting the physical urges.” Others described a more general weakness when they wrote, “i had a moment of weakness and masturbated, i didn't look at porn, i'm getting better at that.” and “the spirit is willing but the flesh is weak”. One attributed their relapse to an inner demon when they wrote, “I was weak and let the inner demon take over.” And, of course, there were multiple responses of simply “weakness” or “I’m weak”.

Some of the more detailed responses came from participants who focused on their mental weakness. One noted both general and mental weakness when they responded, “My weakness of character, mental fragility and erosion of control.” Another wrote:
I wanted to abstain but my failure was due to me being mentally weak. This is an addiction. This is hard. I saw a picture on Facebook and it snowballed. There is a physical need for pornography. After I relapsed, I tried to feel equanimity. To not judge myself and just keep moving forward.

This participant tried to be accepting of their actions and nonjudgmental as they moved forward, but their initial response was to criticize themselves as mentally weak for relapsing. Another wrote:

My weak mind just let me fap, now i feel like s***. I drank (a) few beers and just did that. Havent fap for 7 or 8 days i dont really remember, but i know that with all that failures im getting stronger and stronger in my challange. I've started this summer the challange and i made it few times above 10 days but never above 30. I'll still try and i hope i can change my bad habits and reforge them for something good in my life.

Once again, the “weak mind” they referenced seemed to feel out of their control—creating problems when trying to prevent a relapse.

**Weakness Summary**

The weakness referenced in this group varied from person to person in its meaning. Some referred to a general sense of weakness, while others specifically identified mental weakness. Many participants called their brains or minds weak and highlighted the process of their brain having a thought and subsequently controlling them until they relapsed. The sense of weakness these participants articulated seems necessary to address with clients trying to achieve abstinence because it represents a mental block to a view of self-efficacy that is arguably essential for success in recovery. Perhaps researchers and clinicians in the future can specifically ask about
people’s view of themselves as they work toward abstinence—highlighting an area of intervention needed to restore the belief that they can be in control of their addiction.

**Mental Reasons Summary**

In this sample, 230 responses attributed their relapse to some sort of mental factor—covering 23% of the 999 total coded references. With such a significant number of participants represented in this group, understanding the mental processes leading up to relapse more clearly is relevant to future research and clinical intervention with pornography users. The four main subcategories of mental reasons that emerged from the data were willpower (r=69, 30%), motivation (r=47, 20%), thoughts (r=68, 30%), and weakness (r=46, 20%). Identifying and labeling these different mental experiences may allow future researchers and clinicians to focus even more specifically on unique *types* of mental triggers within this population.

Willpower was a frequently mentioned reason for relapse, but to adequately address it as a possible weakness in relapse prevention strategies we may need a more precise definition of what exactly “willpower” is. For this group of participants, willpower had an external locus of control and a tone of disappointment often accompanied the word. Future studies could explore how this population conceptualizes willpower regarding their level of control over it, how to improve it, and why a lack of willpower feels so much like defeat.

Lack of motivation is another broad term, but this group clearly separated lack of motivation into three groups: those who questioned the benefit of being PMO free, those who valued staying abstinent, but slowly rationalized or justified PMO, and those who simply said, “I like porn”. We do not know why certain people fell into each group, but this data highlights the importance of understanding why someone wants to remain abstinent in the first place. These participants are mostly non-religious, so why are they trying to stay abstinent if not for moral or
religious reasons? What are the promised benefits? Where is this information coming from? Understanding the personal underlying motivations for abstinence could help clarify successful treatment strategies and intervention areas for clients.

Two different types of thought processes emerged in this data—provocative thoughts and rumination. Provocative thoughts are often discussed clinically as a relatively uniform type of trigger, but this group clearly delineated between dreams and fantasies, memories, relational thoughts, and feeling like their brain was out of control. The various types of provocative thoughts highlight how difficult it is for this group to avoid triggers when so many different types of triggers appear directly in their minds. This phenomenon differentiates pornography addictions from a substance addictions and even most behavioral addictions. Images and experiences that are stored in the brain can be recalled and relived at any moment, often leading to the intrusive rumination other participants described. The field is currently unclear about how to mitigate these types of triggers successfully, but perhaps future researchers can focus on these different areas of provocative thoughts and ruminations to more specifically identify the underlying processes at work. Additionally, the sense that the brain is out of control feels particularly important to address with this population whose brains can literally house the “drug of choice”—mental images of pornography.

Regarding those participants who mentioned weakness, “erosion of control” continued to play an important role in this group. They viewed themselves or their minds as weak, while at the same time viewing their brains as powerful enough to take over their entire system and lead them to relapse. The external locus of control seen in the willpower responses also appeared in the weakness responses. They wanted to fight against their thoughts or urges, but felt that their brain was too strong and they were too weak (or their mentality was too weak) to succeed. How
do we restore the sense of empowerment and self-efficacy this group needs to be able to overcome their addiction?

Overall, this group who identified mental reasons for relapse felt very little control over their thoughts and subsequent actions. Mental triggers are nothing new to this field, of course. People with all different types of addictions experience mental triggers. But the fact that so many different types of mental triggers for pornography involve actual images and memories stored in the brain (without even having to consume new pornography) complicates this group’s experience of trigger to relapse. It seems important to address that some mental triggers may actually be the drug itself, while also not confirming this group’s fear that their brain has all the control.
Emotional Reasons for Relapse

Figure 6

Second-Round Coded Subcategories of Emotional Reasons Given for Relapse

Note. n=938, r=267.

267 of the responses indicated that the participant had experienced some sort of emotion just prior to or during their relapse—representing 27% of the 999 total coded references. These 27% of total responses were then coded in a second round and six subcategories of emotional reasons emerged from the data: stressed (r=78, 30%), alone (r=55, 21%), bored (r=52, 20%), depressed (r=45, 17%), frustrated (r=20, 7%), and anxious (r=13, 5%) (see Figure 6).
The most commonly mentioned emotional state was one of stress. This subcategory included 78 references and covered 30% of this subsample’s responses in the category of emotional factors. A small group of responses (r=13) labeled stress alone as a precursor to relapse, like these two participants who said, “I was stressed out and saw no healthy outlet at the time”, and “I believe that I felt stressed and gave in as a way to relax.” The other participants identified two causes of stress and two experiences that combined with stress to trigger relapse.

**Causes of Stress (r=39).** Some participants specifically identified work or school as their cause of stress, while others identified relationships as the main stressor leading to their relapse.

**Work and School Lead to Stress.** The most commonly identified cause of stress was articulated when one participant wrote: “Working towards essay deadlines leads to me procrastinating, which can often lead to me masturbating as a form of procrastination.” Procrastinating with PMO due to school/work stress was a common theme in this subgroup. Struggling to focus and fear of failing were also prominent themes, as identified by the following participants when they wrote “Lots of stress from school, lack of focus on work pertaining to deadlines, worrying about failing school” and “The misconception that getting [my] Nofap struggle out of way would let me focus on my exam studies.” Many other participants simply identified stress and school/work as being connected; i.e. “Stress from school (did bad on calc exam)”.

**Relationships Lead to Stress.** The second most common cause of stress that emerged was relational. One participant described “…a mixture of feeling ‘down’, of BIG stress about Paris strikes (I have friends who live there), also a need to feel comfy and happy for a while, even if it's fake.” Another response centered on a marital relationship when it read: “For me it was
stress. Have been having some personal issues with my spouse and work has been crazy.” In less of a causal, and more of a comorbid, relationship, another relational component of stress came in the form of loneliness. This participant identified: “I had some problems about school last week. I was feeling depressed. I had no one to talk [to]. I watched porn to numb myself and forget my problems for a little time.” In this last case, they were feeling stress due to an individual issue (school), but it seems that more importantly, they felt alone and could not regulate their feelings without talking to someone about them. The pattern of stress being compounded by feeling alone showed up repeatedly in the data, indicating that healthy relationships may be an underutilized area of support for this population when they feel emotionally overwhelmed.

**Comorbid Experiences (r=26).** Other participants identified boredom, exposure to provocative content, or physical urges in combination with stress ultimately leading to their relapse.

**Stress and Boredom Lead to Relapse.** Very few participants identified stress as the single trigger for their relapse. Much more frequently, they identified stress in addition to another component creating the “perfect storm” of triggers for relapse. The most common additional trigger was boredom. Many responses included lists of emotions like “boredom, stress”, “stress, fear, loneliness, boredom”, and “boredom – lack of motivation – stress”. Others expanded the definition of boredom to include “…a lack of something active to fill the time”, which could have been referring to physical or mental activity, or both. One participant described their typical response pattern as: “It is my normal reaction to stress and/or boredom, despite knowing it is not healthy and wanting to stop.”

The articulation of wanting to stop PMO, but still finding themselves relapsing to cope with life stressors is a phenomenon most addictions counselors will be familiar with. Some
people struggle to quit despite logically understanding the reason they turn to it as an unhealthy coping mechanism. The question we need to answer might be how to help when someone can cognitively describe the process of their relapse cycle, but still cannot break it in practice.

**Stress and Exposure or Physical Urges Lead to Relapse.** Unsurprisingly, exposure to provocative content and/or physical urges in combination with stress triggered relapse in this population as well. There was an entire general category of responses about exposure to provocative content, but the ones included in this group under the stress subcategory all mentioned stress as an additional component of their relapse. For example, “A mixture mainly of stress and exposure to provocative images”, “Urges building upon stress pushed me over”, “Overstressed and exposure to provocative content.”. It seems that stress lowered the window of tolerance for this group to be able to move through physical urges or provocative content without relapsing. Or it is possible the exposure to provocative content lowered their window of tolerance for coping with stress in a healthy way. Regardless, their descriptions make it seem like if the two experiences had not been combined, the exposure or stress alone may not have “pushed them over” to relapse.

**Summary of Stressed**

These descriptions articulated stress as a result of mostly work, school, and relationships. They also described being compromised by stress in a way that made it difficult to withstand other triggers such as boredom or exposure to provocative content. Stress was the most frequently mentioned emotion of the six subcategories that emerged from the emotional category of factors contributing to relapse.
**Alone \( (r=55) \)**

The concept of being alone appeared 55 times (21%) in this subsample’s responses about what they felt led to their relapse. There were two distinct conceptualizations of being alone that were analyzed separately as they had different theoretical meanings: being physically alone and being emotionally lonely.

**Physically Alone \( (r=22) \).** The first definition of “alone” as reported by the participants referred to the physical state of being without another person in the room or house. Straightforward responses like “Being alone in front of a computer” or “Being horny, and alone at home” constituted about half of these descriptions. Others talked about being alone as one of a few key situational factors that got them into trouble. The following participants described how being alone was one step in a series of steps leading to their relapse:

I let myself be alone in my room at night. I know that night time is the worst time for me to be in my room and on my laptop. Always leads to pornography and masturbation.

Or:

Not learning from past mistakes. The same rituals lead to relapses (locking bedroom door, alone laying in bed, surrounded by electronics)

The following succinct description represented the overall feeling from the responses—that relapse felt like an inevitable outcome when certain factors aligned: “wanted to fap and alone with computer: 2+2.”

While few participants expanded on what exactly the other “2” in the equation “2+2=relapse” was for them, one described it as follows: “I believe what cause(d) my failure is that I was alone in my house with nothin to do, I needed to keep myself busy and I failed so I relapsed”. Being alone in their house with “nothing to do” opened the door to pornography
becoming an option for filling the time. Not having anything to fill the time while alone with access to the internet was a repeated theme in this group.

**Emotionally Lonely (r=27).** The second version of being alone in this group was the *emotional* state of feeling lonely. As one participant described: “I was extremely depressed and lonely and PMO (Porn, Masturbation, Orgasm) was the only thing I could do to relieve the pain”. In the spirit of the “2+2” equation, another participant wrote: “Porn was filling ‘loneliness’ so it was just inevitable if you ask me”. Loneliness was usually mentioned in combination with other factors such as depression, as the following participant describes:

I stopped thinking about others, and started to think only about me during that one night.

It (was) during my break from school, I had not left the house during the whole week, I felt really depressed and lonely and fapped.

Some answers consisted of just a few words like “loneliness and depression” or “loneliness”. Others provided more context: “I had a terrible day, and was feeling depressed, lonely, Idk, I didn’t even fight it when the urge came.”

**Summary of Alone**

Being both physically alone and emotionally lonely were identified as the main triggers for relapse in this subcategory. This highlights the importance of being able to clarify what we are asking clients and future research participants about on questionnaires. For example, one client might read “lonely” and check yes thinking about being physically alone in a room, while another might check yes thinking about feeling left out socially. Managing those two situations as potential triggers for relapse would require different approaches.
**Bored (r=52)**

Feeling bored represented 20% of the emotional responses, with 52 references coded. Simple responses of “Boredom” or “I was bored out of my mind” appeared 16 times. Two other main groups emerged as factors that combined with boredom to lead to relapse: scheduling or access to pornography and weak willpower.

**Schedule and Access (r=13).** “Boredom. I had nothing to do and that's why I slipped.”

Many participants mentioned not having planned activities to fill their time: “I was bored. Felt like I didn't have anything else to do, this was the only ‘fun’ thing left—getting turned on by a girl over skype.” Or: “My leg is fractured and I couldn't go to training which usually takes most of my free time. Now I was bored.” Others focused on the combination of their boredom and accessibility to pornography. For example, “Getting bored, refusing to sleep, and having a laptop by my bed”, or “I was alone, bored, and had access to the internet.”, or simply “Boredom and availability”.

**Weak Willpower (r=9).** A subset of the overall sample in this study were self-critical and characterized themselves as weak or lazy in regard to their reasons for relapse. Boredom emerged as one of the compounding factors to this perceived “weakness”. One participant wrote: “Overall weak mentality, bored of the grind and was trying to find instant gratification.” Another responded: “Boredom, not having the will power to improve my life.” And perhaps most self-critically:

> I have a bigger goal in life but i am (too) lazy to take action for it. I work, i eat, i sleep, i follow this boring routine. On weekends i have a lot of free time.

This last response combined boredom, an open schedule, and a negative perception of self (“lazy”), effectively capturing the overall message from this group’s responses.
Summary of Bored

While some participants identified boredom alone as their trigger for relapse, more frequently boredom emerged as one of a few factors leading to relapse. Boredom combined with an unfilled schedule, access to pornography, or perceived weak willpower were the main processes this group articulated as leading to relapse. Alternatively, almost one-third of this subcategory identified boredom alone as their reason for relapse. It would be useful to know if this group of “only boredom” participants truly felt that boredom alone contributed to their relapse, or if they only included one emotion in their response for a different reason. If there were other contributing factors as well, it would be important to include this in considering a personalized relapse prevention plan.

Depressed (r=45)

The data for depression covered 17% of the responses from the subsample, with 45 references, but interestingly, only 4 out of the 45 responses mentioned depression alone. These responses included one participant’s description of feeling “sadness and eternal depression. The world is just too hard to live in for me.” Another described an intense depression when they wrote: “I was just feeling very depressed, almost suicidal.” Some participants identified their relapse as a coping mechanism: i.e. “I was depressed, it (was) something I turned to for comfort.” or “Failure to deal with negative moods.” It was unclear what “dealing with negative moods” in a healthy way looked like to this participant, but they viewed turning to PMO to cope as unhealthy. All other depression responses paired depression with another emotion or experience that led to their relapse: loneliness, stress, or hopelessness.

Depression and Loneliness (r=12). The responses included in this group referred to both depression and loneliness in the same thought. This participant described their lack of motivation
to fight when they wrote, “I had a terrible day, and was feeling depressed, lonely, Idk (I don’t know), I didn't even fight it when the urge came”, while another participant demonstrated a more clinical awareness of their depression and loneliness by stating “I’m clinically depressed and cut off from meaningful relationships.” Multiple respondents also mentioned being depressed in conjunction with “lack of intimacy”, “social isolation”, or “feelings of loneliness”.

**Depression and Hopelessness (r=7)**. Depression and hopelessness about life often go hand in hand, and it seems that this group is no exception. One participant described how they “Felt empty inside, no vision for future, hopeless feelings”, while another articulated “being let down by life, failing at everything I try.” A different participant described how their existential crisis led them to quit the NoFap challenge:

Reading a book and realizing life is just without meaning. That we'll all die, and I do think no one is really happy…There was nothing tangible I'd feel I get out of the NoFap. Just less tissue use and a bit of extra time to do what exactly with?

Others described feeling hopeless about their PMO, specifically, when they wrote things like “Lack of faith my PED (porn-induced erectile dysfunction) would be fixed. Depressed about fitness level and weight. Dead bedroom.”. One pointed to the progress he was (or was not) making toward his goals as his reason for relapse:

The feeling of being hopeless. i felt so much better around people, girls were starting to notice me so much more, i started being way more aware and productive, but i was feeling hopeless about the progress. i still was this shy guy who felt like a failure when he had to try to meet new people and hopefully, the girl that one day he can call his girlfriend.
He felt “hopeless about the progress” he was making through this abstinence challenge because he still felt like a failure interpersonally, even if he was technically being successful with NoFap, and then he relapsed.

**Depression and Stress (r=5).** In this group, stress seemed to be a causal factor of the depression. For example, “Stress at work and the depression and anxiety that follow.” Once again, this response showed that it was common to be feeling many of the core triggering emotions of relapse at the same time. Similarly, another participant shared: “(I) have unsolvable problems lately, and gave into depression, which led to numbness, which led to porn.” Others mentioned depression in lists including “stress” and “procrastination”.

**Depressed Summary**

While depression was a common experience expressed in this sample, the data suggests that it was rarely depression alone that led to relapse. Loneliness, hopelessness, and stress also played a role in contributing to depression’s effect on individuals trying to stop PMO. Perhaps having “no vision for the future”, as one participant described, meant motivation to resist relapse was low because consequences did not seem to matter if the future was non-existent. Or maybe depression lowered the window of tolerance for individuals so that factors like stress and loneliness that would normally be coped with healthily were too overwhelming and led to relapse.

**Frustrated (r=20)**

Responses coded under the subcategory of frustrated covered 7% of the emotional responses, with 20 references. The responses were further separated into two groups: frustrated with relationships and general frustration. While the underlying reasons for the feelings of
frustration were often unique, most people also mentioned a feeling of being alone in their frustration.

**Frustrated With Relationships \((r=9)\).** One of the recurring themes from the participants across the entire survey was a lack of confidence and/or competence in their interpersonal relationships. This community was keenly aware of the fact that relationship struggles were a major trigger for relapse, but not all participants identified an emotion to accompany this struggle as their explanation of what led to their relapse. One of the more poignant examples of interpersonal frustration identified not just the emotional frustration, but the physical frustration their relationship caused them as well:

I’ve been meeting with a girl that was arousing me, even though I wouldn’t want to have an intimate relationship with her. It was very frustrating and my crooked mind decided that I need(ed) an immediate ‘reward’ for all the discomfort I was in.

Others focused more on the emotional “frustration from rejection” or “Frustration over a girl”.

One participant identified familial relationships as a source of frustration when they explained:

“I'm a student, trying to best this problem all by myself, nobody knows. Went home during the holidays, felt really frustrated with my mom, brother, just with all the home stuff...”

Some of the expressed frustration was about having to hide their struggle from the people close to them and feeling like they are all alone in fighting it. As one participant described it, “Frustration. Feels like I have no one to talk to about this. It’s difficult to talk about this with the people close to you”. Others identified specific triggers in their romantic relationships: i.e. “I was angry (at) my GF. Started looking at P (porn). And (it) just happened.” or “I was upset with my fiancé. She went to bed, I stayed up angry and horny on my computer.”
**General Frustration** (r=11). All but two of the responses in the general frustration group combined frustration with another emotion or experience. These others included “loneliness”, “boredom”, “horniness”, and being “tired”. Some referred to their state of being as “annoyance” or being “in a bad mood”, which felt theoretically closest to frustration out of all the other emotional subcategories. One participant articulated the fact that their PMO was a coping mechanism for their frustration when they wrote, “I got frustrated and tired and decided on a cheap, feel-good high.” Another articulated a more detailed perspective on how relapse consistently occurs when they said:

Routine of relapse. At a predictable number of days into abstinence, urges rise and there is an eye for external triggers. The triggers are different and are excuses for the intent, which is always the same. I also have a frustration with how difficult it is to do what I think is right compared to the seemingly happy and easy lives others have without such consideration.

The idea that their life was more difficult because of their attempt to remain abstinent, while others did not see anything wrong with PMO, is a consideration for the field as we continue to assess what “healthy” use of pornography is. Could there be a line where trying to attain abstinence creates more harm than good? How do we establish cutoff points of healthy vs. unhealthy levels and treatment options? They did not mention how frequent their usage was or what their motivation for attaining abstinence was, so it is possible that PMO was creating dysfunction in other areas of their life that made the frustration of trying to abstain worth it to them.
Frustrated Summary

While the underlying reasons for experiencing frustration varied from respondent to respondent, it became clear that there were at least two groups of participants—those who experienced frustration because of relational dynamics and those who experienced frustration more generally. The two groups represented different theoretical constructs and might need to be studied separately in future research. For example, if someone marks “frustration” on a questionnaire, we need to understand if they are frustrated because of their addiction, because of a relationship, because of a lack of relationships, or because of another factor. Clinically speaking, helping someone come up with a coping mechanism for generic frustration is probably less helpful than identifying the underlying reason for the frustration and addressing the problem at its root.

Anxious (r=13)

Responses that mentioned anxiety by name made up 7% of the sample from the emotional category (13 references). This surprisingly low number might be attributed to those who identified depression and stress (possibly describing a similar experience), but left the word “anxiety” out of their response. Therefore, it is not surprising that the two main constructs mentioned concurrently with anxiety were feelings of stress and depression, with more frequent mention of stress than depression.

Anxiety and Stress (r=6). Stress can be a major cause of anxiety, so it is no surprise that one participant mentioned feeling “stress, tension, anxiety, (and) fear of a wet dream” just before his relapse. Similarly, many others identified “stress and anxiety” as if they were a pair that always appeared together. It is unclear why this group of people identified “anxiety” as their
trigger, while so many others only mentioned “stress”. Further inquiry and in-depth data collection with this community could shed light on this question.

**Anxiety and Depression (r=4).** Similar to stress and anxiety, depression and anxiety are comorbid and people who struggle with one are likely to struggle with the other (REF). This group of participants differ from those placed in the depression subcategory mentioned above because they emphasized their anxiety and depression equally, rather than their depression appearing on its own. For example:

Lack of sleep, procrastination and lack of connections in real life (people). That makes me feel very down and anxious at night. So I start eating junk food to get feeling a little better and then, usually I search for PMO (Porn, Masturbation, Orgasm).

The above participant’s mention of procrastination indicated that their stress about something contributed to their feeling “down and anxious” at night, leading to eventual relapse. There was no way to know which feelings were stronger—“down” or “anxious”—but they most likely tried to cope with both at the same time with their junk food and relapse.

Another participant was brief, but passionate, when they attributed their relapse to “DEPRESSION AND ANXIETY BULL****!”

**Anxious Summary**

Again, it is unclear why this particular group of participants identified feeling anxious, specifically, when the majority of participants labeled similar feelings as stress, but perhaps stress combined with depression feels different than stress combined with boredom or another emotion. It is also possible that the participants in this subcategory are more familiar with clinical descriptions of experiences. A follow up study would be helpful to understand the
differences between the participants who labeled similar experiences differently and their reasoning for doing so.

**Emotional Reasons Summary**

With 267 of the responses identifying an emotion just prior to relapse—representing 26% of the 999 total coded references—it seems important to explore these emotional factors to help prevent pornography relapse. The six subcategories of emotions that emerged from the data were stressed (r=78, 30%), alone (r=55, 21%), bored (r=52, 20%), depressed (r=45, 17%), frustrated (r=20, 7%), and anxious (r=13, 5%). While these subcategories of emotional factors were unsurprising and have been identified in previous research, the participants in the current study articulated the nuance of these emotional states and their interactions with one another.

Stress lowered participants’ ability to withstand triggers like boredom, relational problems, and exposure to provocative content. Additionally, PMO was frequently used as a form of procrastination to cope with stress. Stress was rarely mentioned by itself—participants usually identified stress plus another emotion or experience leading to relapse.

When it came to feeling alone, participants identified two very different experiences—being physically alone and being emotionally lonely. The group who identified physical aloneness talked about their isolation as if it were a last step before relapse and they rarely described what came before. In contrast, the emotionally lonely group combined depression quite frequently with loneliness—adding a bit of depth to their emotional picture. In research and clinical settings, we need to differentiate between these two constructs of aloneness to be sure we are studying the construct we want to study.

Depression was often combined with feeling lonely, hopeless, and stressed. The loneliness showed that there was a relational component to depression for some in this sample.
Hopelessness regularly accompanies depression clinically, but is normally conceptualized as a generalized sense of hopelessness (Steed, 2001), where this group specifically articulated hopelessness about their capacity to change themselves or maintain abstinence from PMO. The specificity of this hopelessness might highlight the importance of clinicians being able to maintain hope for their clients as they struggle to attain self-change and abstinence. Additionally, stress and procrastination often overlaid the emotional experience of depression. These two experiences were so comorbid in this sample that it may be helpful for clinicians and researchers to specifically assess for how stress and depression interact with one another for people trying to avoid pornography relapse—recognizing the situational factors at play in depression, not just the biological ones.

Frustration was also frequently combined with loneliness, and the main driving factors of frustration were relational issues, addiction and recovery issues, and frustration with life generally. These varying underlying factors highlight the need for clinicians to move beyond the emotional label of “frustration” and help clients understand what factors drive their emotion. Research participants could also benefit from moving beyond the “frustration” label. Breaking down their relapse experience and identifying underlying factors contributing to their emotions could help them logically make sense of emotional patterns, and might bring the locus of control back to this population by adding predictability to their relapse process.

While very few participants labeled their experience as anxiety, those who did always mentioned depression or stress along with it. It is unclear what differentiates the group using the word anxiety from those who mention stress, as in the data they seem to cover similar theoretical constructs.
The overarching finding in the emotional responses was that participants rarely mentioned just one emotion on its own. More often, combinations of multiple emotions and experiences were identified as creating the “perfect storm” leading to relapse. The survey question did not specify how many factors participants should identify regarding what led to their relapse. In fact, in asking “What do you believe caused your failure to continue to abstain from pornography and masturbation?” I expected most people to identify one main trigger. The fact that the majority of participants identified multiple co-occurring emotions and often went on to describe the connection between them shows how multi-faceted and complex relapse was for this group.

Identifying common patterns of emotional experiences leading to relapse could help future researchers assess for these patterns, and could help clinicians identify these patterns in their clients struggling with relapse prevention. Pragmatically, helping clients identify their personal triggers for relapse in as much detail as possible facilitates more detailed relapse prevention plans, and theoretically, more success with this type of intervention. Additionally, the mere act of highlighting an implicit process and making it explicit gives people the ability to make changes that can interrupt said unwanted process (Creswell et al., 2007). For example, because the data repeatedly shows frustration combined with relational factors, a clinician or researcher might ask a general question about relationships when someone mentions feeling frustrated. This approach could change the therapeutic intervention from teaching coping skills for dealing with frustration, to working on the dysfunctional relational dynamics causing the frustration in the first place.
Relational Reasons for Relapse

Figure 7

Second-Round Coded Subcategories of Relational Reasons Given for Relapse

Note. n=938, r=115.

The data included 115 references that mentioned some sort of relational trigger for their relapse—representing 11% of the 999 total coded references. These responses were then coded in a second round and four subcategories of relational reasons emerged from the data: general relational (r=34, 30%), specific relationship (r=49, 43%), lack of connection (r=12, 10%), and “Can’t Get Girls” (r=20, 17%) (see Figure 7).
**General Relational (r=34)**

Under the main category of relational reasons for relapse, a subcategory labeled “general relational” emerged, which included responses that mentioned relational factors without specifying further details. With 34 references, this subcategory covered 30% of the subsample’s responses of relational factors. Most participants identified either loneliness or social isolation as the key relational dynamic that contributed to their relapse.

**Loneliness (r=24).** Many of the references already included in the emotions category above (in the lonely subcategory) are included in this section as well because loneliness is a relational feeling—being *without* relationships, by definition. The descriptions were straightforward as participants wrote things like, “Loneliness”, “loneliness, feeling depressed”, and “feelings of loneliness that had gradually been building up.” One respondent described a complicated relational dynamic that contributed to their loneliness:

> I kinda lost the whole point of it. I have been flatlining from day 30 to like day 90. No motivation, nothing. I wasn’t even attracted to girls anymore it felt like. I feel like it was much much greater the first 30 days. I went out talk to people felt alive, i guess i wanted that back. Today i skipped a party i was supposed to go to, felt lonely and it escalated from there i think.

“Flatlining” is a colloquial term used in the NoFap group to describe a feeling of depression and lack of motivation that hits a few weeks after stopping PMO. This flatlining seems to have contributed to the social withdrawal and loneliness for this participant.

Most responses mentioned loneliness in conjunction with other experiences such as “Mostly feelings of stress and loneliness coupled with urges”, “Just not following my goals.”
Loneliness. Lack of self-discipline.”, and “Lack of sleep, boredom, loneliness and procrastination.”

**Social Isolation (r=10).** In contrast to specifically articulating the emotion of loneliness, another group in this subcategory pointed to social isolation as the cause of their relapse. Most responses were concise, such as “Depression and social isolation”, “Not interacting with other people enough in real life”, or “lack of social life”. The two constructs—loneliness and social isolation—may have represented similar experiences, but the different language used by the two groups to describe them seemed significant.

**General Relational Summary**

The general relational subcategory represented the participants who identified a relational dynamic, but did not specify any further as to what exactly that dynamic entailed. It naturally split itself into two groups—those who identified loneliness and those who identified social isolation as their main triggers for relapse. It is unclear if the difference between these two groups is relevant or worth exploring, but there could be a clinically relevant explanation. Perhaps the group who wrote about social isolation were already thinking of a solution to their (assumed) loneliness, while the group writing about their loneliness were simply identifying their core emotion.

**Specific Relationship (r=49)**

With 49 references, the specific relationship subcategory made up 43% of the main category of relational reasons for relapse. The difference between the specific relationship subcategory and the general relational subcategory is that the references included here involved a relationship with a specifically identified person (romantic or otherwise), rather than the unspecified social relationships referred to above. Four main groups emerged from the specific
relationship data: established romantic relationships, the desire for more sex within an
established romantic relationship, potential romantic interests, and family and friend
relationships.

**Established Romantic Relationships (r=23).** While there were multiple themes that emerged from the data about current or previous romantic relationships, the two main processes described were people getting in fights with their significant others or getting turned on sexually without continuing to full orgasm. Responses identifying fights with significant others ranged from direct and concise, “I was angry (at) my GF. Started looking at Porn. And just happened.” to subtle, “For the past few days, my relationship with my girlfriend has been continuously strained due to lack of communicating and not seeing each other as much as we used to.” Multiple respondents identified fighting or breaking up with their girlfriends with responses like, “shitty day, shitty life, shitty talk with GF, shitty thoughts, but ultimately, it was the fight with the GF and thoughts that did me in”, “I got in a fight with my girlfriend”, “End of a relationship”, and “My break-up”. Others wrote about their spouses and fiancés when they wrote, “personal issues with my spouse” and “I was upset with my fiancé. She went to bed I stayed up angry and horny on my computer.”

In contrast to the tension described in the relationships mentioned above, the other main phenomenon was being sexually aroused by a partner without orgasming. Some of these triggers started with just a conversation, such as the following experience shared by one spouse:

I looked at [pornography] in anticipation of sex with my wife. I had been doing so well and our relationship had been very good. We had just had a talk in bed in which we agreed to do something new, and then I looked at videos of it. Also I had looked at some softcore material the night before.
Similarly, another partner described their process of going from a conversational trigger to relapse when they write, “i got aroused by some conversations with my gf about a possible threesome with her friend. Started looking up photos of her and two days later i looked up porn.”

Others identified the physical discomfort brought on by sexual arousal without orgasm within the relationship. For example, “Girlfriend teased me and wouldn't get me off. I can usually handle it, but after watching a [sexually explicit video] my urges increased beyond my control,” and “make out with a girl without actual sex.” One partner detailed their experience of waiting to have sex until after marriage when they shared:

Sexual desires put there by a real-life partner (my fiancé, who I don't live with, and who is adamant on waiting to have full blown sex after our wedding since its around the corner - so our wedding night and honeymoon would be special). So these desires kind of lingered in the back of my head when I only got a portion of what I wanted and it came back up later during the day. Then having access to porn and having lived a regular life of Porn Masturbation and Orgasm, I went back to it and "PMO'd". I feel less guilty about the MO part because it was born out of a normal healthy source. But I do feel bad about the P part of it.

This participant was one of very few who talked about abstaining because of a partner’s pressure to abstain. Another participant shared an experience about anticipating the return of their girlfriend:

I had been away from my girlfriend for [about a] week and actually did really well. We had texted a little bit about what we should do when I got home. When I got home, suddenly she had to go away, some urgent school related thing, I tried to do other stuff. But it kept coming back to my mind!
And yet another relational effect often described by the community, the “chaser effect”, was described by the following participant:

Chaser effect I got after I stupidly had sex…I believe seasonal depression took over me and other things attributed that led me to...have sex which then lead me to relapse because the chaser effect was so strong.

This chaser effect was defined by one NoFap member as:

Chaser Effect: The super-charged desire to masturbate that sometimes hits 1-3 days after sexual acts. Especially powerful early on in a reboot.

So even though the above participant likely experienced orgasm within their sexual encounter, they connected their subsequent urges to the sexual encounter. This chaser effect was mentioned multiple times and seems to be a colloquial term well understood by the NoFap community.

**Wanting More Sex (r=11).** Many of the overall participants mentioned a desire for sex and/or intimacy as a trigger for their relapse, but the following responses include only those participants who mentioned sexual dissatisfaction *within* a current romantic relationship. As one participant described: “Intense desire to have sex. To release. I feel like my current sex life is leaving me unsatisfied. I want it more often, and with more partners than I currently have.” A few others identified their sexual relationship with their wives specifically when they wrote, “Morning erection, and being alone. Wife not sexually available most times. Not interested”, “Wife not giving me sex. Still didn't view porn though.”, and “continued minor triggers while on vacation. wife's lack of desire or initiative for sex.” Interestingly, there were very few responses that included someone “not giving them sex”. Most referred to their sexual frustration in their relationship in a neutral or self-critical way. For example, the following participant identified feeling unsatisfied with sex with their girlfriend, but first identified their “weak mind” as the
main reason for relapse when they wrote: “My weak mind. But sex with my girlfriend has been sort of frustrating and unrewarding lately.”

**Potential Romantic Interest (r=9).** In contrast to the group of responses detailing current romantic relationships, the following participants identified being triggered by thoughts or experiences with potential romantic interests. A few participants identified conversations with women as the main trigger. For example, “Slept about 4 hours the night before and then had a stressful day at work. Before leaving work had a short conversation with a girl I'm interested in and got excited”, “Engaged in graphic conversation with a female.”, and “Texting with Girls.”

Others mentioned being turned on by women they may not have known personally, but had access to online when they wrote, “Emotions and feelings for a woman caused by visual media” and “…getting turned on by a girl over skype.” And a final group of participants relayed complex emotional experiences triggered by meeting with potential romantic interests with whom romantic relationships were not a desired outcome. For example:

I've been meeting with a girl that was arousing me, even though I wouldn't want to have an intimate relationship with her. It was very frustrating and my crooked mind decided that I need an immediate "reward" for all discomfort I was in.

Another participant also talked about feeling attracted to someone while understanding that a romantic relationship with them might not be a viable option when they wrote:

Resistance to feeling sexual and romantic attraction towards a woman where society would judge the attraction as inappropriate. She is much younger than me (but not underage). Led to edging and watching provocative (but not pornographic) videos.

**Family and Friends (r=5).** In addition to the romantic relationships referred to in the above groups, some participants identified family and friend relational dynamics that contributed
to their relapse. Previously included in the “relationships lead to stress” group of emotional factors for relapse, is the following response:

…A mixture of feeling "down", of BIG stress about Paris strikes (I have friends who live there), also a need to feel comfy and happy for a while, even if it's fake. Briefly: big and urgent need for affection without other ("accessible") possibility to get it.

And from the “frustration with relationships” group:

I'm a student, trying to best this problem all by myself, nobody knows. Went home during holidays, felt really frustrated with my mom, brother, just with all the home stuff...

These responses highlight the emotions that came as a result of their relationship dynamics with their friends and family. Additionally, one parent described how they try to build relationships with their kids to help prevent relapse when they wrote:

Selfishness. I have a number of things on my PMO-free "to-do" list that I have yet to get around to. The biggest one is failing to share my hobbies with my kids. Getting too wrapped up in ME gets me into trouble with PMO every time.

Another participant described these relationships more generally when they wrote, “Stress at home, stress at school, stress at work. Inability to channel stress elsewhere.” It is unclear what “stress at home” looks like, but we can assume it involves familial or friend relationships to some extent.

Specific Relationship Summary

The specific relationship subcategory represented those participants who identified a specific relationship when discussing the relational dynamics at play. Four different groups emerged from the data: established romantic relationships, the desire for more sex within an established romantic relationship, potential romantic interests, and family and friend
relationships. The overarching tone of the responses included in this subcategory was not one of blaming the other person in the relationship. Nearly all the participants wrote about their relational struggles in ways that held themselves accountable for their emotions, while also acknowledging the relational dynamics that may have contributed to those dynamics. This stands in contrast to the common trope seen in some professional circles of the addict who refuses to take accountability or see their part in their own addiction. Perhaps this pattern of taking accountability could also be found among the broader clinical population struggling with pornography addictions.

Lack of Connection (r=12)

Under the general category of relational reasons for relapse, 12 references mentioned feeling a “lack of connection.” This subcategory covered 10% of the subsample’s responses of relational factors. While this theme was mentioned in a relatively small number of responses, the concept seemed very specific and defined something different than what was described in the general relational section above. The references included in the “lack of connection” subcategory naturally separated into two different groups: a general sense of being disconnected from people and not reaching out to connect with someone in a specific moment of need.

Disconnection (r=5). All except one of the references included in this section were also included in the previous groups “depression and loneliness”, “depression and anxiety”, and the subcategory “loneliness”. There is overlap between these sections, but it felt worth noting that some respondents specifically talked about their loneliness and depression in terms of relational connection. For example, “Lack of sleep, procrastination and lack of connections in real life (people).” Additionally, one respondent detailed their search for the “next porn high” and then
reflected on the process as a “new way to subconsciously find fake meaning, fulfillment, and connection.”

I was intrigued by the fact that some participants identified their desire to connect with others as key to their process of relapse, while others articulated more general relational dynamics like “loneliness” and “social isolation”. I would be curious to understand better why there is such a range of different terminology to describe what seem to be similar relational experiences.

**Not Reaching Out (r=7).** The second process that played out in the “lack of connection” theme was that of recognizing when something difficult was happening, but not reaching out to other people for help—either because of a personal choice, or because they had no one to reach out to. A few participants succinctly described not reaching out when they wrote, “Being alone and not going to friends or God to help”, “I did not call someone or reach out for help”, and “Did not get help fast with my fellow [NoFap] warmates.” Others articulated feeling that they had no one to turn to when they wrote, “The feels of missing my ex and not having people around to help me deal with it at the time”, “…Feels like I have no one to talk to about this. It's difficult to talk about this with the people close to you”, and “I had some problems about school last week. I was feeling depressed. I had no one to talk to. I watched porn to numb myself and forget my problems for a little time.”

**Lack of Connection Summary**

The “lack of connection” subcategory represented those participants who identified feeling a disconnected from relationships. Two main processes emerged from the data—a general sense of being disconnected from people and not reaching out to connect with someone in a specific moment of need. While this represented a small percentage of the overall sample,
the articulation around their sense of connection and disconnection was distinct from other
descriptions of relational dynamics. It may be relevant to the field to understand if there are any
differences in rates of recovery based on the different language people use to describe their
experiences.

“Can’t Get Girls” (r=20)

With 20 references, the “can’t get girls” subcategory made up 17% of the overall
category of relational reasons for relapse. These participants identified their hopelessness about
establishing different aspects of romantic relationships as an important trigger. Three different
groups emerged from the data: romantic rejection, not having access to real women, and doubts
about abilities to meet women or establish future romantic relationships.

Rejection (r=5). A small group of participants identified rejection as the precursor to
their frustration when they wrote things like: “1) Alcohol 2) Tinder 3) Frustration from rejection.
4) Justifying that I had already done a good streak” and “Frustration over a girl.” Another
described the rejection as if it had lowered their window of tolerance for triggers when they
described, “I was feeling rejected by a particular love interest and then was exposed to some
rather provocative material while scrolling through Facebook.” One suggested rejection without
saying as much when they wrote, “I ran into the girl who I used to want to be with, she has a
serious boyfriend now.” And a final participant simply stated that they were feeling “Tired and
rejected.”

No Access to Women (r=9). Some participants specifically mentioned not having a
current romantic relationship, having no access to real women, or wanting sex as reasons for
their relapse. One teenager wrote, “It's extremely difficult as a 17 yr old boy with no girlfriend.”
Another response wrote: “Lack of motivation to continue, and the realisation and reality of lack
of sex, intimacy and relationships in life.” These responses did not expand on the reasons why not being in a current romantic relationship caused them difficulty in trying to abstain and it would be difficult to fully understand their mindset without a follow-up study.

Others were straightforward in their communication that their “Lack of real exposure to women” was a main challenge for them. As one participant wrote:

[I] couldn't take it anymore. I could not focus on anything other than women. I wasn't able to get any work done or focus on anything else. the feeling had been really intense at day 27-31 and things were not getting better. I had no access to real women at the time. Another participant talked about wishing they had more girls around them when they wrote:

The urge was strong, and i edged by doing PM (not O)...I think it may be due to my poor social life, I think i'd resist if i had more girls in my entourage. However all the good reports of guy(s) doing Nofap made me resist to the O.

The lack of interaction with real women stood out for these respondents as a road-block to relapse prevention and they seemed to argue that if they’d had more interaction with women they would’ve been better situated to resist the urges that came.

Similarly, but more specifically, a group of participants wrote about not only their lack of access to women, but their subsequent lack of access to sex. One wrote, “Loneliness and lack of mindfulness. I wanted sex. I didn't have sex so I went to masturbation.” Another focused on the more physical aspect of not having a relationship when they described their need for sexual release: “Constant lust for girls around me and on facebook. I would say my feelings of loneliness and need for sexual release were the main causes.” The last participant to specifically mention wanting sex without a relationship described, “No outlet for my sexual desire and need for a romantic partner.”
“I Can’t Get Girls” (r=6). The following participants articulated their doubts about being able to meet women and secure a romantic relationship in the future. One participant concisely wrote, “I can't get girls.”, but others expanded further on a similar doubt when they described even the thought of trying to meet women:

The combined tensions of listening to pornography use being portrayed as normal behavior in the media and also personal efforts at thinking about trying to meet women. Also I was probably using porn to procrastinate from doing school work.

Similarly, another participant wrote:

Stress has always been part of the trigger. It is the end of the semester and I have a formal for my club team coming up and the thought of asking a girl I liked combined with the time of my streak at the time had me reach a point that I relapsed.

It may be that “the thought of asking a girl” they liked might have been a trigger because they were excited about her, rather than a trigger because they were overwhelmed and anxious about the prospect of talking with her. It is impossible to know without more context, but the general sentiment remains—thinking about talking with women romantically in some fashion felt like a trigger to these participants.

Other participants described doubts about their romantic prospects in more general terms than the previous responses. For example:

…When it feels like my romantic prospects are zero and impossible to overcome, which is all the time thanks to this addiction, then it is almost certain I’ll relapse soon, which only makes it worse of course.
And another:

…I do think no one is really happy. It urged on me in the train. People looking around, probably not being happy. (We) think that we'll get a wife, be happy and be a good family. Well that only exists in fairytales.

Both of the above participants felt that their “romantic prospects were zero”, which seems to have contributed to the hopeless tone of their responses. Similarly, another participant, already quoted above in the “depression and hopelessness” group, identified his hopelessness directly when he responded:

…i was feeling hopeless about the progress. I still was this shy guy who felt like a failure when he had to try to meet new people and hopefully, the girl that one day he can call his girlfriend.

These participants identified their self-doubt regarding their ability to establish romantic relationships as contributing significantly to their relapse, but it is important to note that every response also identified an accompanying emotion. Their emotions (sad, hopeless, stress, etc.) seemed to come as a result of the relational dynamics mentioned in the responses. Regardless of which came first—relational dynamics or emotions—we would be remiss to ignore the correlation between the two.

“Can’t Get Girls” Summary

The “Can’t Get Girls” subcategory represented those participants who identified their self-doubt about establishing different aspects of romantic relationships as an important trigger. Three different groups emerged from the data: romantic rejection, not having access to real women, and doubts about abilities to meet future women or establish future romantic relationships. The participants included in this subcategory shared some of the driving reasons
for their hopelessness, anxiety, and depression as they articulated the painful feelings associated with failure in romantic efforts. Interestingly, none of the responses described a desire to find a relationship like those portrayed by any specific type of pornography. They mainly highlighted the emotional component of the romantic relationship they felt they were missing. Their desire for an emotionally fulfilling relationship was juxtaposed with their turning to PMO for a sexual release to numb the feelings of longing and self-doubt.

**Relational Reasons Summary**

With 115 of the total responses identifying a relational trigger just prior to relapse—representing 11% of the 999 total coded references—relational dynamics are difficult to ignore as important in this population’s experience of relapse. The four subcategories of relational reasons shown in the data were general relational (r=34, 30%), specific relationship (r=49, 43%), lack of connection (r=12, 10%), and “Can’t get girls” (r=20, 17%). Each of these subcategories represented an articulation of more specific relational dynamics these participants experienced and offer us a window into the wide range of relational triggers for relapse.

Participants who did not specify which relationship they were referring to mostly fell into two groups—those who wrote about loneliness and those who wrote about social isolation. I would argue that even though these two constructs may be the same externally (being without friends or relationships), the distinction between the language used to describe them is important. For the most part the first group articulated their primary painful emotion—loneliness—while the other group described their situation in more matter-of-fact terms—a literal description of being socially isolated. As a therapist, I am trained to notice subtle differences in how people communicate their painful experiences. This may be why separating these two groups seemed important to me—one used primary emotional language, and the other used cognitive or
solution-focused language. There is no value judgment to be made between the groups, but further research could explore the differences between them and might look at recovery outcomes based on how people described their pain differently.

The two main groups in the specific relationship subcategory stood in surprising contrast to one another—conflict with a partner, vs. being turned on by a partner or romantic interest. If this were quantitative data, it would be difficult to decipher if “relational issues” meant fighting or “relational issues” meant being turned on by a partner. Additionally, some of the relational dynamics were not romantic at all in nature. The dynamics in relationships with friends and family deserve attention from clinicians and researchers too, even though they might appear to be unrelated to a sexual addiction. This data clearly showed that some people turned to PMO as a coping mechanism for struggling in these non-romantic relationships. In future research, simply including multiple subcategories under “relational issues” (romantic, fantasy, family, friendships, etc.) to parse out how different relationships affect this addiction seems prudent.

Those participants who specifically identified feeling disconnected may have experienced the same phenomenon as the previous participants who described loneliness and social isolation, but—highlighting communication style again—their articulation of needing to feel connected to people in order to prevent a relapse set them apart in the data. This lack of connection felt like an extension of the broader picture of relational issues described in this overall category, but may be a point of interest for clinicians assessing the strengths and weaknesses of a client’s relapse prevention strategy. Some clients may need to feel connected to real (rather than virtual) people or communities so that they can reach out to someone in a moment of need for support.

The final subcategory of those who articulated that they “can’t get girls” expressed painful feelings of self-doubt, depression, hopelessness, and anxiety due to the fear that they
would never be successful in romantic endeavors. Very few responses focused on just the physical need for sex that would come with a relationship. Most wrote about longing for the emotional component of an intimate romantic relationship. This may seem surprising because using a sexual coping strategy (PMO) to fill an emotional need could feel counterintuitive, but this group of respondents is an example of how important emotional connection and relational fulfillment are to preventing relapse—particularly in sexual addiction.

The overall finding from the relational category might be that relationships across the spectrum—romantic, platonic, familial, virtual, etc.—had the power to trigger a relapse for these participants. Relationship-type did not seem to matter when it came to triggering strong emotions that led to eventual relapse. For example, a rupture in a romantic relationship was arguably different from frustration with family or friends, but both dynamics led to relapse within this population. Seeing the impact of so many different relationship-types on relapse prevention may encourage future addictions researchers and clinicians to do a more comprehensive assessment of all areas of relationships in someone’s life—not just romantic or sexual.
Relational-Emotional Reasons for Relapse

Each of the previously discussed categories—emotional, mental, and relational reasons for relapse—emerged as separate constructs in the overall data. After several rounds of coding, however, it became evident that the emotional and relational reasons for relapse overlapped with one another quite frequently, whereas mental reasons stayed mostly independent of both the emotional and relational categories. Of 267 emotional and 115 relational responses, for example, 80 responses were included in both categories, covering 30% of emotional responses and 70% of relational responses. In contrast, out of 230 mental responses and 115 relational responses, only 17 responses included both mental and relational reasons together (7% of mental and 24% of relational). Similarly, out of 230 mental and 267 emotional responses, just 27 responses included mental and emotional factors together (11% of mental and 23% of relational). Nine of the aforementioned responses were coded into all three categories (See Figure 8).
Figure 8

Overlap of Responses in Emotional, Mental, Relational, and New Relational-Emotional Categories

Note. $r=80$.

Emotional and relational reasons for relapse overlapped at least 3x more frequently than any of the other categories. This pattern suggests that within this sample emotions and relationships interacted with one another in a significant way. All 80 responses included in this new relational-emotional category mentioned both relational and emotional factors contributing to relapse. After combining the responses into the new category, I conducted a numeric content analysis and the following subcategories emerged: lonely ($r=31, 39\%$), depressed ($r=23, 29\%$), frustrated ($r=13, 16\%$), and stressed ($r=13, 16\%$) (see Figure 9).
Lonely (r=31)

With 31 references, this is the fourth time lonely has appeared in the title of a subcategory or group in this paper, but it has emerged as an important theme for this sample because it embodies the connection between relationships and emotions. By definition, one cannot be lonely without feeling the loss of a relationship in some way or another. Most of the following references have already been included in previous sections of the emotional and relational categories, but they will be explored again here through a combined relational-emotional lens.
Anyone who mentioned loneliness without further specificity was included in this subcategory even though they did not necessarily write about two separate relational and emotional experiences. Since loneliness was the identified emotion, I interpreted it to represent an emotion as a result of a relational dynamic. As such, a number of these responses included straightforward answers like “loneliness” or “I was lonely and in pain”, while others elaborated on their combination of triggers when they wrote “Just not following my goals. Loneliness. Lack of self discipline”, “A feeling of loneliness and restlessness. I was a little bit tired also”, and “No sleep, sick, feeling lonely.”

Some participants identified seemingly unrelated emotions and then included that they were lonely. For example, “Stress from school and work. Also feelings of loneliness that had gradually been building up”, “Procrastination and loneliness instead of doing work I should have done”, and “Loneliness and procrastination.”

Others in the lonely subcategory were explicit about the process of relational dynamics causing their feelings of loneliness and resulting in relapse. For an example of this process, see the following response:

lack of sleep, procrastination and lack of connections in real life (people). That makes me feel very down and anxious at night. So i start eating junk food to get feeling a little better and then, usually i search for PMO.

This identification of their lack of connections “making them feel” down and anxious made the (oversimplified) process of relational dynamic + subsequent emotion = relapse extremely clear. In a similar example another participant wrote, “The feels of missing my ex and not having people around to help me deal with it at the time.” They specifically identified the feelings elicited from “missing their ex” and how those feelings needed to be dealt with relationally to
avoid a relapse. One person discussed rejection when they wrote, “I was feeling rejected by a particular love interest and then was exposed to some rather provocative material while scrolling through Facebook.” By articulating feeling “rejected by a particular love interest”, this participant also articulated the relational dynamic + subsequent emotion = relapse equation.

The following participant, who we have encountered before, suggested several possible reasons for their relapse, but concluded their response with:

…I was also feeling pretty sad at the time since I wasn't hearing back from any of the people I had been talking to the last couple days, including girls. When it feels like my romantic prospects are zero and impossible to overcome, which is all the time thanks to this addiction, then it is almost certain I’ll relapse soon, which only makes it worse of course.

In keeping with the relational dynamic + subsequent emotion = relapse equation, they attributed their sadness to not hearing back from people and girls, which led to hopelessness about romantic prospects and eventual relapse. Another participant we have encountered before went into detail about several relationship dynamics and emotions at play in their road to relapse:

The lack of the feeling that I could do it. When you start, you have motivation and a feeling of belonging especially with a group like noFap. With the first relapse, you feel like it's not a problem and you can keep doing it. However, relapses occur time and time again and you eventually let it become a habit. This breaks you and you don't have the motivation or the belief that you can continue. Part of you still stays around listening to others work towards their goals, but it just worsens how you think about yourself. I started to feel really pathetic. I always asked myself how I just couldn't do it. Truth is, I believe only support from others can help you. Not success stories or random online
quotes. Those lose meaning fast. Instead, one should look for real life support. That's VERY hard to find however.

For this participant, a “feeling of belonging” to a group like NoFap helped them initially, but listening to others work toward their goals while personally relapsing eventually caused them to feel pathetic. Interestingly, even though the source of their low self-esteem stemmed from a relational experience (the support group success stories), they still advocated for a relational solution to their struggle. They believed that only support from real-life people could help. Having real people in their support system seemed to be more effective than online relationships or groups at helping them prevent relapse.

One participant identified both positive and negative emotions as a consequence of relational dynamics when they wrote:

…I have been flatlining from day 30 to like day 90. No motivation, nothing...I feel like it was much much greater the first 30 days. I went out talk to people and felt alive, i guess i wanted that back. Today i skipped a party i was supposed to go to, felt lonely and it esclated from there i think.

They highlighted how talking to people made them feel alive and skipping a party made them feel lonely. Perhaps this “feeling alive” after talking with people is part of what the previous participant was describing when they talked about real-life support people being critical to relapse prevention.

**Depressed (r=23)**

A total of 23 references mentioned depression in conjunction with a relational dynamic. Many responses indicated feeling loneliness and depression in the same response, but did not connect the two of them to each other. Some wrote things like, “Depression and social isolation”,

“depression and lack of intimacy”, and “feelings of loneliness and depression (flatline).” Others articulated, “I'm clinically depressed and cut off from meaningful relationships”, “I had a terrible day, and was feeling depressed, lonely, Idk, I didn't even fight it when the urge came”, and “…Depressed about fitness level and weight. Dead bedroom.” Another wrote, “I had some problems about school last week. I was feeling depressed. I had no one to talk. I watched porn to numb myself and forget my problems for a little time.”

All of these participants articulated feeling depressed while also identifying their lack of desired relationships, but the two thoughts were disconnected—as if they were separate ideas in their minds.

In contrast, another group of participants connected their relational struggles to their depression explicitly. One participant wrote, “I felt really depressed because I was really tired and I had some personal problems”—pointing specifically to their personal problems as a reason for feeling depressed. Another mentioned hopelessness when they wrote:

the feeling of being hopeless. i felt so much better around people, girls were starting to notice me so much more, i started being way more aware and productive, but i was feeling hopeless about the progress. i still was this shy guy who felt like a failure when he had to try to meet new people and hopefully, the girl that one day he can call his gf

He identified his lack of progress as a contributing factor to his hopelessness, but also highlighted his shyness and difficulty meeting new people and girls—a relational struggle. The following participant did not connect their relational struggle and emotions linearly, but their overall experience speaks to the impact of relationships on their emotional state:

As I said about the trigger, a mixture of feeling "down", of BIG stress about Paris strikes (I have friends who live there), also a need to feel comfy and happy for a while, even if
it's fake. Briefly: big and urgent need for affection without other ("accessible") possibility to get it.

It was unclear if they were feeling “down” before or after all that transpired in their response, but their friends being in danger clearly created stress, and their unmet need for affection seemed to impact with their overall mood.

Similarly, another participant did not mention depression explicitly, but used an overall tone of hopelessness about life when they wrote:

Reading a book and realising life is just without meaning. That we'll all die, and I do think no one is really happy. It urged on me in the train. People looking around, probably not being happy. (We) think that we'll get a wife, be happy and be a good family. Well that only exists in fairytales.

This person’s hopelessness came as a result of thinking that they would never achieve the ideal “fairy tale” of a finding a wife and a happy family. The desire to be married with a family was so strong that the fear that they would never attain it sent them into a hopelessness about life, indicating how important close relationships were to them.

\textit{Frustrated (r=13)}

In contrast with loneliness and depression, the 13 people who mentioned both frustration and relational dynamics always connected the two. For example, “I was upset with my fiancé. She went to bed I stayed up angry and horny on my computer” and “shitty day, shitty life, shitty talk with GF, shitty thoughts, but ultimately, it was the fight with the GF and thoughts that did me in.” For some reason it was easy to link frustration to relational problems. In a clear example, one participant wrote, “I was angry (at) my GF. Started looking at P. And just happened.”
A few participants articulated frustration about romantic prospects when they responded, “Frustration over a girl” and “1) Alcohol 2) Tinder 3) Frustration from rejection. 4) Justifying that I had already done a good streak”. One described the physical frustration:

Lack of motivation. I've been meeting with a girls that was arousing me, even though I wouldn't want to have an intimate relationship with her. It was very frustrating and my crooked mind decided that I need an immediate "reward" for all discomfort I was in. Similarly, but within an intimate relationship, another wrote, “My weak mind. But sex with my girlfriend has been sort of frustrating and unrewarding lately.”

Others paired their general frustration with feeling alone when they wrote, “Frustration. Feels like I have no one to talk too about this. It's difficult to talk about this with the people close to you” and “I'm a student, trying to best this problem all by myself, nobody knows. Went home during holidays, felt really frustrated with my mom, brother, just with all the home stuff...”

**Stressed (r=13)**

Relational stress, as mentioned in previous sections, was another common experience in this category. 13 participants explicitly connected their stress to their relationships. For example, one wrote, “I wanted to forget about having to tell my girlfriend that I don't want to see her anymore.” While another wrote, “For me it was stress. Have been having some personal issues with my spouse and work has been crazy.” In less explicit words, one participant mentioned:

The combined tensions of listening to pornography use being portrayed as normal behavior in the media and also personal efforts at thinking about trying to meet women.

Also I was probably using porn to procrastinate from doing school work.

It is possible that this participant’s stress was mostly from school work, but the thought of trying to meet women most likely added to their stress-level as well. Similarly, another wrote:
Stress has always been part of the trigger. It is the end of the semester and I have a formal for my club team coming up and the thought of asking a girl I liked combined with the time of my streak at the time had me reach a point that I relapsed.

One participant referred to their “Stress at home, stress at school, stress at work. Inability to channel stress elsewhere.” Even with multiple areas of stress in their life, this participant’s stress at home indicated relational struggles.

**Relational-Emotional Summary**

With 80 of the total responses identifying combined relational-emotional factors just prior to relapse—representing 30% of the emotional responses and 70% of the relational responses—relationships and emotions were highly correlated in this sample. The four subcategories of relational-emotional reasons shown in the data were lonely (r=31, 39%), depressed (r=23, 29%), frustrated (r=13, 16%), and stressed (r=13, 16%). The responses in each subcategory addressed both emotional and relational dynamics together.

In the responses that identified loneliness, some identified a specific cause of their loneliness while others wrote more generically about feeling lonely. Being connected to people or belonging to a group was important in terms of emotional support while trying to abstain. Additionally, emotional connection with people in “real-life” was repeatedly highlighted as important because online relationships did not seem to have the same bolstering effect for this group.

In the depression subcategory, some participants explicitly connected their relational experiences and their depression while others presented them as independent experiences. Participants who mentioned relationships and frustration in the same response, however, always connected the two. Perhaps something about frustration made it easier to tie it directly to
relational issues than some of the softer emotions like loneliness and depression. This is important information to know because clinically, some people might respond “frustrated” if asked how they are feeling and it is helpful to know that relationships are one area to assess when trying to understand contributing factors to the feelings.

While most participants identified multiple areas of stress in their lives, relational stress seemed to be the type of stress that most frequently pushed people to turn to PMO to cope. Stress is often a vague emotion we talk about clinically, and it could be helpful to make sure we assess relationship stress specifically—especially understanding that social connection is such a strong support for this population.

Since many coping strategies for relapse prevention are centered in the principle of emotional regulation, anything that helps prepare clients to better identify triggers and emotionally regulate through them is beneficial. This data may support using a more systemic assessment in clinical and research settings to bring awareness to clients about how their different emotions and life experiences are connected and impact one another.

**Discussion**

This qualitative study explored which factors led to relapse of PMO (pornography, masturbation, and/or orgasm) in a community of mainly non-religious self-identified problematic pornography users. After coding open-ended responses to the question, “What do you believe caused your failure to continue to abstain from pornography and masturbation?”, I found that the participants attributed their relapse to six main categories of factors—emotional, mental, physical, exposure to provocative content, relational, and an other category. The physical and exposure to provocative content categories were simple and straightforward, while the mental, emotional, and relational categories were nuanced and complex. As such, the physical and
exposure categories received a brief overview in this report, while the mental, emotional, and relational categories received in-depth analysis. There was also a significant subset of responses that described both relational and emotional experiences, that were then grouped into a new category of relational-emotional factors.

The responses from the physical category of reasons for relapse highlighted four main types of physical factors—physical urges, being tired, lack of exercise, and substance use. The descriptions of physical urges leading to relapse indicated that for many participants, sexual or physical urges felt out of their control and they did not know how to manage them without relapsing. Future research could explore how urging presents differently in problematic pornography use than physical cravings in different types of addictions in order to learn how to effectively intervene with this population. The other three main categories—sleep, exercise, and substance use—seem like simple areas of clinical intervention and may not need much further research to address effectively.

The exposure to provocative content category highlighted three different processes—unspecified exposure, intentional exposure, and accidental exposure. Many participants highlighted social media as a main mechanism of coming across provocative content (intentionally and accidentally). The difference between the group who intentionally sought out provocative content and the group who came upon it accidentally seems stark enough that they might be considered different clinical presentations in terms of relapse risk. It is important for future researchers and clinicians to clarify with people if they are accidentally being triggered or intentionally seeking out triggering content, as these might represent different phases of recovery from problematic pornography use.
Responses from the mental category of identified reasons for PMO relapse revealed four main subcategories—willpower, motivation, thoughts, and weakness. Many participants mentioned feeling like their brain was out of their control because it seemed to just “decide” to relapse without their permission. Similarly, the various types of mental triggers they described revealed a unique challenge for this group, most likely stemming from the fact that pornography is usually a visual medium. Some participants felt that previously viewed sexual images and videos were stored as memories in the brain and they could access them at any time without having to physically search for novel content—a description surprisingly consistent with previous bio-behavioral research showing how the brain stores memories during the sensation of withdrawal (Grant et al., 2006). Participants described these stored images and videos as intrusive thoughts, “hijacking their brain”, so to speak, after which relapse felt inevitable. Their description of feeling “hijacked” also aligns with previous research showing neurological similarities between drug-cue reactivity and sexual-cue reactivity in people struggling with compulsive sexual behavior (Voon et al., 2014). Experiencing intrusive memories of actual pornographic content (rather than just memories associated with an addictive substance or behavior) is a unique challenge for PMO relapse prevention versus other types of addictions. Future studies could address this particular struggle by building on existing models that are starting to specifically account for memories in pornography use (Brand et al., 2019). We could also look to the latest neurological findings about the role of memories in other types of addictions as a research model (Rich & Torregrossa, 2019). Another finding from the mental category of reasons for relapse was that articulated motivations for wanting to abstain from PMO varied from participant to participant, but it was unclear why most of them wanted to be “PMO-free.” It seemed like many had a vague expectation of abstinence improving several areas of their
lives, and some became frustrated when they did not see those improvements occur personally. This highlights the importance of clinicians and researchers asking why someone wants to remain abstinent before diving deeper into how to do so to be sure expectations line up with reality.

The emotional category of reasons for relapse separated into six subcategories—stressed, alone, bored, depressed, frustrated, and anxious. The overarching takeaway from this category might be that the participants frequently identified two or three different emotions combined together leading to relapse—rather than a single isolated emotion. Their experience with multiple simultaneous emotions supports previous research that emphasizes the complexity of interacting factors leading up to relapse in internet sex addiction (Griffiths, 2012). Additionally, depression and frustration were often mentioned in conjunction with relational dynamics. The fact that it was uncommon for a response to identify a singular emotion in this data provides further evidence that the emotions leading up to relapse can be complicated and may interact with one another (Lim et al., 2018). Awareness of this dynamic could inform future study designs or guide clinicians to intentionally address the potential for emotional interactions when creating relapse prevention plans with clients.

In the relational category of reasons for relapse, four subcategories emerged—general relational, specific relationship, lack of connection, and “can’t get girls”. The participants in this category referred to the experience of feeling alone as “loneliness”, “social isolation”, or feeling “disconnected” from others—three constructs that have, in fact, been identified in some studies as unique and different from each other, as they can have different effects on mental health outcomes (Cornwell & Waite, 2009). With no possibility of follow-up questions in this study, however, I have presented them as separate, but related, parts of the larger construct of
loneliness. Regardless of the specific verbiage chosen, across most of the responses there seemed to be a consensus that relationships with physical people in “real life” were more valuable (in terms of relational support) than “virtual relationships”. This finding mirrors a previous study’s conclusion that real life relationships increased authenticity and social network support for self-identified pornography addicts (Henderson, 2013).

This category also revealed that relationships in every area of life impacted the participants’ ability to abstain from PMO—not just romantic relationships. Specifically, people mentioned family, friends, coworkers, classmates, and others, in addition to romantic and sexual partners. In many behavioral and substance use addictions, broad social support is a pillar of relapse prevention strategies (Witkiewitz & Marlatt, 2004; Griffiths, 2005), but in the case of problematic sexual behaviors like PMO, the relational relapse prevention strategies tend to be focused mostly on romantic and sexual relationships—possibly ignoring other important relational dynamics in the overall system (Kraus et al., 2017; Griffiths, 2012). Future researchers and clinicians should be aware that, at least for this group, all relationship types had the potential to affect someone’s struggle with PMO relapse.

In looking at interactions between the main categories of reasons for relapse, the emotional and relational responses overlapped heavily, while the mental responses overlapped minimally with the other categories. Specifically, 70% of the relational responses also mentioned an emotion, and 30% of the emotional responses also mentioned a relational experience. Only 15% of mental responses also mentioned either an emotion or a relational experience. Consequently, the mental responses seemed to embody an individualistic perspective of relapse. These participants mostly highlighted their own personal failings (willpower, weakness) in
unemotional terms, without describing specific situations that might have contributed to those failings.

In contrast, the majority of relational responses also included emotions either as a result of, prerequisite to, or concurrent with the identified relational dynamic. Additionally, many of the emotional responses also identified a relational dynamic that contributed to their specified emotion. These patterns revealed a connection between relational dynamics and emotions in this group, possibly suggesting that when an emotion is mentioned as a stumbling block to a client’s ability to avoid PMO relapse, it may be prudent to explore relational dynamics to identify if any specific relationships are contributing to that emotional stumbling block. Or conversely, if a relationship challenge is identified as a stumbling block, identifying any specific emotions surrounding the relationship may create more specificity in a relapse prevention plan—as called for by previous research (Harris et al., 2011; Redish et al., 2008).

The relational-emotional category of reasons for relapse synthesized the information from the previous categories by highlighting four areas where emotions and relationships overlapped most frequently—lonely, depressed, frustrated, and stressed. Loneliness (alone, social isolation, disconnected, etc.) was mentioned most frequently in this group, which might have been because loneliness only exists within the paradigm of our relation to others (Wongpakaran et al., 2020). It was a common thread throughout the data in previous categories as well, showing that at least in this group, feeling lonely may be a common warning sign of impending PMO relapse.

Another main finding from the relational-emotional category was how two different groups of participants described their identified reasons for relapse. One group portrayed their emotions and relational dynamics as connected parts of one holistic overall experience, while the other group presented them as two separate and unrelated experiences. Frustration, in particular,
was always directly linked to a relationship, while depression and stress were only sometimes explicitly linked with relational dynamics. Without follow-up questions, it is impossible to know why some participants connected their emotions and relationships together while others kept them separate. Consequently, we cannot know if there were clinically relevant differences between the groups. There is evidence from existing research, however, to support that labeling and reappraising emotional experiences helps people calm down—facilitating emotional self-regulation (Creswell et al., 2007; Goldin et al., 2008; Torre & Lieberman, 2018). Further, emotional dysregulation was correlated with multiple behavioral addictions in a recent study (Lim, et al., 2018). It is possible that the first group (who connected the two experiences) was demonstrating a post-hoc “reappraisal” of their experience, while the second group (who separated their experiences) was demonstrating affect labeling without trying to make further meaning of it. A follow-up study could ask questions to clarify why these participants described their emotional and relational dynamics as connected or disconnected to clarify if emotional self-regulation was, in fact, part of the phenomenon being displayed and if it was, how it impacted each group’s recovery outcomes.

Finally, the most important high-level information gleaned from the relational-emotional category was probably the general evidence it provided that relationships and emotions are often heavily intertwined with one another—supporting current emotionally focused models of relationships and emotional regulation (Johnson, 2013; Shaver & Mikulincer, 2007). The two constructs interacted frequently in this group. This, again, suggests that when working with people trying to stop PMO, if they mention a relationship, it makes sense to follow up on any emotions they may be feeling. And inversely, if they mention an emotion, it makes sense to further assess the relationships in their life.
The findings in this study add to the current literature attempting to identify triggers in those trying to avoid PMO relapse (Brand et al., 2019; Kraus et al., 2017). One of the main differences in the current study from others studying PMO relapse is that these participants responded to this survey question as close to in the moment of relapse as possible because of its delivery mechanism. It was integrated directly into the online forum (NoFap subreddit) that they visited immediately to report their relapse to the group. This in the moment data most likely provides us with a more accurate reporting of their experiences preceding relapse than if they were asked to identify reasons for their relapse a few days, weeks, or even months after the fact—as is common with most studies using retrospective data (Parsons et al., 2013; Reid et al., 2011).

Overall, the patterns seen in the physical, exposure to provocative content, mental, emotional, relational, and relational-emotional reasons for relapse from this group support the basic premise of the original theory of relapse posited 35 years ago by Marlatt and Gordon (1985). Various intrapersonal-environmental and interpersonal determinants were specifically identified by these participants, supporting the idea that clinicians might be able to identify these risky situations or experiences ahead of time and work on specific coping skills to prevent relapse. These findings also support the more recent revision of Marlatt and Gordon’s original theory, the Process Model of Addiction and Recovery (Harris et al., 2011). This theory posits that finding the source of pain in a system and creating supportive systems to facilitate healthy coping helps with relapse prevention and resiliency. As many of the NoFap participants articulated feeling alone in combination with other emotions (stress, depressed, frustrated, etc.), it seems logical that building supportive relational systems would be an effective place of intervention for relapse prevention. Additionally, these findings support Redish and colleagues’
Unified Framework for Decision-Making, which highlights the many different vulnerabilities people can have that leave them susceptible to relapse. The broad spectrum of emotions and experiences articulated by the NoFap participants further support the theory that each addicted individual requires a specific plan to address their unique vulnerabilities.

While we have yet to see a comprehensive theory of relapse in SPPPU, the Metacognitive Model (Allen et al., 2017) hypothesizes that metacognitions (“thinking about thinking”) might lead to SPPPU relapse. While the mental category of reasons for relapse in the current sample might support this theory, the findings also highlight that metacognitions account for just one area of reasons for relapse. The Metacognitive Model does not specifically account for emotional, relational, or emotional-relational reasons for relapse. In contrast, the I-PACE model (Brand et al., 2019) for addictive behaviors suggests that there is an interaction between multiple areas of triggers (biological, psychological, social, emotional, etc.) and future research must explore these underlying factors more deeply to understand SPPPU. The current study’s findings support their recommendation that the interaction between different areas of reasons for relapse are essential to fully understand SPPPU. Specifically, interactions between emotional and relational factors frequently contributed to relapse in this group and are worth considering in future research.

Implications

The data from this sample covered a broad range of various identified reasons for PMO relapse. While the main categories that emerged were unsurprising and in line with current relapse literature for addictions generally (Brand et al., 2016a; Griffiths, 2012; Griffiths, 2005; Kraus et al., 2017; Witkiewitz & Marlatt, 2004), the open ended responses offered more detailed
insight for those working with problematic pornography use. As such, the knowledge extracted from these responses can be applied clinically quite naturally.

**Clinical Implications**

For clinicians working with people trying to reduce or remove PMO from their lives, the following suggestions are a combination of recommendations offered directly from these participants, as well as clinical areas to be aware of based on recurring themes from the data:

1) **Physical:**
   a. May need specific action plans for coping with unwanted sexual urges.
   b. Sleep, exercise, and general healthy lifestyle habits may help prevent relapse.
   c. Alcohol and drugs may lower window of tolerance for relapse triggers.

2) **Exposure to Provocative Content:**
   a. Clarify whether exposure is accidental or intentional.
   b. Include patterns of peeking and/or edging when addressing relapse prevention.
   c. Structural interventions (web filters, device limits, etc.) may help this area of vulnerability.
   d. In a relapse prevention plan, identify specific strategies for when a client finds themselves in a precarious position likely to lead to relapse (at home, alone, in front of the computer, etc.).

3) **Mental:**
   a. Explicitly identify a client’s motivation for wanting to abstain. What have they learned about PMO? From whom? What are the benefits they are expecting from abstinence? (ex: The current sample was mostly non-religious, and their motivations for abstaining were unclear from this data.)
i. Techniques such as motivational interviewing may be appropriate here if motivation is a major limiting factor in making progress towards relapse prevention.

b. Clarify what a client means if they mention “willpower” as part of their relapse prevention strategy. The vagueness of the term might contribute to this group’s sense that PMO is out of their conscious control.

c. Ask about intrusive or recurring thoughts and begin to address them if present.

4) Emotional:

a. When someone mentions feeling a specific emotion, slow them down and help make their implicit process explicit by exploring and putting language around other possible areas of their life that could be contributing to these emotions (see below for specific examples from these participants).

i. Feeling stressed about school, work, or relationships.

ii. Feeling depressed partially due to lack of social interaction.

iii. Feeling hopeless due to lack of success with romantic relationships.

iv. Feeling frustrated with specific relationships, or with the actual struggle to stop PMO.

b. Clarify and give language to the patterns that repeatedly lead to a client’s PMO relapse by understanding that PMO is often used as a coping mechanism for seemingly unrelated overwhelming experiences (see below for specific examples from these participants).

i. Procrastinating with PMO when stressed.

ii. Feeling lonely and wanting to numb out with PMO for a few minutes.
iii. Searching for emotional fulfillment or connection through PMO.

iv. Self-medicating with PMO for depression or anxiety.

5) Relational

a. Assess all areas of relationships in someone’s life—not just their romantic or sexual relationships. Identify any relational dynamics specifically contributing to the PMO.

6) Relational-Emotional

a. Be aware that relationships could be closely connected with overwhelming emotions—particularly loneliness, depression, frustration, and stress.

When taken together, the overall findings from this study emphasize the general message that when working with someone trying to eliminate PMO from their life, a comprehensive assessment of multiple areas of their life should be completed (including relationships, emotional coping strategies, thoughts, physical state, structural scheduling patterns, etc.). The material from this assessment should then be used to inform the details of a personalized relapse prevention plan, as suggested in current treatment models (Brand et al., 2016a; Griffiths, 2012).

Additionally, most of these life areas overlap with one another to some degree, so they cannot be treated as if they are independent of one another—particularly the areas of emotions and relationships.

Future Research

The current study used a mainly non-religious sample to explore relapse in self-perceived problematic pornography users and found six distinct categories of reasons for relapse. As much of the current research on SPPPU utilizes highly religious samples, these findings are unique to the field and suggest that contrary to some proposed theories about SPPPU (Grubbs et al., 2019),
some people perceive their pornography use as problematic even if they have no religious or moral objections to the practice. It is unclear what these participants’ motivation is for wanting to abstain from PMO, but future research could utilize similar samples to try to understand the perceived value of abstinence in non-religious samples.

Additionally, as there are currently few studies exploring possible clinical treatments for problematic pornography use, future research could use these six basic categories of identified reasons for relapse as a framework for future work on effective relapse prevention strategies in this population. While each of these categories has been identified in previous substance use disorders and other behavioral addictions, none has been explored specifically in regard to problematic pornography use.

And finally, as the field continues to try to understand the complexity of problematic pornography use, these findings suggest that future research—whether working to identify, define, assess, or treat it—should acknowledge and attempt to account for the overlap of factors from these differing life areas. In assessments as well as interventions, it is important to treat emotional and relational issues, in particular, as potentially significantly interactive—rather than as completely separate constructs.

**Limitations**

Due to the qualitative nature of this study, the findings presented here are uniquely detailed and offer valuable insight to the field about the issue of PMO relapse prevention that would be difficult to collect quantitatively. As with all research, however, there are some clear limitations that need to be addressed. First, the sample size (n=938) was exceptionally large for a qualitative study, lending unique strength and breadth to this exploration. The sample, however, was not representative or stratified—it was purposive, theoretical, and intentional. Although
these are precisely the sampling approaches recommended by leading qualitative researchers (Daly, 2008; Marks, 2015), these approaches still carry the burden of being non-generalizable and this is a significant limitation that must be acknowledged.

Additionally, it is unclear whether these participants could be clinically diagnosed with a disorder based on their described amount of PMO and life-distress. The *DSM-5* (American Psychiatric Association, 2013) includes no specific diagnostic code applicable to PMO as these participants describe it (problematic, causing significant distress, out of control, etc). And the World Health Organization’s (2019) *International Statistical Classification of Diseases and Related Health Problems* (11th ed.; ICD-11) includes a code for “compulsive sexual behavior disorder”, but it is unclear how many of these participants would qualify for the diagnosis. Without knowing if this sample meets the requirements to be considered a clinical population, their responses may not be as generalizable to actual clinical populations of people trying to prevent PMO relapse. It is worth noting, however, that even with more detail around the users’ amount of PMO, interruption to daily life, types of pornography viewed, etc., the question of “clinical diagnosability” would still not be resolved entirely. The field has yet to standardize a clinical definition of “pornography”, so there is likely a broad spectrum of mildly explicit to severely explicit (“mild” and “severe” being subjective terms themselves) content being reported on here, with no way to officially differentiate such usage—a problem noted in recent discussions in the field (Willoughby, 2019). Future research concerning pornography use could address this issue by incorporating the measures that have been created to standardize classifications and definitions of the types of pornography being viewed (Busby et al., 2020).

Another limitation is that the phrasing of the question on the survey included the phrase “failure to…abstain”. This had potential to bias the responses and could also affect
generalizability of the findings. This wording was intentional and agreed upon by multiple researchers—in accordance with what the NoFap moderators requested. Even so, it is possible the participants could have been influenced to highlight negative experiences due to negative connotations of the word “failure” in the question. For example, it is possible that a range of positive emotions, not captured in the answers to this question, could also lead to a PMO relapse (e.g. excited, happy, energized, hopeful, etc.). Follow-up studies could explore this possibility by offering these positive emotional responses as options more explicitly to balance the potential negative bias created by asking about negative emotions.

Additionally, this sample included almost entirely men—making the findings less generalizable to women or nonbinary people. It is necessary for future research to study the experience of women and nonbinary people who struggle with PMO as there is evidence that gender differences can affect pornography use and treatment (Paul & Shim, 2008; Schneider, 2000).

Finally, qualitative coding is always somewhat subjective, and “nun in a cell” coding (a single researcher completing most of the work alone) is perhaps the most vulnerable to being affected by personal bias, with fewer people to double check the codes to be sure everyone agrees (Marks, 2015). A numeric content analysis (NCA) is less subjective as it can mean simply reporting the number of times certain words appear in the responses—a process that would theoretically yield similar results regardless of the coder. But there were components of my data analysis that moved beyond strict numeric content analysis into more of a qualitative content analysis (Mayring, 2000; Schreier et al., 2020). After completing the initial NCA, I began to qualitatively code themes (rather than just words, as before) and subthemes, that I then sorted into categories, subcategories, groups, and on and on. During the sorting of these themes, I
viewed the data from an ecosystemic theoretical lens (Bronfenbrenner, 1981), meaning I also engaged in a type of informal comparative analysis to constantly gauge where the categories overlapped with one another. This was important because as I noticed their interactions with each other, the need for a final combined category became clear. While I believe this led to the most accurate representation of the data, and other qualitative researchers have employed similar analysis methods, it means my process was more fluid and harder to track than a strictly numeric content analysis (Epp, 2020). At several points during the coding of the data, my categories and groups were presented to experienced qualitative researchers for feedback about the accuracy of how I was representing the participants’ responses, but the majority of this truly qualitative analysis was completed by me alone. This, of course, created multiple opportunities along the way for me to make decisions about categorizing, grouping, presenting, omitting, etc. the data on my own. I believe I have represented the responses from the participants accurately, but a different researcher could have made different choices along the way, and no two reports would have looked exactly the same. All this to say, it is probable that there is bias in the presentation and narrative of my findings (as there is in any research study), but I have very intentionally tried to minimize its influence through systematic checks with others and scrupulous attention to the possible effects of my bias while coding, organizing, and presenting this data.

**Conclusion**

This qualitative study was designed to explore possible reasons for relapse among a group of self-identified problematic pornography users trying to abstain from what they have labeled PMO (pornography, masturbation, and/or orgasm). Previous limitations notwithstanding, the findings from these participants’ stories offer a unique perspective to the field. First, this was a mostly non-religious sample who were not motivated to abstinence because of religious or
moral reasons. Second, the findings align with current research that has found that there are multiple categories of possible reasons for relapse that can combine together to create a perfect storm of triggers (Griffiths, 2012). And third, these findings show how frequently emotional and relational factors, in particular, overlap just prior to PMO relapse. Application of the main findings suggest that clinicians and researchers should be aware of the frequent overlap between emotional and relational reasons for relapse when considering future research designs and relapse prevention strategies.
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Appendix A

Initial Qualtrics Survey

Intro

Thank you for your willingness to share your experience with us about this sensitive issue. We are researchers and clinicians from the School of Family Life at Brigham Young University who are passionate about figuring out what we are missing about the recovery process for individuals struggling with pornography usage. Please be as honest and detailed as is comfortable for you, as we will be reading your responses carefully to help us help others who are struggling.

All responses are anonymous. We are not collecting any identifying information from you (not even your username). Your courage to share with us will impact many people as we learn how to help them more effectively.

By continuing to the next page, you consent to answer questions that may cause emotional reactions as they deal with the specifics of your pornography use and emotional health.

Thank you!

Please complete the following Captcha:

Type the text

Privacy & Terms

Demographics 1

Age

Gender

Male
Female
Other

Do you consider yourself religious? (i.e. Attend church, read holy texts, practice religion, etc.)
Yes
No

Do you consider yourself spiritual? (i.e. Have a relationship with a higher power of some sort)
Yes
No

Are you in a committed relationship?
Yes
No

Partner's Perception

What is the status of your relationship?
Married
Cohabiting
Separated
Dating

Do you view pornography together with your partner?
Yes
No
How does your partner feel about your pornography use?

Advocates continued use
Indifferent
Views it as a problem (advocates abstinence from pornography)
__ Other: please explain__

Do you feel that pornography impacts your relationship?

Yes
No

How does pornography impact your relationship?

I believe it’s helping
I believe it’s hurting
If you’d like to tell us more about how it’s helping or harming, please do so here:

Addiction Specifics

How long have you been viewing pornography regularly?

Less than a year
1-5 years
6-10 years
11-20 years
21+ years
What age did you first start **seeking out** pornography **regularly**?

- Under 7
- 8-12 years
- 13-18 years
- 19-25 years
- 26-35
- 36+

How were you first introduced to pornography?

- A friend
- A family member
- Accidental exposure on the computer
- Accidental exposure on a handheld device
- Magazines
- I sought it out
- **Other:** please explain

How long have you been trying to stop viewing pornography?

- Less than 6 months
- 6 months-1 year
- 1-2 years
- 3-5 years
- 5-10 years
- more than 10 years

When you were viewing pornography the most, how often were you viewing it?

- 1x a month
- 1x a week
- 2-5x a week
What types of pornography you have sought out? (check all that apply, remember that all responses are anonymous)

- Magazines or Victoria’s Secret-type of images
- Nude images
- Videos without sound
- Videos with sound
- Violent sex

Other: please explain

If you are currently in 'recovery', approximately how many days has it been since your last relapse?


**X Set**

For most people we’ve worked with, pornographic thoughts and images tend to come and go, but for other people, they seem to intrude constantly.

We’ve found that some people will engage in either repetitive behaviors (hand-washing) or mental acts (counting) to help the thoughts go away. The purpose of the following questions is to help us understand how often this happens for people trying to overcome pornography use. Mark the statements that represent your experience.

I experience recurrent and persistent thoughts, impulses, or images.

I engage in repetitive behaviors (e.g. repeated hand washing, ordering/re-ordering objects, checking, etc.) or mental acts (e.g., obsessively counting, repeating words silently, etc.).
In this questionnaire you will read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

You rip a page out of a book in the library and take it with you. Your teacher discovers what you did and tells the librarian and your entire class. What is the likelihood that this would make you feel like a bad person?

After making a big mistake on an important project at work in which people were depending on you, your boss criticizes you in front of your coworkers. What is the likelihood that you would feign sickness and leave work?

You reveal a friend's secret, though your friend never finds out. What is the likelihood that your failure to keep the secret would lead you to exert extra effort to keep secrets in the future?

You secretly commit a felony. What is the likelihood that you would feel remorse about breaking the law?

We have found in working with individuals trying to stop habitual pornography use that emotions often play a big role. Please help us understand a little more about your relationship with your emotions by indicating which choice best represents your experience.

<table>
<thead>
<tr>
<th>I am attentive to my feelings.</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Half the time</th>
<th>Most of the Time</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I'm upset, I believe that I'll end up very depressed.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>When I'm upset, I lose control over my behaviors.</td>
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</tbody>
</table>

**Block A (OCD, FOO)**

Similar to the previous questions, the purpose of the following questionnaire is to help us understand better how often people trying to stop pornography use experience intrusive thoughts or behaviors. Please mark all that apply.
I engage in repetitive behaviors (e.g., repeated hand washing, ordering/re-ordering objects, checking, etc.) or mental acts (e.g., obsessively counting, repeating words silently, etc.).

These behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation.

These behaviors or mental acts images cause me anxiety or distress.

I experience recurrent and persistent thoughts, impulses, or images.

These thoughts, impulses, or images cause me anxiety or distress.

I try to ignore or suppress the thoughts, impulses or images with some other thought or action.

My intrusive thoughts or repetitive behaviors take more than one hour a day.

---

How would you describe the majority of your childhood? (check all that apply)

Peaceful, loving, happy
Safe, secure, stable
Full of conflict and hostility
Insecure, unstable, unsafe
Neither loving nor hostile, neutral
Other: please explain

---

Which best describes how you handled painful emotions as a child and teenager? (loneliness, rejection, bad day, scared, hurt, etc.)

Emotions were private. I didn't show them to my family or anyone else. (You may have cried in your room by yourself.)

I don't remember feeling strong painful emotions.

I shared my emotions with my parents or siblings who comforted me through them.

We talked about emotions in my family, but didn't openly experience them together.

Other: Please explain in as much detail as possible.
Did you have a family member who you could consistently go to for comfort?

Yes
No

**Block B (Shame vs. Guilt, Motivation)**

In the following 4 questions, you will again read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

You strongly defend a point of view in a discussion, and though nobody was aware of it, you realize that you were wrong. What is the likelihood that this would make you think more carefully before you speak?

You successfully exaggerate your damages in a lawsuit. Months later, your lies are discovered and you are charged with perjury. What is the likelihood that you would think you are a despicable human being?

Your home is very messy and unexpected guests knock on your door and invite themselves in. What is the likelihood that you would avoid the guests until they leave?

You lie to people but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?

How do you see regular pornography use? (Check all that apply)

It’s a minor irritation in my life
It’s negatively impacting me emotionally or sexually
It’s morally wrong
It’s interfering with my ability to function in life
It's an addiction that's gotten out of control
Other: Please explain in detail

What have you tried so far to stop viewing pornography? (other than joining the NoFap community)

Therapy
Worked with a religious leader
Self-help reading or online programs (other than joining NoFap)
12-step program, or something like it
Mindfulness or Meditation
Other: Please explain in detail

We want to understand what prevents people trying to reduce their pornography use from utilizing therapy. Please help us by marking all of the following reasons that have kept you from seeking therapy.

I don't think the problem is really that bad--therapy is for people who have more serious problems.
I'm embarrassed to seek outside help.
It costs too much money.
It would take too much of my time.
I wouldn't know where to go.
Other: Please explain in detail
What has helped the most in trying to stop viewing pornography?

Block C (Emotional Regulation)

Please help us understand a little more about your relationship with your emotions by indicating which choice best represents your experience.

<table>
<thead>
<tr>
<th>When I’m upset, I acknowledge my emotions.</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Half of the Time</th>
<th>Most of the Time</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I’m upset, I have difficulty concentrating.</td>
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<tr>
<td>When I’m upset, I believe that wallowing in it is all I can do.</td>
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<tr>
<td>When I’m upset, I feel guilty for feeling that way.</td>
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<tr>
<td>I have difficulty making sense out of my feelings.</td>
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<tr>
<td>When I’m upset, I feel ashamed with myself for feeling that way.</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
When I'm upset, I have difficulty focusing on other things.
I experience my emotions as overwhelming and out of control.
I have no idea how I am feeling.

Open-ended Questions

In the moment of feeling the urge or craving to view pornography, what do you do that is most helpful in preventing a relapse?

How do you make sense of your compulsive pornography use? Why do you think you have the urge to view it so frequently?

What are the messages you've received about pornography in your life?
How do you feel about yourself generally?

What do you wish researchers were asking about this issue?

What are your goals for recovery? What does “recovery” look like to you?
Appendix B

Second Qualtrics Survey

Default Question Block

Thank you for being willing to share your experience. Our goal is to evolve the world's understanding of the cycle of relapse. Please feel free to answer this short survey honestly - your responses will be anonymous.

What time of day did you relapse?
Morning
Afternoon
Evening
Night
Other

Where did you relapse?
Home
Work
School
Other

What day into your current streak did you relapse?

What was the largest factor (or “trigger”) that led to your relapse?
Exposure to provocative imagery in a movie, music, magazine, or other media (NOT online)
Exposure to provocative content online
Seeing or conversing with someone in person
Felt a physical urge with no external trigger
Other:
On a scale of 1-10, how balanced/healthy would you rate your diet in the last 24 hours? (1=very unhealthy, 10-very healthy)

<table>
<thead>
<tr>
<th>Unbalanced</th>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
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<tr>
<td>4</td>
<td>5</td>
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<tr>
<td>6</td>
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<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

How many hours of sleep have you gotten in the last 24 hours? (0-15+)

<table>
<thead>
<tr>
<th>Hours of Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
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<tr>
<td>9</td>
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<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

How often do you get 30 minutes of exercise on average?

- Never-rarely
- 1-2x a week
- 3-5x a week
- Daily
- Multiple times daily

How frequently have you exercised for 30+ minutes in the past week?

- The same as my usual
- Less than my usual
- More than my usual

What do you believe caused your failure to continue to abstain from pornography and masturbation?
What emotions were you feeling in the hours before you relapsed? (Mark all that apply)
- Bored
- Hurt
- Lonely
- Sad
- Tired
- Ashamed
- Frustrated
- Overwhelmed
- Hopeless
- Guilty
  Other

What were the major contributors to those emotions? (mark all that apply)
- Stress (school, work, etc.)
- Feeling inadequate
- Conversation with someone
- Other
  Other

How do you feel about the act of relapsing? (mark all that apply)
How likely are you to relapse again soon (within the next few days)?

Very Unlikely
Unlikely
Somewhat Unlikely
Undecided
Somewhat Likely
Likely
Very Likely

Were there times during the war that you had cravings, but successfully avoided relapse?

Yes
No

How did you avoid relapse up to this point? "Instead of looking at pornography or masturbate, I..." (mark all that apply)

Exercised
Called someone
Wrote in a journal
Went for a walk
Meditated
Prayed
Other: Please explain

What has been the most helpful strategy for you in continuing to abstain from pornography and masturbation in the past? Please explain in detail.
Appendix C

Q16 NoFap Fail Codebook (Round 2)

Q16: What has been the most helpful strategy for you in continuing to abstain from pornography and masturbation?

6 parent categories of strategies for relapse prevention emerged—
1) Emotional
2) Mental
3) Physical
4) Relational
5) Spiritual
6) Structural

Nodes

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Files</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional</strong></td>
<td></td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Hope</td>
<td>Maintain hope.</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Low Stress Level</td>
<td>Lowering stress, not procrastinating, staying on top of schoolwork, going on vacation.</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Motivation (Belongs in multiple parent categories)</td>
<td>Any source of motivation for remaining abstinent. Or watching motivational movies. Different from “willpower” because it’s not just a blanket statement “don’t do it”, it’s more of “think of the reasons why I don’t want this”.</td>
<td>1</td>
<td>162</td>
</tr>
<tr>
<td>Positivity</td>
<td>Positive mindset, mental state, thinking positively, remembering the successes not failures.</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Self-Esteem and Worthiness</td>
<td>Self-esteem boost, worthiness in terms of relationship with higher power or with others, also self-compassion.</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td><strong>Mental</strong></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Avoiding Thoughts</td>
<td>Avoiding thinking about PMO, or triggers.</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>Fighting My Mind</td>
<td>A more intense version of “think of something else”. More of an active “shut it down” type of mindset, or the actual word fight in regards to the urges.</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Focus</td>
<td>Focus on abstinence.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Files</td>
<td>References</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>HALT</td>
<td>Hungry, Angry, Lonely, Tired</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Meditation</td>
<td>Meditation.</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>Mindfulness</td>
<td>Mindfulness, being mindful, living one day at a time, slow breathing, acknowledging emotions, not fighting the urge when it comes.</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td>STAR</td>
<td>Step back, take a few deep breaths, ask myself what I want, respond healthily.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Think of Something Else</td>
<td>Thinking of something else in the moment or just in general all the time trying to think of something else.</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Urge Surfing</td>
<td>Urge surfing, meaning riding the wave of the urge until it passes, rather than trying to fight it hard.</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Willpower</td>
<td>Just a “shut-down” response to cravings and desire. Or the word willpower.</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>Writing</td>
<td>Writing in the moment, or a regular journal.</td>
<td>1</td>
<td>11</td>
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<tr>
<td>Focused On Something Else</td>
<td>In general, focused on some other goal or achievement to work toward. Not really “in the moment” change of focus.</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Goals</td>
<td>Life goals or PMO goals.</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>Other</td>
<td>Other.</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Contradiction</td>
<td>Response was unclear.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Nothing</td>
<td>Nothing has worked.</td>
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<td>16</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exercise</td>
<td>Unspecified exercise.</td>
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<td>88</td>
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<tr>
<td>Eating Healthy</td>
<td>Eating healthy or clean.</td>
<td>1</td>
<td>16</td>
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<tr>
<td>Exercise ATT</td>
<td>Exercise all the time. In life, regularly, daily, etc.</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Exercise ITM</td>
<td>Exercise in the moment—as a distraction from the urge.</td>
<td>1</td>
<td>8</td>
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<tr>
<td>Sleep</td>
<td>More sleep, scheduled sleep.</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Physically Stop Arousal</td>
<td>Physical strategies to stop arousal once it is already started. Doesn’t include cold showers.</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Cold Showers</td>
<td>Cold showers.</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Files</td>
<td>References</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Medication</td>
<td>SSRI’s, ADHD, etc.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sober From Substance Use</td>
<td>Sober from alcohol or substances. Most of these references relapsed because they were under the influence.</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Positive Punishment</td>
<td>Punishing oneself for relapsing or having triggering thoughts.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Relational</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Being with People</td>
<td>Physically, mentally, or emotionally, reaching out to people in the middle of an urge.</td>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td>12-Step</td>
<td>Alcoholics Anonymous.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Accountability</td>
<td>Accountability, support group, close friend.</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>Asking For Help</td>
<td>Asking for help to another person, group, online, etc. Therapist, parents, friends, relationship, etc. Similar to “Accountability”, but isn’t about reporting sobriety. It’s more about reaching out emotionally for support.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Connection</td>
<td>Connection to another human or animal. Reaching out online, support groups, relationships, etc. <em>This is sort of a sister-node to relationships and being with people. I just wanted to specify when people specifically talked about something like emotional connection.</em></td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Have Sex</td>
<td>Within a relationship.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Abstinence</td>
<td>Not having sex.</td>
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<td>1</td>
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<tr>
<td>NoFap</td>
<td>Any mention of NoFap</td>
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<td>42</td>
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<tr>
<td>Relationship</td>
<td>Any type of meaningful relationship with someone (significant other, romantic, close friend, future relationship).</td>
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<tr>
<td>Spiritual</td>
<td></td>
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<td>0</td>
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<tr>
<td>Religion and Spirituality</td>
<td>Religion, spirituality, higher power.</td>
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<td>26</td>
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<tr>
<td>Prayer</td>
<td>Prayer.</td>
<td>1</td>
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</tr>
<tr>
<td>Structural</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Busy or Occupied</td>
<td>Staying busy in order to minimize</td>
<td>1</td>
<td>189</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Files</td>
<td>References</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>opportuni...</td>
<td>opportunities for relapse. Sometimes a long list of activities.</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Active</td>
<td>Active in recovery process, not passive, always trying to avoid it, better yourself. “Active lifestyle”. Engaged in life?</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>Distract</td>
<td>Mostly an in-the-moment response, but also just general “distract myself” with no further explanation. NOT “Do something else” because they use the word distract. NOT “busy” because busy is all the time.</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Do something else</td>
<td>In general, doing something else with no further explanation.</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Do Something Else</td>
<td>Doing something else all the time. Similar to focused on something else, but not using the word focus.</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>ATT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Something Else</td>
<td>Doing something else in the moment, in response to the urge.</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>ITM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>ITM and ATT. Reading as something else to spend time on.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Video Games</td>
<td>Video games. Some report it being like a different addiction, others like a distraction, others stress relief.</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Living Life</td>
<td>Not trying to actively avoid or abstain. Not constantly thinking “I’ve gone so many days since I’ve relapsed” or letting recovery consume you. Just living your life.</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Hobbies</td>
<td>Thinking about or actually doing hobbies.</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Productive</td>
<td>Anything about self-improvement, purpose, intentionality, and/or productivity. NOT work or school.</td>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td>Run Away</td>
<td>Physically remove oneself from the compromising situation. Run out of the house, close the computer, walk to a different room, etc.</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Avoiding situation</td>
<td>Avoiding the physical situation that leads to relapse (bed, room, alone in the house, etc.).</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Avoiding triggers</td>
<td>Sexual triggers as well as emotional triggers (bored, lonely, stressed).</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Files</td>
<td>References</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Device Limits</td>
<td>Being physically far from a physical device, shutting down a device, limiting device usage time, keeping device in separate room.</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td>Filters</td>
<td>Internet filters or porn blockers.</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Get outside (stay out of the house)</td>
<td>Going outside in the middle of an urge. Staying/getting away from the house.</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>Minimize Internet Time</td>
<td>Limiting time on the internet, but not necessarily time on the physical device. <em>A few mention social media specifically, or reddit, or other specific sites.</em></td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>No Peeking or Edging</td>
<td>No peeking or edging (browsing the internet for mild sexual content, watching sex scenes in movies, masturbating without orgasm).</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Relapse Prevention Plan</td>
<td>Some plan in place for how to respond when the urge comes.</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Schedule, Plans, or Routine</td>
<td>Having a daily schedule or routine, or planning activities for the day to limit opportunities to relapse, keeping to a schedule.</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Work</td>
<td>Work or school.</td>
<td>1</td>
<td>31</td>
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</tbody>
</table>
Appendix D

Q7 NoFap Fail Codebook (Round 3)

Q7: “What do you believe caused your failure to continue to abstain from pornography and masturbation?”

Nodes

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Files</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional</strong></td>
<td>Any emotion mentioned (bored, tired, lonely, sad, hurt, scared, etc.)</td>
<td>1</td>
<td>227</td>
</tr>
<tr>
<td>Anxious</td>
<td>Includes the word “anxiety”.</td>
<td>1</td>
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<tr>
<td>Bored</td>
<td>Includes the word “bored”.</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td>Depressed</td>
<td>“Depressed” and “Sad” included.</td>
<td>1</td>
<td>41</td>
</tr>
<tr>
<td>Frustrated</td>
<td>Frustration, annoyance, no mention of “anger”.</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Lonely</td>
<td>Lonely</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Stressed</td>
<td>Stress, not anxiety.</td>
<td>1</td>
<td>77</td>
</tr>
<tr>
<td><strong>Exposure to Provocative Content</strong></td>
<td>Any exposure to actual provocative content (not just in their mind): online, social media, in real life, physical, video games, etc.</td>
<td>1</td>
<td>57</td>
</tr>
<tr>
<td>Accidental Exposure</td>
<td>Specifically mention that they weren’t looking for it, they “stumbled upon it”, accidental, etc.</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>Instagram</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Intentional Exposure</td>
<td>Mentions “searching” or “looking for” provocative material, browsing for images, etc.</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>edging</td>
<td>Physical sexual stimulation, but stopping (or attempting to stop) just short of orgasm.</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Peeking</td>
<td>Searching for revealing photos online, but not intending to actually masturbate or orgasm to them.</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Great Quotes</td>
<td></td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td><strong>Mental</strong></td>
<td>Mention “mental fortitude”, “willpower”, “motivation”, “self-discipline” or thoughts.</td>
<td>1</td>
<td>232</td>
</tr>
<tr>
<td>Motivation-Willpower</td>
<td>Includes motivation, willpower, weakness, commitment, etc. “Willpower” and</td>
<td>1</td>
<td>164</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
<td>Files</td>
<td>References</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>“motivation” feel like very similar, or interchangeable, concepts in answer to this question.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak Mental Fortitude</td>
<td>Many similar quotes as “motivation-willpower”, but specifically mentions “weakness” in regards to willpower or commitment.</td>
<td>1</td>
<td>53</td>
</tr>
<tr>
<td>Thoughts</td>
<td>Thinking, memories, dreams, mind, fantasizing.</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>Provocative thoughts</td>
<td>Entertaining thoughts specifically about sex or other arousing material.</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Rumination</td>
<td>Similar to “provocative thoughts”, but specifically articulates not being able to take the mind off for long periods of time.</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1</td>
<td>75</td>
</tr>
<tr>
<td>Habit</td>
<td></td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Not sure</td>
<td></td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Reward</td>
<td></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Time Management</td>
<td></td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Too much computer time</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Unscheduled time</td>
<td></td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Triggering circumstances</td>
<td></td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Video games</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Physical</td>
<td>Includes sleep, physical urges, lack of exercise, hormones, substances, arousal.</td>
<td>1</td>
<td>157</td>
</tr>
<tr>
<td>lack of exercise</td>
<td></td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Substance Use</td>
<td></td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Tired</td>
<td></td>
<td>1</td>
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<td>Urge</td>
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<td>I can't get girls</td>
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<td>Lack of connections</td>
<td>Emotional connection with current relationship or wanted relationship, or loneliness tied to social or relationship.</td>
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<td>Relationship</td>
<td>Girlfriend, wife, partner, sex-life, crush, etc.</td>
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### Appendix E

#### Self-Reported Reasons for Pornography Relapse

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