Portfolio 1: Major Research Project

The Social Processes Maintaining Engagement in Repetitive Self-Harm

Millie Witcher

19000295

Submitted to the University of Hertfordshire in partial fulfilment of the requirement of the degree of

Doctor of Clinical Psychology

June 2023

Word Count: 29932

Acknowledgements

"Scars are a sign that you have healed and knowing that you are capable of stopping" (May)

"Let everything happen to you: beauty and terror. Just keep going. No feeling is final"

Rainer Maria Rilke

Table of Contents

List of Tables:

List of Figures

List of abbreviations used throughout:

A&E: Accident and Emergency

BPD: Borderline Personality Disorder

CMDU: Cognitive Model of Drug Urges

DSM: Diagnostic and Statistical Manual of Mental Disorders

EBE: Expert by Experience

EUPD: Emotionally unstable personality disorder

GT: Grounded Theory

GP: General practitioner

ICD: International Classification of Diseases

MH: Mental Health

MMAT: Mixed Methods Appraisal Tool

NHS: National Health Service

NICE: National Institute of Clinical Excellence

NSSI: Non-suicidal Self-Injury

RSH: Repetitive self-harm

SH: Self-harm

SLR: Systematic Literature Review

Abstract

Background: Epidemiological studies evidence increasing rates of self-harm within the United Kingdom and pressure on the National Health Service to adequately support individuals who engage in repetitive self-harm. Repetitive self-harm is defined as five or more occurrences of SH within a one-year period. There is a developing evidence base to suggest that repetitive self-harm can be conceptualised as an addictive behaviour, but results are conflicting.

Methodology: This research aimed to qualitatively explore whether repetitive self-harm is experienced as an addictive behaviour, using existing theories and knowledges about addiction and addictive behaviours. Semi-structured interviews were completed with 15 adults aged 20-61 years with current or past experience of repetitive self-harm. Constructivist Grounded Theory methodology was used to guide the collection and analysis of data.

Findings: A conceptual model illustrating the addictive processes within repetitive self-harm was co-constructed, highlighting the dynamic and interacting factors that maintain engagement. Categories were identified that depicted participants journeys with self-harm over time: 'Starting' and soon 'Needing to punish myself' led on to self-harm 'Feeling addictive'. Once they had engaged with repetitive self-harm 'Having the urge to self-harm' and a 'Conflicting relationship with self-harm and self' was ongoing. Throughout each incidence of SH, participants experienced a cycle of processes that interacted, describing this as the *"Cycle of SH"* involving: 'Managing emotions', 'Allowing me to function', 'Caring for myself', 'Controlling' and 'Feeling guilt and shame after self-harm'. It was constructed that 'Responding to others' reactions' interacted with the *"Cycle of SH"* but also led to 'Breaking the cycle'. For some, this led to 'Relapsing' and returning to the cycle.

Conclusions and implications: This work evidences the potential benefits of conceptualising RSH as an addictive behaviour, in particular drawing upon the wealth of models to understand, treat and recover. The findings have generated new knowledges with the potential to influence clinical understanding, treatment and seek to reduce misconceptions and stigma around SH. Clinical, policy and research invitations are discussed.

Chapter 1: Introduction

Chapter Overview

This research aimed to use existing theories and knowledges about addiction and addictive behaviours to explore whether repetitive self-harm (RSH) is experienced as an addictive behaviour. This chapter begins by situating myself as the principal researcher, outlining my relationship to the project and how a critical realist epistemology was utilised throughout. I present and discuss language and key terms used, and the epidemiology of self-harm (SH). Relevant literature is summarised to situate the current study in context, including historical context, current empirical understandings of RSH, how this is assessed, managed, and treated within clinical settings at present. Finally, the chapter discusses conclusions drawn from the literature and presents a rationale for the systematic literature review (SLR).

Situating the Researcher

Charmaz (2014) states it is not possible for researchers to truly remain 'outside' of the research process. Therefore, it is paramount researchers acknowledge and consider the impact of their position, potential biases, privileges, and values on all elements of the research. This is of particular importance when undertaking qualitative research where I, as the principal researcher, am filtering data gathered through my own personal lens and play an active role in the construction of meaning and knowledges (Berger, 2015; Kacen & Chaitin, 2006). Ongoing consideration and evaluation of the role of the researcher has been shown to support both the rigor and credibility of research (Cutcliffe, 2003; Horsburgh, 2003).

Within qualitative research, it is understood it may not be possible to 'bracket off' researchers pre-existing experiences and understanding of SH (Webb, 1997). However, when presented transparently, the role of the researcher in the construction of knowledge can be critically evaluated and readers can form their own conclusions. Clarke (2012) highlights "research reality" is formed by contributions from both the researcher and participants. First-person pronouns will be used throughout to represent and acknowledge my role, influence, and reflections (Tang & John, 1999). Third-person pronouns will be used to represent and centre the participants voices within the current study.

Personal relationship to the project

I identify as being female and 'White British'. I also identify as having lived experience of RSH over a number of years. Throughout adolescence, I used SH as a way to cope with external events but also feelings of overwhelming emotions inside me. This was a private act which often-evoked feelings of shame. When I began to want to stop engaging in this behaviour, I realised over time, it had

increasingly become out of my control; I felt unable to stop even though I wanted to. My experience of stopping SH felt similar to personal experiences of breaking other habits or "addictions". This experience has always fascinated me.

SH scars are something I have always been hyperaware of and paid great attention to. However, over the years my relationship towards my scars has changed. Initially, I would ensure they were always covered within professional settings due to often unnamed stigma around the questioning of clinicians 'fitness to practice' if they have their own lived experiences of mental ill-health and what clinical psychologists should and should not look like (British Psychological Society, BPS, 2020). Stirling and Chandler (2021) discuss this further through dialogue reflecting on their similar experiences as researchers and MH professionals with SH scarred bodies. Through the discovery of inspirational lived experience clinicians and researchers (Longden et al., 2012), I have felt able to talk about my SH experiences within my professional role.

Within my clinical roles in a wide range of settings, I have worked with many individuals who SH. I have unfortunately witnessed, and experienced first-hand, the stigma and an apparent lack of understanding from many MH professionals towards clients who engage in SH. The main narrative observed is those who SH are "attention-seeking" or "manipulative" to ensure MH services remain engaged. I have also worked with many who engage in RSH and describe feeling "addicted" to it or use terms such as "relapse" when returning to the behaviour after a period of abstinence. The combination of my personal and professional experiences and interests have led me to, and shaped, the research questions of this study.

Position of the researcher

Empirical evidence highlights potential benefits of researching an area one identifies as personally connected to, including pre-existing knowledges (Bell, 2005), shared understandings (Asselin, 2003), and faster acceptance of the researcher by participants (Talbot, 1999). However, these advantages also contribute disadvantages and causes for concern (Serrant-Green, 2002). Potential drawbacks of insider research include a lack of objectivity within data analysis (DeLyser, 2001; Workman, 2007), inherent researcher bias (Merriam et al., 2001), and queries about the scientific rigor and reliability of findings (Sikes & Potts, 2008). Whilst acknowledging possible disadvantages of my lived experience, I believe it has largely assisted me in the conceptualisation and development of this study. Importantly, some participants shared feelings of validation that the principal researcher had, and named, lived experience of SH.

I strived to remain cognisant throughout the study, of the many ways I remain an outsider to this population. For example, I was conscious of my identity as a MH professional and power imbalance when speaking to participants with difficult and (often) traumatic experiences of MH services. I recognised my position as a white person, the privileges that affords me and the impact race and racism has played in shaping my experiences of SH. Research has evidenced fewer people from the global majority access either physical or MH services for support with SH (Cooper et al., 2013). Finally, I no longer engage in this behaviour, but many participants continued to do so and have throughout their adult lives. To acknowledge both my similar and dissimilar experiences, I consider my position as an 'Insider-Outsider' (Dwyer & Buckle, 2009).

Epistemological position

Informed by the belief there is an objective reality for individuals who SH, a critical realist stance (Bhaskar, 1978) was taken throughout. Ontologically, critical realism assumes data allows us to explore participants' reality "which exists independently of the researcher's awareness of it" (Willig, 2013). However, unlike positivist epistemologies, this reality is not viewed "as a direct mirroring" (Willig, 2013). Instead, our reality of social processes or constructs are generated and mediated through lenses of language, experiences, and social environments (Oliver, 2012). Bhaskar (1986) posited that our social reality is made up of social, historical, and environmental contexts and the meaning we have made of these, whether participants and researchers are conscious of this or not. Therefore, it is impossible to investigate or critically analyse a concept (which has been inherently socially constructed) from an 'objective' researcher position, as we are unable to separate our own perspectives and realities.

Critical realism aligns with my personal, political, and philosophical views that our realities continue to be constructed and reconstructed by our varying experiences in the world. Therefore, it felt fundamental to own the perspective I brought to both the development and execution of this study as the principal researcher. I reflected that, as an adult with lived experience of RSH, within teenage years, my reality of RSH has shifted and changed and is now very different to the construction of RSH I understood when younger and engaging in this behaviour. Unlike other epistemological positions, critical realism highlights the distressing reality of those who engage in RSH, the physical trauma of harming oneself, and the stigma experienced by many (Inckle, 2017). Finally, my reality of RSH afforded insight into personal experience of its addictive elements, my clinical experience allowed some understanding of clients' realities of the potentially addictive qualities and addiction language used when describing their experiences (e.g., "relapse"). However, these realities do not appear to be widely explored or conceptualised within SH literature or clinical practice.

Language and Key Terms

Language, and how we use it, plays an instrumental role in how we understand and conceptualise our realities (Fairclough, 1989). It is continually socially constructed and reconstructed, with outdated language often replaced by newer terms to reflect current society and how a concept is viewed (Bruffee, 1986). Anthropologists highlight language is inherently social (Geertz, 1983) and shaped by the current social and political context. Ignatieff (1984) suggests, due to the constant reconstruction of language, there may be times where we, as humans, lack the language to adequately describe an emotional experience. For clarity, key terms used throughout, will be presented, and discussed below.

Self-harm (SH)

National Institute for Health and Care Excellence (NICE) guidelines define SH as "intentional self-poisoning or injury, irrespective of the apparent purpose of the act" and as "an expression of personal distress, not an illness" (NICE, 2022). Intentional SH is the term used within the eleventh version of the International Classification of Diseases (ICD-11, World Health Organisation [WHO], 2022) and the diagnostic criteria employed within the National Health Service (NHS).

Within the literature there are many different terms used interchangeably or without specificity to reference SH (Muehlenkamp, 2005). The term Non-Suicidal Self-Injury (NSSI) is more widely used in the United States and features as NSSI "disorder" within the fifth version of the Diagnostic and Statistical Manual (DSM-IV) of Mental Disorders (American Psychiatric Association [APA], 2013). Klonsky et al. (2014) defined this as "the intentional destruction of one's own body tissue without suicidal intent and for purposes not socially sanctioned". Examples of the numerous terms used to define this behaviour include but are not limited to: SH (Carr et al., 2016), deliberate SH (Hawton et al., 2000), self-injury (Nock, 2010), self-injurious behaviour (Iwata et al., 1994; Muehlenkamp, 2005), and self-mutilation (Ross & Heath 2002). The term SH is more widely used in the United Kingdom (UK) and Europe.

For the purpose of this research, the term SH will be used to describe:

> intentional cutting, burning, branding, scratching, picking at skin or reopening wounds, biting, head banging, hair pulling, hitting, and bone breaking.

Unlike NSSI, the term SH is used as it does not imply motive or intent of the behaviour (Silverman, 2016; Skegg, 2005). SH will not be used within this study to refer to harm arising from:

> overeating, body piercing, body tattooing, excessive consumption of alcohol or recreational drugs, restricted eating or starvation arising from eating difficulties or accidental harm to oneself.

The rationale for not including harm arising from the above was because this aligns with the current NICE (2022) guidelines definition and limited definitions found within the literature.

Repetitive self-harm (RSH)

The focus of this study is on adults who engage in RSH, defined within the available literature in a number of ways and featured within both the ICD-11 and DSM-IV. Research suggests SH can be either episodic or repetitive in frequency (Nock & Favassa, 2009), with the former occurring more during adolescence (Heath et al., 2008) and the latter occurring as an individual gets older. Findings from non-clinical populations postulate a cut off of five or more occurrences of SH within a 12-month period as the distinction for RSH (Bjärehed & Lundh, 2008; Klonsky & Olino, 2008; Shaffer & Jacobson, 2009). Recent evidence concluded RSH is common, with approximately 20% of individuals repeating SH within one year (NICE, 2022).

Addiction

Addiction is an abstract concept which scientists have sought to define and understand since 1844 (West & Brown, 2013). The accepted definition of addiction includes, to some extent, a state of physiological adaptation and subsequent dependence on a drug within the body. However, researchers believe it is important to distinguish between 'physical dependence' and addiction. Physical dependence is defined as a state of physiological adaption to a substance which must be taken in order to prevent withdrawal effects (O'Brien et al., 2006). The DSM-IV replaced the term 'dependence' with 'addiction' in 2013. Some addiction researchers support this decision (O'Brien et al., 2006), whilst others contest it (Erickson & Wilcock, 2006).

West and Brown (2013) define addiction as "a chronic condition in which there is a repeated powerful motivation to engage in a rewarding behaviour, accompanied as a result of engaging in behaviour, that has significant potential for unintended harm." The ICD-11 outline criteria for diagnosing disorders due to substance use or addictive behaviours and define these as "mental and behavioural disorders that develop as a result of the use of predominantly psychoactive substances, including medications, or specific repetitive rewarding and reinforcing behaviours".

Orford (2001) posits that the interchangeable use of addiction and dependence has limited and "seriously biased our theoretical understanding". He suggests that the focus on 'drug addiction' or 'substance abuse' has hindered the exploration and development of adequate theory. Addiction language has been heavily constructed by historical, political, and societal contexts. An example of this can be found with smoking tobacco which was not understood to be addictive until 1988 (US

Department of Health & Human Services, 2016). However, nicotine addiction is now one of the largest public health concerns in the UK (Public Health England, 2015).

Addictive behaviour

Addictive behaviours are thought to differ from 'physical dependence' and addiction as they have not yet been found to have a physiological response or dependence. There is a body of evidence (Miller, 1985; Orford, 2001) which posits a wide variety of behaviours can be addictive. Marlatt and colleagues (1988) define addictive behaviours as "a repetitive habit pattern which increases the risk of associated personal and social problems". They stipulate these behaviours are associated with a loss of control. Research suggests gambling (Dickerson & O'Connor, 2006), shopping (Rose & Dhandayudham, 2014), sex (Goodman, 1992), and gaming (Griffiths, 1993) can be conceptualised as addictive behaviours (Lemon, 2002). Many of these are not included in either the DSM-IV or ICD-11 at present, mainly due to insufficient evidence on whether these repetitive behaviours can be characterized as a form of addiction (Grant & Chamberlain, 2016). Since the release of the DSM-IV (APA, 2013), gambling disorder is included within the 'Substance-Related and Addictive Disorders' chapter as a result of growing evidence stating phenomenological and biological similarities to substance use disorders (Grant et al., 2010). What we as a society understand to be an addictive behaviour is constantly evolving, with new research evidencing the addictive components of many behaviours.

Orford's (2001) seminal paper conceptualises addiction as an "excessive appetite" for certain experiences and theorises this can include non-substance forms of addiction, such as gambling, sex, or exercise. He suggests, when using a broad definition of addiction, such as: "an attachment to an appetitive activity, so strong a person finds it difficult to moderate the activity despite the fact it is causing harm", terms of addiction and addictive behaviours become far more inclusive.

A note on language use within this study

Terms used by authors will be directly cited in an attempt to adequately summarise and review the available literature, situating the research in a historical, empirical, and theoretical context. I do not personally agree with a number of these terms and their implications, for example the description of SH as a "maladaptive behaviour" or "disordered". However, through the use of a critical realist epistemological position, attention to and critical analysis of both SH and addiction language will be taken throughout.

A de-colonising action plan was considered in relation to who the research was designed by and for. Accepted 'knowledges' around SH are often created and developed by medical professionals with limited personal experience. It is important to note historically and currently, the majority of MH

research has utilised homogenous samples of white participants (Miller & Cross, 2006; Yancey et al., 2006). Research into SH is no different, and terminology developed to describe this behaviour has been devised by white Europeans, within Western cultures (Hodes, 1990). The concept of whiteness (DiAngelo, 2015) will be considered throughout the research process, specifically in regard to the current accepted 'evidence-base' and therapeutic approaches for SH. Consideration will be given to the differing experiences of SH or treatment options available to people of the global majority (Cooper et al., 2013; Lim, 2020).

Situating the research in context

Brief history of SH in the UK

It is important to consider the historical context in relation to how SH is conceptualised and understood today. In the 1950s, the idea a person may harm themselves to communicate something to others began to emerge in the West (Millard, 2015). This was thought to be through 'overdosing', a phenomenon termed 'attempted suicide'. It became apparent to psychiatrists that ending one's life was not always the intention for patients and other terms were considered, such as 'parasuicide' and 'self-poisoning'. In 1961, the Suicide Act decriminalised attempted suicide in England and Wales (Neeleman, 1996) and patients began to be referred to psychiatrists for support with this public-health concern. The term 'self-cutting' emerged from the early 1960s (Sim, 1961) and became the most used term to encapsulate the overarching meaning of SH. At this time, 'self-cutting' was thought to be used to regulate internal experience or rid oneself of emotional numbness (Millard, 2015). A review of NSSI (Jacobson & Batejan, 2014) reported the affect regulation hypothesis has garnered more empirical support than earlier interpersonal and communicative hypotheses. This would suggest motives for engaging in NSSI are more likely to be an attempt to regulate one's internal feelings of distress or negative emotions rather than in relation to one's social environment or to communicate distress to others.

It is theorised early understandings of suicidal and SH behaviour moved from social, interpersonal explanations to individualised and intrapersonal explanations. The political landscape at the time was likely to have influenced this shift in understanding, for example the reduction of the welfare state in the 1980s and the move towards neo liberal economics and capitalism. Since the introduction of the terms 'self-poisoning' and SH, literature has been saturated with sexism and gender stereotyping (Jack, 1992). Within a patriarchal society, emotionality has historically been understood and articulated as a feminine trait (Kessel, 1963; Millard, 2015). It was theorised self-poisoning is "the female counterpart of delinquency in young men…women turn their aggression against themselves, while men act against society" (Kessel, 1965).

It is important to note the social and political context at the time, and the impact on the gendered dynamics and differentiations stipulated within the SH literature, where SH was largely thought of as a white, female practice (Chandler et al., 2011). For example, the term 'delicate self-cutting' was frequently used by researchers (Chandler & Simopoulou, 2021). The impact of this can still be seen today, as SH is often viewed and depicted within the media as the practice of white, adolescent, females (Bareiss, 2017; Brickman, 2004). This misconception can contribute to an experience of increased stigma and shame for those who do not identify as white, female, or are no longer adolescents and engage in SH. Victor et al. (2018) refutes these gender biases and reported near equal rates of males and females engaging in NSSI, finding both genders to exhibit largely similar features. Finally, these stereotypes minimise the growing evidence that individuals who identify as transgender or gender non-conforming have been shown to be at an increased risk of SH behaviours (Taliaferro et al., 2019).

Epidemiology

Research into the epidemiology of SH has largely occurred within secondary healthcare settings (Carr et al., 2016), predominantly inpatient settings (Gunnel et al., 2008) with adolescent samples (Hawton et al., 2000). Previous research estimated 220,000 presentations to Accident and Emergency (A&E) departments occur annually in England as a result of SH (Hawton et al., 2007). A recent epidemiological study within primary care settings between 2001-2013 found rates of SH to be rising (Carr et al., 2016), with significantly higher rates of SH amongst women and younger age groups. However, incident rates of SH are unlikely to include the many individuals who SH and do not seek medical intervention (Hawton et al., 2002). The Global Burden of Disease study (2019) estimated 14.6 million people are affected yearly by SH. Tsiachristas and colleagues (2020) estimated 228,075 SH presentations to hospitals in England in 2013. Similarly in 2017, a retrospective analysis of general hospitals costs estimated the cost to the NHS to be £162 million annually (Tsiachristas et al., 2017). During the Coronavirus disease 19 (COVID-19) pandemic, evidence from 62 emergency departments across 25 countries (including the UK) found rates of SH doubled during March and April 2020 and 2021 (Wong et al., 2023). Therefore, current incidence rates and cost to NHS are likely to be even higher due to the impact of the pandemic.

RSH in the context of "borderline" or "emotionally unstable personality disorder"

Diagnoses of "borderline" or "emotionally unstable personality disorder" (EUPD) are often used when discussing SH, but there is ongoing debate around their appropriateness (Campbell et al., 2020). RSH has largely been studied within the context of "borderline personality disorder" (BPD) as, within both empirical and clinical understandings, it is thought to be a symptom of this diagnosis (American

Psychiatric Association, 1994; Bowen, 2013). However, it is important to note the ICD-11 (published in April 2022) no longer includes BPD as a separate condition to EUPD (Bach et al., 2022). In addition, women are thought to be three times more likely to be diagnosed with BPD than men (Skodol & Bender, 2003). This is a very large sex difference within a MH disorder. As SH is thought to be a symptom of BPD, it is important to consider this in the gendered historical context of SH.

As RSH has continued to be associated with EUPD, this raises concern around the suggestion the behaviour is 'disordered' and clinical implications of this for those seeking treatment or MH support (Kapur et al., 2013; Morrissey et al., 2018). SH in the context of a 'personality disorder' may be thought of as "manipulative" or "attention seeking" by clinicians, resulting in support and treatment being withdrawn or withheld (Carlen & Bengtsson, 2007). The focus of health professionals may be around the elimination of SH behaviours through methods such as continual observation or contracts around abstinence that may actually increase the person's psychological distress (Cutcliffe & Stevenson, 2007).

RSH as an addictive behaviour

It has been recognised that RSH has addictive qualities (Favazza & Rosenthal, 1993), however RSH is not presently accepted as an addictive behaviour. Emerging research has found a number of SH behaviours to be both "coercive" and "relieving" and Tantam and Whittaker (1992) stated, "we prefer to consider it an addictive behaviour rather than an expression of a wider disorder". Similarly, Faye (1995) presents a theoretical rationale for the conceptualisation of NSSI as an addictive behaviour and drew similarities between aversive withdrawal effects experienced by drug users and an increase in negative emotions prior to NSSI. Within this review of the SH literature, tension-releasing effects of SH were highlighted for how these can be reinforcing through repeated use.

There is limited empirical research to suggest RSH can be understood or conceptualised as an addictive behaviour (Gordon et al., 2010; Nixon et al., 2002; Victor et al., 2012); few empirical studies have investigated or tested this hypothesis (Blasco-Fontecilla et al., 2016) and results are conflicting. This hypothesis was explored within an empirical study of hospitalised adolescents (Nixon et al., 2002) utilising a self-report measure of addictive aspects of NSSI, which was adapted from the DSM-IV substance dependence criteria. Results suggest the "urge" to SH was found to be daily within almost 80% of the sample, and reasons for engaging in SH were "to cope with feelings of depression" and "to release unbearable tension".

Within a study of adolescents, Doyle et al., (2017) found participants rarely described their experiences of SH as a symptom of a diagnosed mental illness and instead identified affect-regulation, self-punishment (Brown et al., 2002), and anti-dissociation models of SH (Klonsky et al., 2015; Polskaya

& Melnikova, 2020). Research findings suggests individuals who engage in RSH may produce less endogenous opioids and a function of RSH may be to simulate the endogenous opioid system, producing relieving or relaxing effects (Sher & Stanley, 2008; Stanley et al., 2010). The opioid system regulates numerous physiological functions, including responses to stress, and plays a key role in modulating mood and well-being, as well as addictive behaviours via reward processing (Le Merrer et al., 2009). However, other studies have found contradictory evidence to the opioid hypothesis of RSH (Russ et al., 1994; Sher & Stanley, 2009).

Victor and colleagues (2012) sought to examine whether NSSI is an "addiction" by comparing substance use and NSSI on craving, one identified dimension of addiction. Their rationale for studying only one dimension was driven by conclusions drawn from empirical literature that craving plays a "pivotal role in perpetuating addictive use of substances" (Roberts & Koob, 1997). Authors adapted and developed measures for craving in NSSI, and substance use. Results found craving scores for substances occurred across a variety of contexts and were significantly higher than craving scores for NSSI. Authors concluded that NSSI appears to be craved only in the context of the removal of negative emotions and that findings advocate for an emotional regulation model of NSSI, as opposed to an addictive behaviour model. This finding contributed to the wider literature on the emotional regulation or affect-regulation hypotheses of SH (Chapman et al., 2006; Klonsky, 2009). However, craving is only one of the diagnostic criteria for addictive behaviour within both the ICD-11 and DSM-IV. Others include impaired or loss of control, increasing priority given to behaviour, and continuation or escalation of behaviour despite negative consequences.

A recent review of the literature (Blasco-Fontecilla et al., 2016) concluded that both NSSI and suicidal behaviour can be conceptualised as addictions and advocates for the use of an addictive model of SH. The review summarises research highlighting the role of neurobiological and psychological mechanisms in the development of an "addiction" to SH behaviours. Through the review of addiction literature (Lovallo, 2006; Shaffer et al., 2004; Volkow & Wise, 2005), authors theorise that when an individual engages in SH opioid and dopaminergic systems are activated (Stanley et al., 2010), providing brief relief from emotional and psychological pain. Research has evidenced these systems to be activated by substances (drugs or alcohol) and behaviours (Shaffer et al., 2004). Blasco-Fontecilla (2011) hypothesised it is possible for this neurobiological system to produce experiences of tolerance (where increasing amounts of a substance or behaviour are required to obtain the desired effect) and addiction.

Further support for RSH as an addictive behaviour can be found within research evidencing the use of the opiate antagonist naltrexone hydrochloride as an effective pharmacological treatment of SH behaviours. Naltrexone is an opioid-receptor antagonist and was developed as a medication to

primarily treat substance use disorder, initially heroin addiction, through a reduction in cravings and feelings of pleasure associated with using the substance (Judson & Goldstein, 1984). This drug has since been used to effectively treat RSH (Roth et al., 1996) and supports hypotheses that the endogenous opioid system plays a maintaining role in RSH. A quantitative synthesis of studies investigating the use of naltrexone as a treatment for SH behaviours found 80% of participants reported a reduction in SH behaviours with just under half of participants' SH behaviours reducing by 50% or more (Symons et al., 2004). However, there are a limited number of studies included in the evidence.

Current treatment of SH within MH services

Brown and Kimball (2013) state "researchers have yet to adequately address the treatment needs of those engaging in the behaviour". NICE guidelines (2022) highlight the need for a psychosocial assessment after each episode of SH at the earliest opportunity. The goal for MH services is often minimising risk through preventing or stopping an individual from self-harming (Shaw & Shaw, 2012). Therefore, recommended treatment options place emphasis on prevention or cessation of the behaviour as an eligibility criterion for treatment. The current NICE recommended longer-term treatment options for SH are Cognitive Behavioural Therapy, Dialectical Behavioural Therapy, or psychodynamic therapy. Guidelines stipulate "if stopping self-harm is unrealistic in the short-term consider strategies aimed at harm reduction" (NICE, 2022). Harm minimisation strategies for SH strive to reduce frequency and long-term damage caused (Davies et al., 2020). The terms harm minimisation or harm reduction are used interchangeably to refer to the same approach.

Within the addiction literature, the concept or approach of harm reduction is not new. It was introduced within drug clinics and treatment centres over 55 years ago (Bewley, 1967; Chapple, 1967) and is now widely accepted as a mainstream treatment for addiction (Shaw & Shaw, 2012). Harm reduction has since been borrowed and applied to the treatment of SH. However, it appears a theoretical step has been missed. There is little evidence into the efficacy or acceptance of harm minimisation (Davies et al., 2020). Additionally, there is a notably limited body of research evidencing the addictive or reinforcing properties of RSH (Blasco-Fontecilla et al., 2016) on which to base effective and evidence-based harm reduction treatments. To develop the most effective treatments for RSH, one must first understand what is maintaining engagement and build upon the emerging evidence base for or against the conceptualisation of RSH as an addictive behaviour. This study aims to address this gap within the literature.

Rationale for the Systematic Literature Review

The literature provides some evidence for an addictive model of SH, and for SH to be understood as an addictive behaviour (Blasco-Fontecilla et al., 2016; Faye, 1995; Nixon et al., 2002). Conversely, there is also an evidence base for emotional or affect regulation models of SH (Jacobson & Batejan, 2014) and authors believe this differentiates RSH from other addictive behaviours (Victor et al., 2012). Additionally, SH is still largely viewed as a symptom of EUPD, within both research and clinical understandings (Bowen, 2013), and treated as such rather than a behaviour with a multitude of personal and purposeful motivations and meanings (Turp, 2003; Inckle, 2017).

Due to limited empirical evidence on the addictive qualities of RSH in adults, the following SLR will explore whether RSH can be conceptualised as an addictive behaviour.

Chapter 2: Systematic Literature Review

Chapter overview

This chapter presents a systematic literature review (SLR) of the available evidence base on whether RSH in adults can be conceptualised as an addictive behaviour.

Aims

As outlined above, research has started to investigate the possible shared characteristics between RSH and addictive behaviours. Studies have highlighted similarities between the emotional state preceding SH and withdrawal effects experienced by substance misuse (Faye, 1995), the experience of daily urges (Nixon et al., 2002), and the activation of opioid and dopaminergic systems (Blasco-Fontecilla, 2011). Research has also identified differences in motivation and reinforcement between RSH and other addictive behaviours (Victor et al., 2011). However, the cursory overview of empirical evidence above does not provide an understanding of whether RSH can or should be conceptualised as an addictive behaviour.

RSH is of great clinical concern within both physical and MH services (Tsiachristas et al., 2020), current treatment options focus on reducing risk and often place emphasis on cessation of the behaviour (Shaw & Shaw, 2012). To our knowledge, only one narrative review focusing on the addictive nature of RSH has been published (Blasco-Fontecilla et al., 2016) identifying only three empirical papers. As a narrative review, rather than a SLR, it did not include pre-specified inclusion criteria to minimise bias, or any risk of bias or critical appraisal tools to assess the quality of included studies. The three studies identified in the previous narrative review were not identified or included within the current SLR. The following SLR will address these methodological limitations and update the existing seven-year-old review. The aim of this SLR was to answer, "Can repetitive self-harm be conceptualised as an addictive behaviour?"

SLRs identify, summarise, and critically appraise the available evidence base in relation to a particular question (Snyder, 2019). A pre-specified inclusion criteria is utilised to systematically review available literature and minimise bias, allowing robust conclusions to be drawn (Moher et al., 2009; Siddaway et al., 2019). Finally, this method allows for the identification of gaps in the literature, highlighting the impact of these on clinical practice, and supports recommendations for future research (Fink, 2019).

Methods

Search strategy

An initial scoping search of "repetitive self-harm addictive", within the Cochrane Library and the Centre for Reviews and Dissemination Databases on the 8/6/2022, revealed no previous systematic review on this topic. Therefore, this review was prospectively registered on PROSPERO(CRD42023370316). When conducting the search, an amendment was made from the registered PROSPERO protocol (see Appendix A) due to the availability of databases at the University of Hertfordshire.

The systematic literature search was conducted between 2/2/2023 and 1/3/2023, using the following electronic databases: PubMed, Scopus, PsycINFO and Google Scholar. These databases were selected to allow for a wide range of literature to be included from a number of different disciplines. Finally, supervisors were consulted as prominent researchers in the fields to identify any further published literature around the review question that met the inclusion criteria.

Search terms were identified through pilot searches of the above databases, examination of previous literature searches within the topic areas of SH and addiction, and from discussion with supervisors. Truncation of search terms was used, where appropriate, to mitigate against different spellings (e.g., addict* = addiction, addictive). Quotation marks were also used to search whole phrases (e.g "self-inflicted wound"). Initial searches were conducted of each concept separately to explore results generated. The Boolean operator 'AND' was then used to combine the previous searches. Final search terms used are listed in Table 1.

Table 1: *Final search terms*

Search Terms	
Concept 1: Repetitive Self-Harm	**Concept 2: Addictive behaviours**
self-harm OR	addict* OR
non-suicidal self-injury OR	dependenc* OR
self-mutilation OR	"behavio* addict*" OR
self-injury OR	craving OR
Suicide OR	urge OR
deliberate self-harm OR	"behavio* addiction" OR
DSH OR	compuls* OR
suicidal behavio* OR	
non-fatal deliberate self-harm OR	
self-poisoning OR	
automutilation OR	
self-mutilation OR	
"self-inflicted wound*"	

Inclusion and exclusion criteria

The majority of research into SH has tended to focus on adolescent samples (Nixon et al., 2002; Victor et al., 2012) and recent systematic reviews can be found of this literature (Cipriano et al., 2017; Kothgassner et al., 2021; Williams et al., 2021). The current empirical study sought to explore whether adults experience RSH as an addictive behaviour or not, and the SLR seeks to identify whether the current evidence base suggests RSH in adults can be conceptualised as an additive behaviour. Therefore, this SLR focused on literature pertaining to adults only (defined under English law as over 18 years). Studies were excluded if participants were under the age of 18 years, or if they primarily focused on suicide, without SH behaviours. The inclusion criteria for the review are outlined in Table 2.

Table 2: *Inclusion and exclusion criteria for systematic review*

Inclusion criteria:	Exclusion criteria:
The study must be published in or translated to the English Language	The study was published in any language other than English and not translated
Must have been published in a peer reviewed journal	Either not published or published within 'grey' literature
Published, primary studies using qualitative or quantitative methods to examine whether self-harm can be conceptualised as an addictive behaviour. All study types are included.	Studies where the primary focus is to review or analyse measures used to assess self-harm or NSSI.
The study must have utilised an adult population (aged over 18 years) who have experience of self-harm.	Any previous systematic or literature review on the topic.
The study must have been conducted with a human population	Studies including children or adolescences within the population or studies conducted on animal populations
Both suicidal and non-suicidal self-harm	Suicidal behaviours where self-harm is not evident, or it is unclear that self-harm has occurred e.g., a suicide plan.
This review will include any studies which examine self-harm or non-suicidal self-injury (NSSI) in the context of addiction or perceived addiction.	Studies which focus only on addictive behaviours and do not include self-harm in anyway
	Papers that focus on the comorbid/co-occurring relationship between SH and alcohol or SH and drug use

Data extraction

Covidence systematic review online software (www.covidence.org) was used to import search results from databases for screening of titles and abstracts, and to remove duplicates. Titles and abstracts were screened, and full-text papers were retrieved. Full texts were screened based upon the inclusion and exclusion criteria to determine which papers were eligible for the review. Reference lists of final included papers were checked and, if additional papers were identified, they were retrieved (if possible) and screened to determine eligibility for inclusion. Covidence was used to document papers excluded from the review and the reason for exclusion. The PRISMA flow chart (Moher et al, 2009) in Figure 1 outlines the process to ensure transparent reporting of the SLR.

A data extraction table (Table 4) was used to summarise key information on studies within the review, including: authors, year published, study aims, design, analysis methods, sample size and participant demographics (gender and age), information on type of SH behaviours, and a results summary pertinent to review question.

Data analysis

A narrative synthesis approach (Popay et al., 2006) was used to synthesise findings from the heterogeneous range of studies included using words and text. Narrative synthesis allows for the inclusion of both quantitative and qualitative research (Baumeister, 2013). Popay's (2006) approach to narrative synthesis was used as it attempts to address the methodological issues highlighted within the Cochrane handbook (Ryan, 2013) around the potential risks of bias within narrative reviews.

Initially, all included papers were read and re-read to identify and extract key information. Studies were read again to develop a preliminary synthesis (identified patterns across study results). Overall findings from each study were collated, and quantitative findings were summarised into tables to compare the direction and size of effects. The preliminary synthesis was used to explore the relationship between studies and their results. Factors were explored that may explain differences in findings, and conclusions were drawn. As this review included a vast range of methodologies, quantitative data are presented as reported (e.g., proportions) and themes identified from qualitative data are summarised.

Results

The initial search yielded 1211 papers, of which 11 full-text papers were screened for eligibility. A total of seven papers were included in the narrative synthesis (Figure 1).

Figure 1: *PRISMA flow diagram*
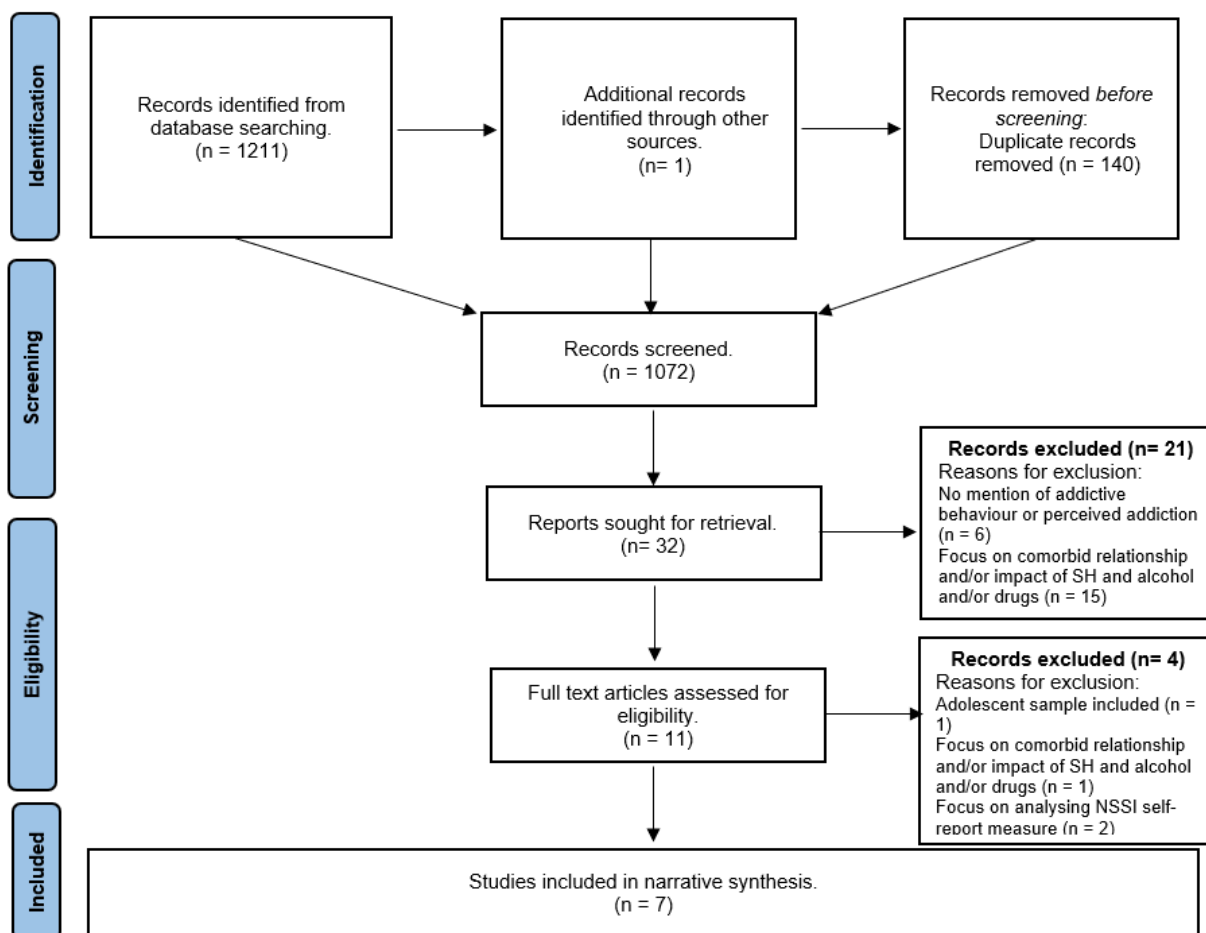
Quality assessment

The Mixed Methods Appraisal Tool (MMAT) developed by Hong et al., (2018), was used to assess the quality of each study included in this review. This tool was selected as it allows for assessment of different methods such as qualitative, quantitative, and mixed-methods studies, and has been shown to be both a reliable and effective (Pace et al., 2012) assessment of methodological quality of studies with diverse designs (Crowe & Sheppard, 2011). MMAT guidance discourages the reviewer from calculating an overall score and instead encourages a more detailed presentation of ratings against each criterion. Quality appraisal findings are summarised in Table 3. Quality was assessed by a single reviewer, under supervision, with uncertainty or discrepancy resolved during discussion with the supervisory team. The quantitative studies included in the review were predominantly of high quality and met almost all quality criteria. Conversely, due to information provided within the mixed methods studies, it was not possible to assess whether quality criteria of each methodological tradition

(quantitative or qualitative) had been fully adhered to. All included studies were appraised to be of medium to high quality.

Table 3: *MMAT checklist of included studies*

Category of study designs	Methodological quality criteria	Author and year published						
		Buckholdt et al. (2015)	Giorgi et al. (2022)	Himelein-Wachowiak et al. (2022)	Lloyd et al. (2016)	Lynam et al. (2011)	Moseley et al. (2019)	Robillard et al. (2022)
Screening questions (for all types):	Are there clear research questions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Does the collected data allow to address the research questions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quantitative descriptive	Is the sampling strategy relevant to address the research question?	Yes			Yes	Yes		Yes
	Is the sample representative of the target population?	Yes			Yes	No		No
	Are the measurements appropriate?	Yes			Yes	Yes		Yes
	Is the risk of nonresponse bias low?	Yes			Can't tell	Can't tell		Yes
	Is the statistical analysis appropriate to answer the research question?	Yes			Yes	Yes		Yes
Mixed methods	Adequate rationale for using a mixed methods design to address the research question?		Yes	No			Yes	
	Are different components of the study effectively integrated to answer the research question?		Yes	Yes			Yes	
	Are outputs of the integration of qualitative and quantitative components adequately interpreted?		Yes	No			Yes	
	Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?		No	Can't tell			Yes	
	Do different components of the study adhere to the quality criteria of each tradition of the methods involved?		Can't tell	Can't tell			Can't tell	

Study characteristics

Included articles consisted of three mixed methods studies (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022; Moseley et al., 2019) and four quantitative studies (Buckholdt et al., 2015; Lloyd et al., 2016; Lynam et al., 2011; Robillard et al., 2022). Within the mixed methods studies, two articles were based on the same dataset (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022). Both studies were included within the review as they aimed to examine different things. Giorgi and colleagues (2022) sought to build upon the study by Himelein-Wachowiak et al. (2022) through the use of the novel analysis method of content-specific topic modelling to investigate addiction and "recovery themes" between NSSI and substance use disorder communities. As both studies utilised a dataset comprising of posts from the SH subreddit, neither reported on demographics (including ages). As this information was not included at all, it was not possible to ascertain the age of those posting and therefore the studies were not excluded on this basis. However, reddit estimates 79% of their users are aged between 18-34 years (Grigonis, 2018) and other research suggests between 84% (Amaya et al., 2021) and 90% (Singer et al., 2014) of users fall within the same age range. Therefore, it was assumed that the majority of the likely user demographic was over 18 years.

Three of the studies were conducted in the USA (Buckholdt et al., 2015; Lynam et al., 2011; Robillard et al., 2022), one in the UK (Moseley et al., 2019) and three were web-based studies so participants could have been from anywhere in the world (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022; Lloyd et al., 2016). Five studies used non-clinical samples, one study used two independent samples (one non-clinical and the second a clinical sample) and one used a clinical sample. Sample sizes ranged from 76 to 38,484; the latter used posts made by users within a forum. As per inclusion criteria, all studies focused on SH and potential addictive elements of this behaviour. One study examined this behaviour within adults with a diagnosis of autism (Moseley et al., 2019), two studies explored similarities and differences between SH, disordered eating, and substance misuse (Buckholdt et al., 2015; Robillard et al., 2022) and one investigated SH within problem gamblers (Lloyd et al., 2016). These studies were included as they did not purely focus on co-morbidity between SH and substances. Instead, they were investigating concepts associated with SH and substance use for example the role of emotional regulation difficulties (Buckholdt et al., 2015), salience of motives (Robillard et al., 2022) or the interaction between SH and problem gambling (Lloyd et al., 2016). Study characteristics and their main findings are reported in more detail within Table 4.

Table 4: *Summary of included studies*

Authors (Year)	Aims of study	Study design	Data analysis	Sample size and characteristics	Information on type of self-harm behaviours	Summary of findings pertinent to review question.
Buckholdt et al., 2015	To investigate the role of emotional regulation difficulties in self-harm, disordered eating, and substance misuse. To explore dimensions of emotion regulation difficulties that may distinguish between the three behaviours.	Cross-sectional study using 3 measures: 1. Deliberate Self-Harm Inventory (Gratz, 2001) 2. Bulimia-Test revised (Thelen et al., 1991) 3. Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004)	Chi-square analyses. Point-biserial correlation analyses Analyses of variance (ANOVA) Analyses of covariance (ANCOVAs).	Two samples: Nonclinical sample of undergraduates (n = 118) (n = 90 females and n = 28 males) Age range: 18-52 years Clinical sample of patients diagnosed with "substance use disorder" currently engaging with residential treatment. (n = 82) (n = 39 females and n = 43 males) Age range: 18-62 years	**Deliberate self-harm:** defined as deliberate, direct, and self-inflicted destruction of body tissue without suicidal intent.	Individuals with co-occurring, clinically relevant incidences of deliberate self-harm and substance misuse were repeatedly associated with greater emotional regulation difficulties, compared to difficulties experienced by those with clinically relevant levels of substance misuse alone. Participants who reported all three co-occurring behaviours reported significantly greater emotion regulation difficulties than those with only substance misuse. Although engagement in behaviours may initially reduce distress, ongoing use of behaviours to avoid emotional distress may result in increased distress and emotional dysregulation in long-term. Clinical interventions focusing on emotion regulation skills may be of particular use for individuals who display both self-harm and substance misuse.

Giorgi et al., 2022	To explore the shared "addiction language" between NSSI and substance use disorder communities. To investigate addiction and recovery themes and compare how NSSI and substance use disorder communities use these across Reddit comments.	Mixed methods design. Examined posts from the self-harm subreddit and substance use subreddits.	Content specific LDA topic modelling. Quantitative evaluation of: 1. Coherence – measuring semantic similarity between words in topic 2. Topic uniqueness – a measure of topic diversity. Qualitative evaluation of: 1. Breadth of themes 2. Minimal thematic overlap 3. Single topic contains a single theme.	Matched sample. Samples were matched approximately on comment and submission counts. Sample 1: Posts within self-harm subreddits (n = 2,470) Sample 2: Posts within self-harm subreddits (n = 77,414)	**Self-injury**: included posts from the "r/selfharm" subreddit. Authors appear to use the terms self-injury, self-harm and NSSI interchangeably.	Found a shared language of addiction between two reddit communities; NSSI and substance use disorder. Both communities equally used terms such as "addiction", "recovery", "relapsed" and "clean".
Himelein-Wachowiak et al., 2022	To characterise and quantify the "addiction language" on Reddit forums. To describe the extent to which individuals	Mixed methods design. Adapted the DSM-IV criteria for substance use disorder to NSSI and measured the symptoms and	Linear and logistic regression analyses. Qualitatively coded posts and identified most used phrases or words.	Original posts on self-harm subreddit. (n = 69,380) Comments from users on r/self-harm reddit forum between March	**Non-Suicidal self-injury**: referring to the deliberate harming of one's body tissue without suicidal intent. Coded for method of NSSI (cutting,	76.8% of posts and comments within a self-harm reddit forum endorsed 2 or more DSM-5 criteria for substance use disorder. The most referenced symptoms were craving/urge (67.6%), escalating severity or tolerance (47.8%) and NSSI that is physically hazardous (38.2%). Evidence of a shared language between NSSI and addiction with 86% of users using 1 or more

	experience NSSI as an addiction.	severity of 'addiction' to NSSI.		2010-December 2019. (n = 290,524)	burning, scratching, etc), and the presence of suicidal thoughts or behaviours. Authors appear to use the terms self-injury, self-harm and NSSI interchangeably.	instance of addiction language. The most frequently used term was found to be "clean", used by 68%, followed by "relapse", used by 50%. Addiction symptoms to be associated with 2 factors of NSSI: 1. Number of methods for NSSI 2. Severity of NSSI that often requires medical attention.
Lloyd et al., 2016	To explore the risk factors associated with self-harm and gamblers. To investigate how these factors relate to gambling-related thoughts of self-harm and/or gambling-related acts of self-harm.	Cross-sectional online survey. Participants were asked about their history of gambling related thoughts and acts of self-harm and completed a screening questionnaire to identify symptoms of DSM-IV problem gambling criteria. Questionnaires completed to assess participants gambling, mental health, general health and substance use experiences.	Hierarchical linear regression analyses to test relationship between history of self-harm and demographic, clinical and gambling related variables.	Non-clinical sample of internet users, identified via gambling-related websites. (n = 4,125) (n = 859 females and n = 3266 Mean age = 35.5 years (SD 11.8)	**Gambling related thoughts of self-harm:** if participants indicated they had thought about harming themselves because of problems with their gambling. **Gambling related acts of self-harm:** if participants indicated they had then acted on self-harm thoughts due to gambling. **Self-harm:** if participants indicated they had self-harmed (by any means) for other reasons.	Identified a number of features significantly associated with self-harm in online gamblers. Gambling related thoughts of self-harm were found to be significantly and positive associated with self-reported problem gambling. Some common factors between gambling-related self-harm and self-harm for other reasons. Results suggest that the motivation of 'gambling to cope' is associated with non-gambling related acts of self-harm.

Lynam et al., 2011	To study the relationship between personality pathways, impulsive behaviour, suicidal behaviour and NSSI. To examine if impulsivity-related traits predict suicidal behaviour and NSSI. To examine whether borderline personality disorder predict suicidal behaviour and NSSI, above the impulsivity-related domains.	Cross sectional study using 6 measures: 1. Structured clinical interview for DSM-IV (First et al., 1997) to assess BPD symptoms. 2. UPPS Behaviour Scale (Whiteside & Lynam, 2001) 3. Personality Assessment Inventory – Borderline Scale (Morey, 1991) 4. Suicidal Behaviours Questionnaire (Lineham, 1996) 5. Deliberate Self-Harm Inventory (Gratz, 2001) 6. Stress Reaction Scale (Patrick et al., 2002) to measure negative emotionality.	Bivariate correlations and hierarchical regressions analyses.	Clinical sample of inpatient residents in a drug and alcohol abuse treatment centre in America. (n = 76) Age range = 18-62 years	**NSSI**: defined as the intentional, direct injuring of body tissue without suicidal intent.	Participants who scored highly on impulsivity-related traits of Negative Urgency and Lack of Premeditation were at particular risk of suicidal behaviour and past NSSI.
Moseley et al., 2019	To qualitatively explore the experiences of NSSI within an autistic population.	Mixed methods design: cross-sectional study.	Statistical Regression Thematic Analysis of two open item from Non-Suicidal	Adults with a diagnosis of autism. (n = 103) (n = 70 females and n = 33 males)	**Current self-harmers**: engaged in self-harm in last year (n=49)	Words "compulsion" and "addiction" were used to describe NSSI. Similarities between thematic analysis subthemes and clinical definitions of "compulsive".

	To investigate the clinical relevance of potentially predictive factors for NSSI.		Self-Injury Assessment Tool (Whitlock et al., 2014).	Average age: 43 years (SD = 13.6)	**Historic self-harmers**: engaged in self-harm more than 1 year previously (n=27) **Non-self-harmers:** never engaged in self-harm (n=27)	Analyses of the reasons for self-harming showed participants used words such as "compulsive" and spoke of a feeling of helplessness, where self-harm began as a "choice" and then as "an addiction".
Robillard et al., 2022	To compare the salience of motives for binge drinking, disordered eating and NSSI among young adults when transitioning to university.	Longitudinal study. One in-person baseline testing session followed by 7 monthly follow-up online surveys. Measures used to investigate: 1. Engagement in self-destructive behaviours 2. Motives for self-destructive behaviours – adapted from Inventory of Statements about Self-Injury (Klonsky and Glenn, 2009)	Three-level multilevel models were constructed separately for each of the 8 identified motives for self-damaging behaviours.	Non-clinical sample of first-year undergraduate students. (n = 513) (n = 401 females and n = 108 males) Mean age = 18 years (SD = 0.78)	**Self-damaging behaviours:** defined as binge drinking, disordered eating, and NSSI. **NSSI:** defined as deliberate damage to body tissue without suicidal intent.	Self-damaging behaviours shared similar motivations to differing degrees. Interpersonal motives (related to changing one's social environment) were found to be most relevant to binge drinking, followed by disordered eating and then NSSI. Intrapersonal motives (related to changing one's internal experiences) were found to be most relevant to NSSI, followed by disordered eating and then binge drinking. Concluded that motives for binge drinking and NSSI may be different, with intrapersonal motives found to be most salient to NSSI and interpersonal motives most salient to binge drinking.

The seven papers identified and included within this narrative analysis investigated RSH and its relation to addiction, or an addictive behaviour, in a range of different ways: exploration of the role of emotional regulation within these behaviours, shared language between the two phenomenon, and shared motives or predictors. Only one study (Himelein-Wachowiak et al., 2022) directly stated an aim of their research to be "describing the extent to which individuals experience NSSI as an addiction".

Can repetitive self-harm in adults be conceptualised as an addictive behaviour?

Two main similarities were found between SH and addictive behaviours: Understanding of and ability to regulate one's own emotions, and shared language used by those with experience of SH and/or addictive behaviours.

Understanding of and ability to regulate emotions.

Five of the seven articles found emotion regulation difficulties to be repeatedly associated with, or a significant predictor of, SH. Four studies directly investigated this within SH and addictive behaviours (substance misuse, binge drinking, and problem gambling). Two studies of clinical samples with a diagnosis of "substance use disorder" and currently engaging in residential treatment (Buckholdt et al., 2015; Lynam et al., 2011), showed that increased emotional regulation difficulties were significantly associated with and a risk factor for SH. One study found increased levels of emotion regulation difficulties in those who engage in both SH and substance misuse, compared to participants with substance misuse behaviours alone (Buckholdt et al., 2015). They suggest this may be indicative of individuals implementing a variety of different coping strategies in an attempt to alleviate negative emotions.

One study (Robillard et al., 2022) categorised emotion regulation difficulties and apparent motives for both SH and addictive behaviours into two main thematic categories: interpersonal - motives impacting one's social environment, and intrapersonal - motives relating to one's internal experience. Results found intrapersonal motives related to changing one's internal experience (e.g., reducing negative emotions, enhancing positive emotions, or punishing oneself) to be most associated with SH, followed by disordered eating, and finally binge drinking. Whereas interpersonal motives (e.g., bonding or conforming with others, reducing distress and demands) were found to be associated most with addictive behaviours (binge drinking), then disordered eating, and least with SH. It is important to note this study used a non-clinical sample of first-year undergraduate students. Very small numbers of participants reported engagement in NSSI (n = 28 at time point 1, reducing to n = 10 by time point 7) which may have weakened the power of the statistical analyses conducted.

Shared language used to describe self-harm and addictive behaviours.

Three articles (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022; Moseley et al., 2019) explored and evidenced a shared language used by individuals when describing SH and/or addictive behaviours. Within the qualitative arm of Moseley and colleagues mixed methods study, adults with a diagnosis of autism used the words "compulsion" and "addiction" to describe their experiences of SH. Two studies (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022) used posts within a SH Reddit forum to compare and characterise the use of addiction language. They defined addiction language as "words associated with addiction or prevalent in substance use disorder recovery circles". Giorgi and colleagues (2022) employed a matched sample design to compare posts within the SH subreddit forum with substance use disorder subreddits. Results indicated a shared language and conceptualisation between these two communities, with equal use of the terms "addiction", "recovery", "relapsed" and "clean".

Himelein-Wachowiak and colleagues (2022) aimed to describe the extent to which individuals who engage in SH, experience it as an addiction. They coded posts within a SH reddit forum for language related to addiction and addiction symptomology, adapting the DSM-5 criteria for substance use disorder to use with SH. They found the words "clean" (68% of posts) and "relapse" (50% of posts) to be the most frequently occurring. In addition, they found evidence of SH being described as an addiction (30% of posts). Himelein-Wachowiak and colleagues (2022) concluded that more than three-quarters of the SH sample met criteria for addiction based on NSSI adapted symptoms and diagnostic guidelines. Results showed the most frequently referenced symptoms were cravings or urges (67.6%), escalating severity or tolerance (47.8%), and SH that is physically dangerous (38.2%). Increased number of methods of SH and engaging in risky SH requiring medical attention were two factors found to be associated with an increase in the presence of addiction symptoms.

Correlates of SH and addictive behaviours

A number of correlates of SH and addictive behaviours emerged within the reviewed literature. Results suggested these were: sex, age, employment status, number of methods of SH, and comorbid psychiatric diagnoses. Sex differences were found among thoughts of SH due to problem gambling. Males were more likely to have thoughts of SH due to problem gambling, whereas females were more likely to engage in acts of SH that were not related to problem gambling (Lloyd et al., 2016). However, no sex differences were found among maladaptive behaviours and emotion regulation difficulties (Buckholdt et al., 2015), or between individuals who are currently self-harming, have previously self-harmed, or with no history of SH (Moseley et al., 2019). One study used a homogeneous sample regarding age, through the recruitment of undergraduate students (Robillard et al., 2022), and two

did not report on demographics characteristics due to this information not being readily available within the dataset (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022). However, age was shown to be negatively associated with emotional regulation difficulties (Buckholdt et al., 2015), suggesting that as age increases, difficulties in emotion regulation decrease. In addition, results showed significant negative correlations between age, frequency of substance use (within previous year), frequency of SH, and number of SH behaviours. Age was also found to be negatively associated with reports of non-gambling related acts of SH (Lloyd et al., 2016). Unemployment was found to be the only demographic characteristic significantly associated with problem gambling-related thoughts and acts of SH (Lloyd et al., 2016).

Using multiple methods of SH was found to be positively associated with addiction symptomology. However, suicidality was not found to be positively associated with addiction symptomology (Himelein-Wachowiak et al., 2022). Co-morbid psychiatric diagnoses were found to be positively associated with addiction symptoms (Himelein-Wachowiak et al., 2022) and more common in those currently engaging in SH (Moseley et al., 2019).

Discussion

One of the findings of this systematic review was that only a few studies, utilising adult populations, have investigated whether individuals experience or conceptualise RSH as an addiction or an addictive behaviour. However, it identifies useful literature exploring the shared language use between addiction and RSH, common factors or traits found within adults with experience of both addiction and RSH, and differences between motives to engage in these behaviours. These studies evidenced not only a shared language to describe both addiction and experiences of NSSI, but also similar symptoms experienced, such as craving or urges, escalating severity or tolerance, and behaviour that is physically hazardous.

Studies utilising clinical samples identified a number of common traits between participants receiving treatment for substance use disorder who also engage in RSH. These were found to be greater emotional regulation difficulties and increased impulsivity-related traits. Some important differences were also identified around the motivation for engaging in NSSI and substance misuse (binge drinking). Findings suggest that RSH is motivated by internal experiences, such as the reduction of negative emotions, whereas binge drinking is motivated by external experiences.

It is important to note that a number of included studies within the SLR utilised similar methodological approaches to previous research into the addictive elements of RSH (Nixon et al., 2002). Himelein-Wachowiak and colleagues (2022) adapted the DSM-IV criteria for substance use disorder to include

NSSI in order to measure the symptoms and "severity" of possible addiction to NSSI, and the current study will use the ICD-11 diagnostic criteria.

The finding that individuals with co-occurring RSH and substance misuse experience greater emotional regulation difficulties is in line with previous theoretical explanations (Faye, 1995) evidencing an increase in negative emotions prior to NSSI. These findings suggest RSH may initially be used as a method to regulate emotions and may also initially reduce feelings of distress, similar to those who experience substance misuse (for a recent review of the literature see Stellern et al., 2023). Although, previous research suggests, repetitive use of these behaviours to avoid or reduce distress, in the long-term this may paradoxically increase emotional dysregulation (Hayes et al., 1996).

Regarding experiences of "urges" to engage in RSH, the findings of this review aligned with empirical studies exploring this behaviour within adolescent samples. Research with adolescents found the "urge" to SH was experienced daily in approximately 80% of the sample (Nixon et al., 2002). A study within this review found the term "urge" to be referenced by 67.6% of the sample (Himelein-Wachowiak et al., 2022). Similarly, NSSI was described as "compulsive" within a sample of adults with a diagnosis of autism.

Motivational differences identified within this review between RSH, and addictive behaviours have previously been evidenced within the literature. In their study of hospitalised adolescents, Victor, and colleagues (2012) concluded craving for NSSI only occurs within the context of removing intrapersonal negative emotional states.

Evaluation of review

A strength of this SLR was the attention given to ensure the quality of the evidence base. All included studies were judged to be of high quality within the quality assessment. Four databases, chosen to elicit clinically relevant research, were searched in an attempt to ensure all relevant published studies were identified and included. However, limitations of the evidence included within this review should also be considered. Findings should be interpreted with caution as some sample sizes were small.

It is important to note the impact of methodological issues across the included papers. Definitions of SH behaviours differed greatly across studies; however, the majority of studies stipulated it was behaviour "without suicidal intent". Many studies did not state how many times participants had engaged in this behaviour or were limited to small subsamples. This may impact the results as previous research has found SH behaviour to become more reinforcing over time and through repeated engagement (Gordon et al., 2010).

The search strategy used may have excluded relevant articles and the exclusion of non-English-language studies will increase the potential bias in outcomes in the review and limits the generalisability of findings. In addition, the focus on only published peer-reviewed papers excluded all grey literature and may have limited the conclusions drawn due to publication bias (DeVito & Goldacre, 2019). Similarly, the focus on adults excluded relevant research into the potentially addictive elements of RSH within adolescent populations (Nixon et al., 2002; Victor et al., 2012). This decision could have excluded relevant research on whether or not RSH can be conceptualised as an addictive behaviour, thus impacting the findings and conclusions drawn. Finally, the number of studies included in this review is relatively small.

Assessment methods within this SLR were largely limited to self-report measures which may produce reporting bias. Finally, only three of the included studies reported on ethnicities of the samples. Findings from the SLR should be generalised with caution, as they may not be representative of other ethnicities, potential cultural or religious differences within SH, motivations to SH, meanings made and help seeking behaviours.

Possible implications

The SLR highlighted a number of clinical and research implications. This review found increased emotional regulation difficulties to be significantly associated with SH. This has implications for clinical practice and treatment of SH and supports emotional regulation or affect-regulation hypotheses of SH (Chapman et al., 2006; Klonsky, 2009). Further application and investigation of these theories around the overlap and differences between SH and addictive behaviours is required. This could further develop appropriate and effective understanding and treatment of RSH behaviours, specifically for adults who have engaged in this behaviour for a number of years and identify as finding it addictive or have many failed attempts at stopping. Buckholdt and colleagues (2015) recommend clinical interventions focused on emotion regulation skills for individuals who engage in RSH and substance misuse. Additionally, they stress future research should examine underlying mechanisms of these behaviours. Dialectical Behaviour therapy (Linehan, 2014) is a clinical intervention often applied and offered to those who engage in RSH, which focuses on teaching and practicing emotion regulation skills.

Similarly, other studies (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022; Lloyd et al., 2016; Moseley et al., 2019; Robillard et al., 2022) demonstrated that a more nuanced approach to clinical treatment of RSH should consider the individual's motives for engaging in the behaviour and these should not be assumed. Some studies (Buckholdt et al., 2014; Lynam et al., 2011; Robillard et al., 2022) highlighted the clinical importance of screening or assessing for behaviours related to SH. However,

there appears to be a general lack of information on this topic as the current review yielded only 7 studies. At present, it is unclear whether any physiological changes occur within the brain, due to ongoing engagement in RSH, that could suggest RSH is an addiction. Evidence of physiological changes have been found in other addictive behaviours such as gaming disorder (Andre et al., 2020; Mohammad et al., 2023) and could be a possible area for further exploration.

One of the key findings that emerged from this SLR was around the shared language, conceptualisation and overlap of symptomology between SH and addictive behaviours. This finding has implications for future research and intervention development for SH. Due to the paucity of research identified, further research should focus on the potential overlap and differences between SH and other behaviours already understood to be addictive, such as gambling. It is hoped that through the identification of similarities and potential differences, future research can ascertain whether individuals who conceptualise and experience SH as addictive who respond well to treatment strategies that have been shown to acceptable and effective in the treatment of other areas of addiction, such as harm minimisation strategies for the treatment of substance misuse.

Rationale for the current study

The SLR highlighted a paucity of research on whether the current evidence base conceptualises RSH as addictive, within adult populations. Based on the published findings available, overall, there is emerging evidence on the similarities between RSH and addiction or addictive behaviours. However, there does not appear to be sufficient evidence to reach a definitive conclusion on whether RSH can be conceptualised as an addictive behaviour. The current project aims to explore this. The main gaps in research identified by the review were qualitative analysis of adults' experience of RSH, as all included studies used either quantitative or mixed methodologies. Furthering our understanding of what continues to motivate people to use RSH over a number of years may allow us to better understand how to support or treat these individuals when they are seeking support from both physical and MH services. The final aim of the current study is to provide a theoretical understanding of any overlap and similarities between the processes that maintain engagement in RSH and addictive behaviours.

Research aims and questions.

The current research study aimed to use the existing theories and knowledges about addiction and addictive behaviours to explore whether RSH is experienced as an addictive behaviour and maintained by similar processes to other addictions. These aims were addressed through the following research questions:

- What maintains engagement in RSH and do these motivations overlap with addictive behaviours?
- What maintains engagement in RSH but does not overlap with addictive behaviours?
- To what extent can RSH be conceptualized as an addictive behaviour or within an addictive behaviour framework?

Chapter 3: Method

Chapter Overview

This chapter outlines the methodology chosen to investigate the research questions. Study design is discussed, including how the researcher's epistemological position informed this, and a justification for Constructivist Grounded Theory (GT) methods, including consideration of alternative analysis methods is provided. Experts by experience (EBE) consultation is detailed, in the context of both the early design and the ongoing development of the project, as well as ethical considerations that were pertinent to the research. A detailed description of the study procedure is presented, including participant recruitment, the interview procedure, data collection, and analysis. Finally, quality appraisal of the study is outlined, including important reflections and considerations regarding researcher reflexivity.

Design

Qualitative research is exploratory by design, therefore well suited to research areas where there is emerging or limited data (Liamputtong & Ezzy, 2005). Qualitative approaches are concerned with the "understanding of experience and processes, rather than establishing causal relationships or quantifying the size or extent of something" (Harper & Thompson, 2011). NICE (2004) guidelines recommend the use of qualitative methods to further understandings of SH and recovery experiences. Research suggests that through the use of individual qualitative interviews, especially within topic areas typically associated with increased feelings of shame and stigma, participants are able to tell their story and report the therapeutic nature of this (Biddle et al., 2013; Cutcliffe & Ramcharan, 2002). For these reasons, and due to the sensitivity of the research topic, this study employed a qualitative design using individual interviews as the method of data collection.

Epistemological position

Within research, critical realism suggests that reality should be cautiously and critically investigated, whilst considering the influence of wider contexts on meaning-making (Pilgrim & Bentall, 1999). It stipulates that all understandings of social reality are fallible and tentative, therefore research methodology must allow for conceptualisation and reconceptualisation of knowledges (Pratt, 1995).

Constructivist Grounded Theory

Considering the epistemological position and research question, this study drew upon constructivist GT methodology, developed by Charmaz (2014). GT was introduced by Glaser and Strauss (1967) as a credible and rigorous qualitative method concerned with the systematic development of theory

through the inductive process of simultaneous data collection and analysis. The overall aim of GT is to "construct a theory that offers an abstract understanding of one or more core concerns" (Charmaz & Thornberg, 2021). Constructivist GTs "emphasise interpretation" and, unlike other methodologies, prioritise abstract understanding (Charmaz, 2014). This aligns well with a critical realist stance as analysis is contextually situated. In order to do so, constructivist GT advocates rigorous reflexivity from the researcher through critique of methodological decision making and "scrutinising who the researcher is" (Charmaz, 2017). This methodology was selected as it assumes that processes are constructed and acknowledges the role of the researcher in the analysis of data. To address the research question and aims, consideration needed to be given to how, why, and in what contexts SH may be conceptualised as an addictive behaviour or within an addictive behaviour framework.

As GT is an iterative process, analysis will be influenced by the researcher's lived experience of SH, clinical experience of working with those who SH, and prior knowledge of the literature relating to SH, as opposed to emerging from the data (Willig & Rogers, 2017). GT methodology provides a framework to evidence what meaning the researcher has made from the data and be transparent with how the research has been systematically conducted (Charmaz & Thornberg, 2021).

One of the challenges of GT methodology is that coding, specifically initial line by line coding, can be incredibly time intensive (Timonen et al., 2018) and may be exacerbated when the time frame for data analysis is relatively tight. Additionally, due to the large amounts of codes that can be generated in the initial stages of analysis, novice researchers risk losing sight of the overall aims of both the study and GT (Hussein et al., 2014; Myers, 2019). To mitigate against this, Annells (1996) recommended use of a mentor throughout. Regular meetings with the principal supervisor (JH) and another member of the University academic team (LN), with extensive experience of GT, were utilised throughout the inductive data collection and analysis stage. As researcher reflexivity is crucial within constructivist GT, multiple steps were taken to engage in this, and a reflective log was completed throughout (see Appendix B).

Consideration of alternative methods

Alternative methods considered during the design of this study, and reasons for excluding, are detailed below:

Table 5: *Consideration of alternative methods*

Method	Description of method and reasons for excluding
Thematic Analysis (TA)	TA was developed by Braun and Clarke (2006) as a way of identifying and analysing patterns of meanings or themes. Through the identification of patterns, TA examines salient themes within the studied phenomenon (Daly et al., 1997). Much of the available literature into RSH adopts a TA methodology and provides more of an overview of the concept of SH and general themes within this behaviour for example the theme of emotional regulation difficulties. However, this research aimed to provide a theory of what maintains engagement in RSH and understand the potential similarities between the processes that maintain engagement in RSH and addictive behaviours.
Interpretative Phenomenological Analysis (IPA)	IPA (developed by Smith et al., 2009) is an approach which is concerned with how people make sense of their experiences (Harper & Thomson, 2011; Larkin et al., 2021). It is guided by an interpretive phenomenological epistemology which foregrounds the meaning participants have made and in turn, their understanding of and relatedness to the world (Starks & Trinidad, 2007). As IPA is exploratory, by design, this method would have provided a detailed exploration of whether participants experience RSH as an addictive behaviour or not but would not have allowed for exploration of the overlap between the processes that maintain RSH and addictive behaviours. Additionally, much of the available literature into self-harm has utilised IPA methodology to "give voice" to those who SH and understand it as a phenomenon.
Narrative Analysis (NA)	NA investigates the stories people tell as a primary way of making sense of experiences (Mishler, 1986) and suggests that narratives are descriptions of how participants view the world and the concept studied (Sarbin, 1986). It is informed by hermeneutic phenomenology which posits how people interpret and make sense of the world around them. This methodology would have offered self-constructed accounts of RSH (Burck, 2005) and offered valuable insight into how those who engage with the behaviour understand and story it. However, as the research aimed to contribute to emerging research exploring possible commonalities between RSH and addictive behaviours, it was felt that this methodology would not provide that comparison.
Discourse analysis (DA)	The goal of DA is to investigate and understand how individuals use language to create identities (Starks & Trinidad, 2007). Discourses can be defined as systems of meaning and DA explores how concepts are constructed (Potter & Wetherell, 1987). It is informed by a social constructionist epistemology and assumes that reality is constructed through the language used (Harper & Thomson, 2011). The aim of the current study was to use the existing theories about addiction and addictive behaviours to explore whether RSH is experienced as an addictive behaviour, rather than how particular language use has constructed and shaped SH.

Consultation

Professional consultation

Within early stages of study conceptualisation and design, professional consultation was sought with Clinical Psychologists. In August 2021, consultation was held with a Clinical Psychologist working in an NHS service with those who RSH. In addition, the psychologist's own doctoral thesis explored SH. Consultation involved discussing the research aims, proposed methodology and recruitment. They advised on personal considerations when positioning myself in relation to this topic and shared some of their own experiences of recruitment with a similar sample. The clinical psychologist advised me to clearly define what I will be referring to as RSH and an addictive behaviour.

Later within the design stage of the study (October 2021), consultation took place with a Clinical Psychologist working within addiction services, both within the NHS and charity sector. The consultation involved similar discussions as above, advising me to be aware and mindful of the differences between clinical and non-clinical samples within research. In addition, they highlighted the vast amounts of data generated from interviews. This was incorporated in the study design and a pilot interview was timed to ensure it did not last longer than one hour.

Expert by experience (EBE) consultation

The importance of including EBE at all stages of research has been highlighted by the Department of Health (DoH, 1999, 2000). Minogue et al. (2005) evidenced many benefits reported for EBE's involvement in research studies: increased wellbeing, self-esteem, and confidence. In addition, EBE also reported valuing the opportunity to gain new knowledge or perspectives on the topic area. EBE involvement was considered and utilised throughout all stages of the current study. EBE's were found using a recruitment poster seeking those with experience of RSH who would be interested in advising on the study (see Appendix C). All EBE were compensated for their expertise and time given to support the study. Consultants to the project with lived experience of RSH received a £10 LoveToShop voucher, via email, following each consultation they offered the project; for example, completing a pilot interview and providing feedback, or consultants meeting about recruitment.

Designing and piloting interview schedule

The setup and structure of interviews, including the interview schedule, was discussed, and developed in collaboration with the research team and two EBE. The decision to share a brief statement around my own lived experience of RSH within the setup of the interview (Appendix D) was made alongside supervisors and EBE's; I and all consulted felt that it was important to be transparent around this.

In August 2021, a pilot interview was completed with one female EBE. This involved going through the draft interview schedule and audio vignettes as if she was a participant in the study, receiving her feedback on what the experience was like, and recording her thoughts on ways it could be developed. The EBE advised on how best to introduce the study, myself as the researcher, and what to expect from the interview. She advised me to include more information around how the audio vignettes were created and a clear content warning that none contained anything explicit about SH. Additionally, she suggested slowing down the transition speed between different voices within audio clips to allow participants more time to process what was said. I asked her to consider whether she felt able and comfortable to say if the audio vignette did not reflect her experience. She fed back feeling able to comment on both similarities and differences, and that having the first audio clip before any questions allowed her to warm up to the study and externalise experiences, if necessary. All suggestions were incorporated into the final interview schedule.

Involvement during data collection and analysis

Subsequent meetings were held with EBE, and they were consulted throughout the data collection and analysis stages of research. In January 2022, consultation was sought around the recruitment poster and guidance on ways to improve theoretical sampling. The focus of sampling at the time was to recruit participants who identify as male and to increase ethnic diversity within the sample to support generalization of findings. The EBE advised that a potential concern for male participants may be fear of lack of anonymity and that participant anonymity should be made clearer on the recruitment advert. As a result, further information around confidentiality was added (Appendix E).

Finally, in May 2023 the developing GT model was shared with EBE's, and their thoughts and comments were invited. Feedback was given on ways in which the model could be improved visually to aid understanding and ease of interpretation (see Appendix P3). Additionally, they shared their reflections on similarities between their experiences of RSH and what participants reported. Discussions were had around similarities and overlap between categories within the model and relevant addiction literature. They also provided their thoughts on key clinical, policy and legislative recommendations based upon the results.

Ethics

Ethical approval

Ethical approval was sought and granted by the University of Hertfordshire Health, Science, Engineering and Technology Ethics Committee; Protocol number: aLMS/PGT/UH/04978(2) (Appendix H).

Participants

As the study aims to understand RSH, I specifically wanted to interview adults who had engaged in this behaviour over several years or on multiple occasions. Therefore, participant inclusion criteria were individuals over the age of 18 years who identify as having experience of RSH. RSH was defined as five or more times within a period of 12 months (Shaffer & Jacobson, 2009). Remote participation afforded the opportunity for participants residing in countries other than the UK to participate, however unfortunately, due to this being unfunded research, recruitment was limited to English-speaking participants.

Procedure

A targeted recruitment strategy was used to identify and recruit participants. Several MH charities (SANE, SHOUT and Muslim Youth Helpline), SH organisations (Battle Scars, Self-Injury Support) and The National Self Harm Forum were contacted to advertise the study. A research advert (Appendix E) was posted on social network sites (Twitter, Facebook, Instagram, and LinkedIn) to access potential participants with experience of RSH outside of clinical populations (Cerrutti et al., 2011; Gratz et al., 2006).

As the study utilised GT methodology, initial sampling was conducted using a purposive sampling method: targeted recruitment of participants using sampling criteria. Throughout all stages of the study pertaining to participants I reflected upon my lived experience knowledge and continually questioned, "how would I feel participating in this study and talking about my experience of RSH?". The research procedure is outlined visually in Figure 3. Following an expression of interest in the study, all participants were electronically sent the information sheet (Appendix I) and invited to contact the researcher with any questions. Once participants had the opportunity to read the information and ask questions, if they expressed interest in participating, they were sent electronic links to complete the consent and demographics questionnaire. Qualtrics (Qualtrics, Provo, UT) was used for convenient completion of both consent and demographic forms.

After completing the demographics and consent forms, prospective participants' responses were checked in correspondence with the inclusion criteria; eligible participants were invited to participate in whichever way they would prefer, face to face, telephone or remote video call (Heath et al., 2018). Individuals who did not meet inclusion criteria received an email thanking them for their time, an explanation as to why they had not been invited to interview, and signposting information to support. Interviews were arranged via participants' preferred contact method. The remote video calling

platform 'Zoom' was selected for its user-friendly interface (Archibald et al., 2019) and security considerations. Participants choosing to participate remotely were sent an encrypted auto-generated link for the Zoom meeting.

Within the interview set up, time was taken to introduce myself as the principal researcher and the current study, I explained I would be consciously pausing following each audio vignette and inviting them to respond with their thoughts in their own time (Appendix D). Participants were reminded of the confidentiality statement, their right to withdraw, take breaks whenever required, and that they could refuse to answer any questions they did not feel comfortable answering.

As all participants chose to participate remotely, non-verbal, and social cues were fewer than when face to face. I used my clinical judgement to regularly check in with participants if they were okay to continue. After each interview, participants were invited to reflect on their experience, share feedback on how it could be improved, and ask any questions. Participants were electronically sent the debrief information (Appendix J), which included signposting to organisations who provide support for RSH.

As compensation for their time, valuable contributions, and expertise, and in an attempt to readdress power dynamics between researcher and participant (Thompson, 1996; Goodman et al., 2004), all participants received a £10 LoveToShop voucher, via email, following interview. This concept was informed by the feminist tradition of research, which questions the ethics of not reimbursing participants (Paradis, 2000). The opportunity to participate in voluntary research is a privilege not afforded to many and often those from lower socioeconomic backgrounds or other marginalised groups are unable to participate. Current research into SH has predominantly occurred within secondary health care settings (Carr et al., 2016), with those admitted into hospital (Gunnel et al., 2008), or those receiving support from MH services. MH services are not always accessible or appropriate for many individuals, often for people of the global majority (Cosgrove et al., 2019; Moreno et al., 2020), and this impacts who is recruited into research studies. It was hoped that remuneration and reimbursement of expenses would support recruitment of individuals who are usually excluded from research.

Figure 2: Procedure flow chart

Interested participants contacted principal researcher for more information.

Participants were sent study information and links to complete electronic consent and demographics form.

Once consent and demographics form completed by participant, eligibility checked by principal researcher.

Participant informed they met eligibility criteria and invited to interview. Offered choice of interview method – remote video call, telephone, or face to face.

Location, date, and time confirmed via email. Reminder on date of interview sent via email.

Interview completed (audio and video recorded). Upon completion, participants given opportunity to ask any questions they may have. Debrief and renumeration process discussed.

Debrief, signposting information and LovetoShop voucher sent via email.

Participant information was pseudo anonymised, if chosen by participant this was checked first by principal researcher.

Audio recordings transcribed by principal researcher.

Transcripts were imported to NVivo 12, checked for inaccuracies, and amended.

Data analysed using constructivist grounded theory.

Measures

Extensive consideration was given to how the conceptualisation of RSH as an addictive behaviour could be introduced and explored with participants in an unbiased way. The study team reflected on the power and influence researchers holds within an interview setting when introducing a concept and decided that, to allow participants to share differing experiences and their own conceptualisation

of RSH, it should not be introduced by the researcher. Instead vignette methodology was employed to introduce these concepts.

Audio vignettes

Atzmuller and Steiner (2010) define a vignette as "a short, carefully constructed description of a person, object or situation". They can also include descriptions of incidents or experiences (Finch, 1987) allowing for the presentation of rich, nuanced information to elicit a reaction, discussion, or opinion, and the exploration of participants beliefs and perceptions (Stacey et al., 2014; Teece et al., 2021). Vignettes are widely used within healthcare research (Brauer et al., 2009) to generate rigorous and valid data (Ramirez et al., 2015).

Although most common in written format, audio vignettes are widely used within research and have been shown to increase validity (Aguinis & Bradley, 2014). Often used within research into sensitive subject areas (Barter & Renold, 1999), vignette methodology aligns with constructivist GT, allowing researchers to investigate decisions and actions within specific contexts (Finch, 1987; Gronhoj & Bech-Larsen, 2010). Qualitative studies typically recruit vignette methodology where story-telling scenarios are created by the researcher (Finch, 1987). However, Hughes and Huby (2004) highlighted the importance of "realistic and believable" vignette scenarios. Initially, I strived to create audio vignettes that could present SH as an addictive behaviour from publicly available media on SH. Unfortunately, publicly available sources on SH mirrored the lack of consideration of SH as an addictive behaviour found in the literature and did not present or probe the current and most widely accepted, clinically and within research, definition of addictive behaviour (APA, 2013; 11th ed; ICD-11; WHO, 2022). It was therefore decided to hold and record a focus group with people with lived experience of addiction, and that questioning should be designed to elicit audio clips which could be edited into short audio vignettes, to be played to participants in the study.

As discussed within Chapter 1, there is much debate within the literature around what an addictive behaviour is, how you define it and how, subsequently, you diagnose or assess for it (Orford, 2001). Due to large discrepancies within the literature of what constitutes an addictive behaviour, it was decided through discussions with the supervisory team that the current world diagnostic standard criteria of addictive behaviours, as defined by ICD-11, would be used to guide the research.

To create the audio vignettes, a recruitment poster was shared, on Twitter and with a local service user research group, seeking individuals with lived experience of addiction. With guidance from supervisors, a list of questions was created based upon the diagnostic criteria within the ICD-11 (see Appendix K), which invited focus group members to discuss their experience of each criterion. In July 2022, a focus group was held with four individuals of varying ages (35 – 65 years): one male and three

females. The focus group was audio and video recorded and lasted for approximately one hour. Focus group members were compensated for their time, they were paid £20 for their participation and sharing their personal experiences within a one-hour, online, focus group. Audio clips were edited into succinct descriptions of focus group members experiences of addiction to create the vignettes (see Appendix L for transcripts of each vignette). Audio vignettes varied in length from 30 seconds to one minute and 40 seconds. All eight vignettes were played to every participant in the same order.

Figure 3: Flowchart of steps taken to create audio vignettes
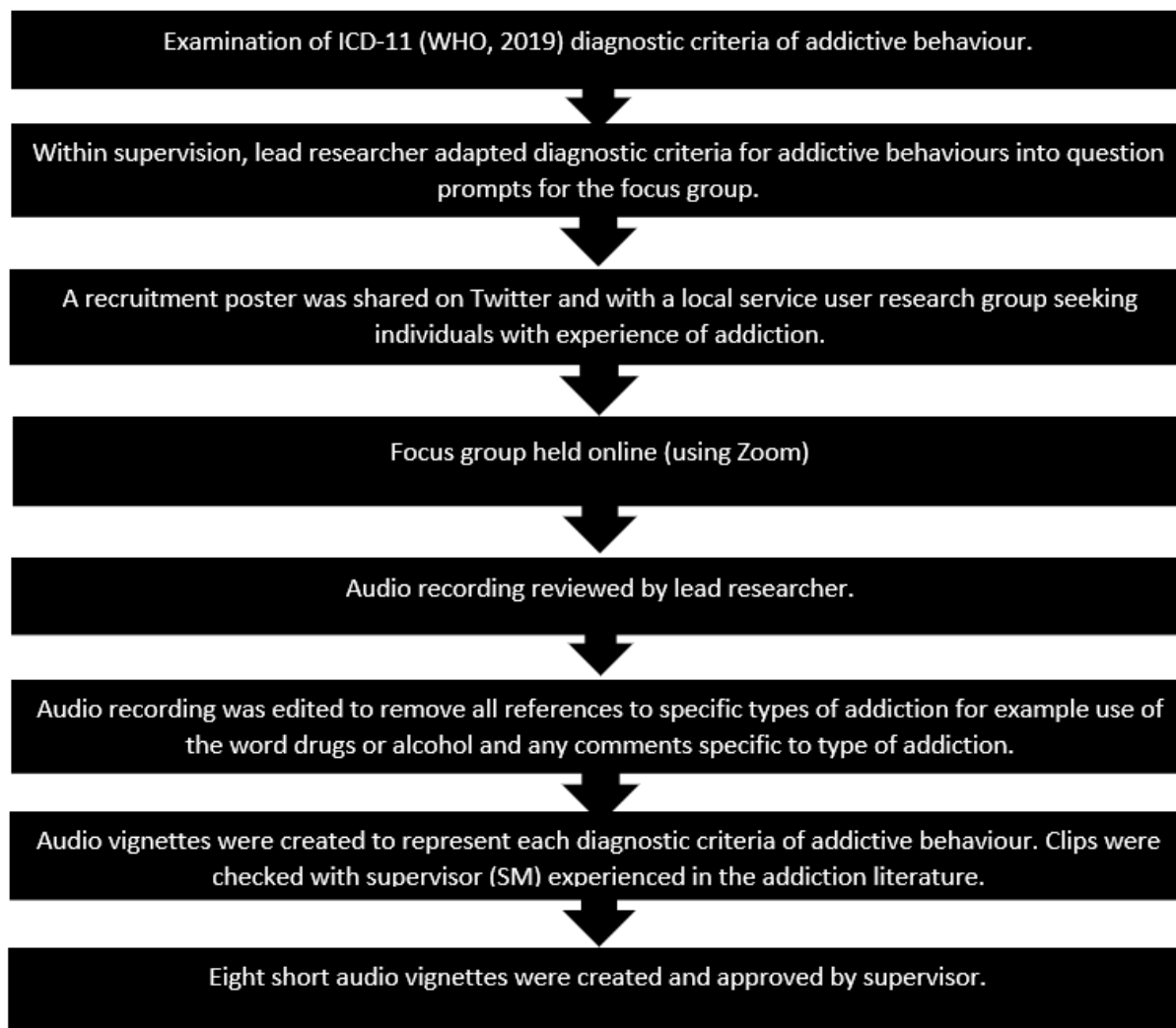
Steps taken to avoid a potential priming effect.

The research and EBE team felt that vignette methodology would allow me to present the ICD-11 diagnostic criteria of addictive behaviours impartially, invite participants to offer their own insights or hold a different opinion, and mitigate against acquiescence bias. There is a wealth of research highlighting the benefits of vignette methodology, particularly to allow the researcher to explore sensitive topics (Hughes, 1998).

The use of a pilot interview with an EBE allowed for feedback on whether they felt the audio vignettes or follow up questions were priming or leading their responses in any way. Following the pilot interview, the EBE fedback that they felt comfortable informing the researcher if their experiences were dissimilar to those shared within the vignette. The decision to create and use real life audio vignettes was taken as a way to focus the interview on the research aims and questions (whether RSH is experienced as an addictive behaviour or not) in an open and non-leading way, where participants felt able to and were encouraged to disagree with material presented if it did not align with their experiences. Prior to the presentation of each audio vignette, participants were asked to tell me how these fits or do not fit with their experiences of RSH.

The epistemological position taken throughout this research of critical realism assumes that participants reality of RSH exists regardless of researcher's awareness of it (Willig, 2013) and the aim of critical realist research is to identify and explore the underlying mechanisms that contribute to actions (Wollin, 1996). This epistemology informed all elements of the study, including selection of methods. As highlighted within the introduction, RSH is a vast topic with many areas participants could discuss or describe within an interview if asked broadly about their experiences overall of RSH. Within this study, audio vignettes were used as microcosms which Törrönen (2018) suggested provides participants "with a non-personal, non-confrontational and safe setting to discuss difficult issues, as well as to discuss what is their temporal, spatial or agential distance or proximity to the speaking voices, character-orientations, actions, practices and setting that they enclose" (p. 11).

Interview schedule

The most popular data collection method within qualitative research are semi-structured interviews (DiCicco-Bloom & Crabtree, 2006; Willig, 2008), allowing the researcher to develop broad, open-ended questions that can begin to focus the interview, whilst allowing for flexibility to explore an individual's experience of the process under investigation. A semi-structured interview schedule (Appendix D) was used to ensure consistency of questions and presentation of material across the interviews. The flexible nature of the interview schedule compliments a GT analysis of data as it allows the interviewer to complete the iterative process of data analysis alongside data collection, and the opportunity to amend the interview schedule in order to seek further information on tentative categories identified within previous interviews (Charmaz, 2014).

In line with GT methodology, the interview schedule must not impose the researchers position or understanding of the topic upon participants from the outset (Charmaz, 2014). Instead, flexible questions allowed for the interview to explore the participant's reality. After listening to each audio vignette, participants were asked to respond in their own time with their perspectives on how these

fit, or not, with their experiences of RSH. Open questions were used throughout to allow participants to explore their experiences and social processes related to RSH. In line with the research aims, the schedule included questions around the individuals' thoughts, feelings, and contexts, and explored the "what", "when", and "how" of their experiences. Follow up questions pertaining to a participant's experience of RSH as addictive were only asked if/when the participant had introduced this to the interview themselves.

Safeguarding participant and researcher wellbeing

Due to the sensitive nature of the topic, there was potential for participation to be difficult and upsetting. Therefore, participant well-being was of the upmost importance. I was also conscious that I was interviewing a community sample who may not have access to therapeutic support, should they require it. Numerous steps were taken to safeguard participants from psychological distress. These were informed by available "suicide-related" literature (Littlewood et al., 2021; Owen et al., 2016) and guidance recommended by ethics committee members and researchers (Lakeman & Fitzgerald, 2009a,b), and are outlined within Table 6.

An ethical consideration of the research was whether to interview individuals currently engaging in SH. As RSH is the subject area of the research, it was decided with the research team that ongoing SH would not be an exclusion criterion. The limits of the research study were documented within the information sheet and participants were made aware that signposting (provided to all participants) was the support that could be offered in relation to SH. A risk protocol (Appendix M) was developed to outline the procedure should a participant disclose suicidal ideation to the researcher. As a trainee clinical psychologist, I needed to remind myself of my role as researcher in this context, and refrain from a desire or habit to use my clinical skills therapeutically when interacting with research participants. Instead, I utilised supervision to reflect upon times I found it more difficult to refrain from using clinical skills in a research context.

As an insider researcher with lived experience of SH, regular supervision, and opportunities to reflect following each interview was a necessity to safeguard myself. During data collection and analysis, regular supervision for myself as the principal researcher was arranged and completed with the primary supervisor (JH) and ad hoc meetings where required, to discuss interviews, anything particularly emotive or potentially distressing, and to consider the three-step model of debriefing. In addition, an ongoing reflective diary was used throughout (see Appendix B).

Table 6: *Steps taken to safeguard against harm*

Recommendations (Littlewood et al., 2021)	Where this was actioned within current study:
Development of a clear protocol outlining how the researcher will assess and respond to risk	A risk events protocol was created (Appendix M)
Ensuring risk protocol is communicated clearly to potential participants prior to commencing the study	Details of this were shared within study information sheet and participants were reminded of this prior to commencing the interview.
Give an overview of the possible positive and negative effects that the research could have on the participant	Benefits and potential risks of participating were clearly outlined within the information sheet.
Make the withdrawal process clear.	This was detailed within both the study information sheet and the consent form. Participants signed to state they understood the withdrawal process.
Outline the potential impact of the research findings.	Stated in the Information sheet (Appendix I)
Clearly explain the research processes in order to alleviate any apprehension which stems from participants not knowing what to expect.	A section titled "what will happen to me if I take part" explained the steps to expect if they consent to participate and that interviews will include audio recordings and be an opportunity to go through more detailed questions about their experiences of RSH.
Explicitly establish the research environment as a non-judgmental, open setting.	A mock interview was conducted with one EBE prior to data collection to explore if this was achieved within the interview schedule. Their feedback was incorporated, and interview schedule adapted. Discussed further within EBE consultation.
Start the research interview with topics which are emotionally undemanding to allow the participant to become comfortable before building up to asking about self-harm.	The interview began with a short audio vignette and participants were asked to share their thoughts on how these fit or do not fit with their own experiences. This was to initially allow participants to begin by speaking about others experiences and the choice to share as much or little about their experience as they felt comfortable. Direct questions about participants own experience were not introduced until later within the interview schedule and after participants had begun to discuss their own experiences more openly.

Data Analysis

Transcription

Interviews were transcribed verbatim by the principal researcher and NVivo 12 software was used to organise, manage, and analyse the data.

Bracketing and Memo-ing

Bracketing originated within phenomenology and is a technique whereby the researcher strives to acknowledge, record, and bracket or set aside their own beliefs and biases, in order to keep an open mind (Drew, 2004; Gearing, 2004; Starks and Trinidad, 2007). This technique is often used within the GT tradition due to the active role the researcher plays in constructing the theory (Creswell & Miller, 2000). As an insider researcher, bracketing was used throughout the research process to mitigate against my personal experience or preconceptions of SH influencing the iterative process of utilising initial data analysis to inform subsequent data collection and theoretical sampling (Tufford & Newman, 2012). Engagement in the continual process of bracketing encouraged self-reflection and was another way to protect myself, as the lead researcher, from the cumulative emotional impact of the emotionally challenging material within this study.

Tentative codes were created to begin to explore participants experience of RSH, what meanings they made of experiences, and the evolution of these (Charmaz, 2014). Memo-ing was used throughout all stages of data collection (see Appendix N) to record analytic observations and ideas (Butler et al., 2018). Again, this supports a transparent process of analysis and meaning making by the researcher, as memos were dated and included clear information around what influenced analytic or theoretical ideas.

Initial coding

Within GT analysis, the first step is to complete line by line coding (Charmaz, 2014) where every line of data is reviewed and codes are created to encapsulate the processes that maintained engagement in RSH described by the participant (Tie et al., 2019). The first seven interviews were analysed using line by line coding. Gerund words (noun form of a verb) were used within all initial codes in an effort to describe active and not static processes (Glaser, 1978; Charmaz & Keller, 2016). The purpose of initial coding is to ensure codes are informed by the data, whilst considering participants meaning to move from concrete statements into theoretical ideas.

Focused coding

Focused coding involves grouping initial codes into conceptual categories, deciding which codes best account for the data and are most theoretically relevant to the research question and aims (Charmaz, 2014). Bracketing and discussions with the principal supervisor (JH) were used within this stage of data analysis to critically reflect on the meaning I was making when comparing and contrasting initial codes. All initial codes were grouped into areas pertaining to the research question and codes that were less relevant were identified.

Memos were used throughout to identify initial codes which had occurred more frequently, or those which presented a novel theoretical idea about RSH, and to develop early comparisons (Charmaz, 2014). An example of this was that many participants spoke about RSH as a way to care for themselves, likening this to self-care. This formed a tentative analytic category and subsequent interviews involved a question around self-care to further explore this concept. This process allowed the researcher to move analysis from focused codes into conceptual categories and is guided by Charmaz (2014).

Theoretical sampling

As data collection and analysis progressed, and exploratory codes were constructed, theoretical sampling was employed to elaborate and refine initial theoretical categories (Charmaz, 2014). With the aim of GT to "weave major threads into generalizable theoretical statements that transcend specific times, places and people" (Charmaz, 2014), demographics of participants thus far were also considered. As all seven initial participants identified as female, it felt important to seek participation from individuals identifying as male in an attempt to capture their experience of RSH. Therefore, social media platforms were utilised again to advertise study recruitment and posts highlighted the interest in speaking to participants who identify as male. During this stage, 20 individuals sought more information and 13 participated in the interview.

Developing categories and subcategories

Diagramming was used to visually represent categories generated from the data and their relationships (Clarke, 2012). Another benefit of displaying the analysis within a diagram was that it allowed the direction of categories to be presented and considered in an active, non-fluid way.

Theoretical coding

Theoretical coding was employed to analyse relationships between constructed categories and subcategories (Charmaz, 2014). The aim of this stage of analysis was to ascertain how these categories interact with one another to form a theory of the social process that motivate engagement within RSH. Theoretical coding is an iterative process, which included reviewing data, reconsidering codes through differing theoretical lenses, and reviewing memos created throughout data. An analysis audit trail can be found in Appendix O. Maps were used to form, develop, and present the analysis (Clarke, 2012). Examples of the diagramming process can be found in Appendix P.

To reach theoretical saturation, I aimed to recruit 15-17 individuals. The iterative process of constructivist GT stipulates the researcher be guided by the data collection and analysis, with a reduction in sample size possible (Strauss & Corbin, 1998). Empirical evidence suggests theoretical saturation occurs between 10-30 interviews (Thomson, 2010). Studies have shown researchers with

more skill, knowledge, and experience of their topic area, may require fewer participants (Morse, 2000). Within constructivist GT, the accepted definition of theoretical saturation is when theoretical categories are sufficiently robust to represent further patterns in additional data (Holton, 2007; Wiener, 2007).

Model-checking interviews

Theoretical coding led to a tentative GT model, which was shared with all consenting previous participants (via email) as part of the member-checking process. The model was also reviewed in detail within model-checking interviews with two new participants. Within model checking interviews, the GT model, and the proposed interactions between categories, was verbally discussed with new participants. Participants were asked to discuss whether they felt it makes sense with their experience or not and whether they believe this is a good framework for us to think about RSH. Member checking is recommended as a method of ensuring rigor within qualitative research (Lincoln & Guba, 1985) and to assess whether analysis is congruent with participants' experiences of RSH (Curtin & Fossey, 2007). Member feedback, as well as the results of the model-checking interviews, was discussed with the principal supervisor (JH) and contributed to the further development of the model.

Reflexivity

Reflexivity within research can be described as the process of turning the analytic lens towards oneself, and the critical analysis of researcher identity, positionality and how these interact with the sample population (Jacobson & Mustafa, 2019). The reflective process is concerned with an ongoing dialogue and hopefully increased awareness or ownership of the researcher's positionality (Pillow, 2003; Mauthner & Doucet, 2003).

This is fundamental within insider research as evidence suggests that insider researchers may find it harder to separate their own personal experiences from participants' experiences (Kanuha, 2000). As a young, white, educated, woman with lived experience of RSH within my teenage years, and a MH professional (currently working within the NHS), I bring a number of biases to the project as the principal researcher. Throughout all stages of this study, I was considering my position as an 'Insider-Outsider' (Dwyer & Buckle, 2009) researcher and the role this played within my analysis of the data and the construction of findings. Within interviews, I was often reminded of the 'insider' privilege my lived experience afforded me and was repeatedly touched when participants expressed an admiration or inspiration that someone with lived experience was not only the principal researcher but was transparent with their experiences. Conversely, stark differences were highlighted between my experiences and experiences of participants who had engaged in RSH for more than thirty years and continued to do so.

In an effort to keep reflexivity at the forefront of my mind throughout the research, a number of techniques were utilised. Regular supervision from the principal supervisor supported me in considering my position within the construction of categories, and encouraged me to continually question if there was any information I was privileging or ignoring because it aligns with or disagrees with my own beliefs and experiences? Bracketing interviews were completed with the principal supervisor (JH) during data collection. Memo-writing allowed me to clearly document the process of developing theoretical codes, including what data codes were influenced by. Finally, an ongoing reflexive journal was completed throughout the research with an emphasis on including an entry following the completion of each interview. The purpose of this was to reflect on assumptions made prior to and during interviews (see Appendix B), how I was left feeling upon completion of the interview and data that stood out.

Chapter 4 Results

Chapter Overview

In this chapter, participant demographics are presented and an overview of the theoretical understanding of the data is displayed in the form of a process model. Categories and sub-categories of the model are presented and elaborated on using participant quotes to help the reader conceptualise the model in more detail.

Results overview

The process model was developed from data co-constructed from the thirteen interviews and additional two model-checking interviews. Participants' demographics are presented in Table 7. Twelve categories were co-constructed, forming the overall model. These categories and subcategories are presented in Table 8; the overall process model is presented in Figure 4 and outlines the interaction and relationships between each category. Included quotes were the most pertinent or descriptive of each category or subcategory and I strived to ensure these reflected a balanced representation of the fifteen participants interviewed.

Participant demographics

Table 7: *Participant demographic information*

Participant pseudonym	Age	Gender	Ethnicity	Received treatment from a physical or mental health setting for SH?	Currently engaging in RSH?	Diagnoses mentioned within interview
Philly	20	Female	British/German	Yes	No	History of eating disorder
Ceri	24	Female	White/English	Yes	Yes	Borderline Personality Disorder
Morgan	50	Female	White/Greek	Yes	Yes	Autism Spectrum Disorder
Leanne	44	Female	White/English	Yes	Yes	Attention Deficit Hyperactivity Disorder
Hannah	36	Female	White/English	No	Yes	Complex trauma
Alana	26	Female	White/English	Yes	No	History of eating disorder
Kate	36	Female	White/English	Yes	Yes	Autism Spectrum Disorder
Molly	25	Female	Black or Black British - African	Yes	No	None
Jake	29	Male	White/English	Yes	Yes	Depression
Beth	39	Female	White/English	Yes	No	None
Dan	61	Male	White/English	Yes	Yes	Depression
Chaya	29	Female	Ashkenazi (Jewish)	Yes	No	Depression
Sandy	25	Female	Malay	Yes	Yes	None
May	24	Female	White/English	Yes	No	None
Ellie	29	Female	White/English	No	No	None

Table 8: *Categories and subcategories of grounded theory model*

Category	Subcategories
1. **Starting**	
2. **Needing to punish myself**	2A Harming using food
3. **'Feeling addictive'**	3A 'Snowballing'
	3B 'Ritual'
4. **Having the urge to self-harm**	
5. **Conflicting relationship with self-harm and self**	
6. **Managing emotions**	6A 'Releasing'
	6B Using behaviour to express emotional pain
	6C 'Calming'
7. **Allowing me to function**	7A Falling asleep after self-harm
	7B 'Coping'
8. **Caring for myself**	8A Protecting from suicide
	8B Comforting familiarity
9. **Controlling**	9A Allowing me to feel in control
	9B Losing control and self-harm controlling me
10. **Feeling guilt and shame after self-harm**	
11. **Responding to others' reactions**	11A Seeking attention myth
	11B Lying to protect others and self-harm
12. **Breaking the cycle**	12A Accepting self-harm
	12B Needing distance from self-harm
13. **Relapsing**	

The model

Through GT analysis, a tentative theoretical rendering of the data was developed and is presented as a model in Figure 4. Participants in this study described the processes that kept them engaging in RSH. The interconnecting arrows are used within the model to represent that participants' journeys with RSH were not linear, instead processes that maintain engagement were reciprocal, reinforcing of one another, and fluid over time.

Participants described their experiences of starting SH; for many, feeling a 'need to punish' themselves either led to starting or occurred soon after. Participants quickly felt they were no longer always consciously choosing to engage in RSH and began feeling it was 'addictive'. Once participants had engaged with SH, they continued to have urges to SH even after stopping for many years and experienced a conflicting relationship with RSH. They described that both the urge to SH and conflicting relationship with RSH did not end once they stopped engaging in this behaviour. Instead, they described feeling this would be something they would always experience, long after stopping RSH.

Throughout each incidence of SH, participants experienced processes that interacted, describing this as the *"cycle of SH"*. SH was used to manage feelings of overwhelming emotion and produced calming effects. This experience enabled participants to function, sleep, and feel they could cope with life. Over time, the process of harming oneself, the relief experienced immediately after, and care given to treating wounds began to be interpreted as their way of caring for themselves. It was described as comforting, familiar and, for some participants, protected them from ending their life because it allowed them to cope with distress and suicidal thoughts or ideation. At times, RSH afforded a sense of control of the uncontrollable (emotions and external events) but at other times it became increasingly apparent to participants that they were no longer in control of their SH, instead experiencing it as controlling them. Effects of SH, such as releasing emotions or calming, were short lived and, quickly, participants experienced guilt and shame due to SH. For some, this reinforced feelings of needing to punish themselves and led them to harm again. Participants described these five processes as cyclical and interacting which is why they are displayed within their own distinct cycle within the model and double headed arrows are used to show the interactions between each category.

Finally, participants detailed how others' responses to their RSH could either contribute to feelings of guilt and shame or support them to *"break the cycle"* of SH. They identified ways in which they found they could *"break the cycle"* of RSH but also described experiences of *"relapse",* which reinforced the cycle and were often experienced as more out of control than previous incidences of RSH. Colour is used within the model to display which categories were similar to theoretical and empirical understandings of addictive behaviours (highlighted in orange) and which appeared to be distinct to RSH (highlighted in blue).

Figure 4: Grounded theory model

A model illustrating the addictive processes within RSH

2. Needing to punish myself
- 2A Harming using food

1. Starting

3. 'Feeling addictive'
- 3A 'Snowballing'
- 3B 'Ritual'

6. Managing emotions
- 6A 'Releasing'
- 6B Using behaviour to express emotional pain
- 6C 'Calming'

7. Allowing me to function
- 7A Falling asleep after self-harm
- 7B 'Coping'

8. Caring for myself
- 8A Protecting from suicide
- 8B 'Comforting familiarity'

9. Controlling
- 9A Allowing me to feel in control
- 9B Losing control and self-harm controlling me

11. Responding to others' reactions
- 11A Seeking attention myth
- 11B Lying to protect others and self-harm

10. Feeling guilt and shame after self-harm

12. Breaking the cycle
- 12A Accepting self-harm
- 12B Needing distance from self-harm

13. 'Relapsing'

Key:

Similarities with addictive behaviour literature

Category appears distinct to RSH

4. Having the urge to self-harm

5. Conflicting relationship with self-harm and self

Journey with self-harm over time

Category 1: Starting

All participants described their experience of first starting SH. The majority of participants described starting SH during adolescence. However, one participant started SH later in life, around age 50. As presented within the model, starting SH was integral to beginning the process and experiencing any of the following categories. From the first incidence of SH, the subsequent experiences depicted within the model occurred for participants. Many described how quickly the SH "escalated" after starting. They appeared to be describing a feeling that once one starts and has that experience, there is no going back.

One described, *"the first time is so crucial"* as *"it felt so taboo, but the second you cross the line of doing it the first time and you realise it is not as bad as you thought it was going to be, then it just becomes easier after that"* (May).

Many explained the feeling that once you have started: *"You can't go back to how life was before; it is always there as an option, and I can't undo that it has happened, and I can't undo how it made me feel at the time"* (Alana).

Some participants spoke of experiencing bullying and feeling that was the catalyst for their first incident of SH: *"I was probably about 12 and I feel like it probably started because I sort of got picked on at school"* (Beth). Others described SH being *"triggered by a trauma"* (May). They explained, *"when it first started, I had already been in a stressful, traumatic situation at home"* (Ellie). Similarly, one participant started self-harming following a loss, *"I started after my mum died"* (Dan).

Category 2: Needing to punish myself

A need for or feeling that they are deserving of punishment characterised the motivation to start and continue harming for eleven participants. This was described as relating to low self-esteem, self-worth, or feelings of intense anger with themselves or others (which was then directed towards themselves). It appeared these feelings preceded starting SH and, for many, contributed to the motivation to engage in SH in the first place. However, some participants observed and described a progression or increase in this feeling or need once they had started. This is depicted in the model by the category bridging the space between starting and the remaining categories which were described as the processes maintaining engagement with SH.

One participant described this experience in detail and how it was also observed by others:

> *"I remember my mum years ago said to me that it was almost like I got to a certain age and this switch went on inside my head and it was almost like from that point I was just hell bent*

on punishing myself. But I think to me it is just something that even now I sort of, I don't really understand it, and it almost did feel like a switch of this all-consuming rage with myself at times, and the only way to get it out was to feel that pain and to punish myself" (Beth).

Again, both participants agreed with this experience during model checking interviews. They added *"the punishing thing definitely resonates, like loathing was how my feelings came out when I was overwhelmed, and it would turn to literal disgust and like I hate you"* (Ellie). Similarly, *"I viewed it like atoning for my sins, it was like anytime I thought I was a bad friend or a bad person I would be like well that doesn't matter because you've punished yourself for it"* (May).

Subcategory 2A: Harming using food

When asked to reflect on their appetite, and the relationship of this with SH, ten participants spoke about harming themselves using food and for many this was an additional way to punish themselves. Participants described how this was an active choice and were clear that the motivation was not to control or lose weight but instead as *"another way to self-harm. So, it is not that I am not thinking about it (eating), as you know sort of starving myself has the same function"* (Jake). Others expanded on this adding: *"I tend to try and starve myself at that point, it's kind of like I want to hurt myself in as many different ways as possible"* (Ceri). Similarly, another participant explained they harmed using self-induced vomiting when more regular methods were unavailable: *"I am a smart girl, I have found ways you know, if I don't have access to a cutter, I have found the vomiting"* (Sandy).

Category 3: Feeling addictive

Twelve of the fifteen participants described in some way the addictive effects or feeling addicted to RSH. Participants appeared to experience the feeling that, once you have started engaging in SH, *"you don't want to stop. You just don't want to."* (Dan). They explained this experience using language typically used to describe addiction to substances, such as "craving", and many described the experience that they needed to increase their SH. for example harming more severely or frequently, in order to experience the same effects. It appeared that participants were suggesting these experiences began quite soon after first engaging in SH, continuing to grow over time and increase through repeated engagement in SH. This felt particularly relevant for participants who had been engaging in self-harm for: *"well over 30 years, I started when I was a really young kid, so you don't continuously do such a self-destructive behaviour if there isn't some level of addiction there"* (Leanne). Participants appeared to suggest that this was a category that was not well understood by others without experience of RSH.

Feeling addicted to SH was not described as part of the RSH cycle process, instead this experience was described as relating to managing emotions. Participants clearly reported the feeling of needing to escalate SH in order to experience the same effect once they had harmed. Participants spoke about their journey with RSH over time and appeared to suggest that, quite quickly after first engaging with SH, they began to experience feeling addicted, snowballing, and SH as a ritual. This is depicted in the model with the two-way arrow between feeling addictive and managing emotions.

One participant described this as: *"At some point I became really aware that… I was quite addicted to it. Yeah, if I gave into it too much, it was definitely less effective and even was becoming a full-blown addiction. It was all the kind of standard stuff, needing it more frequently, needing it to just function…really unexpected kind of withdrawal symptoms, physical withdrawal symptoms from it."* (Morgan)

Participants drew parallels between other well-known addictions, such as:

> *"I have never smoked. I don't know what that craving for nicotine is like, but my dad had desperately tried to give up and it was sending him crazy this absolute craving that he must have it. But it is kind of like that, it is almost a kind of addiction that you're getting stuck into"* (Dan).

During model checking, both additional participants confirmed they experienced RSH to be *"very addictive"* and described an experience of *"when it is not even really tied up to being emotional anymore. No, you're not low, but you are still not high, and it will make you feel better"* (Ellie).

It is important to note that one participant did state they *"don't find it's addictive"* (Hannah) but their experiences did align with many other categories within the model.

Subcategory 3A: 'Snowballing'

There appeared to be a distinction between when participants felt they were consciously choosing to engage in SH and other times where it felt almost unconscious. Participants spoke about the accumulating "snowball" effect of RSH, where they needed to increase their SH or engage in more physically risky methods. They described their bravery increasing with the behaviour over time and feeling that no matter what they did, it did not feel enough. Many explained the feeling of "spiralling" or becoming caught in a *"horrible cycle that was happening and happening over and over again"* (Ceri). This subcategory was confirmed within the model checking interview:

> *"Initially when you choose to first do it, there is definitely a reason for it and you make that decision, but then a few months into it, it definitely became something I did sometimes out of*

boredom or because I felt like I had to and that definitely feeds into the unconscious idea of it" (May).

Subcategory 3B: Ritual

Often conceptions of SH involve an element of acting on impulse or engaging in SH behaviour when feeling overwhelmed and out of control. However, many participants explained in detail the planning, preparation and, at times, waiting they experience before harming. Many identified with the term ritual and described the ways in which they experienced RSH to be ritualistic. For some, this was experienced as going into autopilot and following a well-known routine and steps but, for others, they explained that this was not impulsive and often required careful consideration and set-up.

The process was described as: *"a ritual. You have a particular way that you do it. You have a particular time that you do it and you have a particular place that you do it. People don't do it sporadically; they have a particular safe place for them to do it"* (Ceri).

It appeared a large part of the ritual is around ensuring the RSH is done in the same way, so the person is able to experience the same effects afterwards: *"The routine element of it. It would be the same every time, it would be the same set up, I would do things in the same order, and it was all just to get that feeling when it was done"* (Alana).

One participant conceptualised the ritualistic element of RSH slightly differently, they experienced it as: *"Even euphoric if I hold up the cutter near my arm like yes! I am going to do it! So, it does feel sort of grand sometimes, but I wouldn't think of that as a ritual. If I think of a ritual, it is something special so I guess that is how I would see it, but not in a ritual way in that I do it in a certain way in a specific time"* (Sandy).

Again, the ritualistic elements of RSH were confirmed within the model checking interviews and they felt *"a ritual is a very good way of describing it"* (May).

Category 4: Having the urge to SH

All participants described having ongoing urges or thoughts to SH. This was described by those participants who were still actively engaging with RSH and those who had not self-harmed in many years. Participants described their experiences of having urges to SH since starting, and how these have continued throughout their journey with SH. This is depicted within the model as a category that continues from starting SH and is ongoing even once an individual has broken the cycle, using a solid line. One participant described this in detail:

> *"I would describe it as like a little pea in the back of my brain that just goes you've always got that there if you need it. It's always here for you don't worry. Like you can always fall back on this if you need to"* (Alana).

One participant detailed their experience of continual urges and trying to explain this experience to MH professionals:

> *"It's been 7 years now, just over 7 years, with non-stop twenty-four-seven self-harm urges that their absence is impossible to imagine. When I try to explain to professionals about what the urges feel like, quite often you just see the horror on their faces. You know, it is so powerful, and it's got such a strong pull on you"* (Morgan).

Times were also described where urges are less frequent but present during periods of distress or as a last resort. Interestingly, participants explained how these urges do not always present in the context of negative emotions and can occur when things in their life feel okay. This experience was described as though the urges were intrusive thoughts:

> *"Even when I am otherwise feeling fine and dandy and strong, and you know I can deal with this, and the trigger isn't even that severe. The thought is, it's kind of a bit intrusive. It sort of comes up even when it's not needed, and you still kind of feel a magnetic pull, and you either can or you can't stop yourself or just dismiss that thought"* (Jake).

Another participant, who continued to engage with RSH, reflected *"I suppose for me I don't really have the urges because I've probably never said no to myself, because it is so secretive"* (Hannah).

Category 5: Conflicting relationship with SH and the self

Within the majority of interviews, participants appeared to be describing a conflict and tension between opposing experiences with SH during their journeys. Descriptions of their experience with RSH appeared to highlight a relational element where participants were speaking about SH almost as if it was another person. There was conflict within this relationship, at times RSH was experienced by participants as a supportive friend and at other times it felt more like an enemy who was hurting them. The relational element was described as "toxic" by some participants, as the continual urges telling you to hurt yourself, or that you deserve to be punished, felt abusive. It is important to note that participants described these conflicting themes as coexisting, they described RSH as both an enemy and a friend, it was not either or. Similarly, to the previous category, this was described as an ongoing relationship that does not end when you stop harming. Therefore, this is depicted in the same way using a solid line.

Participants stressed this tension "*can be really difficult and it makes you feel like, if this is the only way that I can cope but this is sort of ruining my life, then what am I meant to do?*" (Beth). One participant captured this changeable relationship as they described feeling:

> "*Really validated by the self-harm, like I know it's not a person, and it can't speak to me, but it really validated everything that I've been through. A maintaining factor was to communicate with myself that I understood how horrible it was and that was reinforced when other people didn't necessarily want to hear about it, so it pushed me further into the self-harm because it was there for me. It was there for me because it would listen, and I could do it when I needed to, and I didn't feel like I was getting that from other places. At that time the self-harm could give me more than anyone around me could*" (Alana).

However, they also acknowledged *"as much as it would help me, it was also just bringing on so many feelings of shame and guilt" (Alana).*

Another participant summarised this conflict as: *"even though in the moment I guess it kind of feels like it helps on a broader scale. It has definitely made life worse"* (Jake).

This category was confirmed by both participants during model checking interviews. One added:

> "*It is a massive conflict, and it's mad even having this conversation because at the time I thought I was completely barmy. But I suppose that's because it is something you feel like you shouldn't do and then saying it feels really good, and it helps me to manage my emotions like what? But it does, it felt really good*" (Ellie).

They went on to describe how this conflicting relationship changes over time:

> "*I viewed it as an enemy definitely when I was in it because I was so angry at myself for doing it. But even now, I do think it is something that I know so intimately, and it knows me so intimately, I have a relationship with it that I don't have with anyone that I know in person, and no one will know of that relationship either, which I think keeps it being such an intimate thing. And I definitely think that when you start to view it as being toxic, I think sometimes makes it worse. But at the same time, you need to acknowledge that you're harming yourself which is something I think that gets lost in it, is that you're being violent to yourself*". (May)

Categories 6 to 10: the RSH *"cycle"*

All participants spoke in some way about the cyclical process that occurs during every incidence of SH. This was discussed during early interviews and an aspect of theoretical coding was to explore

participants experience of this cycle. Categories are numbered for ease of interpretation; however, this was an interactive process with each category contributing to one another.

Category 6: Managing emotions

All participants described an antecedent to RSH was the experience of overwhelming emotions or emotional pain. One emotion that was described as particularly difficult to manage was anger, described by many as a trigger due to feeling like they had no other way to control or stop this feeling. It appeared that RSH became an incredibly effective strategy to manage the build-up of intense emotions and allowed them to feel in control of their emotions: *"After trying all these different things and nothing was working, I worked out that if I self-harm at the right time, at the right point in the build-up, I can stop it going too far"* (Morgan).

This appeared to be of particular importance for participants who described feeling depressed over a long period of time:

> *"In that sort of split second, there's a break, and I think when you're dealing with something that's so just unending, and it just goes on and on and on, with no break. Even just a little break is something and I found that it did work to manage emotions to an extent"* (Jake).

RSH was described as *"just literally an explosion of I have all these feelings. What do I do with it?"* (Leanne). Many participants shared that they were *"more likely"* to SH when *"feeling frustrated, angry or upset"* (Sandy). Anger was described by many participants as the trigger for RSH:

> *"When I'm angry at someone, I now express it on myself. Which is really tough, because actually, instead of confronting the person who inflicts this pain to you, you are there harming yourself"* (Molly).

Subcategory 6A: 'Releasing'

Participants spoke of experiencing a "release" of overwhelming or painful emotions as soon as they had engaged in SH. There appeared to be some interaction where individuals described feeling addicted to the positive feelings of release post-SH. Feeling able to release emotions through SH allowed some participants to express or experience their emotions and was described as almost having a communicatory function to it. Some described an overwhelming sense of emotional numbing and SH allowed them to feel something:

> *"I think sometimes it allowed me to feel sad. I didn't really do sad, refused to do sad, didn't really see the point in crying or feeling sad, what's the point? But obviously, somewhere up there, there must be sadness. So, definitely self-harm allowed me to feel sad or to cry or*

whatever. Yeah, it was just like a way to cut through that numbness, most of the time" (Leanne).

Releasing effects of SH were depicted as: *"it's kind of like your emotions are getting bigger and bigger inside, and you've just got to hit yourself to release the pressure almost building up inside you"* (Hannah).

One participant clarified: *"For me it was not stopping the emotions more releasing them. I was like, I know how to deal with you and afterwards I'd be like a different person. And then once I released the emotions that I need to get rid of that load dissipated. And that, I think for me made it all the more addictive"* (Ellie).

Subcategory 6B: Using behaviour to express emotional pain

It appeared the behaviour of RSH allowed participants the opportunity to take their emotional pain or experience of overwhelming emotions, and express them using a physical, tangible thing that they were able to see and touch. Participants described feeling more able to control the outward expression during times where their internal world felt out of control and unmanageable. For many this was described as: *"the reason I continued and the phrase that always went through my mind was that it was an outward expression of inward pain"* (Ceri). She continued *"for me at that time, it was about getting the hurt from the inside out and so I used it for that purpose"* (Ceri).

Others described how RSH: *"gave me a way to see the emotion as a physical thing, and then I could take care of that, and I could concentration on that and hope that whatever was going on inside went away"* (Kate). In regard to the communicatory function of RSH, one participant described *"it is like a language in a way it's the word that means X. You know these are the words that I use to describe this indescribable thing" (Jake).* Another participant added:

> *"The self-harming is almost like you have something physical to focus on because you don't know what to do with the feelings you've got inside, so you know what to do if you've got something physical. You can see it and feel it. I feel bad so if I physically have something bad as well, I can link the two"* (Leanne).

Subcategory 6C: Calming

Finally, six participants spoke of the immediately calming effects of SH following the release of emotional overwhelm. Feelings of calm following this, were described as brief but incredibly effective. This category and subcategory describe the emotional experience, that may all be felt within a few moments, when participants harmed. Many explained that the positive feelings experienced post-SH *"never last that long"* (Sandy).

One participant described these effects as:

> *"That feeling of relief and clearness and clarity, and like relaxation, and it literally would feel like, if I could describe it going from like burning hot to this nice, cool feeling throughout my body. Just relaxed and not worried"* (Alana).

Category 7: Allowing me to 'function'

Through repeated use of SH, and the way in which it allowed them to manage their emotions, participants began to feel that it allowed them to function and continue to engage well in other areas of their lives. Participants described quickly feeling reliant on RSH to survive and manage life, it was described as though this behaviour allowed them to continue to present as normal and be productive:

> *"I worked out that if I self-harm at the right time, at the right point in the build-up, I can stop it going too far. I can pull everything back, I can tidy things away, I can function again. I often can't function if I'm not self-harming. Self-harm often helps me to function"* (Morgan)

Similarly, when discussing what they got from SH, another participant added:

> *"Self-harm is almost like a reset button on the brain. I think that the sort of basic stuff around self-care like the really basic stuff like sleep and food, and you know the stuff that keeps you alive. When that becomes kind of difficult, I think one function that self-harm has is it's almost like I can get through this. I can get up and have a shower, and I can make myself breakfast and I can get through work, because at the end of the day I can self-harm and make it all go away"* (Jake)

Another way in which SH allowed participants to function was it allowed them to manage anxiety or stop their racing thoughts. One explained that SH: *"usually has the same effect of hitting the big reset on the brain and stopping the thoughts that are happening for a bit. I don't know, releasing all the endorphins and to stop the anxiety for a couple of minutes"* (Jake). Another added that *"scratching or pinching myself just gives me some sensations to snap myself out of whatever negative thoughts I am having"* (Sandy).

Within model-checking interviews, both participants stressed how they also experienced SH as a way to function: *"I felt like it would bring my brain back into my body. It was like I was up somewhere, having a panic attack and then suddenly I'm in my body and it's real"* (May).

Subcategory 7A: Allowing me to sleep

Many participants described experiencing difficulties with their sleep for a number of reasons, for example experiencing nightmares, or feeling unable to calm their racing thoughts and relax. An

important part of category 7, how SH allowed participants to function, was described as being the experience of being able to fall asleep after engaging in SH. Due to the calming effects experienced immediately after SH, many participants were able to sleep once they had harmed. Participants described regularly harming at night-time for this reason, and because it was a time they were less likely to be disturbed. For one participant, he felt this was one of the main reasons he continued to engage in RSH: *"Why do I do it? The first answer that came up is to help me sleep, you know, the racing thoughts making actually getting to sleep quite difficult"* (Jake).

Another participant described how she uses SH to allow her to sleep, and the impact on her sleep when she tried to stop:

> *"What I hadn't realised is that I was using imagining self-harm or fantasising about self-harm, or whatever you want to call it, and that used to help me sleep. And then when I stopped, I also had to stop doing that. And I just stopped being able to sleep"* (Morgan).

Many explained that this was due to experiencing racing thoughts: *"Sometimes if my thoughts are racing and I can't bear them, if I self-harmed it is like it stops the thoughts and then I can sleep"* (Kate).

Conversely, a few participants spoke about how SH impacted their sleep in a negative way as they would often SH at night-time: *"I would definitely get less sleep on the days where self-harm would fall, because I would be actively partaking in that rather than being asleep"* (Alana).

Subcategory 7B: Coping

All participants mentioned coping within the interview in different forms; RSH was mainly described as a way to cope. This formed part of category 7 as feeling able to cope with stress through the use of SH allowed participants to function. One described how this experience reinforced the use of SH to cope in future: *"whether it is true or not, the thought that self-harm makes life possible, I think is a contributing thought to its continuation"* (Jake).

Within the model-checking interviews, participants confirmed this experience and added:

> *"It is a massive coping mechanism, more effective than anything else I could have done in that moment. For me, the calm that came after was that like, okay, now you get on, now you move. And that would make me be that fun, bubbly person at school that was popular. And I think if I couldn't have had that, I don't know how I would have coped. It was a way of managing my responses to a stressful home life"* (Ellie).

As described above, it appeared the ability to cope was due to a feeling that SH allowed them to manage their emotions and provided a brief period of relief afterwards. This highlights how categories 6 and 7 continue to interact and reinforce one another.

Category 8: Caring for myself

It appeared within many participants descriptions of RSH that it soon became their way to take care of themselves. They described prioritising this behaviour, even during times when they did not feel able to engage in basic acts of self-care, such as taking care of personal hygiene. Again, this experience relates to all other categories (6-10) within the SH cycle as participants began to interpret if a behaviour makes me feel better and can at times stop me from feeling worse, then it is my way of caring for myself. Similarly, to Category 5, participants spoke of being aware that they are harming themselves but feeling conflicted as it also became their way of caring for themselves:

> *"This is where you get the self-harm ritual and the self-care side of stuff start overlapping. You know because I see that hour as me time. It's for me, for nobody else and that's part of the process. That this is actually, it gets to the point where this is almost self-care."* (Morgan).

Another participant described prioritising SH: *"I would make time for that when I wouldn't necessarily make time for…other things. Like do I need a shower? I absolutely am not going to have a shower today. Have I showered in four days? No, I'm good. But I'll make sure that I get ten minutes up in my bedroom every two hours, with that door shut"* (Leanne).

One participant added that they also imagine how others may care for them after they have harmed themself:

> *"This might sound a little bit strange, but I think one of the things that helps, even though I don't tell anyone about it. It's kind of imagining someone else finding out and caring for me and caring for whatever's happened"* (Jake).

Again, the concept of SH becoming a way of caring for yourself was affirmed during model-checking interviews.

Subcategory 8A: Protecting from suicide

Five participants reflected on the protective function of RSH from suicidal thoughts or trying to end their life. For some, they experienced that RSH had stopped them ending their life and allowed them to continue to live. One participant spoke of how:

> *"self-harm keeps me from killing myself. You know I'm doing what I need at this point, because I know the alternative is actually far worse than this. So, I need to stop myself from getting there, I need to protect myself from trying to kill myself"* (Morgan).

A number of participants described RSH as: *"a way of doing less when I actually wanted to do more. As in taking my own life" (Dan).* One participant explained the protective element of RSH further and advised those supporting individuals who engage in RSH:

> *"That's the other myth. People think you know the second you do that, oh my God! They're suicidal, and it's like no, but this is why I'm not! Understand this. But stop me from doing it, and you're going to have a whole other problem on your hands"* (Leanne).

Subcategory 8B: Comforting familiarity

Within descriptions of how RSH allowed them to care for themselves, ten participants described how it is comforting and, over time has become like familiar and reassuring. Many of the participants who had engaged in RSH for many years, and continued to do so, described the comforting familiarity of RSH is what motivates them to repeat. Descriptions centred around feeling they could rely on SH to make them feel better and provide them with comfort. One participant explained that SH is *"like a crutch from back in the day, it's like an old familiar thing, I guess. Like pulling out your favourite blanket or something like that, it's the old familiar" (Beth).* When asked what brings him back to SH over a number of years, one participant answered:

> *"Familiarity. You're doing something you know, and you know what the outcome is going to be"* (Dan).

Another participant answered similarly to the same question, that the comforting familiarity of RSH is what motivates them to continue to engage:

> *"I'd say it's comforting, because I am now 25 and the first time I self-harmed I was 17, and so it feels like an old friend that comforts me. An old friend who has been there with me since I was a teen. And sometimes we drift away but when things get hard, that old friend is back to sort of remind me about who I am and how to feel less lonely, how to feel okay. How to not believe in certain negative thoughts. It's really difficult to describe to people who don't understand but it is really comforting self-harm"* (Sandy).

Category 9: Controlling

This category illustrates the polarising nature of RSH which participants described, in some ways, afforded them a sense of control but, in other ways, felt as though they had lost control of their SH;

instead, it was controlling them. It appeared feeling in control of SH was something that occurred soon after participants started. However, over time, they detected SH may no longer be in their control by noticing feeling that they needed to SH, by taking risks with their SH and risking being caught, or feeling that whatever they did it was never enough. It is important to note that, whether participants felt more or less in control of RSH was fluid and changing, control over RSH did not appear to be something you had and then lost. Instead, there would be periods where one feels more in control of it and when they became aware they were not. One participant described a point when they realised, they were not in control:

> *"There was this moment actually where my mum took me on a drive, I was going to CAMHS [Child and Adolescent Mental Health Services] and my mum said please, why can't you just stop? Why can't you? I had this moment in my head, I was like I can't! But I've never considered that I couldn't at all. It had always felt like a choice until it didn't"* (Alana).

Subcategory 9A: Allowing me to feel in control

There was a sense of SH allowing participants to feel in control when many other situations in their lives, including their own emotions at times, felt largely out of their control. One participant expanded on this: *"I could control what I did, and I could control how to fix it. Because everything else was out of control and fake. My mind always felt and does always feel like it is out of control, it was something that gave me more control. Like holding a hair straightener until you give yourself a third-degree burn. You have to have a lot of control to be able to do that!"* (Kate).

However, some participants reflected that feelings of control are fleeting and may represent only the illusion of control. For many, even when discussing the ways in which RSH allowed them to feel in control, they acknowledged how, at times, this was not always the case: *For me, it's sort of a way to feel in control, I guess. But I don't want to say it has never got away from me"* (Jake).

Subcategory 9B: Losing control and SH controlling me

Participants described that it quickly became apparent that they were no longer in control of the SH. Those who had engaged in SH over long periods of time (for many years) appeared to be more likely to report feeling their RSH was out of their control. For some this was experienced as soon as they engaged in SH: *"Before I did it for the first time I was in control because I chose not to. But from the first time I did it, I was not in control anymore. To be honest, I think I knew I wasn't in control, but I wanted to feel like I was in control, and I wanted to take control over it. But basically, everything I did in order to feel like I had control of it just showed that I had no control"* (Philly).

Others explained that they were aware that they had lost control of the frequency of SH, or where (the location) they engaged with it, for example in more public spaces, and over time they began harming more, and in more risky ways:

> *"When I got older it felt more like it was more controlling me, because I changed how I did it. So, it became perhaps more violent, which is when it felt like it was going out of control"* (May).

Another described feeling unable to stop themselves repeating the SH: *"When it gets too overwhelming it's really out of control. It's like one line of a cut is not enough. You just want more and more. And that moment again, I can't…it's hard to just stop myself"* (Sandy).

Many participants felt that the longer they engaged in RSH, the more often the behaviour began to feel out of their control:

> *"As you continue doing it, at times you're in control, at times you lack control over it, and when you lack control over it you find yourself just doing it automatically. So, the more you continue doing it the more it gets like out of hand"* (Molly).

Within the model checking interview, one participant described how, at different times, she felt more or less in control of the RSH, and how she believed this interacted to keep her engaging with it:

> *"I wonder actually, if when it feels like it's in control, if sometimes you need those moments so that you can keep doing it. Because if it felt uncontrollable the whole time, you logically wouldn't be able to keep up with it. But if there are moments that it feels calming, then you're almost like that's what keeps you hooked on it because even when it's uncontrollable, it can become controlled. And if it didn't have that aspect, I think you'd be less inclined to continue with it"* (May).

Category 10: Feeling guilt and shame after SH

After initial feelings of release and calm, following an incident of SH, participants described that very quickly they experienced intense feelings of guilt or shame. Feelings of guilt and shame after SH could contribute to needing to punish themselves (category 2), causing participants to feel worse. This can, in turn, start the process of building negative emotions again. Participants described that guilt and shame feelings can occur within minutes after harming and continue to build due to the constant and visual reminder of harm. One participant described how feelings of shame reinforced their SH as it:

> *"Would then pile on to everyday crap I was feeling and that would then trigger the next episode and the next. So as much as it would help me, it was also bringing on so many feelings of shame and guilt"* (Alana).

Many shared that this could cause the cycle to continue: *"Ironically, sometimes for doing it you would be like oh I was really stupid! I shouldn't have done that. So now I am going to do it some more to tell myself off for doing it"* (Leanne).

Within this category, participants described RSH *"as quite isolating"* (Morgan). Many described that, due to feeling the need to hide wounds or scars as a result of SH, they became isolated from others reinforcing their conflicting relationship with SH: *"I think it has definitely made me isolate myself. People have asked me like where have you been? There is that sort of social isolation especially with fresh scars. I don't really want to meet people because I don't want them to ask"* (Sandy).

Category 11: Responding to others' reactions

All participants spoke of experiences of responding to others' reactions to SH, including professionals. Many had felt stigmatised due to their SH and described feeling that no one understood. Fear of judgement and stigma was given as one of the main reasons for not telling others or seeking help for RSH. A number of participants explained that they had not previously told anyone about their SH but discussed examples of when strangers had commented on scars or asked about them. Participants described how others' reactions, including professionals' responses and use of language when they had sought help, were fundamental in either supporting them to feel more able to reduce or stop RSH or, at times, reinforcing and maintaining the behaviour. An example of this was use of the medical term "superficial" to describe SH injuries:

> *"When you've had someone say they're superficial to you before, it does make you think that you're almost doing it like wrong, like you're not bad enough. You are not doing it deep enough"* (Ceri).

Additionally, responses from others were described as focusing around:

> *"What can we do to get you to stop? And I was like I am not there! The lack of understanding from other people about why you might not want to stop. Don't invalidate what I'm going through by telling me that if I draw red pen on my arms, I'm going to feel loads better. Things like that used to really annoy me. And I feel like there was such a lack of understanding or not wanting to ask the question of what am I getting from this, that other things can't give me? No one ever asked me that"* (Alana).

Subcategory 11A: Seeking attention myth

Five participants described one of the biggest myths in others' understanding of RSH is that it's for attention from others. Participants spoke about the lengths they were willing to go to conceal their

SH, and passionately described their view around this misinterpretation of the function of RSH and the minimisation or misunderstanding when others suggest one is doing it for attention:

> *"I can tell you what it isn't. It isn't acting out. When I was younger there was a lot of, I still hear it now, are you doing it for attention? I would be absolutely mortified if people found out so that is not why I'm doing it. I hate that! For every one person that may be doing it for attention, there's nine other people behind them that you'd never know, because the thought of getting attention from it is mortifying! So, it's definitely not that. It's a coping mechanism. It's I literally don't know what to do with myself and I did this once, and it made me feel better" (Leanne).*

Another participant discussed how other symptoms or expressions of mental distress do not appear to be thought of in the same way as RSH: *"The way that I view is that if I had anorexia or something like that, it is acceptable, and those people are seen as vulnerable whether it is a 50-year-old woman or it's a teenager. Whereas self-harm seems to be something that is very stereotyped as you're looking for attention"* (Kate).

Subcategory 11B: Lying to protect others and the SH

Finally, within the overarching category of responding to others' reactions, participants all described lying about their SH in some way. Participants explained that often this was out of fear of becoming hospitalised. Throughout interviews, it appeared that a strong motivation for lying to loved ones was to *"protect other people's feelings and you're protecting everyone from the truth"* (Alana). However, the same participant described another motivation:

> *"Function of lying was also to keep it protected it was mine! It wasn't to be shared with other people. It was about me, and it was something that I had, and I didn't want to invite other people's commentary or opinions on it. So, I used it to protect the self-harm as well (Alana).*

Category 12: Breaking the cycle

Many participants in this study had stopped RSH at some point in their life, some had then returned to SH after a period of abstaining. Others' described periods of time where they tried to reduce or limit their SH. Participants described reaching a point where they had had enough, or could no longer engage in this behaviour, and termed this breaking the cycle of RSH. One participant reflected upon what supported or enabled them to do so: *"The thing that actually broke the self-harm cycle was that I went on holiday, and I couldn't do it because I was going to be with my grandparents. That broke it and then it was more sporadic, and I felt like I could control it from that point"* (Ceri). This category is made up of a number of different reasons participants gave, or their experiences of, being able to

break the cycle of RSH.

Subcategory 12A: Accepting SH

Feeling acceptance from others about SH or accepting your own SH was discussed as one of the ways participants began to break the cycle. When others were able to accept SH as their way of coping and be curious about why, or the function of their SH, participants experienced this as acceptance, and many found this incredibly supportive. To be clear, acceptance does not mean ignoring the behaviour or treating it with disregard. Instead, participants spoke of the experience of not feeling judged. One participant described that, initially, it is important for the individual to accept the SH as a problem: *"I suppose it's kind of like admitting its self-harm is the first stage of trying to get over it, like admitting you've got a problem, like that stage"* (Hannah).

When describing support from others which allowed them to stop engaging in RSH, one participant described: *"They would just accept anyone the way they were. They would not care if I had scars or anything. They would basically just accept me, not make a big deal out of anything. So, I think that's what really, really helped me in the end"* (Philly).

Subcategory 12B: Needing distance from SH

Participants who had stopped engaging in SH for some time reflected that, when inside the reinforcing cycle of RSH, they were unable to perceive how bad or dangerous it was. They experienced that the more time that passed between their last incident of SH, the easier it became to manage the urge to harm again (category 4). A few participants stressed the importance of distance and time away from engaging in RSH to appreciate the impact of it: *"You don't realise how bad it is until after. And when I say after I don't mean like a couple of months. I mean like for me obviously it has been nearly 10 years now and I can look back and think God! That was actually really significant as an experience"* (Alana).

Category 13: 'Relapsing'

Six participants spoke of their experiences of "relapsing" and returning to RSH after not engaging in it for some time. Many described a worry or anxiety that, because RSH was how they coped in the past, they would return to this behaviour in future, and the experience of a sliding scale which would inevitably result in SH. For one participant this was experienced as: *"there is always that fear that worry, and that acknowledgment that at any point in time, because of how many times things have spiralled in the past. No matter how long it's been since my last really bad episode, in my head it could just go, and if it does then it will come back"* (Leanne).

Summary

The categories and subcategories presented above, together with consideration of their position and interacting relationships within the GT model, represent a co-constructed theoretical rendering of the overlap and similarities between the processes that maintain engagement in RSH and addictive behaviours. Through the GT analysis process, the 12 detailed categories were determined by the principal researcher, within model checking interviews and member checking, to be the central processes that keep participants engaging in SH. It is important to highlight that not all fifteen participants described experiencing every category within this model, and there was some discrepancy between experiences (for example subcategory 7A). However, as discussed above, there were some categories or concepts that all participants spoke of and detailed their experience of (categories 1, 4, 5, 6 & 7). Results will be considered in relation to relevant literature in the discussion.

Quality assurance

To assess the quality of this research, applying a consistent quality assessment framework to this work as applied to studies in the SLR, the MMAT (Hong et al., 2018) was used. This tool highlights seven factors of methodological rigor within high quality qualitative research, each of which was applied to the current study (Chapter 5).

Chapter 5 Discussion

Chapter overview

This chapter provides an overview of the results and summarises how key findings address the research aims and questions. Results are presented and discussed with reference to the empirical evidence base, theoretical concepts, and existing models of both SH and addictive behaviours. A quality evaluation of the current study is presented, strengths and limitations of this project are discussed. Finally, implications, suggestions for future research and conclusions are presented.

Revisiting the research question

Using existing theories and knowledges about addiction and addictive behaviours, whether RSH is experienced as an addictive behaviour was explored through the following research questions:

- What maintains engagement in RSH and do these motivations overlap with addictive behaviours?
- What maintains engagement in RSH but does not overlap with addictive behaviours?
- To what extent can RSH be conceptualized as an addictive behaviour or within an addictive behaviour framework?

The research aims and questions will structure the discussion to evidence how the findings seek to answer each question, with reference to the wider literature. Invitations for future research are discussed throughout.

Overview of results

GT analysis of data collated from 15 participants was used to construct a model of the processes that maintain engagement in RSH . Interconnecting arrows within the model represent that participants' journey with RSH were not linear, instead, processes that maintain engagement were reciprocal, reinforcing of one another, and fluid over time.

After starting SH, participants described feeling they needed or deserved to be punished. Initial engagement with SH was described as a conscious choice, however, soon after the first-time, participants began to describe feelings which were similar to addiction and described how their SH escalated. Each repetition of SH was described as a cycle. Participants experienced a build-up of overwhelming emotions, particularly anger, and SH allowed them to feel they could release or stop this build-up. Immediately after harming, they experienced a brief moment of calm. These post-SH effects allowed participants to function and cope with life and were interpreted as their way of caring for themselves. Feeling in control or out of control of RSH was described as an everchanging

experience whilst engaging in this behaviour. Effects post-SH were described as short-lived and were soon replaced with increased feelings of guilt and shame. Participants spoke of how others' responses to their SH could either increase their guilt and shame, or support them to break the cycle of SH. Finally, many participants experienced a relapse and return to RSH. When participants were able to stop, breaking the RSH cycle was facilitated by feeling accepted (by others and through acceptance of their RSH) and having some physical distance from SH e.g., not harming for a brief period.

Categories and relevant subcategories within the model are now discussed in the context of the existing evidence base, including literature presenting in the SLR to address the existing knowledge gap identified within the literature.

What maintains engagement in RSH and do these motivations overlap with addictive behaviours?

Starting

This category encompasses reasons why participants started self-harming, often due to bullying or trauma. They described an experience that, once you make the choice to start engaging in SH, you are exposed to the potential benefits of the behaviour and are unable to unlearn this. Within addiction literature, the Rational Informed Stable Choice model (Becker & Murphy, 1988), of addiction as a reflective choice, suggests that initial choice to engage in a potentially harmful behaviour (such as using substances) always involves consideration and evaluation of the options. Similar to how participants described making a conscious choice the first time they harmed, this model suggests that we all decide to do something with an expectation or hope of potential benefits and an acceptance of adverse consequences (Vuchinich & Heather, 2003). There is a large body of research around the role of trauma in addiction (for a recent review see Moustafa et al., 2021) and addictive behaviours (D'Argenio et al., 2019; Gunstad et al., 2006). Exposure to early life trauma has been shown to be strongly linked to the development of addiction (Langeland et al., 2003; Marcenko et al., 2000; Wilsnack et al., 1997). The role of trauma has also been well documented within the literature in relation to SH and findings suggest that trauma, specifically childhood trauma, predicts SH (Polskaya & Melnikova, 2020).

Revisiting the example of smoking used within the introduction (see page 16), there is a wealth of research suggesting the process of smoking initiation is crucial as it has been shown to be easier to avoid starting than it is to quit (Douglas & Hariharan, 1994). Therefore, public health campaigns now focus on reducing numbers of those who start smoking in the first place (Pierce et al., 2012). At present, the focus of SH literature is understandably around how to treat this behaviour. However, results of this study suggests that consideration, both within research and public health policy, should

be given to reasons why individuals start harming and focus on reducing harming initiation. Further research exploring the decision-making process for first engaging in SH or not, possibly using a mixed sample of individuals with experience of SH and those without, would be valuable.

'Feeling addictive'

This category connects with the SLR findings on the shared language used to describe RSH and addictive behaviours. Results showed that participants within the current study used words that are often found within the addiction literature and terms generally used to describe addiction, such as *"compulsion"*, "craving", *"addiction"*, *"recovery",* and *"relapse"* when describing their experiences of RSH. This supports one of the main findings of the SLR around a shared language to describe both RSH and addictive behaviours (Giorgi et al., 2022; Himelein-Wachowiak et al., 2022; Moseley et al., 2019).

There is overlap between participants descriptions of needing SH more frequently, or engaging in more risky harm behaviours, to the well evidenced concept of tolerance. Tolerance is defined within the diagnostic criteria of addiction (APA, 2013, WHO, 2022), and the literature, as the need for greater amounts of substance to achieve the desired effect. With the interview schedule used in this study based upon the ICD-11 diagnostic criteria for addictive behaviours, this finding suggests that participants experience of RSH share comparisons with the criterion of tolerance.

'Snowballing'

Within this subcategory, participants described the accumulating effects of RSH, and the experience of needing to increase the frequency or severity of their SH to reach a seemingly unobtainable goal of harming enough. This description of RSH is very similar to the definition of tolerance in the diagnostic criteria (above). One of the diagnostic criteria for an addictive behaviour within the ICD-11 (WHO, 2022) is the "continuation or escalation of a behaviour despite the occurrence of negative consequences". Participants described experiencing this criterion within RSH. This finding aligns with Orford's (2001) excessive appetite theory of addictive behaviour. This theory highlights 'the law of proportionate effect', suggesting that a behaviour or 'consumption' will increase when incentives are perceived as great, and restraint is weak. Informed by operant conditioning theory (Skinner, 1971), Orford postulates that strong appetite development (engaging in a behaviour increasingly) is driven and reinforced by the varied emotional rewards associated with the behaviour. This relates closely to the findings of the current study as participants identified that feeling addicted to the behaviour related closely to the experience of it allowing them to manage overwhelming emotions, with relief from these being rewarding.

'Ritual'

Ritualistic behaviours have been well researched within the field of neuroscience (Graybiel, 2008) and ritual-oriented cognitions have been found in addictive behaviours, such as gambling (Billieux et al., 2012; Steenbergh et al., 2002). Actions and steps taken when self-harming have been described as a ritualistic for many (Biernesser et al., 2020; Chandler & Simopoulou, 2021). One can draw similarities between the equipment and processes associated with types of drug use and the method or equipment used to harm as a ritual, where individuals are careful to follow the same steps, in the same order, to achieve the same effects (Gardner, 2013).

Having the urge to SH

Participants described that once they had first engaged in SH, they experienced an ongoing *"urge"* to harm again. Experience of urges is described as "a strong desire or sense of compulsion" within the ICD-11 (2022) diagnostic criteria for addiction. Similarities are observed between participants' descriptions of the urge to SH and urges experienced within addiction and addictive behaviours. Evidence has shown the urges experienced within addictive behaviours, and the distress that occurs if unable to act upon urges, resemble those experienced by individuals with substance use disorder (Marks, 1990). The Cognitive Model of Drug Urges (CMDU; Tiffany, 1990; 1999; Tiffany & Conklin, 2000) posits two dimensions of urges. The first is the experience of an urgent need to use as a result of unpleasant withdrawal symptoms (within addictive behaviours this can be the experience of anxiety) and a cognitive attempt to stop "automated action sequences" that have become learnt through repetition. The second is the anticipated pleasure or reward that will ensue as a result of the behaviour. The model suggests that the first dimension represents intent and the second desire.

The current study included participants who were currently engaging in RSH and those who had stopped for a number of years. It appeared that participants currently engaging in RSH, described more intense or consistent urges, whereas those who had stopped for some time described managing fleeting thoughts or urges to reengage with the behaviour. This could be understood within the CMDU (Tiffany, 1990) predictions that, for those actively engaging with a drug (such as smoking), both intent and desire to engage in the behaviour remain 'coupled'. Whereas, when an individual is trying to quit, these dimensions become 'uncoupled' as they may still desire a cigarette, but they intend to stop and not engage with this urge.

This finding also aligns with previous research into SH in adult populations, which evidenced that urges or cravings increase with age (Washburn et al., 2010) and that SH can be experienced as more reinforcing through repeated exposure over a number of years (Gordon et al., 2010). Within a longitudinal study of urges within NSSI (Turner et al., 2019), results showed that thoughts and urges

are commonly experienced and intense urges predicted more frequent NSSI. Nixon and colleagues (2002) found similar results in their study of self-injury within adolescents, with almost 80% of the sample reporting daily urges to self-injure. They discussed how these findings evidence the addictive features of self-injurious behaviours in adolescents.

Previous studies found the 'craving' or 'urge' to SH only occurs in the context of removal of negative emotions (Victor et al., 2012); for example, one would only experience urges to SH when feeling distressed or low as a way to remove the negative feelings. However, participants in this study described experiencing an urge to SH even when well and reflected that they can have the thought or urge to SH when it is not needed. Results of this study suggest urges to SH were experienced within a number of different contexts and were not limited to the context of removal of negative emotions.

Conflicting relationship with SH and self

This category plays a central role in the model in that, throughout all interviews, participants appeared to be describing a conflict or tension within their relationship to SH and, in turn, themselves. Experience of conflict within the relationship between the behaviour (of RSH) and the individual was pervasive across many categories within the model; for example, within the SH cycle participants described that SH makes them feel better in the short-term but then causes them to feel shame and worse than before. When participants described their experiences, it was as if each element or function of RSH had a reciprocal role: it is a friend and an enemy, it makes me feel better, but it also makes me feel worse, it is comforting but it hurts and causes injury. This finding aligns with previous research into excessive alcohol use (Boreham et al., 2019). A theme from Boreham et al. (2019) was "having a relationship with alcohol" and similar descriptions were given of alcohol as a "best mate" whilst also feeling they were in an abusive relationship with it.

This finding also aligns with relational models of addiction and the application of attachment theory to conceptualising and treating addiction and addictive behaviours (Flores, 2004). Addiction and addictive behaviours can be viewed as a relationship and are often conceptualised by those experiencing it as such (Surrey, 1997). Many models of recovery acknowledge the relational element of addiction and centre treatment around rebuilding an individual's relationships with others whilst abstaining from their relationship with substances (Kelly et al., 2020; Price-Robertson, 2017; Waldorf, 1983). Finally, within The Excessive Appetites theory, Orford (2001) highlights that individuals are likely to experience conflict due to the strong attachment they are experiencing to an addictive behaviour. He posits that experiences of conflict play an important role within addiction.

Managing emotions

Participants explained that engaging in SH was often due to overwhelming feelings of emotions, such as sadness or anger, and they experienced RSH as a way to effectively manage and *"release"* them. Another diagnostic criterion for addictive behaviours within the ICD-11 and DSM-IV is that an individual is more likely to engage in the behaviour when feeling distressed. Participants within the current study suggested that they were more likely to engage in RSH when feeling distressed or overwhelmed. This finding aligns with the application of instrumental learning, in particular operant conditioning (Skinner, 1971) and addiction. Negative reinforcement occurs when a behaviour allows one to mitigate or avoid unpleasant stimuli (Lewis, 1990; Schulteis & Koob, 1996) and has been shown to be incredibly powerful within the development and maintenance of addictive behaviours (West & Brown, 2013). This finding may also be further understood using motivational models of addiction (Cox & Klinger, 1988), which suggest that an individual's motivation to use substances is comprised of their expectations, emotional states, and the affective changes experienced as a result of using the substance. This finding could reflect a process of associative learning (Pavlov, 1927) within RSH, whereby cues and actions are formed and learned based on past experience of performing those actions. For participants within this study, it appeared that a distressing emotional experience (particularly anger) became the cue, and SH was the action that became associated with this over time. Further consideration should be given to the development and role of associative learning within RSH.

This finding supports the wealth of literature evidencing the affect-regulation hypothesis of SH (Doyle et al., 2017; Kimball & Diddams, 2007; Klonsky, 2009; Polk & Liss, 2009), the role of emotion regulation in SH through negative reinforcement (Armey et al., 2011; Nock & Prinstein, 2004, 2005), and the function of RSH as an emotion regulation strategy (Chapman et al., 2006; Gratz, 2003). As highlighted by participants within this study, anger has been evidenced as a potential trigger for SH behaviour (Chapman & Dixon-Gordon, 2007; Nock et al., 2009). A key motivation for engagement in RSH appears to be the reduction of negative affect, removal of negative emotions, and an increase in positive affect such as feelings of relief or calm (Armey et al., 2011; Franklin et al., 2013; Klonsky, 2009; Nock, 2009). Blasco-Fontecilla and colleagues (2016) theorise that relief experienced post-SH is associated with the release of endogenous opioids and may contribute to what participants within this study described as needing to harm more to produce the same effects. This aligns with the opioid hypothesis of RSH (Sher & Stanley, 2008; Stanley et al., 2010). Participants identified that they were able to manage increased levels of emotion regulation difficulties by stimulating feelings of immediate release or calm through RSH. Finally, this category supports the finding from the SLR that one of the overlaps between RSH and addictive behaviour could be increased levels of emotion regulation difficulties.

However, humans are social beings and when one focuses entirely on intrapersonal factors or an individual's ability to manage their emotions, they risk ignoring or minimising consideration of social, cultural, and political factors that impact on an individual and, in turn, their emotional state (Bronfenbrenner, 2000). There is a wealth of literature evidencing the role of poverty, environmental stress, and environmental influences within the development of addictive behaviours (Fitzgerald & Zucker, 2021; Morales et al., 2020), and responsibility should not be situated purely within the individual. Further longitudinal research should investigate the role of socioeconomic status and exposure to negative or traumatic life events as risk factors for future engagement in RSH.

Using behaviour to express emotional pain

Many participants described the conceptualisation of SH as both an outward expression of inner pain but also a process whereby enacting emotional pain physically allowed them to focus on that and communicate their distress. This finding also correlates with the diagnostic criteria of increased engagement in addictive behaviour or substance when feeling distressed (ICD-11, WHO, 2011). Previous research has found significantly higher levels of depression within individuals with problematic gambling use (Getty et al., 2000). Therefore, similarities could be drawn between an individual experiencing gambling disorder who gambles when distressed, and an individual who engages in SH when distressed.

For participants within the current study, it appeared this category was an important process in the maintenance of RSH. This finding could be explained using evidence of pain offset relief within NSSI (Franklin et al., 2013). This theory suggests that acute emotional stress activates a number of brain areas, including the anterior cingulate cortex and anterior insula (Eisenberger, 2012), signifying emotional pain activity. Within these areas of the brain, there is a large degree of overlap between emotional and physical pain activity (Eisenberger, 2012). Evidence suggests that the physical pain caused by SH may offset or provide relief from the experience of emotional pain (Andreatta et al., 2010; Leknes et al., 2008). Within their study into SH, Hooley, and Franklin (2018) provide support for pain offset relief phenomenon and provide a useful visual of how this may contribute to repetition and conditioning of this behaviour (see Figure 5).

Figure 5: Visual description of pain offset relief within the context of NSSI (Hooley & Franklin, 2018)
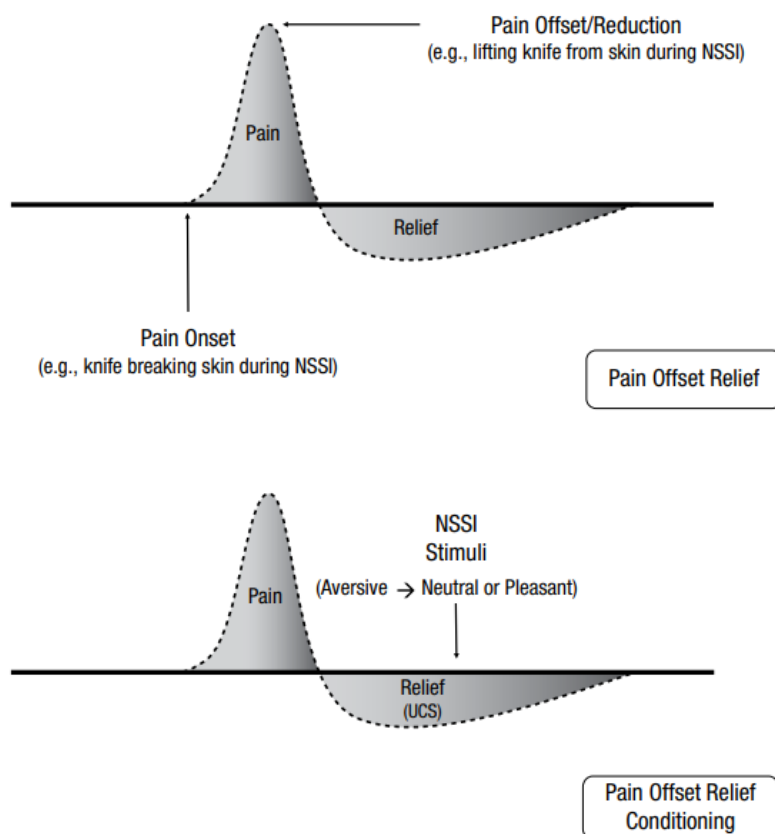
Allowing me to function

Within this study, participants viewed RSH as their way of functioning and coping with life. A subcategory identified was experiences that SH allowed them to sleep due to the relief of distress and calming feelings. Within the addiction literature, this finding could be described as similar to descriptions or conceptualisation of "functioning alcoholism" (Benton, 2009) or a "functioning addict" (Clary et al., 2021). Although not diagnostic terms, these terms are commonly used to describe someone with problematic substance use who continues to be high functioning within most areas of their life. Within substance use disorders, needing the drug to function is understood within the context of the physiological withdrawal effects one would experience if they were not to use (Saunders et al., 2019). However, as discussed above, similarities can be drawn between the overwhelming, negative emotional state preceding SH to withdrawal symptoms (Blasco-Fontecilla et al., 2016, Faye, 1995) as SH has been evidenced to activate a number of opioid and dopaminergic systems, producing relieving effects (Sher & Stanley, 2008; Stanley et al., 2010) – when these effects wear off, there is a need to harm again.

To compound this further, we are now increasingly aware of the physiological effects of anxiety (Zinbarg & Barlow, 1996), depression (Beck, 1967), and stress (McEwan, 2022). These symptoms are

comparable to the effects of substance withdrawal, for example feeling nauseous, shaking, and insomnia. The finding around using RSH to sleep, contains overlap with understandings that many use substances to self-medicate sleep difficulties (Brower, 2001; Conroy & Arnett, 2014).

Controlling

Within this category, participants described their experiences of losing control of their SH, or feeling as though it is controlling them. The ICD-11 diagnostic criteria of addictive behaviour outline a loss or impairment of control over the behaviour (e.g., onset, frequency, intensity, duration, termination, context). Many participants described increasing the frequency, intensity, and duration of SH, how they found it harder to stop and that the context in which they would harm changed over time.

This finding aligns to addiction and addictive behaviour literature suggesting, throughout the development of addiction, processes become unconscious and automatised leading to the experience of a loss of control (Brandon et al., 2004). Dual process models evidence the role of both automatic (unconscious) and controlled (conscious) processes within addiction (Wiers et al., 2007). The concept and role of self-control or 'impaired control' is discussed at length within the addiction literature (for a review see Baler & Volow, 2006).

Feeling guilt and shame after SH

Results of this study suggest that quickly after each SH incident, participants experienced a dramatic increase in feelings of guilt and shame. They shared guilt and shame were maintaining factors in RSH as they could often contribute to feelings of low self-worth and feeling deserving of punishment. Shame and guilt have been well researched, and findings suggest each emotion has distinct implications for motivation (Baumeister et al., 1995; Tangney & Dearing, 2003). Shame is defined as a negative feeling about the self, due to a perceived flaw or wrongdoing, and can impact self-esteem (Lewis, 1971). Guilt is defined as a negative appraisal or perception of a specific event as opposed to about the self. However, within the context of SH, where the event of harming is towards the self, it is easier to see how guilt and shame can become intertwined and indistinguishable. For example, I feel guilty for harming myself and I must be a bad person for doing that to myself.

The role of guilt and shame has been explored at length within addiction literature and a focus on the experience of these emotions is a large focus of models of recovery for addiction (Meehan et al., 1996). It is thought that efficacy of peer-led recovery interventions, such as Alcoholics Anonymous, is largely due to the social components offered providing a sense of belonging and a reduction in guilt and shame (Kelly et al., 2020; Orrok, 1989). The role of shame within SH has been evidenced (Chapman et al., 2006), with some research suggesting that individuals may engage in SH to manage feelings of

shame (Schoenleber & Berenbaum, 2012). Additionally, feelings of shame within those that SH could be further confounded by ongoing experiences of bodily shame relating to physical scars caused by SH and stigma experienced from others (Hodgson, 2004; Lewis & Mehrabkhani, 2016). Understandings of shame from both the addiction and SH literature can be used to further understand the cycle of RSH described by participants.

Responding to others' reactions

Some participants described the reactions they had experienced from others in relation to their SH and described regularly lying or hiding the behaviour from others. They highlighted that others' reactions were often fundamental in either contributing to feelings of guilt and shame or supporting them to stop harming. Correlations between this finding and the literature on addictive behaviours can be drawn. Firstly, engaging in deceitful behaviour to conceal the impact of the addictive behaviour is one of the diagnostic criteria (WHO, 2022). Additionally, Orford (2001) claims that social reactions to excessive behaviours are significant in the process of stopping or giving up.

Participants also spoke about others (including professionals) asking them what they could do to support them to stop using the behaviour. The cycle of change model (Prochaska & DiClemente, 1986) provides a framework for understanding stages of change and has long been applied to addiction to support recovery (Prochaska et al., 1997). This allows those supporting recovery to meet someone where they are at and align treatment with their current stage. The use of motivational interviewing to ascertain stage of change has been shown to be an effective treatment within addiction and addictive behaviour (Miller & Johnson, 2001; Rubak et al., 2005) and may also be useful when applied non-judgementally within the treatment of RSH. Further research is required to explore the efficacy of this as an intervention for RSH.

Breaking the cycle

For many participants within the current study, accepting that SH had become a problem and deciding that they wanted to stop was crucial in breaking the SH cycle. Comparisons can be drawn between participants descriptions of needing to admit they had a problem with SH and one of the core principles of Alcoholics Anonymous: new members' acceptance of the "alcoholic" label and admitting that one is powerless over alcohol (White & Kurtz, 2008). Research has explored the role of acceptance and affiliation within recovery (Caldwell & Cutter, 1998).

This finding highlights the role of social stigma and isolation within the maintenance of RSH. Participants described how common misunderstandings within society and the media, around SH as attention-seeking or a suicidal behaviour, may contribute to increased feelings of guilt and shame and

thus reinforce their relationship with SH. The SH literature suggests that online SH forums or peer support groups may provide a crucial sense of acceptance (Lewis et al., 2012).

'Relapsing'

In line with the findings of the SLR, many participants used the term "relapse" when describing returning to RSH. This term was developed within the addiction literature and over time many models of relapse have been developed (Marlatt, 1996; Velicer et al., 1990). Many clinical treatments for addiction or addictive behaviour patterns are referred to as "relapse prevention" (Marlatt & George, 1984). Within Marlatt and Gordon's model of relapse (1980), they propose the Abstinence Violation Effect whereby after a relapse, individuals believe they have underdone all previous work to abstain. They posit that emotional reactions to the relapse of guilt and shame can hinder recovery. This effect appears to adequately summarise what participants were reporting when they described that relapse takes them back into the RSH cycle and how the role of guilt and shame interacts.

What maintains engagement in RSH that does not overlap with addictive behaviours?

Needing to punish myself

Participants spoke of feeling a need to punish themselves and finding different ways to harm. This appeared to play a role in individuals both starting and continuing to engage with RSH. This finding is similar to a previous etiological model, the Defective Self Model of NSSI (Hooley et al., 2010), which proposes that individuals engage in RSH due to feelings of low self-worth and the belief that they are in some way deserving of harm. Many participants within the current study spoke of low self-worth and feeling they deserved to be punished. This category supports previous research into motivations for SH within adolescents. Doyle and colleagues (2017) found 38% of an adolescent sample indicated "I wanted to punish myself" as the primary motive. Menninger (1938) was thought to first postulate the relationship between anger towards oneself and SH. The current study provides additional support for the self-punishment model of SH (Brown et al., 2002; Gunderson & Ridolfi, 2001; Nock & Prinstein, 2004).

Consideration should be given to the role of trauma, particularly developmental trauma, on the development of self-esteem. Attachment relationships have been shown to be fundamental in the development of feelings about the self and shame (Bowlby, 1988; Kenny et al., 1993). Research has evidenced that individuals with low self-esteem, are less likely to value themselves and more likely to engage in risk-taking behaviours (Leather, 2009). Additionally, shame has been shown to inhibit help seeking behaviour, within both SH and addictive behaviours (Evans & Delfabbro, 2005; Rusch et al., 2014), and may reinforce hiding SH and reinforce that RSH is the only way to cope or the only thing

that understands. This is in line with participants descriptions of low self-worth as one of the antecedents for engaging and maintaining engagement in SH.

Caring for myself

Participants highlighted how RSH became their way of caring for themselves, either through the removal of negative emotions or through the care given to a wound after harming. This aligns with previous research into the caring qualities of SH (Barbiker & Arnold, 1997; Conterio & Lader, 1998). Simopoulou & Chandler (2020) go further and suggest the experience of caring for oneself through SH is not limited to wound-care alone. They conclude that self-harm can become an act of self-care. The conceptualisation of SH as self-care, or an attempt to care, completely shifts the narrative on a behaviour that is usually described with evocative language and in the context of violence towards oneself. Turp (2002, p. 9, 34) states that current characterisations of SH are "too narrow in its scope" and considers SH as self-care as many describe "they harm themselves physically in order to cope emotionally". This summarises what participants described within this study; they appear to be sacrificing their physical self-care in order to prioritise emotional self-care needs. Consideration should also be given to what society deems to be self-care or self-harm (Claes et al., 2005). Society often determines socially acceptable forms of causing harm to oneself, such as tattoos, body piercings, nail biting, skin picking, and those defined as unacceptable behaviour, such as RSH (Favazza, 1996; Favazza & Rosenthal, 1993). Participants in this study spoke at length about the stigma experienced from society due to SH, and about experiences of adapting their behaviour to use more socially acceptable ways to harm themselves, such as alcohol use, smoking, and fighting others.

Participants described acceptance, from others and their own acceptance of SH, as one of the supportive factors to be able to break the cycle of RSH. Therefore, conceptualisation of SH as a functional behaviour, for example an individual's ways of caring for themselves, rather than a dysfunctional behaviour, may help to reduce stigma and feelings of guilt and shame experienced by many who SH (Chapman et al., 2006; Hodgson, 2004; Lewis & Mehrabkhani, 2016). A move away from the pathologizing discourses, towards a more nuanced understanding of what maintains engagement and what factors may make it harder for some to stop (for example feeling addicted to effects of RSH) could aid a reduction in stigma around SH. Within current understandings of both RSH and addiction, public discourses need to change. As participants highlighted, there are misinformed beliefs around one's ability to just stop engaging in these behaviours.

Protecting from suicide

This subcategory suggests that, for many participants within the current study, RSH was a way to manage suicidal thoughts and, at times, protected them from ending their life. Suicidal thoughts and behaviours are often thought of or discussed together with RSH. However, this finding contradicts popular conceptualisations of RSH as a form of suicidal behaviour and supports previous evidence that RSH allows people to manage intense emotions, cope, and continue to live (Brown & Kimball, 2013). Similarly, Nixon and colleagues (2002) found that approximately half of their sample reported using SH as a way to stop suicidal thoughts or attempts. The anti-suicide model of SH (Suyemoto, 1998), informed by psychoanalytic drive theories, highlights this finding from the current study through the conceptualisation of RSH as an active coping mechanism employed to protect against and avoid death by suicide. This finding is of particular importance when considering any treatment of SH that implements enforced cessation of the behaviour as clinicians may inadvertently be removing an individual's way to manage suicidal thoughts or urges. Additionally, this finding may go some way in understanding why stays under section or within secure hospitals to manage risk of SH and suicide can result in an increased risk of suicide (Ballard et al., 2014; Erlangsen et al., 2015; Qin et al., 2013), rather than a reduction.

Within the literature, it is apparent that SH is distinct from suicidal behaviour in a number of ways (for a review see Suyemoto, 1998). However, when it comes to clinical practice and risk assessment tools, there is little differentiation between the two (Boudreaux et al., 2016; Jobes, 2012). Similarly, in the literature around clinical risk screening the word SH is almost always followed by "and suicide". Future research and clinical practice should seek to change this through the continued understanding and acknowledgement that these are distinct behaviours with a variety of functions.

To what extent can RSH be conceptualised as an addictive behavior or within an addictive behavior framework?

As discussed above, there was a large degree of overlap between categories identified within this study and the diagnostic criteria of addictive behaviour. Results of this study evidence that the conceptualisation of RSH as an addictive behaviour and utilisation of the wealth of recovery models from addiction literature may be clinically beneficial. Crucially, this conceptualisation may not be useful for all adults who engage in RHS. As highlighted by the large number of categories within the model, what maintains engagement in RSH cannot and should not be reduced to a one size fits all approach. Interestingly, the diagnostic criteria of "negative impacts or consequences" (for example loss of employment due to behaviour) of engagement did not appear to be as apparent within the data. Participants described at length the social isolation caused by RSH and unfortunately some had

experienced a loss of employment, but they did not attribute this to RSH directly, instead as a result of experiences of depression or overall decline in MH. This may suggest that one is able to conceal the negative impacts of RSH for longer, compared to addictive behaviours.

General reflections on the model

The GT model highlights the many functions of RSH, the overlap between processes involved in maintaining RSH and addictive behaviours and processes that appear to be distinct to SH. This model highlights the journey of RSH and evidences the interplay and reinforcing natures of a number of functional reasons one keeps engaging. This model is unique as it is the first grounded theory model illustrating the addictive processes within RSH, to our knowledge. It is hoped this model can be used to inform clinical practice across assessment, formulation, and to guide appropriate intervention. It supports previous research into the addictive model of SH (Blasco-Fontecilla et al., 2016) through its visual depiction and explanation of the RSH cycle.

Critical evaluation of the research

This study was evaluated using the MMAT (Hong et al., 2018), see Table 9 for the appraisal.

Table 9: *MMAT checklist*

Category of study designs	Methodological quality criteria	Current study
Screening questions (for all types):	Are there clear research questions?	Yes
	Does the collected data allow to address the research questions?	Yes
Qualitative	Is the qualitative approach appropriate to answer the research question?	Yes
	Are the qualitative data collection methods adequate to address the research question?	Yes
	Are the findings adequately derived from the data?	Yes
	Is the interpretation of results sufficiently substantiated by data?	Yes
	Is there coherence between qualitative data sources, collection, analysis, and interpretation?	Yes

This study is believed to be the first to utilise GT to illustrate the addictive processes within RSH, contributing empirical evidence to the developing literature around SH as an addictive behaviour. More importantly, this research increases our understanding of what support and deters individuals to break the RSH cycle, providing clear clinical recommendations and a clinical model. Finally, the study was evidenced to be of high quality when appraised using the MMAT criteria (Hong et al., 2018).

However, it is important to consider the findings in the context of the strengths and limitations highlighted below.

Study sample

The sample comprised of fifteen adults with experience of RSH. Majority of participants (80%) identified as White/British, thus limiting the transferability of findings to other ethnic groups who may have qualitative differences in their conceptualisation, experiences, and behaviours of RSH (Al-Sharifi et al., 2015). Participants were of a variety of ages; this is a strength of the research as it aids transferability of findings to working with adults who engage in RSH across the lifespan. The current sample included only two participants who identify as male; therefore, findings may not be wholly representative of the male experiences of RSH. It is important to consider the role I played as the principal researcher within this, it is possible that participants who identify as female felt more comfortable speaking with a female researcher. Future research should strive to mitigate against the gender bias within SH literature it would be useful to assess the replicability of current findings within an all-male sample.

A strength of this research was the inclusion of participants who were currently engaging in RSH, supporting the clinical utility of findings and implications. A further strength was the use of realistic and believable vignette scenarios (Hughes & Huby, 2004), as these were developed from a focus group with individuals with lived experience of addictive behaviours. Finally, when asked about their experiences of participating in the study, many participants reported they have found it to be validating and interesting.

Recruitment

Due to geographical limitations of the study and ease for participants of remote interviewing using Zoom, all interviews were completed online, and many participants were recruited through online forums (such as Twitter). A possible limitation is around the sincerity of those participating within online qualitative research (Ridge et al., 23). The use of a self-selecting sample (with all participants bar one residing in the UK) may limit the transferability of findings beyond a Westernised view of RSH.

Implications

Within the NHS at present, current treatment options focus on reducing risk and often place emphasis on cessation of RSH (Shaw & Shaw, 2012) as an eligibility criterion for treatment. Assumed understanding and a lack of curiosity around why someone is harming can result in those who SH disengaging from services. Whilst it is important to acknowledge that this model is the production of all involved and situated within the context of time and place, the model has the potential to predict

the processes that maintain engagement in RSH and thus ways to support. As evidenced within the model, this is not always a conscious choice or something that an individual can just stop without appropriate support. Additionally, assessment of SH needs to be far more than just an assessment of someone's risk to themselves or how frequently they are harming. An in-depth understanding of what functions RSH is serving for that individual and treatment focused around such areas is paramount before recommending an individual stops a behaviour that may be a fundamental coping skill and for some keeping them alive. Finally, as participants highlighted, MH professionals should accept this behaviour is happening regardless of their involvement and should seek to provide treatment around why someone is harming not because they are harming.

Invitations for future research

Invitations and considerations for future research have been suggested throughout Chapter 5 and are summarised within Table 10 below.

Clinical invitations

Direct work

Initial presentation to primary care services, such as GPs, A&E and secondary MH services, affords a golden opportunity for an accepting, non-judgemental and potentially therapeutic experience of seeking help. Participants identified how crucial early experiences of seeking help were within their cycle of RSH. In this study, participants recommended professionals should strive to remain calm and not assume they know why someone may be harming or enforce that they need to stop immediately. It was reported to be most helpful when others validated and accepted their SH, without contributing to their already high levels of shame and guilt. As outlined within the model, experiences of acceptance and support are more likely to contribute to breaking the cycle. Prioritisation should be given to formulating why someone may be harming and using this as a guide for treatment, rather than insisting initial treatment focus on reducing RSH behaviours. Many participants had been harming for years and been in contact with many professionals and reported that no one had ever asked them what does RSH offer you?

The current study sought to ask that question and through the conceptualisation of RSH as potentially addictive and the clear depiction of processes maintaining engagement, provide those working with individuals who RSH an understanding of its functions. The GT model could be used as a clinical model of RSH to guide discussions during assessment and formulation stages of treatment. In particular, working alongside the client to identify what stage they are at in relation to changing their SH

behaviours (Prochaska et al., 1997) or incorporating "relapse" into clinical safety planning, when an individual wishes to stop.

Particular attention should be given to language used to describe RSH behaviours. Participants clearly stated that experiences of their SH being described as "superficial" by professionals contributed to feeling that they were not harming severely enough and an escalation of these behaviours. An awareness of the power we hold as professionals and current societal stigma experienced by those who SH are areas in which we can strive to change beliefs around RSH through the language we use. An example of this would be the conceptualisation or reframe of SH as an ongoing effort to cope and self-care.

Staff training

Working directly with individuals who engage in RSH, can raise anxiety within staff teams and understandably cause both physical and MH professionals to feel de-skilled in regard to how to help. This can be further compounded if an individual reports they do not want to stop using this behaviour. The findings of this research evidence the utility of training for all supporting those who RSH, but specifically MH teams, to address the current biases and stigma relating to SH. Again, when viewing SH through an addictive behaviour lens, this may address some of the narrow definitions of what constitutes SH, for example the current gendering of SH. Services should continually reflect on how these biases may impact access to services. RSH may present in a number of different ways, and it appears at present we have a largely Westernised and heavily gendered understanding of this behaviour. Further research around the role of culture and ethnicity within RSH behaviours and help seeking is required.

The findings of this study were presented and used to inform staff training around RSH with a team of MH professionals working clinically within an NHS CAMHS setting (4/05/23). This training was well received by the team (see Appendix Q) and the main feedback was around the clinical utility of conceptualising RSH as an addictive behaviour, within both their own understanding and sharing elements of the model with clients. Within the session, clinicians reflected on their biases around SH, assumptions they often make and what SH or working with risk evokes in professionals.

Legislation and policy invitations

Results of this study highlighted the long-term benefits of increased funding and training for primary care services and therapies available to those who SH (O'Connor, 2013). This could result in significant long-term cost-saving to the NHS in lieu of the current presentation and costs in the form of surgical treatment of SH (Somanathan et al., 2023), 24-hour crisis team support, or hospitalisation of those

who engage in RSH (Department of Health [DOH], 2015; McCrone et al., 2009). Early intervention and therapeutic support for those who SH is in line with the national suicide prevention strategy for England (DOH, 2012).

Some participants described third sector and lived experience led organisations, such as Battle Scars, who, like AA, have offered acceptance and peer support, being incredibly therapeutic. Results of this study highlight the potential benefits of such organisations and invite policymakers to consider funding community, lived experience led projects and organisations who are already providing services for those who engage in RSH. Increased funding to these organisations is paramount as charitable organisations are reliant on funding that has been decreasing exponentially during years of austerity policies (Clifford, 2017; Jones et al., 2016). In addition, services providing MH support for SH appear incredibly reluctant to offer peer support groups potentially as a result of concerns around the 'social contagion' or also referred to as 'suicide contagion' of RSH (Hilton, 2017; Jarvi et al., 2013; Khasawneh et al., 2020).

The 'social contagion' model of SH suggests that by witnessing both online and real-life discussions or portrayals of SH, others (particularly adolescents) are more likely to 'copy' or engage in this behaviour (Arendt et al., 2019; Nock et al., 2010). Unfortunately, these understandable and valid concerns around online safety may inadvertently contribute to the stigma and shame described by participants within this study, thus reinforcing the RSH cycle. These narratives may also overestimate potential harm and underestimate possible benefits of peer support, such as gaining an understanding of their SH and support from others with similar experiences (Lavis & Winter, 2020).

Results of this study support literature which posits alternative models for the consideration of SH content (Joiner, 2003; Lavis & Winter, 2020) as participants identified that acceptance and finding alternatives supported them to break the RSH cycle. One must also consider the impact of using evocative language such as 'social contagion' or the framing of SH content as 'causal' when discussing a population shown to already experience low self-worth (Hooley et al., 2010) and high levels of guilt and shame (McDonald et al., 2007). This language continues to locate blame for SH in the individuals engaging in the behaviour, whilst often ignoring the wider social and political contexts all forms of media reflect. Findings of this study suggest that broad governmental statements or policies for social media platforms (Lumley, 2019) to limit or remove all SH content are at risk of causing unintentional harm. Further research is required exploring the benefits of peer support (both online and face-to-face) to inform future clinical treatment options, policy and guidance.

Table 10: *Summary of clinical, policy and research implications*

Future research invitations	• Exploring the decision-making process for first engaging in SH or not, possibly using a mixed sample of individuals with experience of SH and those without. • Longitudinal research should investigate the role of socioeconomic status and exposure to negative or traumatic life events as risk factors for future engagement in RSH. • Investigation around the efficacy of motivational interviewing in the treatment of RSH • Further exploration around the role of faith in RSH • The role of neurodevelopmental differences on engagement with SH, specifically rejection sensitivity dysphoria within ADHD (Dodson, 2022). • Exploring the benefits of peer support (both online and face-to-face) to inform future policy and guidance.
Clinical invitations	• Practitioners should remain curious and open to why someone may be self-harming and adopt a non-judgement approach. • Practitioners should ensure that initial assessment or therapy does not replicate experiences of shame, stigma, and discrimination. These experiences are likely to contribute to increase feelings of guilt and shame which has been evidence to maintain the RSH cycle. • Particular attention should be given to language use when describing SH for example terms such as "superficial" or "seeking attention". • Use of the GT model to inform assessment, formulation, and treatment of RSH. • Practitioners should work alongside the client to identify what stage they are at in relation to changing their SH behaviours (Prochaska et al., 1997). • Practitioners should seek to incorporate potential to "relapse" into clinical safety planning, when an individual wishes to stop. • Staff training should be offered to professionals of all levels engaging with those who SH. Reflection and consideration should be given to biases and assumptions made about those who SH and their motives.
Legislation and policy invitations	• Increased funding and training for primary care services and therapies available to those who SH (O'Connor, 2013), that could result in a significant long-term cost-saving to the NHS. • Early intervention and therapeutic support for those who SH. • Policymakers to consider funding community, lived experience led projects and organisations who are already providing services for those who engage in RSH. • Broad governmental statements or policies for social media platforms (Lumley, 2019) to limit or remove all SH content are at risk of causing unintentional harm.

Conclusions

This thesis has provided a critical review of current empirical and theoretical understandings of RSH and treatment methods within the NHS. Additionally, a systematic literature review of the current evidence base sought to understand whether, at present, RSH can be conceptualised as an addictive behaviour. This novel study has provided a conceptual model of the processes that maintain engagement in RSH and illustrates similarities and overlap between RSH and addictive behaviours. Through the use of audio vignettes probing each of the addictive behaviour diagnostic criteria, results evidence the criteria that appears within both behaviours. This work evidences the potential benefits of conceptualising RSH as an addictive behaviour, in particular drawing upon the wealth of models to understand, treat and recover. The current study highlights way in which the addiction literature can be used to provide a positive model for people who engage in RSH. This work has generated new knowledges with the potential to influence clinical understanding and treatment and to seek to reduce misconceptions and stigma around SH.

References

Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational research methods*, *17*(4), 351-371.

Allen, R. E., & Wiles, J. L. (2016). A rose by any other name: Participants choosing research pseudonyms. *Qualitative Research in Psychology*, *13*(2), 149-165.

Al-Sharifi, A., Krynicki, C. R., & Upthegrove, R. (2015). Self-harm and ethnicity: A systematic review. *International Journal of Social Psychiatry*, *61*(6), 600-612.

Amaya, A., Bach, R., Keusch, F., & Kreuter, F. (2021). New data sources in social science research: Things to know before working with Reddit data. *Social science computer review*, *39*(5), 943-960.

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

André, F., Broman, N., Håkansson, A., & Claesdotter-Knutsson, E. (2020). Gaming addiction, problematic gaming and engaged gaming–Prevalence and associated characteristics. *Addictive Behaviors Reports*, *12*, 100324.

Andreatta, M., Mühlberger, A., Yarali, A., Gerber, B., & Pauli, P. (2010). A rift between implicit and explicit conditioned valence in human pain relief learning. *Proceedings of the Royal Society B: Biological Sciences*, *277*(1692), 2411-2416.

Annells, M. (1996). Grounded theory method: Philosophical perspectives, paradigm of inquiry, and postmodernism. *Qualitative health research*, *6*(3), 379-393.

Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using zoom videoconferencing for qualitative data collection: perceptions and experiences of researchers and participants. *International journal of qualitative methods*, *18*, 1609406919874596.

Arendt, F., Scherr, S., & Romer, D. (2019). Effects of exposure to self-harm on social media: Evidence from a two-wave panel study among young adults. *New Media & Society*, *21*(11-12), 2422-2442.

Armey, M. F., Crowther, J. H., & Miller, I. W. (2011). Changes in ecological momentary assessment reported affect associated with episodes of nonsuicidal self-injury. *Behavior therapy*, *42*(4), 579-588.

Asselin, M. E. (2003). Insider research: Issues to consider when doing qualitative research in your own setting. *Journal for Nurses in Professional Development*, *19*(2), 99-103.

Atzmüller, C., & Steiner, P. M. (2010). Experimental vignette studies in survey research. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, *6*(3), 128.

Bach, B., Kramer, U., Doering, S., di Giacomo, E., Hutsebaut, J., Kaera, A., ... & Renneberg, B. (2022). The ICD-11 classification of personality disorders: a European perspective on challenges and opportunities. *Borderline Personality Disorder and Emotion Dysregulation*, *9*(1), 1-11.

Ballard, E. D., Cwik, M., Storr, C. L., Goldstein, M., Eaton, W. W., & Wilcox, H. C. (2014). Recent medical service utilization and health conditions associated with a history of suicide attempts. *General hospital psychiatry*, *36*(4), 437-441.

Baler, R. D., & Volkow, N. D. (2006). Drug addiction: the neurobiology of disrupted self-control. Trends in molecular medicine, 12(12), 559-566.

Bareiss, W. (2017). Adolescent daughters and ritual abjection: Narrative analysis of self-injury in four US films. *Journal of medical humanities*, *38*, 319-337.

Boudreaux, E. D., Camargo Jr, C. A., Arias, S. A., Sullivan, A. F., Allen, M. H., Goldstein, A. B., ... & Miller, I. W. (2016). Improving suicide risk screening and detection in the emergency department. *American journal of preventive medicine*, *50*(4), 445-453.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and applied social psychology*, *17*(1-2), 173-198.

Beck, A. T.(1967). Depression: Clinical, experimental, and theoretical aspects. *New York: Hoeber*.

Becker, G. S., & Murphy, K. M. (1988). A theory of rational addiction. *Journal of political Economy*, *96*(4), 675-700.

Barter, C., & Renold, E. (1999). The use of vignettes in qualitative research. *Social research update*, *25*(9), 1-6.

Bell, J. (2005). Doing your research project Maidenhead. *Open University Press. Butt G and Lance A (2005)'Modernizing the roles of support staff in primary schools: changing focus, changing function', Educational Review*, *57*(2), 39-49.

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research*, *15*(2), 219-234.

Bewley, T. H. (1967). Centres for treatment of drug addiction. Advantages of special centres. *British Medical Journal*, *2*(5550), 498.

Bhaskar, R. (1978). A Realist Theory of Science Brighton: Harvester Wheatsheaf.

Bhaskar, R. (1986). Scientific Realism and Human Emancipation, Thetford, Norfolk, UK.

Bhaskar, R.A. (1989). Reclaiming Reality: A Critical Introduction to Contemporary Philosophy. London: Verso

Biddle, L., Cooper, J., Owen-Smith, A., Klineberg, E., Bennewith, O., Hawton, K., ... & Gunnell, D. (2013). Qualitative interviewing with vulnerable populations: Individuals' experiences of participating in suicide and self-harm based research. *Journal of affective disorders*, *145*(3), 356-362.

Billieux, J., Van der Linden, M., Khazaal, Y., Zullino, D., & Clark, L. (2012). Trait gambling cognitions predict near-miss experiences and persistence in laboratory slot machine gambling. *British Journal of Psychology*, *103*(3), 412-427.

Bjärehed, J., & Lundh, L. G. (2008). Deliberate self-harm in 14-year-old adolescents: How frequent is it, and how is it associated with psychopathology, relationship variables, and styles of emotional regulation?. *Cognitive behaviour therapy*, *37*(1), 26-37.

Blades, C. A., Stritzke, W. G., Page, A. C., & Brown, J. D. (2018). The benefits and risks of asking research participants about suicide: A meta-analysis of the impact of exposure to suicide-related content. *Clinical psychology review*, *64*, 1-12.

Blasco-Fontecilla, H. (2011). The addictive hypothesis of suicidal behavior. *Medical Hypotheses*, *78*(2), 350-350.

Blasco-Fontecilla, H., Fernández-Fernández, R., Colino, L., Fajardo, L., Perteguer-Barrio, R., & De Leon, J. (2016). The addictive model of self-harming (non-suicidal and suicidal) behavior. *Frontiers in psychiatry*, *7*, 8.

Boreham, M., Marlow, S., & Gilchrist, G. (2019). ".. that warm feeling that [alcohol] gave me was what I interpreted love would feel like.." Lived experience of excessive alcohol use and care proceedings by mothers in the family justice system in the UK. *Addictive behaviors*, *92*, 186-193.

Bowen, M. (2013). Borderline personality disorder: clinicians' accounts of good practice. *Journal of psychiatric and MH nursing*, *20*(6), 491-498.

Bowden, H. (2012). A phenomenological study of anorexia nervosa. *Philosophy, Psychiatry, & Psychology*, *19*(3), 227-241.

Brauer, P. M., Hanning, R. M., Arocha, J. F., Royall, D., Goy, R., Grant, A., ... & Horrocks, J. (2009). Creating case scenarios or vignettes using factorial study design methods. *Journal of advanced nursing*, *65*(9), 1937-1945.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Brickman, B. J. (2004). 'Delicate'cutters: Gendered self-mutilation and attractive flesh in medical discourse. *Body & Society*, *10*(4), 87-111.

Bronfenbrenner, U. (2000). *Ecological systems theory*. Oxford University Press.

Brower, K. J. (2001). Alcohol's effects on sleep in alcoholics. *Alcohol research & health: the journal of the National Institute on Alcohol Abuse and Alcoholism*, *25*(2), 110.

Brown, T. B., & Kimball, T. (2013). Cutting to live: A phenomenology of self-harm. *Journal of Marital and Family Therapy*, *39*(2), 195-208.

Bruffee, K. A. (1986). Social construction, language, and the authority of knowledge: A bibliographical essay. *College English*, *48*(8), 773-790.

Buckholdt, K. E., Parra, G. R., Anestis, M. D., Lavender, J. M., Jobe-Shields, L. E., Tull, M. T., & Gratz, K. L. (2015). Emotion regulation difficulties and maladaptive behaviors: Examination of deliberate self-harm, disordered eating, and substance misuse in two samples. *Cognitive Therapy and Research*, *39*, 140-152.

Burck, C. (2005). Comparing qualitative research methodologies for systemic research: The use of grounded theory, discourse analysis and narrative analysis. *Journal of family therapy*, *27*(3), 237-262.

Burnham, J. (2018). Developments in Social GRRRAAACCEEESSS: visible–invisible and voiced–unvoiced 1. In *Culture and reflexivity in systemic psychotherapy* (pp. 139-160). Routledge.

Butler, A. E., Copnell, B., & Hall, H. (2018). The development of theoretical sampling in practice. *Collegian*, *25*(5), 561-566.

Campbell, K., Clarke, K. A., Massey, D., & Lakeman, R. (2020). Borderline Personality Disorder: To diagnose or not to diagnose? That is the question. *International journal of MH nursing*, *29*(5), 972-981.

Caplin, R. (1994). Rosalind Caplin. *Self-Harm Perspectives from Personal Experience (ed LR Pembroke), Survivors Speak Out, London*, 27-29.

Carlen, P., & Bengtsson, A. (2007). Suicidal patients as experienced by psychiatric nurses in inpatient care. *International Journal of MH Nursing*, *16*(4), 257-265.

Carr, M. J., Ashcroft, D. M., Kontopantelis, E., Awenat, Y., Cooper, J., Chew-Graham, C., ... & Webb, R. T. (2016). The epidemiology of self-harm in a UK-wide primary care patient cohort, 2001–2013. *BMC psychiatry*, *16*(1), 1-10.

Cassin, S. E., & von Ranson, K. M. (2007). Is binge eating experienced as an addiction?. *Appetite*, *49*(3), 687-690.

Cerutti, R., Manca, M., Presaghi, F., & Gratz, K. L. (2011). Prevalence and clinical correlates of deliberate self-harm among a community sample of Italian adolescents. *Journal of adolescence*, *34*(2), 337-347.

Chandler, A. (2014). A sign that something is wrong?: Young people talking about self-harm.Chandler, A., Myers, F., & Platt, S. (2011). The construction of self-injury in the clinical literature: a sociological exploration. *Suicide and Life-Threatening Behavior*, *41*(1), 98-109.

Chandler, A., & Simopoulou, Z. (2021). The violence of the cut: Gendering self-harm. *International journal of environmental research and public health*, *18*(9), 4650.

Chapman, A. L., Gratz, K. L., & Brown, M. Z. (2006). Solving the puzzle of deliberate self-harm: The experiential avoidance model. *Behaviour research and therapy*, *44*(3), 371-394.

Chapple, P. A. (1967). Centres for treatment of drug addiction. Treatment in the community. *British Medical Journal*, *2*(5550), 500.

Charmaz, K. (2014). *Constructing grounded theory*. Sage.

Charmaz, K. (2017). The power of constructivist grounded theory for critical inquiry. *Qualitative inquiry*, *23*(1), 34-45.

Charmaz, K., & Keller, R. (2016). A personal journey with grounded theory methodology. Kathy Charmaz in conversation with Reiner Keller. In *Forum: Qualitative Social Research* (Vol. 17, No. 1). Freie Universität Berlin.

Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative research in psychology*, *18*(3), 305-327.

Cipriano, A., Cella, S., & Cotrufo, P. (2017). Nonsuicidal self-injury: A systematic review. *Frontiers in psychology*, *8*, 1946.

Clarke, A. E. (2012). Feminism, grounded theory, and situational analysis revisited. *Handbook of feminist research: Theory and praxis*, *1*, 388-412.

Clifford, D. (2017). Charitable organisations, the great recession and the age of austerity: longitudinal evidence for England and Wales. *Journal of Social policy*, *46*(1), 1-30.

Conroy, D. A., & Arnedt, J. T. (2014). Sleep and substance use disorders: an update. *Current psychiatry reports*, *16*, 1-9.

Cooper, J., Steeg, S., Webb, R., Stewart, S. L., Applegate, E., Hawton, K., ... & Kapur, N. (2013). Risk factors associated with repetition of self-harm in black and minority ethnic (BME) groups: a multi-centre cohort study. *Journal of affective disorders*, *148*(2-3), 435-439.

Cosgrove, L., Amsterdam, J., Heath, I., Mehta, A., Kalathil, J., & Shaughnessy, A. (2019). Global MH. *The Lancet*, *394*(10193), 117-118.

Cox, W. M., & Klinger, E. (1988). A motivational model of alcohol use. *Journal of abnormal psychology*, *97*(2), 168.

Cram, F. (2009). Maintaining indigenous voices. *The handbook of social research ethics*, 308-322.

Cresswell, M. (2005). Self-harm 'Survivors' and psychiatry in England, 1988–1996. *Social Theory & Health*, *3*, 259-285.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, *39*(3), 124-130.

Crowe, M., & Sheppard, L. (2011). A review of critical appraisal tools show they lack rigor: alternative tool structure is proposed. *Journal of clinical epidemiology*, *64*(1), 79-89.

Curtin, M., & Fossey, E. (2007). Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists. *Australian occupational therapy journal*, *54*(2), 88-94.

Cutcliffe, J. R. (2003). Reconsidering reflexivity: Introducing the case for intellectual entrepreneurship. *Qualitative health research*, *13*(1), 136-148.

Cutcliffe, J. R., & Ramcharan, P. (2002). Leveling the playing field? Exploring the merits of the ethics-as-process approach for judging qualitative research proposals. *Qualitative Health Research*, *12*(7), 1000-1010.

Cutcliffe, J. R., & Stevenson, C. (2007). *Care of the suicidal person.* Elsevier Health Sciences.

Daly, J., Kellehear, A., & Gliksman, M. (1997). *The public health researcher: A methodological guide.* Oxford University Press.

D'Argenio, A., Mazzi, C., Pecchioli, L., Di Lorenzo, G., Siracusano, A., & Troisi, A. (2009). Early trauma and adult obesity: is psychological dysfunction the mediating mechanism?. *Physiology & behavior*, *98*(5), 543-546.

Davies, J., Pitman, A., Bamber, V., Billings, J., & Rowe, S. (2020). Young peoples' perspectives on the role of harm reduction techniques in the management of their self-harm: a qualitative study. *Archives of suicide research*, 1-15.

DeLyser, D. (2001). "Do you really live here?" Thoughts on insider research. *Geographical Review*, *91*(1-2), 441-453.

Department of Health. (1999, September 10). *National service framework: MH.* https://www.gov.uk/government/publication/quality-standards-for-mental-health-services

Department of Health. (2000, July 1). *The NHS Plan: a plan for investment, a plan for reform.* https://www.gov.uk/government/publications/quality-standards-for-mental-health-service

Department of Health (2015, November 18). NHS reference costs 2014 to 2015. https://www.gov.uk/government/publications/nhs-reference-costs-2014-to-2015

DeVito, N. J., & Goldacre, B. (2019). Catalogue of bias: publication bias. *BMJ Evidence-Based Medicine*, *24*(2), 53-54.DiAngelo, R. (2015). White fragility: Why it's so hard to talk to White people about racism. *The Good Men Project*, *9*.

DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, *40*(4), 314-321.

Dickerson, M., & O'Connor, J. (2006). *Gambling as an addictive behaviour: Impaired control, harm minimisation, treatment and prevention.* Cambridge University Press.

Dodson, W. (2022). New Insights Into Rejection Sensitive Dysphoria.

Douglas, S., & Hariharan, G. (1994). The hazard of starting smoking: estimates from a split population duration model. *Journal of health economics*, *13*(2), 213-230.

Doyle, L., Sheridan, A., & Treacy, M. P. (2017). Motivations for adolescent self-harm and the implications for MH nurses. *Journal of Psychiatric and MH Nursing*, *24*(2-3), 134-142.

Drew, N. (2004). Creating a synthesis of intentionality: The role of the bracketing facilitator. *Advances in Nursing Science*, *27*(3), 215-223.

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International journal of qualitative methods*, *8*(1), 54-63.

Eisenberger, N. I. (2012). Broken hearts and broken bones: A neural perspective on the similarities between social and physical pain. *Current Directions in Psychological Science*, *21*(1), 42-47.

Erickson, C. K., & Wilcox, R. E. (2006). Please, not "Addiction" in DSM-V. *American Journal of Psychiatry*, *163*(11), 2015-2016.

Erlangsen, A., Vach, W., & Jeune, B. (2005). The effect of hospitalization with medical illnesses on the suicide risk in the oldest old: A population-based register study. *Journal of the American Geriatrics Society*, *53*(5), 771-776.

Evans, L., & Delfabbro, P. H. (2005). Motivators for change and barriers to help-seeking in Australian problem gamblers. *Journal of gambling studies*, *21*(2), 133-155.

Fairclough, N. (1989). Language and Power. Longman Group UK

Fagerström, K. O. (1978). Measuring degree of physical dependence to tobacco smoking with reference to individualization of treatment. *Addictive behaviors*, *3*(3-4), 235-241.

Faye, P. (1995). Addictive characteristics of the behavior of self-mutilation. *Journal of psychosocial nursing and MH services*, *33*(6), 36-39.

Favazza, A. R., & Rosenthal, R. J. (1993). Diagnostic issues in self-mutilation. *Psychiatric Services*, *44*(2), 134-140.

Finch, J. (1987). The vignette technique in survey research. *Sociology*, *21*(1), 105-114.

Fink, A. (2019). *Conducting research literature reviews: From the internet to paper*. Sage publications.

Flores, P. J. (2004). *Addiction as an attachment disorder*. Jason Aronson.

Franklin, J. C., Puzia, M. E., Lee, K. M., Lee, G. E., Hanna, E. K., Spring, V. L., & Prinstein, M. J. (2013). The nature of pain offset relief in nonsuicidal self-injury: A laboratory study. *Clinical Psychological Science*, *1*(2), 110-119.

Gardner, F. (2013). *Self-harm: A psychotherapeutic approach*. Routledge.

Gearing, R. E. (2004). Bracketing in research: A typology. *Qualitative health research*, *14*(10), 1429-1452.

Geertz, C. (1983). Local knowledge: fact and law in comparative perspective. *Local knowledge*. New York: Basic.

Getty, H. A., Watson, J., & Frisch, G. R. (2000). A comparison of depression and styles of coping in male and female GA members and controls. *Journal of gambling studies*, *16*, 377-391.

Giorgi, S., Himelein-Wachowiak, M., Habib, D., Ungar, L., & Curtis, B. (2022, July). Nonsuicidal Self-Injury and Substance Use Disorders: A Shared Language of Addiction. In *Proceedings of the Eighth Workshop on Computational Linguistics and Clinical Psychology* (pp. 177-183).

Glaser, B. G. (1978). *Theoretical sensitivity*. University of California,.

Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology the journal of the British sociological association*, *12*(1), 27-49.

Global Burden of Disease Collaborative Network. Global Burden of Disease Study (2019). Reference Life Table. Seattle, United States of America: Institute for Health Metrics and Evaluation (IHME), 2021.

Goodman, A. (1992). Sexual addiction: Designation and treatment. *Journal of sex & marital therapy*, *18*(4), 303-314.

Goodman, L. A., Liang, B., Helms, J. E., Latta, R. E., Sparks, E., & Weintraub, S. R. (2004). Training counseling psychologists as social justice agents: Feminist and multicultural principles in action. *The counseling psychologist*, *32*(6), 793-836.

Gordon, K. H., Selby, E. A., Anestis, M. D., Bender, T. W., Witte, T. K., Braithwaite, S., ... & Joiner Jr, T. E. (2010). The reinforcing properties of repeated deliberate self-harm. *Archives of Suicide Research*, *14*(4), 329-341.

Grant, J. E., & Chamberlain, S. R. (2016). Expanding the definition of addiction: DSM-5 vs. ICD-11. *CNS spectrums*, *21*(4), 300-303.

Grant, J. E., Potenza, M. N., Weinstein, A., & Gorelick, D. A. (2010). Introduction to behavioral addictions. *The American journal of drug and alcohol abuse*, *36*(5), 233-241.

Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice*, *10*(2), 192.

Gratz, K. L. (2006). Risk factors for deliberate self-harm among female college students: The role and interaction of childhood maltreatment, emotional inexpressivity, and affect intensity/reactivity. *American Journal of Orthopsychiatry*, *76*(2), 238-250.

Grigonis, H. K. (2018, March 18). *Reddit scatters in-feed sponsored posts inside its mobile apps.* Digital trends. https://www.digitaltrends.com/social-media/reddit-ads-promoted-posts/

Griffiths, M. D. (1993). Are computer games bad for children?. *The psychologist: bulletin of the British Psychological Society*, *6*, 401-407.

Grinyer, A. (2002a). *Cancer in young adults: through parents' eyes*. McGraw-Hill Education (UK).

Grinyer, A. (2002b). The anonymity of research participants: assumptions, ethics, and practicalities. *Social research update*, *36*(1), 4.

Grønhøj, A., & Bech-Larsen, T. (2010). Using vignettes to study family consumption processes. *Psychology & Marketing*, *27*(5), 445-464.

Gunnell, D., Hawton, K., Ho, D., Evans, J., O'Connor, S., Potokar, J., ... & Kapur, N. (2008). Hospital admissions for self harm after discharge from psychiatric inpatient care: cohort study. *Bmj*, *337*.

Gunstad, J., Paul, R. H., Spitznagel, M. B., Cohen, R. A., Williams, L. M., Kohn, M., & Gordon, E. (2006). Exposure to early life trauma is associated with adult obesity. *Psychiatry research*, *142*(1), 31-37.

Harper, D., & Thompson, A. R. (Eds.). (2011). *Qualitative research methods in MH and psychotherapy: A guide for students and practitioners*. John Wiley & Sons.

Hawton, K., Bergen, H., Casey, D., Simkin, S., Palmer, B., Cooper, J., ... & Owens, D. (2007). Self-harm in England: a tale of three cities. *Social psychiatry and psychiatric epidemiology*, *42*(7), 513-521.

Hawton, K., Fagg, J., Simkin, S. U. E., Bale, E., & Bond, A. (2000). Deliberate self-harm in adolescents in Oxford, 1985–1995. *Journal of adolescence*, *23*(1), 47-55.

Hawton, K., Linsell, L., Adeniji, T., Sariaslan, A., & Fazel, S. (2014). Self-harm in prisons in England and Wales: an epidemiological study of prevalence, risk factors, clustering, and subsequent suicide. *The Lancet*, *383*(9923), 1147-1154.

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of consulting and clinical psychology*, *64*(6), 1152.

Head, E. (2009). The ethics and implications of paying participants in qualitative research. *International Journal of Social Research Methodology*, *12*(4), 335-344.

Heath, N. L., Schaub, K., Holly, S., & Nixon, M. K. (2008). Self-injury today: Review of population and clinical studies in adolescents. *Self-injury in youth*, 28-46.

Hilton, C. (2017). Unveiling self-harm behaviour: what can social media site Twitter tell us about self-harm? A qualitative exploration. *Journal of clinical nursing*, *26*(11-12), 1690-1704.

Himelein-Wachowiak, M., Giorgi, S., Kwarteng, A., Schriefer, D., Smitterberg, C., Yadeta, K., ... & Curtis, B. (2022). Getting "clean" from nonsuicidal self-injury: Experiences of addiction on the subreddit r/selfharm. *Journal of behavioral addictions*, *11*(1), 128-139.

Holton, J. A. (2007). The coding process and its challenges. *The Sage handbook of grounded theory*, *3*, 265-289.

Hodes, M. (1990). Overdosing as communication: a cultural perspective. *British journal of medical psychology*, *63*(4), 319-333.

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., ... & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. Education for Information, 34(4), 285-291.

Hooley, J. M., & Franklin, J. C. (2018). Why do people hurt themselves? A new conceptual model of nonsuicidal self-injury. *Clinical psychological science*, *6*(3), 428-451.

Horsburgh, D. (2003). Evaluation of qualitative research. *Journal of clinical nursing*, *12*(2), 307-312.

Hughes, R. (1998). Considering the vignette technique and its application to a study of drug injecting and HIV risk and safer behaviour. *Sociology of health & illness*, *20*(3), 381-400.

Hughes, R., & Huby, M. (2004). The construction and interpretation of vignettes in social research. *Social work and social sciences review*, *11*(1), 36-51.

Hussein, M., Hirst, S., Salyers, V., & Osuji, J. (2014). Using grounded theory as a method of inquiry: Advantages and disadvantages. *Qualitative Report*, *19*(27).

Ignatieff, M. (1984). The Needs of Strangers, reprint (2001). *New York and London: Viking Penguin Books*.

Inckle, K. (2017). *Safe with self-injury: A practical guide to understanding, responding and harm-reduction.* Pccs Books.

Iwata, B. A., Pace, G. M., Dorsey, M. F., Zarcone, J. R., Vollmer, T. R., Smith, R. G., ... & Willis, K. D. (1994). The functions of self-injurious behavior: An experimental-epidemiological analysis. *Journal of applied behavior analysis*, *27*(2), 215-240.

Jack, R. (1992). *Women and attempted suicide.* Lawrence Erlbaum Associates, Inc.

Jacobson, C. M., & Batejan, K. (2014). Comprehensive theoretical models of nonsuicidal self-injury. *The Oxford handbook of suicide and self-injury*, 308-320.

Jacobson, D., & Mustafa, N. (2019). Social identity map: A reflexivity tool for practicing explicit positionality in critical qualitative research. *International Journal of Qualitative Methods*, *18*, 1609406919870075.

Jarvi, S., Jackson, B., Swenson, L., & Crawford, H. (2013). The impact of social contagion on non-suicidal self-injury: A review of the literature. *Archives of Suicide Research*, *17*(1), 1-19.

Jobes, D. A. (2012). The Collaborative Assessment and Management of Suicidality (CAMS): An evolving evidence-based clinical approach to suicidal risk. *Suicide and Life-Threatening Behavior*, *42*(6), 640-653.

Joiner Jr, T. E. (2003). Contagion of suicidal symptoms as a function of assortative relating and shared relationship stress in college roommates. *Journal of adolescence*, *26*(4), 495-504.

Jones, G., Meegan, R., Kennett, P., & Croft, J. (2016). The uneven impact of austerity on the voluntary and community sector: A tale of two cities. *Urban Studies*, *53*(10), 2064-2080.

Judson, B. A., & Goldstein, A. (1984). Naltrexone treatment of heroin addiction: one-year follow-up. *Drug and alcohol dependence*, *13*(4), 357-365.

Kacen, L., & Chaitin, J. (2006). 'The times they are a changing': Undertaking qualitative research in ambiguous, conflictual, and changing contexts. *The Qualitative Report*, *11*(2), 209-228.

Karp, D. A. (2009). Learning how to speak of sadness. In *Ethnographies Revisited* (pp. 57-67). Routledge.

Kanuha, V. K. (2000). "Being" native versus "going native": Conducting social work research as an insider. *Social work*, *45*(5), 439-447.

Kapur, N., Cooper, J., O'Connor, R. C., & Hawton, K. (2013). Non-suicidal self-injury v. attempted suicide: new diagnosis or false dichotomy? *The British Journal of Psychiatry*, *202*(5), 326-328.

Kelly, J. F., Humphreys, K., & Ferri, M. (2020). Alcoholics Anonymous and other 12-step programs for alcohol use disorder. *Cochrane database of systematic reviews*, (3).

Kessel, N. (1965). Self-poisoning. II. *British Medical Journal*, *2*(5474), 1336.

Kessel, N., Spencer, S., & Stafford-Clark, D. (1963). Attempted Suicide. *The Lancet*, *281*(7278), 448-449.

Khasawneh, A., Chalil Madathil, K., Dixon, E., Wiśniewski, P., Zinzow, H., & Roth, R. (2020). Examining the self-harm and suicide contagion effects of the Blue Whale Challenge on YouTube and Twitter: qualitative study. *JMIR MH*, *7*(6), e15973.

Kimball, J. S., & Diddams, M. (2007). Affect regulation as a mediator of attachment and deliberate self-harm. *Journal of College Counseling*, *10*(1), 44-53.

Klonsky, E. D. (2009). The functions of self-injury in young adults who cut themselves: Clarifying the evidence for affect-regulation. *Psychiatry research*, *166*(2-3), 260-268.

Klonsky, E. D., & Olino, T. M. (2008). Identifying clinically distinct subgroups of self-injurers among young adults: a latent class analysis. *Journal of consulting and clinical psychology*, *76*(1), 22.

Klonsky, E. D., Victor, S. E., & Saffer, B. Y. (2014). Nonsuicidal self-injury: What we know, and what we need to know. *The Canadian Journal of Psychiatry*, *59*(11), 565-568.

Klonsky, E. D., Glenn, C. R., Styer, D. M., Olino, T. M., & Washburn, J. J. (2015). The functions of nonsuicidal self-injury: converging evidence for a two-factor structure. *Child and adolescent psychiatry and MH*, *9*(1), 1-9.

Kolb, D.A. (1984). Experiential learning: experience as the source of learning and development. Englewood Cliffs, New Jersey: Prentice-Hall.

Kothgassner, O. D., Goreis, A., Robinson, K., Huscsava, M. M., Schmahl, C., & Plener, P. L. (2021). Efficacy of dialectical behavior therapy for adolescent self-harm and suicidal ideation: a systematic review and meta-analysis. *Psychological Medicine*, *51*(7), 1057-1067.

Kourosh, A. S., Harrington, C. R., & Adinoff, B. (2010). Tanning as a behavioral addiction. *The American journal of drug and alcohol abuse, 36*(5), 284-290.

LaFrance, J., Nichols, R., & Kirkhart, K. E. (2012). Culture writes the script: On the centrality of context in indigenous evaluation. *New Directions for Evaluation*, *2012*(135), 59-74.

Lakeman, R., & Fitzgerald, M. (2009a). Ethical suicide research: a survey of researchers. *International journal of MH nursing, 18*(1), 10-17.

Lakeman, R., & FitzGerald, M. (2009b). The ethics of suicide research: The views of ethics committee members. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *30*(1), 13.

Langeland, W., Draijer, N., & van den Brink, W. (2003). Assessment of lifetime physical and sexual abuse in treated alcoholics: Validity of the Addiction Severity Index. *Addictive behaviors*, *28*(5), 871-881.

Larkin, M., Flowers, P., & Smith, J. A. (2021). Interpretative phenomenological analysis: Theory, method and research. *Interpretative phenomenological analysis*, 1-100.

Lavis, A., & Winter, R. (2020). #Online harms or benefits? An ethnographic analysis of the positives and negatives of peer-support around self-harm on social media. *Journal of child psychology and psychiatry*, *61*(8), 842-854.

Leknes, S., Brooks, J. C., Wiech, K., & Tracey, I. (2008). Pain relief as an opponent process: a psychophysical investigation. *European journal of neuroscience*, *28*(4), 794-801.

Le Merrer, J., Becker, J. A., Befort, K., & Kieffer, B. L. (2009). Reward processing by the opioid system in the brain. *Physiological reviews*.

Lemon, J. (2002). Can we call behaviours addictive? *Clinical psychologist*, *6*(2), 44-49.

Lewis, H. B. (1971). Shame and guilt in neurosis. *Psychoanalytic review*, *58*(3), 419.

Lewis, M. J. (1990). Alcohol: mechanisms of addiction and reinforcement. *Advances in alcohol & substance abuse*, *9*(1-2), 47-66.

Lewis, S. P., & Mehrabkhani, S. (2016). Every scar tells a story: Insight into people's self-injury scar experiences. *Counselling Psychology Quarterly*, *29*(3), 296-310.

Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods. Second.* Melbourne: Oxford university press.

Littlewood, D. L., Harris, K., Gooding, P., Pratt, D., Haddock, G., & Peters, S. (2021). Using my demons to make good: The short-and long-term impact of participating in suicide-related research. *Archives of suicide research*, *25*(2), 315-339.

Lim, D. (2020). I'm embracing the term 'People of the Global Majority.'. *Medium. com. https://regenerative. medium. com/im-embracing-the-term-people-of-the-global-majority-abd1c*, *12512*, 41.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newberry Park.

Liu, J., Gao, Y., Liang, C., & Liu, X. (2022). The potential addictive mechanism involved in repetitive nonsuicidal self-injury: The roles of emotion dysregulation and impulsivity in adolescents. *Journal of behavioral addictions*, *11*(4), 953-962.

Lloyd, J., Hawton, K., Dutton, W. H., Geddes, J. R., Goodwin, G. M., & Rogers, R. D. (2016). Thoughts and acts of self-harm, and suicidal ideation, in online gamblers. *International Gambling Studies*, *16*(3), 408-423.

Longden, E., Madill, A., & Waterman, M. G. (2012). Dissociation, trauma, and the role of lived experience: toward a new conceptualization of voice hearing. *Psychological bulletin*, *138*(1), 28.

Lovallo, W. R. (2006). Cortisol secretion patterns in addiction and addiction risk. *International Journal of Psychophysiology*, *59*(3), 195-202.

Lumley, S. (2019, 26th January). Matt Hancock tells social media giants to remove suicide and self-harm material. The Telegraph. https://www.telegraph.co.uk/ne ws/2019/01/26/matt-hancock-tells-social-media-giantsremove-suicide-self-harm/

Lundström, M., & Lundström, T. P. (2021). Podcast ethnography. *International Journal of Social Research Methodology*, *24*(3), 289-299.

Lynam, D. R., Miller, J. D., Miller, D. J., Bornovalova, M. A., & Lejuez, C. W. (2011). Testing the relations between impulsivity-related traits, suicidality, and nonsuicidal self-injury: a test of the incremental validity of the UPPS model. *Personality disorders: Theory, research, and treatment*, *2*(2), 151.

Manca, M., Presaghi, F., & Cerutti, R. (2014). Clinical specificity of acute versus chronic self-injury: Measurement and evaluation of repetitive non-suicidal self-injury. *Psychiatry research*, *215*(1), 111-119.

Marcenko, M. O., Kemp, S. P., & Larson, N. C. (2000). Childhood experiences of abuse, later substance use, and parenting outcomes among low-income mothers. *American Journal of Orthopsychiatry*, *70*(3), 316-326.

Marks, I. (1990). Behavioural (non-chemical) addictions. *British journal of addiction*, *85*(11), 1389-1394.

Marlatt, G. A. (1996). Models of relapse and relapse prevention: A commentary.

Marlatt, G. A., Baer, J. S., Donovan, D. M., & Kivlahan, D. R. (1988). Addictive behaviors: Etiology and treatment. *Annual review of Psychology*, *39*(1), 223-252.

Mauthner, N. S., & Doucet, A. (2003). Reflexive accounts and accounts of reflexivity in qualitative data analysis. *Sociology*, *37*(3), 413-431.

Marlatt, G. A., & George, W. H. (1984). Relapse prevention: Introduction and overview of the model. *British journal of addiction*, *79*(4), 261-273.

Marlatt, G. A. (1989). Determinants of relapse: Implications for the maintenance of behavior change. *Behavioral medicine: Changing health lifestyles.*, 410-452.

McCrone, P., Johnson, S., Nolan, F., Sandor, A., Hoult, J., Pilling, S., ... & McKenzie, N. (2009). Impact of a crisis resolution team on service costs in the UK. *Psychiatric Bulletin*, *33*(1), 17-19.

McDonald, G., O'Brien, L., & Jackson, D. (2007). Guilt and shame: Experiences of parents of self-harming adolescents. *Journal of Child Health Care*, *11*(4), 298-310.

McEwen, B. S. (2022). Protective and damaging effects of stress mediators: central role of the brain. *Dialogues in clinical neuroscience*.

Meehan, W., O'Connor, L. E., Berry, J. W., Weiss, J., & Acampora, A. (1996). Guilt, shame, and depression in clients in recovery from addiction. *Journal of psychoactive drugs*, *28*(2), 125-134.

Merriam, S. A., Johnson-Bailey, J., Lee, M.-Y., Kee, Y., Ntseane, G., & Muhamad, M. (2001). Power and positionality: Negotiating insider/outsider status within and across cultures. International Journal of Lifelong Education, 20(5), 405-416.

Millard, C. (2015). *A history of self-harm in Britain: A genealogy of cutting and overdosing* (p. 268). Springer Nature.

Miller, W. R. (1985). Addictive behavior and the theory of psychological reversals. *Addictive behaviors*, *10*(2), 177-180.

Miller, W. R., & Johnson, J. L. (2001). When is it motivational interviewing?. *ADDICTION-ABINGDON-*, *96*(12), 1770-1771.

Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Harvard university press.

Minogue, V., Boness, J., Brown, A., & Girdlestone, J. (2005). The impact of service user involvement in research. *International Journal of Health Care Quality Assurance*.

Mohammad, S., Jan, R. A., Alsaedi, S. L., & Jan, R. (2023). Symptoms, Mechanisms, and Treatments of Video Game Addiction. *Cureus*, *15*(3).

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group*, T. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine*, *151*(4), 264-269.

Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., ... & Arango, C. (2020). How MH care should change as a consequence of the COVID-19 pandemic. *The lancet psychiatry*, *7*(9), 813-824.

Morrissey, J., Doyle, L., & Higgins, A. (2018). Self-harm: From risk management to relational and recovery-oriented care. *The Journal of MH Training, Education and Practice*, *13*(1), 34-43.

Morse, J. M. (2000). Determining sample size. *Qualitative health research*, *10*(1), 3-5.

Moseley, R. L., Gregory, N. J., Smith, P., Allison, C., & Baron-Cohen, S. J. M. A. (2019). A 'choice', an 'addiction', a way 'out of the lost': exploring self-injury in autistic people without intellectual disability. *Molecular autism*, *10*(1), 1-23.

Moustafa, A. A., Parkes, D., Fitzgerald, L., Underhill, D., Garami, J., Levy-Gigi, E., ... & Misiak, B. (2021). The relationship between childhood trauma, early-life stress, and alcohol and drug use, abuse, and addiction: An integrative review. *Current Psychology*, *40*, 579-584.

Muehlenkamp, J. J. (2005). Self-injurious behavior as a separate clinical syndrome. *American Journal of Orthopsychiatry*, *75*(2), 324-333.

Myers, M. D. (2019). *Qualitative research in business and management*. Sage.

National Institute for Health and Care Excellence. (2004, July 28). *Self-harm in over 8s: short-term management and prevention of recurrence.* NICE. https://www.nice.org.uk/guidance/cg16

National Institute for Health and Care Excellence. (2022, September 7). *Self-harm: assessment, management and preventing reoccurrence.* NICE. https://www.nice.org.uk/guidance/ng225

Neeleman, J. (1996). Suicide as a crime in the UK: legal history, international comparisons and present implications. *Acta Psychiatrica Scandinavica*, *94*(4), 252-257.

Nixon, M. K., Cloutier, P. F., & Aggarwal, S. (2002). Affect regulation and addictive aspects of repetitive self-injury in hospitalized adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *41*(11), 1333-1341.

Nock, M. K. (2010). Self-injury. *Annual review of clinical psychology*, *6*, 339-363.

Nock, M. K., & Favazza, A. R. (2009). Nonsuicidal self-injury: Definition and classification.

Nock, M. K., Prinstein, M. J., & Sterba, S. K. (2009). Revealing the form and function of self-injurious thoughts and behaviors: A real-time ecological assessment study among adolescents and young adults. *Journal of abnormal psychology*, *118*(4), 816.

Nock, M. K., & Prinstein, M. J. (2004). A functional approach to the assessment of self-mutilative behavior. *Journal of consulting and clinical psychology*, *72*(5), 885.

Nock, M. K., & Prinstein, M. J. (2005). Contextual features and behavioral functions of self-mutilation among adolescents. *Journal of abnormal psychology*, *114*(1), 140.

Nock, M. K., Prinstein, M. J., & Sterba, S. K. (2010). Revealing the form and function of self-injurious thoughts and behaviors: A real-time ecological assessment study among adolescents and young adults.

O'Brien, C. P., Volkow, N., & Li, T. K. (2006). What's in a word? Addiction versus dependence in DSM-V. *American Journal of Psychiatry*, *163*(5), 764-765.

Oliver, K. L. (1998). A journey into narrative analysis: A methodology for discovering meanings. *Journal of Teaching in physical Education*, *17*(2), 244-259.

Oliver, C. (2012). Critical realist grounded theory: A new approach for social work research. *British Journal of Social Work*, *42*(2), 371-387.

Orford, J. (2001). Addiction as excessive appetite. *Addiction*, *96*(1), 15-31.

Orrok, B. G. (1989). Alcoholics Anonymous: The story of how many thousands of men and women have recovered from alcoholism. *JAMA*, *261*(22), 3315-3316.

Owen, R., Gooding, P., Dempsey, R., & Jones, S. (2016). The experience of participation in suicide research from the perspective of individuals with bipolar disorder. *The Journal of Nervous and Mental Disease*, *204*(11), 840-844.

Pace, R., Pluye, P., Bartlett, G., Macaulay, A. C., Salsberg, J., Jagosh, J., & Seller, R. (2012). Testing the reliability and efficiency of the pilot Mixed Methods Appraisal Tool (MMAT) for systematic mixed studies review. *International journal of nursing studies*, *49*(1), 47-53.

Paradis, E. K. (2000). Feminist and community psychology ethics in research with homeless women. *American Journal of Community Psychology*, *28*(6), 839-858.

Pavlov, I. P. (1927). Conditioned reflexes: an investigation of the physiological activity of the cerebral cortex (Anrep GV, trans.) Dover New York. *Original work published*.

Pierce, J. P., White, V. M., & Emery, S. L. (2012). What public health strategies are needed to reduce smoking initiation? *Tobacco control*, *21*(2), 258-264.

Pilgrim, D., & Bentall, R. (1999). The medicalisation of misery: A critical realist analysis of the concept of depression. *Journal of MH*, *8*(3), 261-274.

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International journal of qualitative studies in education*, *16*(2), 175-196.

Polk, E., & Liss, M. (2009). Exploring the motivations behind self-injury. *Counselling Psychology Quarterly*, *22*(2), 233-241.

Polskaya, N. A., & Melnikova, M. A. (2020). Dissociation, trauma, and self-harm. *Counseling psychology and psychotherapy*, *28*(1), 25-48.

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version*, *1*(1), b92.

Potter, J., & Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. Sage Publications, Inc.

Pratt, A. C. (1995). Putting critical realism to work: the practical implications for geographical research. *Progress in Human Geography*, *19*(1), 61-74.

Price-Robertson, R., Obradovic, A., & Morgan, B. (2017). Relational recovery: beyond individualism in the recovery approach. *Advances in MH*, *15*(2), 108-120.

Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. *Treating addictive behaviors: Processes of change*, 3-27.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1997). In search of how people change: applications to addictive behaviors.

Public Health England, (2015, September 15). *Health matters: smoking and quitting in England. https://www.gov.uk/government/publications/health-matters-smoking-and-quitting-in-england/smoking-and-quitting-in-england*

Qin, P., Webb, R., Kapur, N., & Sørensen, H. T. (2013). Hospitalization for physical illness and risk of subsequent suicide: a population study. *Journal of internal medicine*, *273*(1), 48-58.

Ramirez, R., Mukherjee, M., Vezzoli, S., & Kramer, A. M. (2015). Scenarios as a scholarly methodology to produce "interesting research". *Futures*, *71*, 70-87.

Ridge, D., Bullock, L., Causer, H., Fisher, T., Hider, S., Kingstone, T., ... & Southam, J. (2023). 'Imposter participants' in online qualitative research, a new and increasing threat to data integrity?. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, *26*(3), 941.

Roberts, A. J., & Koob, G. F. (1997). The neurobiology of addiction: an overview. *Alcohol health and research world*, *21*(2), 101.

Robillard, C. L., Legg, N. K., Ames, M. E., & Turner, B. J. (2022). Support for a transdiagnostic motivational model of self-damaging behaviors: comparing the salience of motives for binge drinking, disordered eating, and nonsuicidal self-injury. *Behavior therapy*, *53*(6), 1219-1232.

Roehrs, T., & Roth, T. (2001). Sleep, sleepiness, and alcohol use. *Alcohol Research & Health*, *25*(2), 101.

Rose, S., & Dhandayudham, A. (2014). Towards an understanding of Internet-based problem shopping behaviour: The concept of online shopping addiction and its proposed predictors. *Journal of behavioral addictions*, *3*(2), 83-89.

Ross, S., & Heath, N. (2002). A study of the frequency of self-mutilation in a community sample of adolescents. *Journal of youth and Adolescence*, *31*(1), 67-77.

Rubak, S., Sandbæk, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *British journal of general practice*, *55*(513), 305-312.

Rüsch, N., Müller, M., Ajdacic-Gross, V., Rodgers, S., Corrigan, P. W., & Rössler, W. (2014). Shame, perceived knowledge and satisfaction associated with MH as predictors of attitude patterns towards help-seeking. *Epidemiology and psychiatric sciences*, *23*(2), 177-187.

Russ, M. J., Roth, S. D., Kakuma, T., Harrison, K., & Hull, J. W. (1994). Pain perception in self-injurious borderline patients: naloxone effects. *Biological psychiatry*.

Ryan, R. (2013, June). Cochrane Consumers and Communication Review Group. 'Cochrane Consumers and Communication Review Group: data synthesis and analysis'. http://cccrg.cochrane.org

Sarbin, T. R. (1986). *Narrative psychology: The storied nature of human conduct.* Praeger Publishers/Greenwood Publishing Group.

Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical psychology review*, *28*(8), 1326-1342.

Schaub, K., Holly, S., Toste, J. R., & Heath, N. L. (2006). Addictive properties of self-injurious behavior in young adults. In *Poster presented at the annual meeting of the New England Psychological Association, Manchester, NH.*

Schoel, J. (1988). *Islands of Healing. A Guide to Adventure Based Counseling.* Project Adventure, Inc., PO Box 100, Hamilton, MA 01936.

Schoenberg, N. E., & Ravdal, H. (2000). Using vignettes in awareness and attitudinal research. *International journal of social research methodology*, *3*(1), 63-74.

Schoenleber, M., & Berenbaum, H. (2012). Shame regulation in personality pathology. *Journal of Abnormal Psychology*, *121*(2), 433.

Schulteis, G., & Koob, G. F. (1996). Reinforcement processes in opiate addiction: a homeostatic model. *Neurochemical research*, *21*, 1437-1454.

Serrant-Green, L. (2002). Methodological issues for black researchers working in minority ethnic. *Nurse researcher*, *9*(4), 30-44.

Shaffer, D., & Jacobson, C. (2009). Proposal to the DSM-V childhood disorder and mood disorder work groups to include non-suicidal self-injury (NSSI) as a DSM-V disorder. *American Psychiatric Association*, 1-21.

Shaffer, H. J., LaPlante, D. A., LaBrie, R. A., Kidman, R. C., Donato, A. N., & Stanton, M. V. (2004). Toward a syndrome model of addiction: Multiple expressions, common etiology. *Harvard review of psychiatry*, *12*(6), 367-374.

Shaw, C., & Shaw, T. (2012). Harm-minimisation for self-harm. *MH Today*, 19-21.

Sher, L., & Stanley, B. H. (2008). The role of endogenous opioids in the pathophysiology of self-injurious and suicidal behavior. *Archives of Suicide Research*, *12*(4), 299-308.

Sher, L., Stanley, B. (2009). Biological models of non-suicidal self-injury. In: Nock, M.K. (Ed.), Understanding Non-suicidal Self-injury: Origins.

Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual review of psychology*, *70*, 747-770.

Sikes, P., & Potts, A. (2008). (Eds.) Researching education from the inside: Investigations from within. London, UK: Routledge.

Silverman, M. M. (2016). Challenges to defining and classifying suicide and suicidal behaviors. *The international handbook of suicide prevention*, *11*.

Sim, M. (1961). Psychological Aspects of Poisoning. *G. Cumming, The Medical Management of Acute Poisoning London, Cassell.*

Simopoulou, Z., & Chandler, A. (2020). Self-harm as an attempt at self-care. *European Journal for Qualitative Research in Psychotherapy*, *10*, 110-120.

Singer, F. F., Meinhart, C., & Zeitfogel, E. (2014). Reddit research and data.

Skegg, K. (2005). Self-harm. *The Lancet*, *366*(9495), 1471-1483.

Skinner, B. F. (1950). Are theories of learning necessary?. *Psychological review*, *57*(4), 193.

Skinner, B. F. (1971). Operant conditioning. *The encyclopedia of education*, *7*, 29-33.

Skodol, A. E., & Bender, D. S. (2003). Why are women diagnosed borderline more than men?. *Psychiatric Quarterly*, *74*, 349-360.

Smith, J.A., Flowers, P. & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, research, practice. London: Sage.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research*, *104*, 333-339.

Snyman, G. (2015). Responding to the decolonial turn: Epistemic vulnerability. *Missionalia: Southern African Journal of Mission Studies*, *43*(3), 266-291.

Somanathan, A., Lee, A., Harrison, C. J., & Rodrigues, J. N. (2023). Management of Incisional Self-Harm of the Upper Limb: A Systematic Review. *JPRAS Open*.

Stacey, D., Briere, N., Robitaille, H., Fraser, K., Desroches, S., & Légaré, F. (2014). A systematic process for creating and appraising clinical vignettes to illustrate interprofessional shared decision making. *Journal of Interprofessional Care*, *28*(5), 453-459.

Starks, H., & Brown Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative health research*, *17*(10), 1372-1380.

Stanley, B., Sher, L., Wilson, S., Ekman, R., Huang, Y. Y., & Mann, J. J. (2010). Non-suicidal self-injurious behavior, endogenous opioids, and monoamine neurotransmitters. *Journal of affective disorders*, *124*(1-2), 134-140.

Steenbergh, T. A., Meyers, A. W., May, R. K., & Whelan, J. P. (2002). Development and validation of the Gamblers' Beliefs Questionnaire. *Psychology of addictive behaviors*, *16*(2), 143.

Stellern, J., Xiao, K. B., Grennell, E., Sanches, M., Gowin, J. L., & Sloan, M. E. (2023). Emotion regulation in substance use disorders: a systematic review and meta-analysis. *Addiction*, *118*(1), 30-47.

Stirling, F. J., & Chandler, A. (2021). Dangerous arms and everyday activism: A dialogue between two researchers with lived experience of self-harm. *International Review of Qualitative Research*, *14*(1), 155-170.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques* (pp. 1-312). Thousand oaks, CA: Sage publications.

Symons, F. J., Thompson, A., & Rodriguez, M. C. (2004). Self-injurious behavior and the efficacy of naltrexone treatment: A quantitative synthesis. *Mental retardation and developmental disabilities research reviews*, *10*(3), 193-200.

Talbot, K. (1999). Mothers now childless: Personal transformation after the death of an only child. *OMEGA-Journal of Death and Dying*, *38*(3), 167-186.

Taliaferro, L. A., McMorris, B. J., Rider, G. N., & Eisenberg, M. E. (2019). Risk and protective factors for self-harm in a population-based sample of transgender youth. *Archives of suicide research*, *23*(2), 203-221.

Tang, R., & John, S. (1999). The 'I' in identity: Exploring writer identity in student academic writing through the first person pronoun. *English for specific purposes*, *18*, S23-S39.

Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (1989). Test of self-conscious affect–3.

Tantam, D., & Whittaker, J. (1992). Personality disorder and self-wounding. *The British Journal of Psychiatry*, *161*(4), 451-464.

Teece, A., Baker, J., & Smith, H. (2021). Using audio-visual vignettes to explore how critical care nurses make the decision to restrain a patient with psychomotor agitation. *Nurse Researcher*.

The British Psychological Society. (2020, September 10). Who looks and sounds like a psychologist. BPS. Retrieved March 31, 2023, from https://www.bps.org.uk/psychologist/who-looks-and-sounds-psychologist

Thomson, S. B. (2010). Sample size and grounded theory. *Thomson, SB (2010). Grounded Theory-Sample Size. Journal of Administration and Governance*, *5*(1), 45-52.

Thompson, S. (1996). Paying respondents and informants. *Social research update*, *14*, 1-5.

Tie, C. Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE open medicine*, *7*, 2050312118822927.

Timonen, V., Foley, G., & Conlon, C. (2018). Challenges when using grounded theory: A pragmatic introduction to doing GT research. *International Journal of Qualitative Methods*, *17*(1), 1609406918758086.

Tørmoen, A. J., Grøholt, B., Haga, E., Brager-Larsen, A., Miller, A., Walby, F., ... & Mehlum, L. (2014). Feasibility of dialectical behavior therapy with suicidal and self-harming adolescents with multi-problems: training, adherence, and retention. *Archives of suicide research*, *18*(4), 432-444.

Törrönen, J. (2018). Using vignettes in qualitative interviews as clues, microcosms or provokers. *Qualitative Research Journal*, *18*(3), 276-286.

Tsiachristas, A., Geulayov, G., Casey, D., Ness, J., Waters, K., Clements, C., ... & Hawton, K. (2020). Incidence and general hospital costs of self-harm across England: estimates based on the multicentre study of self-harm. *Epidemiology and psychiatric sciences*, *29*, e108.

Tsiachristas, A., McDaid, D., Casey, D., Brand, F., Leal, J., Park, A. L., ... & Hawton, K. (2017). General hospital costs in England of medical and psychiatric care for patients who self-harm: a retrospective analysis. *The Lancet Psychiatry*, *4*(10), 759-767.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative social work*, *11*(1), 80-96.

Turner, B. J., Baglole, J. S., Chapman, A. L., & Gratz, K. L. (2019). Experiencing and resisting nonsuicidal self-injury thoughts and urges in everyday life. *Suicide and Life-Threatening Behavior*, *49*(5), 1332-1346.

Turp, M. (2002). *Hidden self-harm: Narratives from psychotherapy*. Jessica Kingsley Publishers.

US Department of Health and Human Services Oral Health Coordinating Committee. (2016). US Department of Health and Human Services oral health strategic framework, 2014–2017. *Public health reports*, *131*(2), 242-257.

Velicer, W. F., Diclemente, C. C., Rossi, J. S., & Prochaska, J. O. (1990). Relapse situations and self-efficacy: An integrative model. *Addictive behaviors*, *15*(3), 271-283.

Victor, S. E., Glenn, C. R., & Klonsky, E. D. (2012). Is non-suicidal self-injury an "addiction"? A comparison of craving in substance use and non-suicidal self-injury. *Psychiatry research*, *197*(1-2), 73-77.

Victor, S. E., Muehlenkamp, J. J., Hayes, N. A., Lengel, G. J., Styer, D. M., & Washburn, J. J. (2018). Characterizing gender differences in nonsuicidal self-injury: Evidence from a large clinical sample of adolescents and adults. *Comprehensive psychiatry*, *82*, 53-60.

Volkow, N. D., & Wise, R. A. (2005). How can drug addiction help us understand obesity?. *Nature neuroscience*, *8*(5), 555-560.

Vuchinich, R. E., & Heather, N. (Eds.). (2003). *Choice, behavioral economics, and addiction*. Elsevier.

Waldorf, D. (1983). The Social-Psychological Processes of Control and Recovery from Substance Abuse: An Introduction. *Journal of Drug Issues*, *13*, 189.

Washburn, J. J., Juzwin, K. R., Styer, D. M., & Aldridge, D. (2010). Measuring the urge to self-injure: Preliminary data from a clinical sample. *Psychiatry Research*, *178*(3), 540-544.

Webb, G. (1997). Deconstructing deep and surface: Towards a critique of phenomenography. *Higher education*, *33*(2), 195-212.

West, R., & Brown, J. (2013). Theory of addiction.

Wiener, C. (2007). Making teams work in conducting grounded theory. *The Sage handbook of grounded theory*, (Part IV), 293-310.

Wiers, R. W., Bartholow, B. D., van den Wildenberg, E., Thush, C., Engels, R. C., Sher, K. J., ... & Stacy, A. W. (2007). Automatic and controlled processes and the development of addictive behaviors in adolescents: a review and a model. *Pharmacology Biochemistry and Behavior*, *86*(2), 263-283.

Williams, A. J., Jones, C., Arcelus, J., Townsend, E., Lazaridou, A., & Michail, M. (2021). A systematic review and meta-analysis of victimisation and mental health prevalence among LGBTQ+ young people with experiences of self-harm and suicide. *PLoS One*, *16*(1), e0245268.

Willig, C. (2008). Introducing qualitative research in psychology., 2nd ed. (Open University Press: Berkshire).

Willig, C. (2013). Introducing qualitative research in psychology (3rd ed.) Maidenhead, England: Open University Press

Willig, C., & Rogers, W. S. (Eds.). (2017). *The SAGE handbook of qualitative research in psychology*. Sage.

Wilsnack, S. C., Vogeltanz, N. D., Klassen, A. D., & Harris, T. R. (1997). Childhood sexual abuse and women's substance abuse: national survey findings. *Journal of studies on alcohol*, *58*(3), 264-271.

Wollin, D. (1996, December). Rigor in theory-building from cases. In *ANZAM'96 Conference, Wollongong, NSW* (pp. 6-8).

Wong, B. H. C., Cross, S., Zavaleta-Ramírez, P., Bauda, I., Hoffman, P., Ibeziako, P., ... & Ougrin, D. (2023). Self-harm in children and adolescents who presented at emergency units during the COVID-19 pandemic: An international retrospective cohort study. *Journal of the American Academy of Child & Adolescent Psychiatry*.

Workman, B. (2007). "Casing the joint": Explorations by the insider-researcher preparing for work-based projects. *Journal of workplace learning*, *19*(3), 146-160.

World Health Organization(WHO). (1993). *The ICD-10 classification of mental and behavioural disorders*. World Health Organization.

World Health Organization. (2022). *ICD-11: International classification of diseases* (11th revision). https://icd.who.int/

Zamani, M., Schwartz, H. A., Eichstaedt, J., Guntuku, S. C., Ganesan, A. V., Clouston, S., & Giorgi, S. (2020, November). Understanding weekly COVID-19 concerns through dynamic content-specific LDA topic modeling. In *Proceedings of the conference on empirical methods in natural language processing. Conference on empirical methods in natural language processing* (Vol. 2020, p. 193). NIH Public Access.

Zinbarg, R. E., & Barlow, D. H. (1996). Structure of anxiety and the anxiety disorders: a hierarchical model. *Journal of abnormal psychology*, *105*(2), 181.

Appendices

Appendix A: Registered PROSPERO protocol

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for Health Research

UNIVERSITY *of York*
Centre for Reviews and Dissemination

Systematic review

A list of fields that can be edited in an update can be found here

1. * Review title.

Give the title of the review in English

Can repetitive self-harm be conceptualised as an addictive behaviour?: A systematic review.

2. Original language title.

For reviews in languages other than English, give the title in the original language. This will be displayed with the English language title.

3. * Anticipated or actual start date.

Give the date the systematic review started or is expected to start.

02/02/2023

4. * Anticipated completion date.

Give the date by which the review is expected to be completed.

01/08/2023

5.1 * Stage of review at time of this submission.

This field uses answers to initial screening questions. It cannot be edited until after registration.

Tick the boxes to show which review tasks have been started and which have been completed.

Update this field each time any amendments are made to a published record.

The review has not yet started: No

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for Health Research

Review stage	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	Yes	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

Provide any other relevant information about the stage of the review here.

During formal screening, became aware of research looking at self-harm in the context of when an individual has drank alcohol or taken drugs. This has led to an addition to exclusion criteria - current amendment.

During formal screening, became aware of research looking at self-harm in the context of when an individual has drank alcohol or taken drugs. This has led to an addition to exclusion criteria - current amendment.

6. * Named contact.

The named contact is the guarantor for the accuracy of the information in the register record. This may be any member of the review team.

Millie Witcher

Email salutation (e.g. "Dr Smith" or "Joanne") for correspondence:

Millie

7. * Named contact email.

Give the electronic email address of the named contact.

████████████

8. Named contact address

Give the full institutional/organisational postal address for the named contact.

9. Named contact phone number.

Give the telephone number for the named contact, including international dialling code.

████████████

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for
Health Research

10. * Organisational affiliation of the review.

Full title of the organisational affiliations for this review and website address if available. This field may be completed as 'None' if the review is not affiliated to any organisation.

University of Hertfordshire

Organisation web address:

11. * Review team members and their organisational affiliations.

Give the personal details and the organisational affiliations of each member of the review team. Affiliation refers to groups or organisations to which review team members belong. **NOTE: email and country now MUST be entered for each person, unless you are amending a published record.**

Miss Millie Witcher. University of Hertfordshire
Dr Jennifer Heath. University of Hertfordshire
Dr Sarah Rowe. University College London

12. * Funding sources/sponsors.

Details of the individuals, organizations, groups, companies or other legal entities who have funded or sponsored the review.

None

Grant number(s)

State the funder, grant or award number and the date of award

13. * Conflicts of interest.

List actual or perceived conflicts of interest (financial or academic).

None

14. Collaborators.

Give the name and affiliation of any individuals or organisations who are working on the review but who are not listed as review team members. **NOTE: email and country must be completed for each person, unless you are amending a published record.**

15. * Review question.

State the review question(s) clearly and precisely. It may be appropriate to break very broad questions down into a series of related more specific questions. Questions may be framed or refined using PI(E)COS or similar where relevant.

Can repetitive self-harm be conceptualised as an addictive behaviour?

16. Searches.

PROSPERO
International prospective register of systematic reviews

National Institute for
Health Research

State the sources that will be searched (e.g. Medline). Give the search dates, and any restrictions (e.g. language or publication date). Do NOT enter the full search strategy (it may be provided as a link or attachment below.)

Searches will be conducted from 2nd February - 1st March 2023.

- Electronic databases: PubMed, Scopus, PsycINFO, EMBASE, CINAHL and Google Scholar

- Reference list of all papers included papers will be checked="checked" value="1"

- Expert recommendations: Supervisors will be consulted as prominent researchers in the field to identify any further published literature around the concept of self-harm as an addictive behaviour.

Limitations:

-No geographical limitations will be applied to ensure a representative search; however, studies will be limited to the English language.

-The search will be limited to human participants.

Search terms will include (but not limited to):

'self-harm or self-injury or self-mutilation or non-suicidal self-injury or suicide or deliberate self-harm or DSH or suicidal behavio$ or NSSI or non-fatal deliberate self-harm or self-poisoning or self-injurious behavio$ or parasuicide'

addict* OR dependenc* OR "behavio* addict*" OR craving OR urge OR compulsion

17. URL to search strategy.

Upload a file with your search strategy, or an example of a search strategy for a specific database, (including the keywords) in pdf or word format. In doing so you are consenting to the file being made publicly accessible. Or provide a URL or link to the strategy. Do NOT provide links to your search **results**.

Alternatively, upload your search strategy to CRD in pdf format. Please note that by doing so you are consenting to the file being made publicly accessible.
Do not make this file publicly available until the review is complete

[18. chGoge]tion or domain being studied.

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for
Health Research

Give a short description of the disease, condition or healthcare domain being studied in your systematic review.

In this review we define self-harm as any deliberate act of injurous behaviour towards the self and

irrespective of motive or suicidal intent of that behaviour (Natonal Institute for Health and Care Excellence,

2011) for example cutting, burning, branding, scratching, picking at skin or reopening wounds, biting, head

banging, hair pulling, hitting and bone breaking.

Inclusion:

Both suicidal and non-suicidal self-harm

Exclusion:

Suicidal behaviours where self-harm is not evident or it is unclear that self-harm has occured e.g a suicide

plan.

Papers that focus on the comorbid/co-occurring relationship between SH and alcohol or SH and drug use

19. * Participants/population.

Specify the participants or populations being studied in the review. The preferred format includes details of both inclusion and exclusion criteria.

Adult population (aged over 18 years) who have experience of self-harm.

Exclusion:

Child or adolescent populations and animal studies.

20. Intervention(s), exposure(s).

Give full and clear descriptions or definitions of the interventions or the exposures to be reviewed. The preferred format includes details of both inclusion and exclusion criteria.

An addictive behaviour is defined as "an overpractised behaviour which becomes largely automatic in its

optimal expression" (Tiffany, 1990). In addition, addictive behaviours involve automatic, non-intentional

cognitive processes (McCusker et al., 1995). The term addiction is usually concerned with substance misuse

As addiction is physiological dependences (Welsh and Brown, 2013) associated with addiction or substance misuse.

This review will include any studies which examine self-harm or non-suicidal self injury (NSSI) in the context

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for Health Research

of addiction or perceived addiction.

Exclusion criteria:

Papers that focus on the comorbid/co-occurring relationship between SH and alcohol or SH and drug use

Papers that focus on the impact of alcohol use or drug use on self-harm behaviour

21. * Comparator(s)/control.

Where relevant, give details of the alternatives against which the intervention/exposure will be compared (e.g. another intervention or a non-exposed control group). The preferred format includes details of both inclusion and exclusion criteria.

Not applicable

22. * Types of study to be included.

Give details of the study designs (e.g. RCT) that are eligible for inclusion in the review. The preferred format includes both inclusion and exclusion criteria. If there are no restrictions on the types of study, this should be stated.

Published, primary studies using qualitative or quantitative methods to examine whether self-harm can be

conceptualised as an addictive behaviour. All study types are included.

Excluded:

Any previous systematic or literature review on the topic.

23. Context.

Give summary details of the setting or other relevant characteristics, which help define the inclusion or exclusion criteria.

Studies in any clinical or non-clinical setting.

24. * Main outcome(s).

Give the pre-specified main (most important) outcomes of the review, including details of how the outcome is defined and measured and when these measurement are made, if these are part of the review inclusion criteria.

Potential physiological changes (for example changes in endogenous opioids) measured as a result of self-

harm. Self-report measures on addictive behaviours or self-harm. Identifying themes relevant to addictive

behavious and self-harm and individuals experience of and thoughts about repetitive self-harm as an

addictive behaviour, within qualitative literature.

Measures of effect

PROSPERO
International prospective register of systematic reviews

Please specify the effect measure(s) for you main outcome(s) e.g. relative risks, odds ratios, risk difference, and/or 'number needed to treat.

25. * Additional outcome(s).

List the pre-specified additional outcomes of the review, with a similar level of detail to that required for main outcomes. Where there are no additional outcomes please state 'None' or 'Not applicable' as appropriate to the review

Not applicable.

Measures of effect

Please specify the effect measure(s) for you additional outcome(s) e.g. relative risks, odds ratios, risk difference, and/or 'number needed to treat.

26. * Data extraction (selection and coding).

Describe how studies will be selected for inclusion. State what data will be extracted or obtained. State how this will be done and recorded.

Study selection: One researcher will screen the titles and abstracts based upon the inclusion and exclusion criteria to determine which papers are potentially eligible for the review. A second reviewer will review 20% of studies. If any discrepancies arise, these will be discussed and resolved within the research team.

- Excel will be used to document numbers of studies removed and the reason for this.

- Duplicates will be removed.

Data extraction:

- Full text articles of eligible studies will then be retrieved. Studies that are not accessible to the University of Hertfordshire or University College London and require a payment to access will be removed from the review due to financial limitations.

- One reviewer will screen eligible papers using guidance on the inclusion and exclusion criteria.

- Corresponding reference lists of final included papers will then be retrieved (if possible) and screened to determine eligibility for inclusion in the above process.

- For included studies, a single reviewer will then complete data extraction. A data extraction table will be used covering title, author(s), year of publication, country, aim of study, study design, sample size, inclusion criteria, sample characteristics (i.e demographic information), information on type of self-harm behaviours,

PROSPERO
International prospective register of systematic reviews

findings relevant to addictive behaviours, strengths and limitations of study. Relevant quotations reported in the qualitative studies will also be extracted.

27. * Risk of bias (quality) assessment.

State which characteristics of the studies will be assessed and/or any formal risk of bias/quality assessment tools that will be used.

The Mixed Methods Appraisal Tool (MMAT) version 2018 will be used to assess the quality of each according to the methodology used. This tool is appropriate as it allows assessment of different methods such as qualitative, quantitative (including quantitative descriptive studies) and mixed-methods studies.

Quality will be assessed by a single reviewer, under supervision. Any uncertainty or discrepancy will be resolved by discussion with the research team.

28. * Strategy for data synthesis.

Describe the methods you plan to use to synthesise data. This **must not be generic text** but should be **specific to your review** and describe how the proposed approach will be applied to your data. If meta-analysis is planned, describe the models to be used, methods to explore statistical heterogeneity, and software package to be used.

A narrative synthesis approach (Popay et al, 2006) will be utilised. The main elements of this include:

2: Developing a preliminary synthesis

3: Exploring relationships in the data

4: Assessing the robustness of the synthesis product

29. * Analysis of subgroups or subsets.

State any planned investigation of 'subgroups'. Be clear and specific about which type of study or participant will be included in each group or covariate investigated. State the planned analytic approach.

None planned

30. * Type and method of review.

Select the type of review, review method and health area from the lists below.

Type of review
Cost effectiveness
No

Diagnostic
No

Epidemiologic
No

PROSPERO
International prospective register of systematic reviews

National Institute for
Health Research

Individual patient data (IPD) meta-analysis
No

Intervention
No

Living systematic review
No

Meta-analysis
No

Methodology
No

Narrative synthesis
Yes

Network meta-analysis
No

Pre-clinical
No

Prevention
No

Prognostic
No

Prospective meta-analysis (PMA)
No

Review of reviews
No

Service delivery
No

Synthesis of qualitative studies
No

Systematic review
Yes

Other
No

Health area of the review

Alcohol/substance misuse/abuse
No

PROSPERO
International prospective register of systematic reviews

National Institute for
Health Research

Blood and immune system

No

Cancer

No

Cardiovascular

No

Care of the elderly

No

Child health

No

Complementary therapies

No

COVID-19

No

Crime and justice

No

Dental

No

Digestive system

No

Ear, nose and throat

No

Education

No

Endocrine and metabolic disorders

No

Eye disorders

No

General interest

No

Genetics

No

Health inequalities/health equity

No

Infections and infestations

No

International development

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for
Health Research

No

Mental health and behavioural conditions
Yes

Musculoskeletal
No

Neurological
No

Nursing
No

Obstetrics and gynaecology
No

Oral health
No

Palliative care
No

Perioperative care
No

Physiotherapy
No

Pregnancy and childbirth
No

Public health (including social determinants of health)
No

Rehabilitation
No

Respiratory disorders
No

Service delivery
No

Skin disorders
No

Social care
No

Surgery
No

Tropical Medicine

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for Health Research

No

Urological

No

Wounds, injuries and accidents

No

Violence and abuse

No

31. Language.

Select each language individually to add it to the list below, use the bin icon to remove any added in error.
English

There is not an English language summary

32. * Country.

Select the country in which the review is being carried out. For multi-national collaborations select all the countries involved.

England

33. Other registration details.

Name any other organisation where the systematic review title or protocol is registered (e.g. Campbell, or The Joanna Briggs Institute) together with any unique identification number assigned by them. If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here. If none, leave blank.

34. Reference and/or URL for published protocol.

If the protocol for this review is published provide details (authors, title and journal details, preferably in Vancouver format)

Add web link to the published protocol.

Or, upload your published protocol here in pdf format. Note that the upload will be publicly accessible.
No I do not make this file publicly available until the review is complete

Please note that the information required in the PROSPERO registration form must be completed in full even if access to a protocol is given.

35. Dissemination plans.
Do you intend to publish the review on completion?

PROSPERO
International prospective register of systematic reviews

NHS
National Institute for
Health Research

Yes

Give brief details of plans for communicating review findings.?

Review will be submitted as part of a clinical psychology doctoral thesis. Additionally, review findings will be submitted to appropriate journals for publication to add to the developing literature.

36. Keywords.

Give words or phrases that best describe the review. Separate keywords with a semicolon or new line. Keywords help PROSPERO users find your review (keywords do not appear in the public record but are included in searches). Be as specific and precise as possible. Avoid acronyms and abbreviations unless these are in wide use.

37. Details of any existing review of the same topic by the same authors.

If you are registering an update of an existing review give details of the earlier versions and include a full bibliographic reference, if available.

38. * Current review status.

Update review status when the review is completed and when it is published.New registrations must be ongoing so this field is not editable for initial submission.

Please provide anticipated publication date

Review_Ongoing

39. Any additional information.

Provide any other information relevant to the registration of this review.

40. Details of final report/publication(s) or preprints if available.

Leave empty until publication details are available OR you have a link to a preprint (NOTE: this field is not editable for initial submission). List authors, title and journal details preferably in Vancouver format.

Give the link to the published review or preprint.

Appendix B: Reflective journal extracts

The following reflective journey entry was completed immediately after the first interview:

21/09/22

Reflections after an interview

I was pleased with the introduction and set up.

Noticed bias in me and some confusion/disappointment when they mentioned [method of SH] on the [body part]. I fell into the trap of assuming what that meant and started to wonder about my definition of SH in the information sheet, was this in it?

Felt surprise that they are participating when previously only told 2 people! Should this be part of consideration? How secretive or open they are currently about SH? I was surprised as had assumed that majority of participants may be those who are comfortable discussing their SH with lots of experience doing so.

As the interview went on was then shocked and surprised regarding the extent of what [method of SH] meant.

Observed a sense of complete understanding when they said about not feeling they deserve treatment. May be important to consider how this differs when people do cut or inflict harm that immediately requires treatment, could this be a reason that stops those seeking any support or treatment even from themselves? Continue to monitor and reflect on this theme.

It felt as though the interview flowed well and was seamless between audio clips, last just under 1 hour.

The following entry relates to early stages of participant recruitment:

15/11/22

Slowing

After quite a few participants getting in touch all at once, there has now been a real slowing of those expressing an interest in the research! I am aware that it is coming towards the end of the year and people may not want to participate around Christmas period as can be difficult for some.

I am conscious that all participants thus far have been female. Perhaps men are less likely to want to participate because the principal researcher is female? I'm feeling the pressure of the number of participants I need and wanting to ensure the sample can be as representative as possible. Perhaps this is reflective of the stigma those who engage in SH experience and that is why they are less likely to feel able to talk about it?

I felt very disappointed when after much back and forth, a potential male participant decided they did not want to complete the interview. I was curious as to their reasons for deciding against it but also wanting to respect their decisions and not continue to contact.

I will discuss this with my supervisory team and consultants – they always have good ideas and insight. I wonder what would make me more or likely to participate in this study if I was approached? What motivates me to participate in research? It would be important to me to be paid for my time, so I am glad I am able to reimburse participants.

Appendix C: Expert by experience recruitment poster

Appendix D: Semi-structured interview schedule

Semi-structured interview schedule

Set up =

- Introductions

Intro to myself: Trainee Clinical Psychologist.

"I have lived experience of self-harm over a number of years and have always been very interested in self-harm research and how we understand it. Since working within mental health settings, I also have experience working with individuals who are currently self-harming or have self-harmed in the past.

I felt it was important to let individuals who participate in the study know this; however, I am aware that experiences of self-harm can be entirely different for everyone. Throughout the interview, I will not assume an understanding of your experiences and will try to ask clarifying questions throughout to make sure that I can hopefully capture your experience of self-harm."

- Purpose of study – What are the social processes maintaining repetitive engagement in self-harm?
- Purpose of interview.
- Confidentiality of data - Your participation and the information collected in this study about you will be kept strictly confidential. Only members of the study team may be given access to data about you for monitoring purposes to ensure the research is complying with university regulations. Pseudonym used.
  Can't withdraw data after two weeks.
- Zoom environment – leaving off mute, how to manage distractions, confidentiality of space researcher is in.
- Any questions?
- **Record!**

"I am going to play you some extracts of people talking about their experiences, I want you to tell me how these fits or DON'T fit with your experience of SH".

To be clear, within the audio there is nothing at all explicit about self-harm. However, it is natural that some people may find things triggering when being asked to think about your experiences. Please remember that you can take a break whenever you would like to, and you do not have to answer any questions you would prefer not to.

The clips have been created from a focus group of individuals talking about their experiences, you may hear different voices. Please don't feel pressure to remember everything, if you would like me to play it again, or if you forget anything, feel free to bring up later.

I will play the first clip now, please respond with thoughts and comments in your own time. After you have shared these, I might ask some follow up questions."

Play audio clips

1. **Pre**
2. **Distress**
3. **S&A**
4. **LC**
5. **Lying**
6. **U&C**
7. **Ritual**
8. **NI**

Follow up questions:

1. **Could you tell me about your experience of self-harm/self-harming? Can you remember how it first started?**

2. **What were your thoughts and feelings leading up to self-harming?**

   About the first time – when? How? Definition of repetitive self-harm – and explanation of study aim.

3. **What do you think continued to motivate you to self-harm? – What was the reason you continued to self-harm?**

4. **What factors do you think contributed to a feeling that you could not stop self-harming? If you ever did stop – what was it that helped them? If you didn't, what was it that was barriers.**

5. **During the time you were/have self-harmed, did it change at all? For example, when how or why you would do it?**

6. **What or who was most helpful or supportive for you when you self-harmed?**

7. **What or who was least helpful or supportive for you when you self-harmed?**

8. **What factors do you think helped/supported you to stop self-harming for any period of time?**

Ending =

- "Is there anything I have not asked you that you think would be helpful/useful for me to know?
- How did you find the interview today?
- Do you have any questions for me?
- Thanks, and debrief information. Thank you voucher – sent shortly.
- Check consent for further contact and contact preferences. – still happy for me to contact again for follow up or theme-checking?

Appendix E: Participant recruitment poster
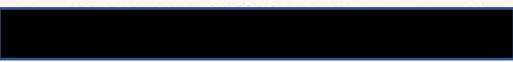
Appendix F: Ethics approval notification 1

University of Hertfordshire UH

HEALTH, SCIENCE, ENGINEERING AND TECHNOLOGY ECDA

ETHICS APPROVAL NOTIFICATION

TO	Millie Witcher
CC	Dr Jen Heath
FROM	Dr Simon Trainis, Health, Science, Engineering & Technology ECDA Chair
DATE	13/07/2022

Protocol number: **LMS/PGT/UH/04978**

Title of study: What are the factors maintaining engagement in repetitive self-harm?

Your application for ethics approval has been accepted and approved with the following conditions by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

no additional workers named

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Permissions: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

Invasive procedures: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Validity:

This approval is valid:

From: 13/07/2022

To: 31/10/2022

Appendix G: Ethics approval notification 2

University of Hertfordshire **UH**

HEALTH, SCIENCE, ENGINEERING AND TECHNOLOGY ECDA

ETHICS APPROVAL NOTIFICATION

TO	Millie Witcher
CC	
FROM	Dr Simon Trainis, Health, Science, Engineering & Technology ECDA Chair
DATE	08/08/2022

Protocol number: **aLMS/PGT/UH/04978(1)**

Title of study: What are the factors maintaining engagement in repetitive self-harm?

Your application to modify and extend the existing protocol as detailed below has been accepted and approved by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

no additional workers named

Modification: detailed in EC2

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Original protocol: Any conditions relating to the original protocol approval remain and must be complied with.

Permissions: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

Invasive procedures: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Appendix H: Ethics approval notification 3

University of Hertfordshire UH

HEALTH, SCIENCE, ENGINEERING AND TECHNOLOGY ECDA
ETHICS APPROVAL NOTIFICATION

TO   Millie Witcher

CC   Dr Jen Heath

FROM   Dr Simon Trainis, Health, Science, Engineering & Technology ECDA Chair

DATE   23/01/2023

Protocol number: **aLMS/PGT/UH/04978(2)**

Title of study: What are the social processes maintaining engagement in repetitive self-harm?

Your application to modify and extend the existing protocol as detailed below has been accepted and approved by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

No additional workers named

Modification: detailed in EC2.

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Original protocol: Any conditions relating to the original protocol approval remain and must be complied with.

Permissions: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

Invasive procedures: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Appendix I: Information sheet

University of
Hertfordshire **UH**

Participant information sheet

University of Hertfordshire
Doctorate in Clinical Psychology (DClinPsy)
Department of Psychology and Sport Sciences
College Lane, Hatfield
Hertfordshire AL10 9AB

Principal Investigator
Millie Witcher, Trainee Clinical Psychologist

████████████████

Supervisory Team

Dr Jen Heath, Dr Sarah Rowe, and Dr Sally Marlow

Consultancy Team

████████████████

Consent to participate in a research study

The purpose of this information sheet is to provide you with the information that you need to help you decide whether to participate in a research study. The study is being conducted as part of a Doctorate in Clinical Psychology degree at Hertfordshire University. Joining the study is entirely up to you, and before you decide, I would like you to understand the purpose of the research and what it would involve for you. Please do talk to other people about the research or please feel free to contact us if there is anything that is unclear or if you have further questions. If you are happy to take part, you will be asked to sign the consent form online.

Project title:
What are the social processes maintaining engagement in repetitive self-harm?

Why have I been asked to participate?
You may have heard about the study through Twitter, Facebook, Instagram, LinkedIn, research announcement on a charity website, research announcement on a self-harm forum, or through word of mouth. You have been invited because you identify as someone with lived experience of self-harm and have got in touch for further details about the study.

University of
Hertfordshire **UH**

The term self-harm can be used to describe lots of behaviours and within research into self-harm it has not always been clear what researchers mean. For the purpose of this study, we are defining self-harm as:

> intentional cutting, burning, branding, scratching, picking at skin or reopening wounds, biting, head banging, hair pulling, hitting and bone breaking.

For this study, the term self-harm will **not** be used to refer to:

> harm arising from overeating, body piercing, body tattooing, excessive consumption of alcohol or recreational drugs, restricted eating or starvation arising from eating difficulties or accidental harm to oneself.

Do I have to take part?

It is entirely your decision whether you want to take part or not. If you decide to take part, you will need to provide consent by filling in the consent form to show you have agreed to take part. You do not need to take part just because you have experience of self-harm, or have seen this study advertised on social media and/or a website or because other people you know have spoken to you about it.

What will happen to me if I take part?

This research aims to explore what motivates individuals to engage in self-harm repetitively. If you decide to take part in this study, you will be asked to fill in the consent form and a demographic online survey. This survey is important for the study and will take approximately 3 minutes; questions will cover areas such as your age, your ethnicity, and some broad questions about your experiences of self-harm. Following this you will be asked if you are willing to be involved in an interview with the principal investigator. If you consent to this, you will be asked to record your contact details and how you would prefer to be contacted (telephone, email, or text message). Once you have completed this, responses will be reviewed by the principal investigator only.

After reviewing your answers within the demographic survey, the principal investigator may then contact you, if you have consented to this, to arrange the most suitable date and time for the interview to take place. Previous studies that have been interested in interviewing similar populations have found that lots of people kindly consent to participate. Unfortunately, due to the limited funding and time available to complete this study the principal investigator will not be able to invite all interested participants to interview. All individuals who get in touch with the study team, complete the consent form and demographic survey will receive an email (if you have consented to be contacted in this way) to let you know if they will not be contacting you for a 1:1 interview, thanking you for your time and for sharing your initial information with the principal investigator.

University of Hertfordshire

The 1:1 interview will last approximately 45-60 minutes and will be conducted either online via Zoom or face to face, if you would prefer, at the University of Hertfordshire. Should you prefer to complete this face to face, you will be able to let us know your travel costs and we will reimburse you. The interviews will be audio and video recorded. These interviews will be an opportunity to go through more detailed questions about your experiences of self-harm and ways in which treatment could be improved. During the interview, you will also be played audio recordings of a podcast. If you are happy to be contacted following the first interview for a follow up interview, I may get in touch with you again to arrange a further interview with you. The purpose of this would be to ask some further questions or to follow up on any of your earlier responses and/or comments.

Participation in this study is entirely voluntary and you may withdraw up to two weeks after interview, should you change your mind about participating.

Are there any benefits in taking part?

By taking part, you will have the opportunity to share your experiences of self-harm, what was supportive for you and what felt unhelpful for you. Some people have found that reflecting about their experiences is helpful. Whilst there might be no direct benefit to you participating, there is limited research into understanding how individuals experience or think about self-harm or their views on what helped them or what felt unhelpful. The information we gather from this study will be shared with mental health professionals, and we hope the findings can be used to inform how individuals with experience of self-harm are viewed and/or treated.

Are there any risks involved?

Whilst I do not predict this interview will cause distress, it is possible that you could find talking about your experiences difficult and this may be upsetting. If this happens, I will pause the interview and ask whether there is anything that you find upsetting or unsafe. You will also be offered a break from the interview, or should you wish not to continue we will end the interview there. If you would like support, I will signpost you to appropriate services. Following the interview, you will be offered a debrief pack providing information about services and or resources in the community that may be of help.

What data will be collected?

The demographic survey will be collected online and will be kept strictly confidential. Interviews will be collected via Zoom due to COVID-19 restrictions and risks unless you specifically request face to face as an easier method for you to participate. Interviews will be audio and video recorded. Personal data will be handled securely during collection, analysis, storage, and transfer using password protected and encryption protected access.

University of
Hertfordshire

Will my participation be confidential?

Your participation and the information collected in this study about you will be kept strictly confidential. Only members of the study team may be given access to data about you for monitoring purposes to ensure the research is complying with university regulations.

Your personal data (including information you give within the demographics and consent forms) will be stored for five years in either electronic form (within a password protected laptop and on the University's One Drive in password protected documents) or paper copy (in a locked filing cabinet in the supervisor's office at the University of Hertfordshire). After 5 years, these will be deleted or destroyed.

If you do not meet the criteria for participation in the study, your personal data (including information you give within the demographics and consent forms) will be deleted and/or destroyed when the recruitment process is complete (no longer than 6 months).

Your name and any identifying details will be changed and anonymised via the interview transcription. I will not discuss your individual interview with anyone except the research supervisors and will maintain your anonymity during my discussions with them. The pseudonym will also be used for the dissemination of our findings from the interviews.

The interviews will be transcribed by me, the principal investigator and/or a transcription service. For both, we will follow ethical practices and all information about you will be handled in confidence. Recordings of interviews will be stored on a password protected device and only the immediate study team will have access to them. They will be stored until transcription process is complete (no longer than 12 months post interview). Transcriptions will be stored on a password protected device and only the immediate study team will have access to them. They will be stored until the post-doctoral degree is awarded (no longer than five years post interview).

What you say during the interview is kept confidential, however, should you disclose anything which makes me worry about your safety or the safety of others, I may feel it is necessary to share this with one of my supervisors or a third-party agency to ensure your and everyone else's safety. If this is the case, we may need to ask you for further personal details. If this is the case, we will of course discuss this with you as well as signposting you for support.

Will you contact me after the interview?

If you agree to it, I may ask to meet with you again, or to speak on the phone. This may be to conduct a follow up interview or to gather your opinion on the themes I have identified in the information collected from several interviews, including yours. It would be entirely your

University of
Hertfordshire

choice if you are willing for me to contact you again following the initial interview. I will not contact you about the study again without your explicit consent.

What happens if I change my mind?

Your participation is voluntary, and you are free to withdraw without giving us a reason or your participation rights being affected. If you wish to withdraw, please do let me know. Please note that due to the work and analysis that takes place following an interview it is **not possible for participants to withdraw their interview data after two weeks following the interview date.**

What will happen to the results of the research?

The study will be written up as part of a major research project for the Doctorate in Clinical Psychology degree at Hertfordshire University and we intend to submit it for publication in a peer-reviewed journal. A summary of results will also be disseminated shared with mental health professionals, and we hope the findings can be used to inform how individuals with experience of self-harm are viewed and/or treated. However, the information from your interview will only be included in this dissemination if you give specific consent will your information be used in this. Research findings made available in any publications and or reports will not include information that can be directly identifiable without your consent.

Where can I get more information?

If you have any questions or would like to know more about the study, please do feel free to get in touch. Details of the research team are provided here:

Principal Investigator: Millie Witcher, █████████████████

Research Supervisors - Dr Jen Heath, █████████████████

Dr Sarah Rowe, █████████████████

Dr Sally Marlow, █████████████████

What happens if there is a problem?

If you have any concerns about any aspect of the study, please do get in touch with the research supervisors Dr Jen Heath ██████████████ Dr Sarah Rowe, ████████████████ and Dr Sally Marlow, ████████████████

University of Hertfordshire

Appendix J: Debrief information

Debrief form

Project title: What are the social processes maintaining engagement in repetitive self-harm?

Thank you for taking part in this study. Through this research study we hope to gain a better understanding of repetitive self-harm and what maintains this behaviour. In addition, we would hope the findings can be used to inform mental health professionals understanding of self-harm and potentially how individuals with experience of self-harm are viewed and/or treated.

If you would like more information about the study or would like to know about our findings once all the data has been collected and analysed, please contact the principal investigator Millie Witcher, ███████████████ Unfortunately, we are unable to provide you with your individual quotes and data.

If taking part in this study raised or left you with anything which felt distressing and you feel you may benefit from further support, please do contact one of the following if it feels comfortable to do so:

- If you are unable to keep yourself safe, or feel you are in immediate danger, please visit A&E or call 999.
- If you are currently supported by a local mental health team, please get in touch with them using the contact number(s) provided.
- Contact your GP to let them know how you are feeling and to be directed to local mental health services.
- Contact NHS 111 for advice about where to get help for your symptoms, if you're not sure what to do, how to find general health information and where to get an emergency supply of your prescribed medicine.
- Contact Samaritans on 116 123 (for free) to talk to someone on the phone at any time of the day of night or visit www.samaritans.org for more information and ways to get in touch with their volunteers. Their volunteers will listen to you and help you talk through your concerns, worries and troubles. They offer a safe place for you to talk any time you like (available 24 hours a day, 7 days a week), in your own way.

Thank you so much!

Appendix K: Focus group questions

1. Could you tell me about your experience of losing control of the addiction?

2. Over time, did it feel as though your addiction began to take over your life? Can you describe this?

3. Did you have experience of being preoccupied with it above all other things?

4. Please tell me about your experience of going to X (gambling, drinking, using drugs) even when it began to have negative impacts on your life? For example, please tell me if you ever lost an important relationship or job due to the behaviour.

5. Can you describe your experience of urges or cravings to engage in the behaviour (gambling/substance use) during other activities? For example, when at work or socialising.

6. What sort of experiences of lying about the behaviour (gambling or using substances) to others did you have?

7. Can you describe when you were more likely to X (gamble or use substances) - when you were feeling low in mood, anxious, distressed, bored or lonely?

8. Please tell me about your experiences of disruption to your sleep, diet, and levels of exercise.

Appendix L: Transcripts of audio vignettes

Vignette 1: Preoccupied

Group member 1: You almost don't see it or don't want to see it yourself; you know it's this self-destruction. You've got like for example like my family around me…um… you know I'd often get the oh you know why can't you just stop? I got the shouting at me, you know every sort of which way that they could try to get through to me, they … was tried you know. The…um… giving me what I want, taking away what I want. But because I was on my own, I was like had my own place and I was just able to shut my door and not let anybody really know what was going, not know the extent of it. You know, it was just life, sort of, you know, I'd lost everything, I'd lost everyone around me. I've lost every, you know, well I hadn't… I say I had lost everyone I mean; my mum never gave up on me and she didn't, but you know.

Vignette 2: Distress

Group member 1: But I held all these feelings, and I would get so angry and feel like almost, you know, like if somebody had done me wrong then that would, that would burn inside me, and I didn't know how to deal with it at the time.

Group member 2: I was always low, I was always miserable, there was no positivity, there was… all the time! There was no distinction.

Group member 3: It was when my relationship here started going pear shaped and thinking I left everything in the UK to be here, that's when I started.

Vignette 3: Sleep and Appetite

Group member 1: Couldn't sleep, whatsoever. Horrendous! My experience with sleep during a very long period of time, over years was horrific! So… and I am the sort of person you know, I need my sleep, so having that sort of physical impairment almost, you know just not being able to sleep and racy brain and everything else, it was awful! Really bad!

Group member 2: I couldn't sleep anyway, it just wasn't…that whole self-care wasn't part of… it wasn't me, it wasn't for me. It wasn't something I thought about.

Group member 3: I used to eat hardly.

Group member 1: Yeah, same with me it just wasn't a priority food. No.

Vignette 4: Losing control

Group member 2: You know in the past, there was no switch off button for me, there was no kind of control. It was literally get up and just do that. It was an all-day thing. I didn't live by any kind of rules or anything like that so just when I wanted it, I would get it, even when I didn't want it, it was like an automatic thing.

Group member 3: So basically, went from being sort of okay, to being socialised, to being a hermit in intensive care so the whole world evaporated around me, and it took a long time, in the hospital, in recovery, still not wanting to stop. I don't know, in and out, in and out, before it slowly got better again.

Group member 1: And then it just got worse and worse and worse. To the point again where my sort of stop point was, I also was hospitalised.

Group member 4: Looking back, I can pinpoint it, when you're in it it's you know yesterday is similar to today. It is almost like a destructive relationship you've got; you don't know it's destructive until you walk away, and you look…why didn't I walk away X,Y and Z. But you sort of make that acceptance, that small adjustment that day, you know it's been a bit worse, but it isn't that bad.

Group member 3: A Friday night, which then became a Friday and Saturday night and then gradually became every night and then it really went pear-shaped and then gradually builded up until eventually I just think it crossed a line. It builded up day after day after day, and I didn't see it how it was slowly increasing. But it crept up without me feeling that it was becoming a problem.

Vignette 5: Lying

Group member 1: I was just going to say, you know, you'd convince yourself like say for instance when you start hiding it… I's blatantly, blatantly lie to my mum's face, or my mum or my brother or my sister. No, I haven't! How can you say that I have when I haven't? But because I was on my own or had my own place and I was just able to just shut my door and not really let anybody know what was going on, not know the extent of it.

Vignette 6: Urges and cravings

Group member 3: Again, where you get really angry, or I just went through a really bad period, it would be easy at some points to just switch that button back on and think I will just leave it all behind and go back to where I was. But you sort of know you can't.

I do get the odd urge, the odd urge, especially if I'm stressed out or if somebodies annoyed me!

Yeah, when I used to think about it, it used to pull me like magnetically towards it and I know that disproportionate energy. And that to me was urges and cravings.

Vignette 7: Ritual

Group member 4: But I think sometimes the actual lead up, it's a relief. People call it a ritual, but it almost is that ritual.

Group member 3: The reality of the ritual being gone, and the big emptiness that came with it because it was a routine and I did know exactly how it went and although it wasn't a good one, it was always the same and I knew what was happening. And then suddenly there was this big void, and I didn't know what to do with myself.

Vignette 8: Negative impacts

Group member 2: And things started to get so bad, that I just couldn't do with it, and I couldn't do – it was just madness! So yes… yeah, I realised that people were not really agreeing with it, that actually people were frowning on it. I looked up one day and I'd lost most of my reliable, responsible friends. When I'd lost my job, I didn't realise that everything was out of control I was just angry. How dare they sack me!

Group member 3: Yeah, I can tell you, it started by not being able to function properly anymore. First of all, I was losing my job because I couldn't function properly. I was working for a lawyer's office, so it was again sort of high maintenance. Couldn't concentrate, then I started not going to work, then I started losing my relationships, then I started losing my family completely, my best friends, everyone started dropping out, then I started to hibernate.

Appendix M: Risk protocol

Adverse events risk protocol for suicidal ideation

Definition of suicidal ideation
In this study, suicidal ideation is identified as:

- Study participant discloses information to a member of the research team, indicating that they have been thinking of ways to end their life/die by suicide.

Action required:
A schematic of the suicidal ideation pro forma is shown in figure 1.

1.   If a participant discloses within an interview that they have thoughts of or have made plans to die by suicide, the researcher will first ascertain whether the participant has talked to his/her/their GP or local mental health team about them. The researcher should reinforce the importance of starting or maintaining a dialogue with his/her/their GP or local mental health team. Suggested scripts for this are shown below.

2. If the participant informs the researcher that they have disclosed this information to their GP and/or local mental health team and feel supported with this, the researcher will encourage them to contact them at the earliest opportunity to seek clinical support. The researcher will then use their clinical training and skills to bring the interview to a close. The researcher will discuss the debrief information with the participant, encouraging them to seek support from suitable services.

3. If the participant informs the researcher that they have not disclosed this information to their GP and/or local mental health team, the researcher will use their clinical training and skills to encourage the participant to inform their GP as soon as possible and will discuss the benefits of doing so. The research will discuss the debrief information, in detail, with the participant and support them to identify a support network they would be happy to get in touch with. If it feels appropriate and the researcher has utilised their clinical judgement to deem that the person is not an immediate risk to themselves, the researcher will bring the interview to a close.

4. The researcher will contact the principal supervisor (qualified clinical psychologist) to discuss the participant, the interview and review the risk protocol.

** If the research believes that the participant is in immediate danger, the researcher must stay with the participant (either online or face to face) and contact the emergency services, who will take appropriate action.**
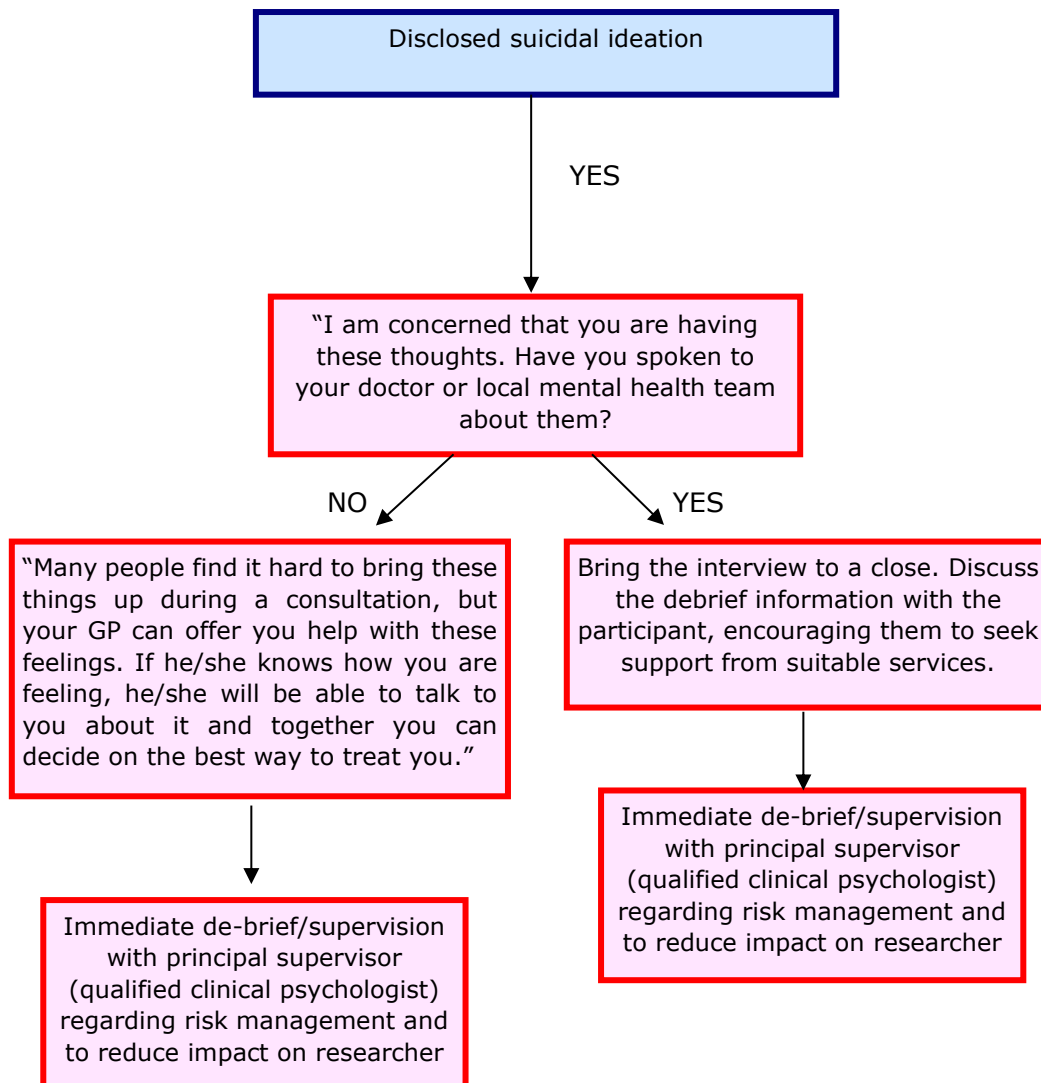
Suggested Scripts:

Following disclosure

I am concerned that you are having these thoughts/feelings about [INSERT AS APPROPRIATE BASED ON WHAT THEY HAVE REPORTED]. Have you spoken to your doctor or local mental health team about them? It is important that your doctor knows about the way you feel, as they will be able to make sure that you have the necessary support in place. Are you happy to contact your doctor to let them know the things you have told me?

If study participant is hesitant or refuses

Many people find it hard to bring these things up during a consultation, but your GP can offer you help with these feelings. If he/she knows how you are feeling, he/she will be able to talk to you about it and together you can decide on the best way to treat you.

Figure 1 – Suicide ideation pro forma

The following action must be taken and recorded by a member of the research team whenever a study participant discloses suicide ideation to a researcher.

```
┌─────────────────────────────────┐
│  Disclosed suicidal ideation    │
└─────────────────────────────────┘
              │
             YES
              │
              ▼
┌─────────────────────────────────┐
│ "I am concerned that you are     │
│  having these thoughts. Have you │
│  spoken to your doctor or local  │
│  mental health team about them?" │
└─────────────────────────────────┘
      │                    │
     NO                   YES
      │                    │
      ▼                    ▼
```

"Many people find it hard to bring these things up during a consultation, but your GP can offer you help with these feelings. If he/she knows how you are feeling, he/she will be able to talk to you about it and together you can decide on the best way to treat you."

Bring the interview to a close. Discuss the debrief information with the participant, encouraging them to seek support from suitable services.

Immediate de-brief/supervision with principal supervisor (qualified clinical psychologist) regarding risk management and to reduce impact on researcher

Immediate de-brief/supervision with principal supervisor (qualified clinical psychologist) regarding risk management and to reduce impact on researcher

Appendix N: Example of memo-ing

Memo: Conflicting relationship with SH and self

Within all interviews, participants have described some sort of difficulty or conflict. This **conflict** appears to be within people but also with SH – feeling of a need to punish self but then it is also described by them as an old friend. Relational element to it.

SH becomes something they used to let themselves know how they were feeling, to communicate their distress to themselves. Descriptions as if SH is almost personified. If you were unaware of subject matter, could be forgiven for thinking they are describing a person supporting them – but it is the SH itself. They appear to be in **a relationship** with SH but it is also about the relationship with the self and how they feel. Appears as if SH is part of them.

However, it can be toxic and something they are feeling abused by. How do both states align? Like many relationships, there are two sides to being in a relationship with SH, there is conflict. At times it is a comforting best friend and is the only one who is there for you. Other times it tells you that you are useless and you should be punished, or it controls you and leads you to do things that cause you pain and hurt others around you, when they find out.

Feelings are different during journey of self-harm. SH being both someone's friend and enemy.

Comfort but it hurts and has negative impacts on my life.

It is a friend, but it is an enemy. BOTH/and. It is a **conflicting relationship** not just **with SH** but also with the **self**.

Relating to SH

Relating to oneself

Conflicting relationship

Conflicting relationship with SH and self

Conflicting relationship to SH

Category that occurs once someone has started and continues across their journey with SH, even after stopping due to physical reminders.

Appendix O: Analysis audit trail

Appendix O1: Line by line coding extracts

...it to be like anybody else. So, the self-harm kind of fitted in that.

Researcher: In feeling different?

In feeling different yeah, you know, I didn't find out that what I was doing had a name until you know I've been self-harming for like twenty-five years by that point.

Researcher: So not even as a concept?

Morgan: Even as a concept I didn't have a clue, it I was only when I found out it had a name that I thought well if it's just got a name then other people are doing it.

Researcher: That must have felt quite isolating, if you don't even know maybe, that it's the thing. Is that right?

Yeah, it was. It was quite isolating, but it was also the super ultra-private thing that's mine, you know, and I'm not sharing with anybody else. And fortunately, because I'd accepted that, okay, I'm a bit different and it doesn't matter if anything, you know, I'm reasonably comfortable with that. Yeah, that that didn't feel so okay, so that's different as well. But at the same time, like I said it, I wouldn't say I was disappointed I found out that other people were doing it. If anything at that point is like, you know I'm not a freak.

Researcher: So, it went from being something like you say that first felt quite um yours, and just only you in a quite a possession, you know, that only you were doing it or you knew about. But then it didn't feel upsetting like you say, when you found out. How did it feel when you found out that maybe other people use that?

You know, because by that point, you know, when I first started. But then, obviously, as I was growing up, so you know, I started at So, we are talking about, you know, around about the age of t or something like this, to find out this isn't just me ... and obviously I had grown out of this oh I need to be different, or I need to be the same as everybody else or I need to fit in and all that stuff. So it was, yeah, I was more curious, I think, in a lot of ways. I guess I started looking in to it at some points if there were any books or anything I could get. I got one. It was all right. There were some things in it that I thought were okay. But there were other things that I was like not to sure about that, actually.

Researcher: So wanting to learn more about it?

Yeah, I started to. You know the fact that there were books written about it as well. You know this – *laughing* – this private thing I bloody am. You know this, it must be more widespread than I thought. Even then I didn't realize how widespread it was. It took even more years before I figured that one out was, was when I when I started when I tried to stop, and I had contact with mental health services. That's when I started realizing ...that was a lot more common.

Responding to other's reactions
Impacting
Guiding others to support me
Racing brain or thoughts
Accepting SH (others)
Exhausting - effects of SH
3. Having a purpose other than SH
Seeking help
Building up
Calming
Destroying self
Justifying SH to others
Relapsing or returning to SH
Losing things – negative impacts
Feeling guilt
Keeping it secret
Gaining support or friends
Coping
Hurting loved ones
Enacting emotional pain physically
Naming SH
Responding to other's reactions
5. Conflicting relationship with SH and self
Feeling addictive
Method of SH
Hiding
1. Starting
Stopping emotions or Numbing
Feeling angry
Harming using food
Lying
Resorting to SH
Changing the way they view or treat you
Continuing thought or urge about SH
Z. Extra codes that do not answer research Qs
Waiting to SH
Functioning
Z. Unclear
Coding Density

Isolating

Possessing or owning SH

Z. Info about RSH

Fitting in

about. So, for me, there was. I used to describe this. I'll try to describe this, when I was in CAMHS about this addictive element to it that I don't maybe think that people understood if they hadn't experienced it. It was something that would start off with like one thing, and it turned into a thing on its own that I needed to do to like, survive, and get through the day; or, if it might not have been every day, it might have been like I might have missed a day, and it wasn't maybe like so habitual in terms of like it's this time of day, or it's this time of night, and I will now do this activity. But it became such an ingrained part of my life as like. That was just what I did to cope in the same way that you know someone stressed, they might go and have a bath. If I was stressed, I would go self-harm and that's just what I did.

And the addictive element of like not being able to stop that, and the lack of understanding from other people about why you might not want to stop. So, when my self-harm was first discovered, so I had always made a point of self-harming on my legs not my arms, because it didn't want people to see. And there was a really like, I felt like a really private element to that, that it was mine, I could own that and like people didn't have to know necessarily. And so, when it was discovered, everyone around me was like, what can we do to get you to stop? And I was like I am not there! I don't want to like; I don't want to talk to people about it. I don't want to engage in like a program that tells me to reduce this behaviour, because what else have I got? It is not the same as doing this. It's not going to give me that same feeling. Don't invalidate what I'm going through by telling me that if I draw red pen on my arms, I'm going to feel loads better.
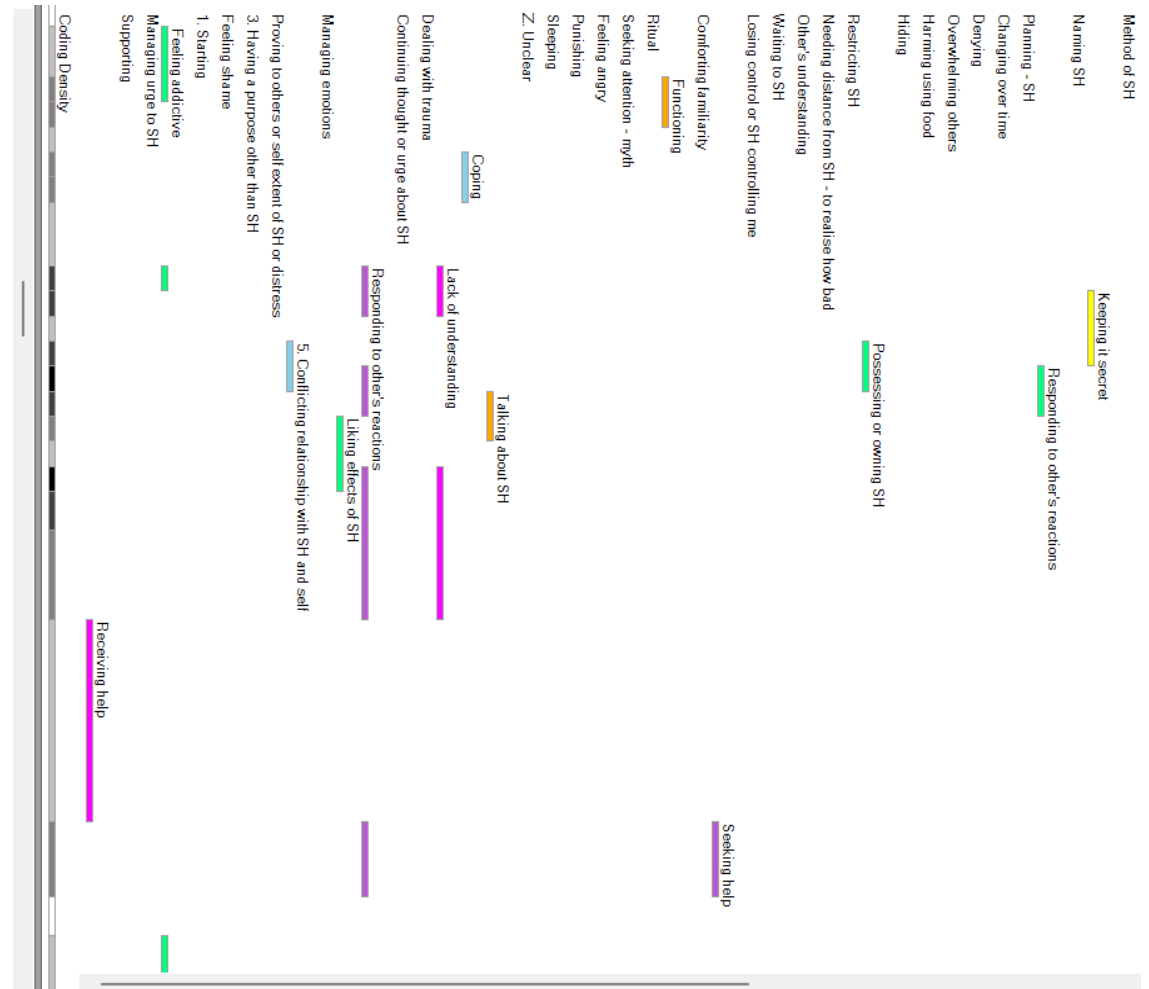
Like things like that used to really annoy me. And I feel like there was such a lack of understanding or not wanting to ask the question of like, what am I getting from this, that other things can't give me? No one ever asked me that.

Researcher: Never? They never asked you that in any treatment.

Alana: No. And I didn't get asked, so the approach that I was given at the time, my experience of mental health services with my self-harm wasn't great to be honest. And I do talk about that. But it was very much kind of it was behaviouralised as an approach, so very like a CBT model of like okay, so you're doing an unhelpful coping strategy and unhelpful behaviour. And we need to break that cycle. But actually, all of the things that have led you to this point, we're not really going to focus on them, because our main focus is keeping you safe and not letting this get any worse.

And I wasn't willing to let it go. So, I was saying no, you have to do the other bit first and figure out why I am doing it before I will even consider letting this go. So, I was in arguments constantly with my care team about thinking like I want this first. And they would say no, that comes after. And I would say I have nothing else. I have nothing else. This is all I've got.

So, thinking about, and then that's when it start to escalate in severity as well, because obviously, if you think of it in the form of an addiction, which some people might resonate with some people

Appendix O2: Focused coding examples

Focused code	Line by line codes	Examples of corresponding coded text
2. Needing to punish myself	**Punishing**	I think I would let it build up and I think that's why the self-punishment element comes in.
		But where that sort of punishment, I'm not entirely sure where. I think it's almost like so like punishing myself for not being perfect, or something which is completely ridiculous.
		just negative thoughts, I suppose, against myself. It's kind of like I'm being a twat, I'm being an idiot, you know. It's like just shut yourself up and stop being and idiot and crying and stop getting upset. And it's yeah, like almost attacking yourself inside.
		But they are the sort of emotions that are sort of present at that point, and that's sort of what makes me continue is, I feel like I need that punishment.
	Destroying self	I was like so angry at everything, but it came out in a self-destructive way
		There was some stuff that they said about self-destructive, yeah, we know it is a self-destructive thing and there were times where I have been really struggling and it's like na I just want to destroy myself.
		Yeah, because it's just self-bashing isn't it. Like hello, I feel really bad. What am I going to do about it? Well, I go and do any of the destructive things I would normally do, and self-harm happened to be one of them. So, it was one of the reasons, one of the things.

Appendix P: Diagramming

Appendix P1: Initial model

Appendix P2: After model checking interviews

Appendix P3: Model after member checking feedback
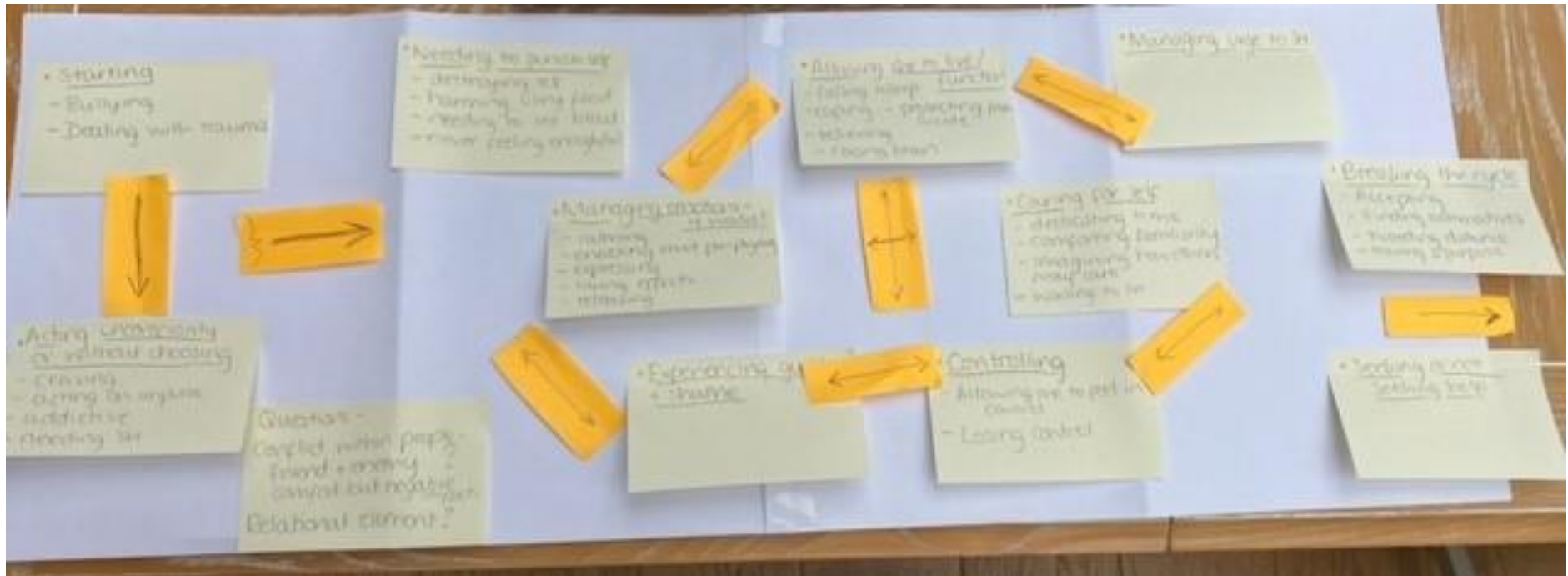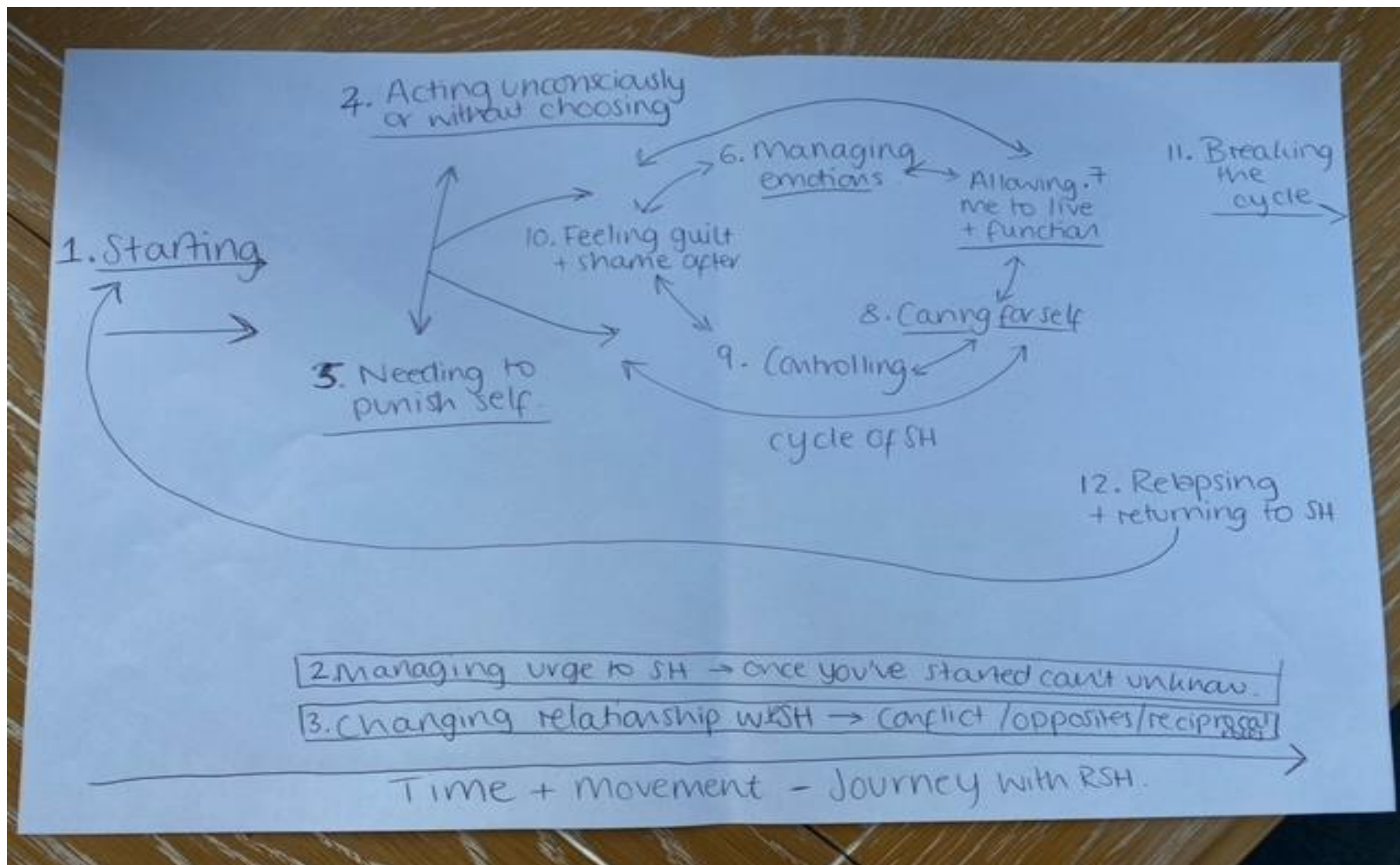
Social processes maintaining engagement in repetitive self-harm
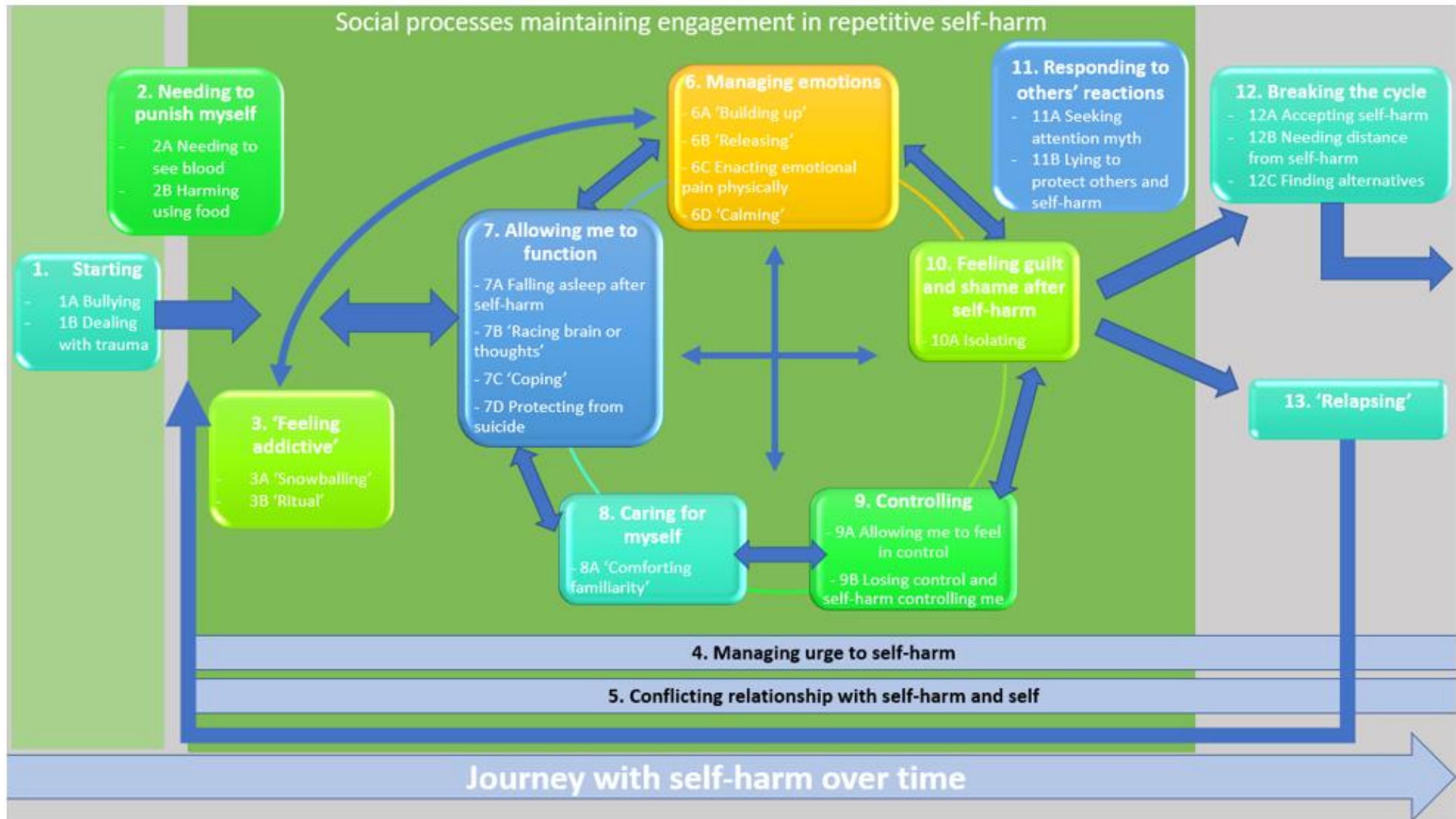
Appendix Q: Feedback received from staff team training

Team member 1 (verbal feedback):

"I just wanted to say your presentation has really stuck with me and I told my family member about it, I was talking about it like it was this fascinating podcast I had listened to. We reflected on whether they had ever thought about self-harm as feeling addictive and they were really intrigued by this and could see a lot of similarities. It then prompted a whole hour-long discussion about their experiences, so thank you very much!"

Team member 2 (verbal feedback):

"That was great and really got me thinking. I am working with a couple of clients who self-harm and I am going to discuss it with them. Also really made me think about how we all immediately thought of cutting when it came to self-harm. Such an interesting discussion too about what is self-harm, what about tattoos? Or eating too much?

Supervisor providing feedback within supervision:

Your presentation really got people thinking and enlivened people. Overall, it was really engaging.

Key feedback areas:

The way you handled self-disclosure was done in a human and respectful way, it was open and accepting that others may also have experience with self-harm, and it allowed others to feel safe to share.

Great question to ask team members what are they interested in about your study, what would they like to know or what questions do they have of this research? Rather than just presenting your own ideas through your own lens. This really promoted curiosity and you nicely came back to all questions to ensure you had answered them at the end.

The model was really clear, and it made sense both theoretically and that it was grounded in the work you had done. It was helpful that you took your time to talk through each category, this did the model justice and ensured it was clear to everyone in the training.

Team manager:

The discussion that your session bought up was amazing. Thanks for your presentation.