School of Population Health

Faculty of Health Sciences

Experiential Avoidance and Non-Suicidal Self-Injury

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Human Ethics The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated July 2018. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262): Approval Numbers HREC2018-0536 and HREC2020-0624.

Signature:

Date: 9th June 2023

Acknowledgement of Country

I acknowledge that Curtin University works across hundreds of traditional lands and custodial groups in Australia, and with First Nations people around the globe. I wish to pay our deepest respects to their ancestors and members of their communities, and past and present leaders. Our passion and commitment to work with all Australians and peoples from across the world, including our First Nations peoples are at the core of the work we do, reflective of our institutions' values and commitment to our role as leaders in the Reconciliation space in Australia.

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List of Publications

1. **Haywood, S. B**., Hasking, P., & Boyes, M. E. (2022). We have so much in common: Does shared variance between emotion-related constructs account for relationships with self-injury?. *Journal of Affective Disorders Reports*, *8*, 100332. https://doi.org/10.1016/j.jadr.2022.100332

2. **Haywood, S. B.,** Hasking, P., & Boyes, M. E. (2023). Associations between non-suicidal self-injury and experiential avoidance: A systematic review and Robust Bayesian Meta-analysis. *Journal of Affective Disorders*. https://doi.org/10.1016/j.jad.2023.01.027

3. **Haywood, S. B.,** Hasking, P., & Boyes, M. E. (under review). "It's not avoiding anything: Exploring avoidance in the context of self-injury". *Qualitative Research.*

4. **Haywood, S. B**., Hasking, P., & Boyes, M. E. (under review). Untangling the link between experiential avoidance and non-suicidal self-injury: A multidimensional approach. *Archive of Suicide Research.*

Conference Presentations

1. Haywood, S.B. (2023, June). *"I'm not avoiding anything.". Exploring the role of avoidance from the perspective of individuals with lived experience of self-injury.* International Society for the Study of Self-injury. Annual Conference. Conference Presentation, Vienna, Austria. https://www.itriples.org/conference-2023

2. **Haywood, S.B.** (2022, June). *Non-suicidal self-injury and experiential avoidance: A systematic review and Robust Bayesian meta-analysis.* International Society for the Study of Self-injury. Annual Conference. Conference Presentation, Vienna, Austria, https://www.itriples.org/conference-2022

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5. **Haywood, S.B.** (2021). *Emotion related constructs and self-injury.* Mark Liveris Seminar, Faculty of Health Sciences Curtin University. Annual Conference, Conference Presentation, Bentley, Western Australia.

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Extended Abstract

Non-suicidal self-injury (NSSI) is the deliberate and intentional damage to one's own body tissue in the absence of suicidal intent. Self-injury serves a number of functions including self-punishment, and anti-disassociation, but emotion regulation is the most endorsed reason for engagement in NSSI. The Experiential Avoidance Model purports that individuals who sit at the higher end of the continuum of wanting to avoid uncomfortable internal experiences such as thoughts, feelings, or emotions (experiential avoidance) are more likely to report a history of self-injury. A number of our existing models of self-injury discuss the role of experiential avoidance but it is not clear to what extent experiential avoidance, as opposed to other emotion-related constructs, underlies self-injury. The aim of this thesis is to explore and understand the role experiential avoidance plays in non-suicidal self-injury.

In **Study 1**, ($n = 487$), I explored the associations between emotion related constructs that are related to non-suicidal self-injury. Constructs such as alexithymia, distress tolerance, difficulties with emotion regulation, emotional reactivity, experiential avoidance, and positive and negative affect have all been associated with the onset and maintenance of self-injury. Whilst they are all purported to be distinct constructs, they do share some conceptual similarities. I wanted to explore the overall and unique contributions of these constructs to self-injury. As anticipated, all emotion related constructs were highly correlated. Likewise, in bivariate analysis all constructs, except for emotional awareness, were associated with history of self-injury. However, in multivariate analysis, the strength of these relationships was attenuated. Only positive affect, distress tolerance, and experiential avoidance were negatively associated with self-injury, and limited emotion regulation strategies were positively associated with self-injury. Exploratory factor analysis also revealed that all constructs loaded on to a single factor. These findings suggest that there may be considerable overlap between the emotion related constructs we currently understand to be associated with

the onset and maintenance of self-injury. It appears there may be one underlying "negative emotion" latent construct with which a number of these emotion related constructs share variance. Given that experiential avoidance was one of the few unique predictors of differentiating individuals with and without a history of self-injury, in Study 2 I decided to explore experiential avoidance in more detail to understand the role it plays in self-injury.

In **Study 2** I wanted to look at the body of literature that had explored the association between experiential avoidance and self-injury. To assess the association, I completed a systematic review and robust Bayesian meta-analysis. An extensive search of the literature was conducted using several database and grey literature. Nineteen articles (two dissertations) were retained. Of these, 14 articles provided statistics required for inclusion in the robust Bayesian meta-analysis. A small to medium pooled effect was found, however there was considerable heterogeneity among the included studies and publication bias could not be ruled out. A moderating effect was found for the measure used to assess experiential avoidance (β = .98 (SE = .44); p = .024; 95% CI[.13, 1.84]). However, accounting for this did not reduce the heterogeneity. A limitation was that most studies included in the meta-analysis used a unidimensional measure of experiential avoidance. However, experiential avoidance is suggested to be a multidimensional construct. Therefore, in Study 3, I wanted to look at the associations between a unidimensional and multidimensional measure of experiential avoidance and what constructs are associated with self-injury.

Study 3 (n = 632) assessed the overall association between experiential avoidance and self-injury but also explored the sub-facets of experiential avoidance. One measure that assessed components of experiential avoidance is the Multidimensional Experiential Avoidance Questionnaire (MEAQ). The multidimensional questionnaire breaks experiential avoidance down into six subscales: behavioural avoidance, distress aversion, procrastination, distraction and suppression, repression and denial, and distress endurance. However, due to

the length of the questionnaire (62 items) it is not often used in research, especially where a battery of questions is being administered. Consequently, a shortened version (15 items) of the measure which conceptualises experiential avoidance as unidimensional, The Brief Experiential Avoidance Questionnaire (BEAQ), was developed. Participants were categorised into three groups: those with a history of self-injury, those with a history but had not engaged in the last 12 months, and those with a recent history of engagement in self-injury (within the last 12 months). In bivariate analysis, the unidimensional construct of experiential avoidance, captured using the BEAQ, differentiated all groups. However, in multivariate analysis only the subscales of behavioural avoidance, and repression and denial, differentiated individuals with no history and with recent history of engagement in self-injury, and those with previous history and recent history of self-injury. No aspects of experiential avoidance differentiated individuals with a previous history and those who had no history of self-injury. This suggests that viewing experiential avoidance as a unidimensional construct may result in us missing which aspect(s) of experiential avoidance play a pivotal role in the onset and maintenance of self-injury. Therefore, in Study 4, I decided to ask individuals with lived experience of self-injury, their thoughts on experiential avoidance and the role it plays in their self-injury.

In **Study 4** (*n = 35*), I explored the lived experience perspective of the role avoidance plays in non-suicidal self-injury. I conducted 35 interviews with individuals who had lived experience of self-injury and analysed the data using reflexive thematic analysis. Three themes were developed: *Active not Passive, A Short-term Distraction,* and *Internal and External*. In *Active not Passive*, participants saw their engagement in self-injury as an active way of dealing with what they were experiencing in the moment rather than an avoidance of it. It allowed them to feel in control and to actively regulate their emotions. *A Short-term Distraction* details the awareness that participants had around self-injury not being a long-term fix or solution to their problems but rather just what they needed in that moment to

function. The final theme *Internal and External* had a dual meaning; The first aspect of this theme is the incongruence between feelings and behaviours. Participants view their engagement in self-injury as a response to external stimuli and often do not associate it with the internal feelings that it elicits. Secondly, this theme details how the act of engaging in self-injury was a way of making internal feelings external. Participants recount how internal pain is often dismissed, whereas external pain is taken more seriously. Overall, the findings of this study support the Experiential Avoidance Model but highlight the importance of using the language of our participants when developing theories, models, and measures to explain self-injury. Using language that does not resonate with individuals (e.g., avoidance) may lead individuals to not endorse behaviours that they do not see as representative of their experience.

Together my four studies found some support for the Experiential Avoidance Model of Self-injury, in that experiential avoidance does play a central role in why an individual may start or continue to engage in self-injury. However, it appears that further refinement of the model to focus on the specific dimensions of experiential avoidance that are associated with the onset and maintenance of self-injury may be warranted. Furthermore, there appears to be an incongruence between our theoretical understanding of experiential avoidance and the way individuals with lived experience understand the function of self-injury. The language we use to describe behaviours related to experiential avoidance does not appear to resonate with individuals who engage in self-injury. Together these findings have theoretical, measurement, and clinical implications. Theoretically while our existing models do appear to provide an understanding of the factors associated with self-injury, they may need to be refined to capture the specific aspects of experiential avoidance that are associated with self-injury. Questionnaires designed to capture the construct of experiential avoidance should reflect language that resonates with the individuals that engage in self-injury or we are at risk

of items not being endorsed due to individuals not viewing their behaviour in that way. Additionally, measures should reflect the theoretical construct of experiential avoidance, and this will require work and effort to ensure that this is conveyed in a way that is reflective of the lived experience. Without this refinement we could miss accurately capturing the specific aspects of avoidance that are associated with self-injury. Furthermore, with regards clinical interventions, by not acknowledging the intricacies of experiential avoidance/avoidance we may not be tailoring interventions to the specific needs of the individual. I hope the findings from my research will provide education to researchers, health professionals, and individuals with lived experience of self-injury on the nuanced role of experiential avoidance in the onset and maintenance of self-injury.

Author's Note

This thesis is presented in a hybrid format, which includes papers that have been submitted or accepted for publication. As these chapters are standalone manuscripts, there is some inevitable repetition throughout the thesis, particularly when describing the background and rationale for each paper. Considering this, effort has been made to reduce repetition in the introduction and general discussion. Each chapter is presented with a short introduction linking the individual chapters to create a cohesive body of work. There are minor differences in the formatting of each of the published chapters, according to the respective journals. Spelling switches according to where the journal is published vs Australian English. Due to a comprehensive review of the literature in Chapter 3 (Systematic review and meta-analysis) a literature review has not been included. Additionally, reference lists have been omitted from the individual papers and are presented together at the end of the thesis for cohesion.

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Chapter 1: Introduction to Thesis

Non-suicidal self-injury (NSSI) is the deliberate and intentional damage to an individual's own body tissue, in the absence of suicidal intent (International Society for the Study of Self-injury, 2022). Whilst cutting is the most commonly reported form of self-injury, it can also present in a range of different forms including, but not limited to, burning, scratching, pinching, biting, hitting one's self, and interfering with wounds healing (Bresin & Schoenleber, 2015; Swannell et al., 2014). It is not uncommon for individuals to engage in multiple forms of self-injury (Swannell et al., 2014). Non-suicidal self-injury does not include culturally sanctioned behaviours such as tattooing and piercing, indirect behaviours such as accidental damage to body tissue, food restriction, or risk taking behaviour such as excessive alcohol or other drug use, or driving without a seatbelt (Favazza & Conterio, 1988; International Society for the Study of Self-injury, 2022; Nock & Favazza, 2009).

Non-suicidal self-injury falls under the larger umbrella of self-harm. However, self-harm includes self-injury regardless of intent, whereas self-injury is explicitly engaged without the intent to end one's life (Hamza et al., 2012; International Society for the Study of Self-injury, 2022). Self-harm also encompasses suicidal behaviours which differ from non-suicidal behaviour in lethality, intention, and frequency of the behaviour (Hamza et al., 2012). Non-suicidal self-injury is differentiated from self-harm in a number of ways. The means of NSSI is often less lethal and less likely to require medical attention, and NSSI is more frequent across the lifespan than suicidal behaviour (Whitlock et al., 2011). It is common for the term self-harm to be used by both researchers and clinicians when referring to non-suicidal self-injury as well as suicidal behaviours. However, in order to provide a clear and comprehensive understanding of the mechanisms associated with the self-injury and interventions it is imperative that researchers and clinicians are explicit in what they are referring to when discussing non-suicidal self-injury (Nock & Favazza, 2009).

Despite NSSI explicitly being engaged in without the intent to suicide it is significantly associated with future thoughts or attempts at suicide (Kiekens et al., 2018; Ribeiro et al., 2016). Individuals who engage in self-injury are significantly more likely to report suicidal thoughts and behaviours than individuals with no history of self-injury (Guan et al., 2012; Hamza & Willoughby, 2016; Kiekens et al., 2018). Given the associations between NSSI and suicide the American Psychiatric Association has included NSSI in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as an area that requires further research (American Psychiatric Association, 2013).

Epidemiology

Self-injury is a prevalent behaviour in community samples, with 17% of adolescents, 13% of young adults, and 5% of adults reporting a history of self-injury (Swannell et al., 2014). The prevalence increases in clinical inpatient samples with 40 – 80% of adolescents and 18 – 20% of adults reporting a lifetime history of self-injury (Briere & Gil, 1998; Darche, 1990; DiClemente et al., 1991; Glenn & Klonsky, 2013; Nock & Prinstein, 2004; Polanco-Roman et al., 2014). The average age of onset of self-injury is 14 years of age, with a second peak of onset at 20 years old (Gandhi et al., 2018; Kiekens et al., 2019).

The second peak of onset coincides with the developmental period referred to as emerging adulthood. Emerging adulthood is described as the period between late teens and early adulthood (Arnett, 2000). Emerging adulthood is a unique period of transition for many young people, with individuals exploring their identity, undertaking higher education or vocational training for future careers, and changes to relationships (Arnett, 2000). For many, this period of development coincides with starting university which brings with it, its own challenges. For a number of people this can mean moving away from home for the first time, financial pressure, as well as greater academic and personal autonomy and pressure (Kiekens et al., 2019). Not surprisingly then, university students are more likely to report a history of

self-injury than their peers; 20% of university students compared to 11% of their peers (Swannell et al., 2014). Furthermore, 10.3% of university students report beginning to engage in self-injury in their first year of university, with 6% reporting onset of self-injury in their second year of university (Kiekens et al., 2019). University students who engage in self-injury have been reported to have greater instances of academic failure, poorer mental health outcomes (Kiekens et al., 2016), experience more stigma (Burke et al., 2019), and be at increased risk for suicide attempts (Whitlock et al., 2013). It is important to note that both suicide and self-injury are said to be under reported (Pompili et al., 2012; Stanley et al., 2019). Given the prevalence of self-injury in university populations and the associated risks, it is imperative to gain a deeper understanding of the behaviour.

Why do People Self-injure?

Individuals report engaging in self-injury for a number of reasons. These include anti-disassociation, self-punishment, and the most endorsed reason for engagement is to regulate their emotions (Taylor et al., 2018). A number of emotion regulation constructs have been associated with the onset and maintenance of self-injury including difficulty regulating emotions (Chapman et al., 2006; Hasking et al., 2017), emotional reactivity (Nock, 2009), an inability to tolerate distress (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009), negative affect (Chapman et al., 2006; Nock & Prinstein, 2004; Selby & Joiner, 2009) and experiential avoidance (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009),.

Emotion related constructs have been associated with recency, frequency, and severity of self-injury. Recency and history of NSSI engagement has been associated with experiential avoidance (Greene et al., 2019; Howe-Martin et al., 2012; Liu et al., 2021; Nielsen et al., 2016, 2017) and alexithymia (an individual's inability to identify or describe their feelings; Nemiah & Sifneos, 1970; Liu et al., 2021). Frequency of engagement in NSSI has been

associate with an inability to tolerate distress (Anestis et al., 2014; Slabbert et al., 2018) and experiential avoidance (Nielsen et al., 2016), whilst severity of engagement has also been associated with experiential avoidance (Hu et al., 2021; Singhal et al., 2021). Given that experiential avoidance plays a role in differentiating individuals across all aspects of engagement in self-injury, it is not surprising that it plays a pivotal role in our current models of understanding self-injury.

Avoidance is a broad construct that includes the avoidance of actions, situations, individuals, and objects (Ottenbreit & Dobson, 2004). As previously mentioned, avoidance plays a pivotal role in self-injury, however within these models the process of avoidance is labelled differently. Labels include avoidance (Hasking et al., 2017), avoidance-escape (Nock & Prinstein, 2004), distraction (Selby & Joiner, 2009), as well as experiential avoidance (Chapman et al., 2006). Experiential avoidance is defined as an individual's difficulty or inability to tolerate difficult internal experiences such as feelings, emotions, and thoughts (Hayes et al., 1999). The term experiential avoidance was coined as part of Acceptance and Commitment Therapy and details the process of how avoiding the experience of unpleasant emotions can hinder individuals from achieving their goals (Hayes et al., 1999).

The Experiential Avoidance Model of Self-injury

The Experiential Avoidance Model of Self-injury details the central role of experiential avoidance in the onset and maintenance of self-injury (Chapman et al., 2006). The authors state that all individuals sit on a continuum of reluctance to experience uncomfortable internal experiences such as emotions, feelings, and thoughts. Individuals who sit at the higher end of this continuum are more likely to report a history of self-injury. Chapman and colleagues (2006) elaborate that an individual will encounter a stimulus that will elicit an uncomfortable internal experience. Those who are more inclined to want to avoid this internal experience are more likely to engage in self-injury. This is especially true

for individuals who have an inability to tolerate distress, lack of emotion regulation skills, are more emotionally reactive, and unable to regulate their emotions when they are aroused. Given the emotional regulatory function that self-injury serves, it is likely that when the individual next experiences the uncomfortable internal experiences they are likely to re-engage in self-injury as they associate the self-injury with the regulation of the internal experience. This creates a negative feedback loop, in that the individual is more likely to engage in self-injury in the context of emotional distress. While experiential avoidance looks to play an important role in self-injury there have been mixed findings regarding its association with NSSI (Angelakis & Gooding, 2021; Brereton & McGlinchey, 2020; Haywood et al., 2023). For example, in university students, some studies have found associations between experiential avoidance and history of self-injury (Anderson et al., 2018; Bentley et al., 2015; Gratz et al., 2010; Greene et al., 2019; Haywood et al., 2022; Horgan & Martin, 2016; Liu et al., 2021; Steele, 2017; Turner et al., 2015), whereas others have not found this association (Anderson, 2009; Singhal et al., 2021).

Thesis outline

The aim of this doctoral project is to explore the role of experiential avoidance in non-suicidal self-injury to gain a deeper understanding of the intricacies of this relationship.

Chapter Two presents the first study of this PhD, titled "*We have so much in common: Does shared variance between emotion-related constructs account for relationships with self-injury?*". The objective of this study was to explore the individual associations between emotion-related constructs and self-injury and if these relationships were maintained when analysed in multivariate analysis. Specifically, I wanted to ensure that experiential avoidance still made a unique contribution over and above potential shared variance with other "negative" emotion related constructs. This chapter is published in a peer-reviewed journal.

Chapter Three presents the second study titled "*Associations between non-suicidal self-injury and experiential avoidance: A systematic review and Robust Bayesian Meta-analysis*". The primary aims of this study was to review, compare, and meta-analyse the associations between experiential avoidance and non-suicidal self-injury. The secondary aim was to explore potential moderators of the association, including biological sex, measure of experiential avoidance, country of study, population, and age. This chapter is published in a peer-reviewed journal.

Chapter Four details the third study "*Untangling the link between experiential avoidance and non-suicidal self-injury: A multidimensional approach*". The objective of this study was to explore associations between experiential avoidance and self-injury using both global and multidimensional measures of self-injury. This study is currently under review at a peer-reviewed journal.

Chapter Five presents the fourth study "*It's not avoiding anything: Exploring avoidance in the context of self-injury.*". The aim of this study was to explore non-suicidal self-injury from a lived experience perspective and to investigate the role avoidance may play in the engagement in self-injury. This study is currently under review with a peer-reviewed journal.

Chapter Six concludes this thesis and comprises a general discussion of the key findings. I detail the theoretical, methodological, and clinical implications of these findings. I also detail limitations of the thesis findings and provide directions for future research, followed by concluding remarks.

Chapter 2: Does shared variance between emotion-related constructs account for

relationships with self-injury.

Introduction to Chapter 2

In this first study I explore the unique association between emotion-related constructs and self-injury. Once these association are established, I explored if these associations remain when analysed simultaneously using multivariate analysis. A study by Juarascio and colleagues (2020) raised concerns regarding the shared variance between emotion related constructs. As a first step in my research program, I wanted to ensure that experiential avoidance still retained a unique association with history of self-injury over and above shared variance with other emotion related constructs.

This chapter is published in a peer-reviewed journal. Ethical approval, a copy of the survey questionnaire (including the participant information sheet and informed consent) can be found in Appendices A and B.

Reference:

Haywood, S. B., Hasking, P., & Boyes, M. E. (2022). We have so much in common: Does shared variance between emotion-related constructs account for relationships with self-injury?. *Journal of Affective Disorders Reports*, *8*, 100332. https://doi.org/10.1016/j.jadr.2022.100332

Author contribution statement

Author	Contribution	Acknowledgement[*]
Sophie Haywood	Development of research question, data collection, data management, data analysis, interpretation of results and discussion, manuscript preparation, reviewing and editing of drafts.	
Penelope Hasking	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	
Mark Boyes	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	

[*]I acknowledge that these represent my contribution to the above research output.

Abstract

Background: Emotion regulation, distress tolerance, experiential avoidance, and both positive and negative affect have all been linked to NSSI. These constructs are proposed to be distinct; however, they share conceptual similarities. For example, some people may regulate emotions by avoiding stressful situations, conflating emotion regulation and avoidance. We tested if constructs linked with NSSI (when studied in isolation), remain significant correlates of NSSI when considered alongside related constructs (with which they may share variance). **Method:** University students ($n = 487$, $M = 21.36$, $SD = 2.48$, 74% female, 40% with lived experience of self-injury) completed well-validated self-report measures of NSSI, difficulties with emotion regulation, distress tolerance, experiential avoidance, emotional reactivity, positive and negative affect, and alexithymia. **Results:** As predicted, emotion-related constructs were generally highly correlated. Additionally, with the exception of lack of emotional awareness, all constructs were significantly associated with NSSI in bivariate analyses. In multivariate analyses, associations were substantially attenuated. Positive affect, distress tolerance, and experiential avoidance were negatively associated with NSSI, and limited emotion regulation strategies was positively associated with NSSI. No other constructs were uniquely associated with NSSI, and exploratory factor analyses indicated that all constructs loaded onto a single factor. **Limitations:** Cross-sectional design rules out temporal sequencing. **Conclusion:** Findings raise the possibility that associations between some emotion-related constructs (e.g., alexithymia) and NSSI may reflect variance shared with other emotion-related constructs. If true, this will have important theoretical, clinical, and measurement implications for NSSI research.

Non-suicidal self-injury (NSSI) is the intentional damage to one's own body tissue in the absence of suicidal intent (International Society for the Study of Self-injury [ISSS], 2020). NSSI is common, with one in five adolescents, 13.4% of young adults, and 5.5% of adults reporting engaging in the behavior in their lifetime (Swannell et al., 2014). Furthermore, 20% of university students report engaging in NSSI, with many beginning to engage in NSSI for the first time during their first year of university (Kiekens et al., 2019; Muehlenkamp et al., 2019). Common methods of NSSI include burning, cutting, and scratching (Klonsky & Muehlenkamp, 2007). Individuals report engaging in NSSI for a number of reasons including self-punishment and anti-dissociation, however the most frequently reported reason for engagement in NSSI is emotion regulation (Taylor et al., 2018).

Given the emotion regulatory function of NSSI, most models of NSSI focus on the experience and regulation of emotion (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Nock & Prinstein, 2004; Selby & Joiner, 2009). Across the models a number of emotion-related constructs have been postulated to play a role in the onset and maintenance of self-injury; including negative affect (Chapman et al., 2006; Nock & Prinstein, 2004; Selby & Joiner, 2009), difficulties regulating emotions (Chapman et al., 2006; Hasking et al., 2017), inability to tolerate distress (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009), emotional reactivity (Nock, 2009), and experiential avoidance (Chapman et al., 2006).

Emotion related constructs have been linked to engagement in NSSI, as well as recency and frequency of engagement. Difficulties regulating one's emotions have been found to be one of the main reasons for engaging in NSSI (Nock & Prinstein, 2004). Experiential avoidance has been positively associated with a recency of engagement in NSSI (i.e. engagement in self-injury in the last 12 months; Lin et al., 2017; Nielsen et al., 2017).

An inability to tolerate distress has been associated with frequency of engagement in NSSI (Anestis et al., 2014; Slabbert et al., 2018). Likewise, alexithymia (an inability to describe or differentiate ones feelings; Nemiah & Sifneos, 1970) has been associated with both recency and frequency (Lin et al., 2017; Howe-Martin et al., 2012; Nielsen et al., 2017). A large body of research has been conducted into the links between negative affect and NSSI; including trait negative affect being associated with likelihood and frequency of engagement in NSSI and engagement in NSSI associated with a reduction of negative affect (Bresin & Gordon, 2013; Nicolai et al., 2016; Turner et al., 2016). However, recently there has been a growing body of literature that focuses on the role positive affect plays in the engagement of NSSI. Positive affect differentiates individuals who have never, previously, and currently engage in NSSI, in that those with less positive affect were more likely to report a history of NSSI regardless of level of negative affect (Boyes et al., 2020; Slabbert et al., 2020). Individuals also report an increase in positive affect (i.e. relief) after self-injuring, but this may be more accurately considered a reduction in negative affect (Jenkins & Schmitz, 2012).

Whilst constructs such as negative and positive affect, alexithymia, emotion regulation, distress tolerance, emotional reactivity, and experiential avoidance, are theorized to be unique, there are conceptual overlaps between them. For example, avoidance and emotion regulation are posed as different constructs (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009), however an individual's avoidance may be a form of emotion regulation, in that if an individual gets anxious in social situations they may regulate that anxiety by avoiding social situations (Jazaieri et al., 2015).

Concerns regarding the general overlap across emotional constructs were recently expressed by Juarascio and colleagues (2020). In their paper, they explored constructs that are associated with emotional states that fall under the umbrella of "negative emotion". These included constructs such as anxiety sensitivity, negative urgency, distress tolerance,

emotional dysregulation, and avoidance. Juarascio et al. (2020) found considerable overlap

between item content on widely used measures of these constructs, and moderate to high

correlations between items (r = .24 - .67). Conceptually some of the items were very similar,

even though they purported to be measuring separate constructs. For example, across all

measures, the non-acceptance of emotions is assessed. Specifically, the items "*when I am*

upset I become angry with myself for feeling that way" on the Difficulties with Emotion

Regulation Scale (Gratz & Roemer, 2004), "*my feelings of distress or being upset are not*

acceptable" on the Distress Tolerance Scale (Simons & Gaher, 2005), and "*I'm afraid of my*

feelings" on the Acceptance and Action Questionnaire – II (AAQ-II; Bond et al., 2011)

appear to be similar. Similarly, items on the widely used Distress Tolerance Scale (Simons &

Gaher, 2005) "*I'll do anything to avoid feeling distress or upset*" and "*I'll do anything to*

stop from feeling distressed or upset" appear to be measuring avoidance of distress rather

than tolerance. Likewise, on the Brief Experiential Avoidance Questionnaire (Gámez et al.,

2014) the item "*It is hard for me to know what I am feeling*" appears to be tapping into the

construct of alexithymia.

Juarascio and colleagues' (2020) paper raises important theoretical and

methodological implications, particularly for areas such as self-injury, where these constructs

are central to most theoretical models (Chapman et al., 2006; Hasking et al., 2017; Nock,

2009; Nock & Prinstein, 2004; Selby & Joiner, 2009). Due to the focus on the importance of

the emotional experience and its relationship with NSSI, it is also important to consider the

overlap and complementary nature of emotion related constructs (Gross, 2008). Emotion

related constructs involve multiple processes and skills that whilst distinct do have some level

of inter-relatedness. This includes how we monitor, evaluate, accept, and modulate our

emotions all dependent on the situation (Gross, 1998). We should also be considering how,

based on this awareness or lack thereof, we decide whether or not to act on these emotions

(Gratz & Roemer, 2004). The aim of this study was to test whether emotion-related constructs previously identified as being important to our understanding of NSSI (when studied in isolation) still make a unique contribution when considered alongside other related constructs, with which they may share variance. It is expected that the constructs will be associated with self-injury when considered in isolation. However, if constructs do overlap in terms of shared variance, we hypothesized that when constructs are analyzed simultaneously associations with NSSI may be reduced or no longer present. Furthermore, it is hypothesized that when factor analyzed together all constructs will load on a single factor.

Method

Participants

University students completed one of two studies on emotion regulation and NSSI. Datasets were combined to increase sample size. Both datasets included responses from Australian university students recruited between 2017 and 2019. Four hundred and eighty seven participants completed measures of interest; of these eight identified as transgender, intersex or did not specify a gender (74% Female, 25% Male, 1 % Transgender/Inter-sex/Unspecified, M_{age} = 21.36, SD = 2.48).

Most participants were born in Australia (78%), 191 (40%) reported a lifetime history of NSSI and 115 (33%) reported a diagnosis of a mental illness. The most commonly reported diagnoses were anxiety (23 %) and depression (18%), or comorbid anxiety and depression. Of the individuals reporting a history of self-injury 123 (63%) had engaged in self-injury during the last year. Age of onset ranged from 4 – 30 years (M = 13.85, SD = 3.32). Most commonly reported methods of self-injury were cutting (45.4%), banging or hitting oneself (11.7%), and severe scratching (11.2%).

Measures

Demographic information: Information regarding age, gender, country of birth, and any mental illness diagnoses (as well as specific diagnosis) was collected.

Non-suicidal self-injury. Information related to non-suicidal self-injury was collected using Section 1 of the Inventory of Statements about Self-injury (ISAS; Klonsky & Glenn, 2009). Participants were presented with a definition of NSSI and then asked if they had ever engaged in self-injury. Participants who indicated that they had engaged in NSSI were then asked if they had engaged in the last year, what their main form of self-injury is (if any), and how old they were when they first engaged in self-injury. The short term (1 – 4 weeks) test-retest reliability of the ISAS is good ($r = .85$; Glenn & Klonsky, 2011).

Positive and negative affect. Trait positive and negative affect were measured using the Positive and Negative Affect Schedule (Watson et al., 1988). The scale consists of two factors that measure positive affectivity (e.g. *"enthusiastic"*) and negative affectivity (e.g. *"afraid"*). Participants were asked to read each item and rate the extent to which they felt that emotion "in general" on a 5 point Likert scale (1: very slightly or not at all; 5: extremely). The scale has demonstrated good internal consistency for both factors: positive affect (α = .89) and negative affect ($\alpha = .85$; Crawford & Henry, 2004). The internal consistency in the current sample was excellent for both positive ($\alpha = .91$) and negative ($\alpha = .91$) affect.

Alexithymia: The Toronto Alexithymia Scale (TAS-20; Bagby et al., 1994) is a 20 item scale with items (e.g. *"I have feelings that I can't quite identify"*) rated on a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scores range from 20 – 100; higher scores indicate greater alexithymia. The TAS-20 total score demonstrates good internal consistency ($\alpha = .81$) and test-retest reliability ($r = .77$; Bagby et al., 1994). The internal consistency in this study was excellent ($\alpha = .89$).

Emotion Regulation: Participants' perceived ability to regulate emotion was assessed using the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004). The

DERS is a 36 item scale, consisting of 6 subscales, with items (e.g. *"When I'm upset, I become embarrassed for feeling that way."*) rated on a five-point Likert scale ranging from 1 (almost never) to 5 (almost always). Subscales include non-acceptance of emotional responses, difficulty engaging in goal directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. The DERS has excellent internal consistency (α = .80 - .89), construct validity, and test-retest reliability (Gratz & Roemer, 2004). In this study internal consistency was excellent for all subscales (lack of emotional awareness α = .84 – non-acceptance of emotional responses α = .93).

Distress Tolerance. The ability to tolerate distress was measured using the Distress Tolerance Scale (DTS; Simons & Gaher, 2005). Fourteen items (e.g. *"I can't handle feeling distressed or upset."*) were rated on a 5 point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree); higher scores indicate a greater capacity to tolerate distress. The DTS demonstrates excellent internal consistency (α = .89), as well as good convergent and divergent validity with positive (r = .26) and negative affect (r = -.59; Simons & Gaher, 2005). The internal consistency in this sample was excellent (α = .93).

Emotional Reactivity: An individual's tendency to react to emotional stimuli was assessed using the 21 item Emotional Reactivity Scale (ERS; Nock et al., 2008). Items (e.g. *"I experience emotions very strongly"*) were rated on a 5 point Likert scale ranging from 0 – 4 (0: not at all like me; 4: completely like me). The ERS has excellent internal consistency (α = .94) and has demonstrated convergent and divergent validity with related measures (Nock et al., 2008). The internal consistency in this sample was excellent (α = .97).

Experiential Avoidance: Experiential avoidance was measured using the Brief Experiential Avoidance Scale (BEAQ; Gámez et al., 2014), a short form of the Multidimensional Experiential Avoidance Questionnaire (MEAQ; Gámez et al., 2011). The

BEAQ is a 15 item, unidimensional scale. Participants rated statements (e.g. *"I rarely do something if there is a chance it will upset me"*) on a 6 point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores range from 15 – 90, with higher scores indicative of higher levels of experiential avoidance. Internal consistency for the BEAQ is good ($\alpha = .86$) and it demonstrates convergent validity with the MEAQ ($r = .62$; Gámez et al., 2014). The internal consistency in this sample was excellent ($\alpha = .90$).

Procedure

After approval from the University Human Research Ethics Committee, studies were advertised and made available on the University's online research participation pool, and online via various social media platforms. Students recruited through Curtin University were awarded course credit, and students recruited through other universities were entered into a prize draw to win an iPad. Participants were provided with a link to the online survey that detailed the projects aims, nature of the questionnaire, confidentiality, and how the data would be stored. Participants were able to complete the survey in their own time. Each survey took approximately 45-60 minutes to complete. Upon completion, all participants were provided with a list of resources including counselling services and information on self-injury.

Data Analysis

Participants were categorized into two groups depending on their NSSI history; participants with no history of NSSI or a lifetime history of NSSI. Point biserial correlations were conducted to assess bivariate associations between each emotion-related construct and NSSI history. Binary logistic regression assessed unique associations between these constructs and NSSI history when variables were entered into the same model simultaneously. Factor analysis was conducted to investigate the underlying structure of all constructs.

Results

Preliminary Analysis

All analysis were conducted with SPSS version 27. Although not missing completely at random, $\chi^2(5751) = 6021.865$, $p = .006$, there was minimal missing data (<1% across variables), therefore expectation maximization was used to impute the data (Tabachnick & Fidell, 2013). Age was correlated with the TAS-20 and Lack of Emotional Clarity (see Table 1). More female participants reported a history of NSSI, $\chi^2(3) = 22.09$, $p <.001$, V = .21. As such, age and gender were included as a covariate in the logistic regression. In bivariate analyses, history of self-injury was associated with positive and negative affect, alexithymia, emotional regulation, DERS (non-acceptance of emotions, difficulties with goal directed behavior, impulse control difficulties, limited emotion regulation strategies, lack of emotional clarity), emotional reactivity, and experiential avoidance ($r = -.39 - .41$). The only item not associated with self-injury was the lack of emotional awareness subscale from the DERS. All correlations between constructs of interest were in the expected direction (Table 2.1).

Binary Logistic Regression

A logistic regression, with all variables entered simultaneously, significantly differentiated participants who did and did not report a history of NSSI, $\chi^2(14) = 132.55$, $p <.001$, Cox and Snell $R^2 = .24$, Nagelkerke $R^2 = .33$. However, unlike in the bivariate analyses, few variables uniquely differentiated participants who did and did not report a history of NSSI. Only positive affect, limited emotion regulation strategies (DERS), distress tolerance, and experiential avoidance were significant predictors in the model (Table 2.2). However, in the regression the relationships were significantly weaker; positive affect ($r = .01$), limited emotion regulation strategies ($r = .02$), distress tolerance ($r = .01$), and experiential avoidance ($r = .01$).

Factor Analysis

Exploratory Factor Analysis was conducted in Jamovi (The jamovi project, 2021; R Core Team, 2020; Revelle, 2019) to explore whether the measures could be captured by a single underlying construct. Maximum likelihood extraction with Promax (oblique) rotation was used, as factors were expected to be correlated. Parallel analysis indicated a potential 2 factor solution; however, Eigenvalues and visual inspection of the scree plot indicated a clear single factor structure (see Appendix C). A subsequent test of this single factor solution demonstrated that all constructs, with the exception of lack of emotional awareness, had loadings over .30. After removing lack of emotional awareness, the single factor accounted for 52% of the overall variance and all factor loadings were above .40 (Table 2.3).

Table 2.1

Correlations between Variables in the Model

		Never (n = 291)		Engaged in NSSI (n = 196)		2	3	4	5	6	7	8	9	10	11	12	13	14
		M	SD	M	SD													
1	Age	21.35	4.25	21.36	2.48	.00	-.06	-.07	-.11**	.05	-.01	-.00	-.07	.02	-.14**	.01	-.03	-.08
2	NSSI[a]	-	-	-	-	-	.31***	.30***	.16***	.27***	.35***	.27***	.06	.41***	.15**	-.39***	.39***	.20***
3	Positive affect	33.53	7.02	28.65	7.85		-	-.32***	-.34***	-.32***	-.33***	-.28***	-.34***	-.45***	-.33***	.43***	-.37***	-.38***
4	Negative affect	23.55	7.90	28.81	8.71			-	.52***	.61***	.52***	.59***	.08	.70***	.42***	-.54***	.68***	.59***
5	Alexithymia	49.38	13.34	53.71	13.58				-	.47***	.35***	.48***	.49***	.51***	.73***	-.42***	.39***	.63***
6	Non-acceptance of emotional responses	14.69	6.14	18.28	6.62					-	.50***	.57***	.11*	.69***	.40***	-.57***	.58***	.54***
7	Difficulty in goal directed behaviour	14.95	4.46	18.37	4.60						-	.62***	-.02	.72***	.36***	-.53***	.62***	.47***
8	Impulse control difficulties	13.20	5.07	16.39	6.17							-	.07	.76***	.44***	-.58***	.66***	.49***
9	Lack of emotional awareness	15.25	4.54	15.83	5.31								-	.11*	.44***	-.20***	-.01	.27***
10	Limited emotion regulation strategies	18.85	7.23	25.62	7.79									-	.45***	-.68***	.75***	.62***
11	Lack of emotional clarity	12.38	4.05	13.69	4.63										-	-.34***	.33***	.51***
12	Distress Tolerance	48.14	11.86	38.04	11.81											-	-.63***	-.49***
13	Emotional Reactivity	55.15	18.88	71.67	19.87												-	.54***
14	Experiential Avoidance	46.49	13.35	52.09	13.88													-

[a] Correlations between dichotomous and continuous variables are point bi-serial correlations

*p < .05. **p <.01. ***p<.001

Table 2.2

Predictor Coefficients for the Model Predicting NSSI

	b	*SE (b)*	*p*	*Exp (B)* [95% CI]
Constant	1.53			
Gender	.60	.26	**.022**	1.83 [1.09, 3.06]
Age	-.01	.03	.675	.99 [.93, 1.05]
Positive affect	-.05	.02	**.007**	.95 [.92, .99]
Negative affect	.01	.02	.595	1.01 [.97, 1.05]
Alexithymia	-.01	.01	.696	.99 [.97, 1.02]
Non-acceptance of emotional responses	-.02	.02	.382	.98 [.93, 1.03]
Difficulty in goal directed behaviour	.06	.03	.097	1.06 [.99, 1.13]
Impulse control difficulties	-.05	.03	.091	.95 [.89, 1.01]
Lack of emotional awareness	.01	.03	.737	1.01 [.95, 1.07]
Limited emotion regulation strategies	.07	.03	**.013**	1.08 [1.02, 1.14]
Lack of emotional clarity	-.01	.04	.858	.99 [.92, 1.07]
Distress Tolerance	-.03	.01	**.009**	.97 [.94, .99]
Emotional Reactivity	.02	.01	.053	1.02 [1.00, 1.04]
Experiential Avoidance	-.03	.01	**.030**	.97 [.95, 1.00]

Table 2.3

Factor Structure of Emotion Related Constructs

	Loadings
	Factor 1
Limited emotion regulation strategies	.92
Emotional Reactivity	.81
Impulse control difficulties	.80
Negative affect	.77
Non-acceptance of emotional responses	.74
Distress Tolerance	-.74
Difficulty in goal directed behaviour	.73
Experiential Avoidance	.70
Alexithymia	.61
Lack of emotional clarity	.54
Positive affect	-.47

Note: Lack of emotional awareness was excluded due to loading of less than .30. Factor loadings <.03 were suppressed.

Discussion

The aim of the current study was to investigate the unique contributions of constructs relating to the experience and regulation of emotion that are theorized to be important in initiating and maintaining NSSI. Responses to measures of positive and negative affect, alexithymia, emotion regulation, distress tolerance, emotional reactivity, and experiential avoidance were analyzed. Moderate to large correlations were found between all constructs, suggesting there may be conceptual or methodological overlap between constructs. Not surprisingly then, although most constructs were significantly associated with NSSI history in bivariate analysis; these association were attenuated, or disappeared, in multivariate analyses. Although the overall model, in which constructs were entered simultaneously, performed well in differentiating individuals with or without a history of self-injury, only positive affect, limited emotion regulation strategies, distress tolerance, and experiential avoidance uniquely differentiated individuals with and without a lifetime history of NSSI, and their unique contribution was small. Consistent with this, all emotion related constructs, except a lack of emotional awareness, loaded onto a single factor accounting for 52% of total variance.

These findings highlight the need for careful consideration of the existing theories of NSSI and the constructs identified as central to onset and engagement in NSSI. Most existing theories propose there are multiple emotion-related constructs that either predispose or play a role in the onset and maintenance of NSSI. Our findings demonstrate this is the case when we consider these constructs individually. However, when considered collectively it appears that for many of these constructs (e.g., alexithymia, negative affect, emotional reactivity, and some difficulties in emotion regulation) the shared variance with other related constructs may account for their association with self-injury. Additionally, the factor analysis highlights the potential of a single underlying latent emotion-related construct. Future research investigating this possibility is clearly needed.

Overlapping constructs and shared variance have been noted in other fields such as health psychology and social psychology (Bianchi & Brisson, 2019; Hagger & Luszczynska, 2014; Lancastle & Boivin, 2005). Hagger and Luszczynska (2014) coined the term "deja-variable" referring to how descriptions of constructs are often familiar but labelled differently. This built on the work of Skinner (1996) who identified the lack of consensus in regards to control-related constructs in social psychology. Identification of overlap between constructs and refinement of the definition of constructs will allow for more clearly operationalized definitions that will be beneficial in identifying the specific constructs that are involved in the onset and maintenance of NSSI.

These findings raise theoretical implications regarding our current understanding of the mechanisms that may be involved in the onset and maintenance of NSSI. Current models postulate that there are multiple constructs at play. However, the findings from both the logistic regression and exploratory factor analysis (and consistent with the findings of Juarascio et al, 2020), raise the possibility that it may be a general "negative emotion" construct that may account for the relationships with NSSI. This may explain why positive affect, and an ability to tolerate distress were still associated with NSSI when analyzed simultaneously, as these differ in valence of the emotion (positive affect) and the specific focus on tolerating negative emotion (distress tolerance).

With regards to difficulties with emotion regulation only the subscale *limited access to emotion regulation strategies* differentiated those with and without a history of NSSI. This is consistent with the meta-analysis by Wolff et al. (2019), suggesting individuals who are lacking in access to a variety of emotion related skills are more likely to report a history of NSSI. Additionally, the fact that experiential avoidance remained associated with NSSI suggests that the measure is capturing something unique. This corresponds with Chapman and colleagues' (2006) Model of Experiential Avoidance. However, The Brief Experiential

Avoidance Questionnaire is a unidimensional measure (Gámez et al., 2014) making it difficult to tease apart the specific nuances of what forms of avoidance are associated with a lifetime history of NSSI. Whilst the measure was created to provide a briefer version of the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011), what is gains in brevity it lacks in the ability to differentiate between the various types of avoidance including; behavioral avoidance, distress aversion, procrastination, distraction and suppression, repression and denial, and distress endurance.

Given that positive affect but not negative affect was associated with NSSI history, future research investigating associations between both negative and positive emotional reactivity may be beneficial. There have recently been similar calls to measure difficulties in the regulation of both negative and positive emotions (Weiss et al., 2015), as well as assess difficulties in identifying and describing both negative and positive emotions (Preece et al., 2018). Future research should consider the inclusion of measures that capture the valence which could allow for further exploration of the role positive affect plays in relation to NSSI.

Further theoretical implications are related to the current models of NSSI. The current models postulate that there are multiple constructs involved in an individual engaging in NSSI. As previously mentioned, individuals experience an event that leads to them to engage in NSSI to regulate their emotions. Given the evident conceptual overlap and interplay between constructs we know to be important in the onset and maintenance of NSSI, it raises the question of whether our existing models could be simplified, to focus on the specific factors at play. Rather than considering overarching constructs such as difficulties with emotion regulation, looking at the specific factors that contribute to NSSI could improve our understanding of this behavior. For example, as demonstrated in this study, when looking at difficulties with emotional regulation it appears that the lack of alternative strategies may be particularly important in differentiating individuals with and without a history of NSSI.

Relatedly, more refined measurement of these emotion-related constructs is likely required if we are to accurately test specific predictions arising from different models of self-injury. This supports the theory that there are multiple processes associated with how we regulate and interact with our emotions (Gratz & Roemer, 2004; Gross, 1998). Refining our existing models and measures to capture the specific strategies that are involved in the onset and maintenance of NSSI, will improve our current understanding of what differentiates individuals with and without a history of NSSI. Notwithstanding these concerns, the findings of the current study support the theory that individuals with higher levels of positive affect and a greater ability to tolerate distress are less likely to engage in NSSI (Boyes et al., 2020; Cohen et al., 2015; Hasking et al., 2018; Slabbert et al., 2020). This suggests that increasing an individual's positive affect, emotion regulation strategies, and ability to tolerate distress may be beneficial. Targeting these constructs in interventions may reduce an individual's likelihood of engaging or beginning to engage in NSSI.

Limitations

The findings of this study should be considered with some limitations in mind. Firstly, due to the use of cross-sectional data, conclusions about temporal sequencing cannot be drawn. Although not the aim of this study, future longitudinal research could be conducted to investigate if changes in emotion-related constructs are associated with changes in frequency or recency of NSSI. Secondly, as this sample was a self-selected sample, the generalizability of the sample may be limited. Future research should consider replicating this study among other community and clinical samples. Thirdly, whilst the measures used in this study were well validated and popular measures in the area of NSSI research, future research should investigate if the same pattern of findings exist with other measures such as The Acceptance and Action Questionnaire II (Bond et al., 2011) and The Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011), which assess avoidance over multiple

dimensions. Likewise, with measures of emotion-related constructs which differentiate between negative and positive valence (e.g. Difficulties with Emotional Regulation Scale – Positive; Gratz, 2002).

Conclusion

Self-injury is a significant and prevalent health concern that is associated with a number of negative outcomes, including increased risk of future thoughts and acts of suicide (Kiekens et al., 2018). Therefore, a deeper understanding of the constructs that differentiate individuals with and without a history of self-injury is critical. Emotion regulation is the most frequently reported function of NSSI, and most theoretical models focus on emotion-related constructs, such as positive and negative affect, alexithymia, regulation of emotions, ability to tolerate distress, emotional reactivity, and experiential avoidance. However, the current study demonstrates that there is considerable overlap between a range of constructs we currently believe to be involved in the onset and maintenance of NSSI. If this study is replicated in other samples this would have important theoretical, conceptual, and measurement implications for research into NSSI.

Chapter 3: Systematic review and meta-analysis: Associations between non-suicidal self-injury and experiential avoidance: A systematic review and Robust Bayesian Meta-analysis

Introduction to Chapter 3

In Chapter 2, I established that experiential avoidance was a unique predictor over and above other emotion-related constructs and could still differentiate between those who had a history of self-injury and those who reported no history of self-injury. In this chapter I wanted to review, compare, and meta-analyse the associations between experiential avoidance and non-suicidal self-injury. Specifically, I investigate the strength and direction of relationships between experiential avoidance and non-suicidal self-injury. I also explore potential moderators of the associations including measure of experiential avoidance, country study was conducted, population (adolescent, community, university), and age.

Reference: Haywood, S. B., Hasking, P., & Boyes, M. E. (2023). Associations between non-suicidal self-injury and experiential avoidance: A systematic review and Robust Bayesian Meta-analysis. *Journal of Affective Disorders, 15*, 470-479. https://doi.org/10.1016/j.jad.2023.01.027

Author contribution statement

Author	Contribution	Acknowledgement[*]
Sophie Haywood	Development of research question, data collection, data management, data analysis, interpretation of results and discussion, manuscript preparation, reviewing and editing of drafts.	
Penelope Hasking	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	
Mark Boyes	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	

[*]I acknowledge that these represent my contribution to the above research output

Abstract

Objectives: Non-suicidal self-injury (NSSI) is the intentional and deliberate damage to an individual's own body tissue without the intent to suicide. Individuals who have higher self-reported levels of experiential avoidance are more likely to report a history of NSSI. The current study systematically reviewed the literature and meta-analysed studies assessing associations between experiential avoidance and self-injury.

Method: An extensive review was conducted of several databases (including ProQuest, Joanna Briggs, Web of Science, PsychArticles, PubMed, Scopus, and Ovid). Nineteen articles (two dissertations) met the inclusion criteria for the systematic review and 14 were analysed in a Robust Bayesian Meta-analysis. This review was pre-registered through PROSPERO (CRD42020198041).

Results: There was a small to medium, pooled effect size (d= .48, 95% Credibility Interval .00 - .85). There was strong evidence for this effect size (Bayes Factor = 12.16), although there was considerable heterogeneity between studies (τ =.68, 95% CI [.44, .1.05]). The analysis testing whether these findings may be due to publication bias was inconclusive (Bayes Factor = 2.45).

Limitations: The majority of studies included were cross-sectional and most studies were of university students. While some studies reported on recency/frequency of NSSI there was not enough data to conduct a meta-analysis for these outcomes.

Conclusion: These results suggest there is a robust association between history of NSSI and experiential avoidance. However, as most studies operationalise avoidance as a unidimensional construct, it is not clear which aspects of avoidance differentiate individuals with and without a history of NSSI.

Keywords: Experiential Avoidance, Self-injury, NSSI, Shared Variance, Meta-Analysis

Non-suicidal self-injury is the intentional and deliberate damage to an individual's own body tissue in the absence of suicidal intent (International Society for the Study of Self-injury, 2022). Common methods of self-injury include, but are not limited to, cutting, burning, and scratching (Klonsky & Muehlenkamp, 2007). Self-injury is a prevalent behaviour within community samples, with 17% of adolescents, 13% of young adults, and 5% of older adults reporting a history of self-injury (Swannell et al., 2014). The prevalence increases within inpatient samples with 20% of adults and 40-80 % of adolescents reporting a history of NSSI (Briere & Gil, 1998; Darche, 1990; DiClemente et al., 1991; Nock & Prinstein, 2004). There are a number of reasons individuals engage in NSSI, including self-punishment and anti-disassociation, but the main reason given for engagement is emotion regulation (Taylor et al., 2018). Although individuals engage in NSSI without the intention to suicide, it is one of the most salient predictors of future suicide attempts (Franklin et al., 2017; Kiekens et al., 2018; Ribeiro et al., 2016). Whilst self-injury is reported to be a robust predictor of future suicide attempts, it is imperative that we also consider that both self-injury and suicide are frequently under reported (Pompili et al., 2012; Stanley et al., 2018). As such, efforts to understand factors that may initiate and maintain NSSI have been researched, to develop early interventions and treatments.

One such factor is experiential avoidance. Experiential avoidance is defined as an individual's inability or unwillingness to experience uncomfortable internal experiences such as thoughts, feelings, and emotions (Hayes et al., 1999). These internal experiences are often purported to be distressing for the individual (Gámez et al., 2011). A number of models of self-injury highlight the role of experiential avoidance in predisposing individuals to engage in NSSI (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009). The Experiential Avoidance Model suggests that all individuals sit on a continuum of wanting to avoid unpleasant internal experiences and individuals at the higher end of this continuum are

posited to be more likely to engage in self-injury to regulate their emotions. (Chapman et al., 2006). Engaging in self-injury helps distract from what individuals are feeling, which can in turn create a negative feedback loop with self-injury becoming an effective emotion regulation strategy when these unwanted feelings occur.

A number of studies have explored the link between experiential avoidance and NSSI, with mixed results. Studies of the associations between experiential avoidance and history of NSSI, using the Acceptance and Action Questionnaire (AAQ; Anderson & Crowther, 2012; Hayes et al., 2004; Horgan & Martin, 2016), found that individuals with a recent history of NSSI were more likely to report experiential avoidance than those who no longer self-injured, and those who reported no history of engagement in NSSI. In contrast, using the Brief Experiential Avoidance Questionnaire (BEAQ; Gámez et al., 2014), Greene and colleagues (2019) found that experiential avoidance was not significantly associated a history of engagement in NSSI. Experiential avoidance has also been associated with frequency, recency (within the last 12 months), and severity of engagement in NSSI (Hu et al., 2021; Nielsen et al., 2017; Singhal et al., 2021).

Brereton and McGlinchey (2020) conducted a systematic review of the literature around NSSI, emotion regulation, and experiential avoidance. In their study they found support for the role of experiential avoidance in NSSI engagement. However, due to the search criteria requiring both emotion regulation and experiential avoidance to be included, this may have resulted in the exclusion of studies that only focused on experiential avoidance. Furthermore, this study only provided a qualitative review of the literature; including a quantitative (meta-analysis) summary would allow for a precise indication of size of effect between experiential avoidance and NSSI. A recent study by Angelakis and Gooding, (2021) also looked at the role of experiential avoidance in NSSI and suicidal ideation. Overall a small effect size was found between experiential avoidance and NSSI; however, grey

literature was excluded from Angelakis and Gooding's (2021) study, which could inflate potential publication bias. Consequently, to date there is still not a systematic review/meta-analysis that focusses purely on the association between experiential avoidance and NSSI. Given that experiential avoidance is purported to play such a central role in our current understanding of why people engage in NSSI, is it important that we provide a synthesis of the existing literature in this area.

To extend on the previous synthesis of literature in this area, the aim of this study is to critically evaluate, meta-analyse using a Bayesian approach, and compare associations between experiential avoidance and NSSI. Specifically, we predict there will be a strong, positive association between experiential avoidance and NSSI. Additionally, potential moderators of the relationship (age, gender, population, measure of experiential avoidance) will be explored.

Method

Procedure

The study was registered with PROSPERO (CRD42020198041) and followed The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021). When conducting systematic reviews it is recommended that at least four databases are searched in order to ensure efficient search results (Bramer et al., 2017). Given the overlap between databases and due to our interest in single study designs, the following databases were searched Joanna Briggs, Ovid – All Journals, ProQuest, ProQuest Dissertations, PsycArticles, PubMed, Scopus, and Web of Science. Search terms are listed in Table 3.1. Initial searches were conducted between the 29th of November and the 2nd of December 2021. A second search was conducted on the 5th April 2022 to capture more recent publications. All searches were conducted by the first author. Inclusion criteria were as follows: (1) articles published in English; (2) quantitative design that allowed calculation of

effect sizes (i.e. means, standard deviations, effect sizes); (3) human participants; (4) articles

related to NSSI published after 2006 (when International Society for the Study of Self-injury

published a comprehensive definition of NSSI; International Society for the Study of Self-

Injury [ISSS], 2006). Exclusion criteria included: (1) qualitative studies that excluded

calculation of effect sizes, (2) NSSI due to genetic disorder, developmental disorder, or

psychosis, (3) systematic reviews/meta-analysis, (4) animal studies. Reference lists of articles

included in the study were scanned to locate any additional studies not located by the initial

searches. Key authors were also contacted for unpublished data and additional information

required for inclusion in meta-analysis.

Table 3.1

Search Terms

Experiential Avoidance	Non-suicidal Self-injury (papers published since 2006)
Avoid* OR distract* OR escap*	self-injur* OR selfinjur* OR selfharm OR self-harm OR self-mutilat* OR selfmutilat* OR parasuicid* OR para-suicid*
Limits applied	Published since 2006 and published in English

      The identification, screening, eligibility, and inclusion procedures are summarised in

Fig. 3.1. At each step of the PRISMA screening protocol, three additional researchers

checked 20% of the eligible studies. Document screening of titles, abstracts, and full text was

independently screened by the primary author. As per PRISMA guidelines 20% of the total

documents was screened by three independent reviewers. An agreement rate of 91.74% was

achieved (Fleiss Kappa = .45).

Study quality and risk of bias

      Study quality and risk of bias were assessed using a tool adapted from the Agency for

Healthcare Research Quality (Williams et al., 2010) that has been used in past NSSI

systematic reviews to assess quality of articles (Greene et al., 2019; Taylor et al., 2018).

Studies were assessed to determine whether they met methodological safeguards and quality

Figure 3.1

PRISMA Study Screening Procedure

Records identified in initial database searches (k = 11750)

Updated search conducted 5/4/2021 (k = 197)

Records after duplicates removed (k = 10052)

Updated search conducted 5/4/2021 (k = 160)

Titles screened (k = 10052)

Updated search conducted 5/4/2021 (k = 160)

Records removed (k = 9813; 9487 excluded on title, 326 additional duplicates)

Updated search conducted 5/4/2022 (k = 154; 134 excluded on title, 20 additional duplicates)

Abstracts screened (k = 239)

Updated search conducted 5/4/2021 (k = 6)

Records removed (k = 172)

Updated search conducted 5/4/2021 (k = 2)

Full-texts screened (k = 67)

Updated search conducted 5/4/2021 (k = 4)

Records removed (k = 49) Records removed due to: avoidance conflated with other construct, no measure of avoidance used, measure of avoidance not capturing experiential avoidance, definition of avoidance, not capturing history of NSSI, statistics not available/ not responding to email

Updated search conducted 5/4/2021 (k = 3)
Records removed due to: previously included

Studies included in qualitative synthesis (k = 18)

Updated search conducted 5/4/2021 (k = 1)

Studies included in quantitative synthesis (k = 13)
Updated search conducted 5/4/2021 (k = 1)

checks that assesses bias (i.e. unbiased selection of sample, adequate description of sample, validated measure of NSSI and experiential avoidance, adequate handling of missing data).

Data management and extraction

Reported descriptive statistics were used to calculate standardised effect sizes of the mean difference and their variance (Cohen's *d*). If data provided did not allow for calculation of appropriate effect size, authors were contacted. In NSSI literature some studies reported history, recency (within last 12 months), frequency, and severity of NSSI. For the meta-analysis only, history is reported as there were not enough studies to meta-analyse the other variables. However, these are all reported in the systematic review.

Data analysis strategy

Prior to analysis the relationship between history, frequency, and recency of NSSI (where possible) and experiential avoidance was examined by converting all effect sizes to standardised mean differences (Cohen's *d*) using the "Practical Meta-Analysis Effect Size Calculator" online calculator (www.campbellcollaboration.org). Robust Bayesian meta-analysis was conducted in JASP v0.14 (JASP Team, 2022). Robust Bayesian analysis allows for prior distributions of specific biases to be considered (Higgins et al., 2019). It also allows for the stimulation of studies that may have not been published thereby allowing for a more accurate reporting of publication bias (Givens et al., 1997). The predictive quality of two rival hypotheses are quantified with Bayes factors (van Doorn et al., 2021). Bayes factors between 1 and 3 are considered weak evidence, 3 to 10 moderate evidence, and Bayes factors greater than 10 are considered strong evidence for the proposed hypothesis (Jeffreys, 1939). Strength and interpretation of effect sizes was assessed in accordance with Cohen's guidelines (Cohen, 1988).

Results

Qualitative reviews

Overall, our search strategy identified 11,750 results. After removal of duplicates, screening of titles, abstracts, and full text 19 articles (two dissertations) were retained. Of these 14 met the criteria for the quantitative synthesis (Figure 3.1). Fourteen studies contributed 16 independent effect sizes for the relationship between experiential avoidance and history of NSSI.

There was a total sample size of 13,820 with a weighted mean age of 20.08 ($SD =$ 3.90; this excludes Hu et al. (2021) who did not provide mean age or standard deviation). Of the total sample 4,078 (32%) reported a history of NSSI. Participants were primarily university students and studies were predominantly conducted in the USA and Australia (see Table 3.2). Findings have been categorised by sample population.

University students

Seven research groups published 12 studies that examined the association between NSSI and experiential avoidance among university students (Anderson, 2009; Anderson et al., 2018; Anderson & Crowther, 2012; Bentley et al., 2015; Gratz et al., 2010; Greene et al., 2019; Haywood et al., 2022; Horgan & Martin, 2016; Liu et al., 2021; Singhal et al., 2021; Steele, 2017; Turner et al., 2015). Experiential avoidance was positively associated with NSSI (Anderson et al., 2018; Anderson & Crowther, 2012; Gratz et al., 2010; Haywood et al., 2022; Horgan & Martin, 2016; Liu et al., 2021; Turner et al., 2015). Anderson and Crowther (2012) and Greene et al. (2019) reported that participants with a history of NSSI reported higher scores on measures of experiential avoidance than those with no history of NSSI. Turner et al. (2015) reported positive associations between experiential avoidance and NSSI among Asian and Caucasian participants, but these were only significant among Asian participants. Likewise, Horgan and Martin (2016) reported significant differences in

experiential avoidance among individuals who had recently engaged in NSSI and those who had no history of NSSI, as well as individuals with a current history of NSSI and individuals had previously engaged in NSSI. However, no differences were found between individuals who no longer engaged and individuals with no history of NSSI. Steele (2017) reported that individuals with a history of NSSI reported significantly more experiential avoidance than individuals with no history of self-injury. Significant positive correlations were reported between experiential avoidance and frequency of NSSI engagement (Anderson et al., 2018; Gratz et al., 2010).

In contrast, experiential avoidance and NSSI were not significantly correlated in a study by Anderson (2009). Singhal et al. (2021) also reported no associations between experiential avoidance and NSSI, all participants in this study reported a history of self-injury.

Adolescents

Four studies explored the association between experiential avoidance and self-injury among adolescents (Brausch & Woods, 2019; Howe-Martin et al., 2012; Hu et al., 2021; Xavier et al., 2018). All studies looked at the relationship between experiential avoidance and history of self-injury and found positive associations. Howe-Martin and colleagues (2012) also explored the association between experiential avoidance and frequency of engagement in NSSI. There was a significant, positive association between frequency of engagement in NSSI for females, but not for males. Conversely Xavier et al. (2018) found significant, positive associations between experiential avoidance and NSSI for both males and females. Hu and colleagues (2021) also found a positive association between experiential avoidance and severity of NSSI. Brausch and Woods (2019) reported a positive interaction between experiential avoidance and NSSI, when exploring if NSSI moderated the relationship between experiential avoidance and suicidal ideation.

Table 3.2

Document Inclusion

	Author	Year	Country	Type of article	C or NC	Population	N	Age M(SD)	Gender	NSSI N (% of total sample)	Measure of NSSI	Measure of EA	Results
#	Anderson	2009	USA	Thesis	NC	Undergrad	95	18.97 (1.90)	67 % F	95(100 %)	DSHI	AAQ	Experiential avoidance was not significantly correlated with NSSI ($r = 0$-.05, $p = .62$) $d = -0.10$, $SE = 0.01$
#	Anderson and Crowther	2012	USA	Journal	NC	Undergrad	214	18.86 (1.97)	70 % F	95 (44 %)	DSHI	AAQ	$d = 0.43$, $SE = 0.14$
#	Anderson et al.	2018	USA	Journal	NC	Undergrad	230	18.76 (2.99)	100 % F	230 (100 %)	DSHI	AAQ	$d = 0.37$, $SE = 0.09$
	Bentley et al.	2015	USA	Journal	NC	Undergrad	150	18.77 (0.97) n = 146	71.3 % F	150 (100 %)	ISAS	MEAQ	No overall score of experiential avoidance and NSSI. Reported on frequency, recency, and severity. Used the MEAQ and reported only procrastination was correlated with NSSI severity. Frequency and recency of NSSI were not associated with any other aspects of experiential avoidance.

	Author	Year	Country	Type of article	C or NC	Population	N	Age M(SD)	Gender	NSSI N (% of total sample)	Measure of NSSI	Measure of EA	Results
	Brausch and Woods	2019	USA	Journal	NC	Adolescents	436	13.19 (1.19)	52.7 % F	75 (17.2 %)	ISAS	AAQ-II	Categorised as high BPD and Low BPD. Experiential avoidance was associated with DSH frequency in low BPD group (r = 0.35, p<.01).
#	Gratz et al.	2010	USA	Journal	NC	Undergrad	392	20.25 (2.46)	74 % F	101 (26 %)	DHSI	AAQ	d = 0.32, SE = 0.12
#	Greene et al.	2019	Australia	Journal	NC	Undergrad	778	22.27 (6.71)	77.1 % F	126 (16 %)	ISAS	BEAQ	d = 0.40, SE = 0.10
#	Haywood et al.	2022	Australia	Journal	NC	Undergrad	487	21.36 (2.48)	74 % F	191 (40 %)	ISAS	BEAQ	d = 0.41, SE 0.09
#	Horgan and Martin	2016	Australia	Journal	NC	Community and University students (96.5% students)	215	20.09 (4.23)	79.1 % F	63 (29.3 %)	NSM	AAQ	d = 0.02, SE = 0.15

	Author	Year	Country	Type of article	C or NC	Population	N	Age M(SD)	Gender	NSSI N (% of total sample)	Measure of NSSI	Measure of EA	Results
#	Howe-Martin et al.	2012	USA	Journal	NC	School children	211	16.22 (1.23)	50.7 % F	72 (34 %)	m-DSHI	RAFQY	d = 0.29, SE = 0.15
#	Hu et al.	2021	China	Journal	C	Adolescents	250	not specified but selection criteria 12 - 18	62 % F	120 (48 %)	ANSBQ	AAQ-II	d = 1.90, SE = 0.15
#	Liu et al.	2021	China	Journal	NC	Undergrad (College)	6763	21.00 (3.51)	56.6 % F	1404 (20.8 %) CSA and NSSI	NSSQ	AAQ - II	d = 0.37, SE = 0.03
#	Nielsen et al.	2016	UK	Journal	NC	University students and community	1332	19.57 (6.22)	75.2 % F	1173 (88.1 %)	ISAS	AAQ-II	d = 0.07, SE = 0.03
	Nielsen et al.	2017	UK	Journal	NC	Community	313	19.78 (3.48)	81 % F	313 (100 %)	ISAS	MEAQ	
	Singhal et al.	2021	India	Journal	NC	Undergrad & Postgrad	353	20.69 (1.72)	58.3 % F	352 (100 %)	ISAS	BEAQ	
#	Steele	2017	USA	Thesis	NC	Undergrad	100	21.6 (5.43)	87.7 % F	35 (35 %)	ISAS	AAQ	d = 2.92, SE = 0.39
#	Turner et al.	2015	Canada	Journal	NC	Undergrad	931	20.26 (3.22)	71.3 % F	202 (21.7 %)	DSHI	AAQ	d = 0.28, SE = 0.10 (Asian) d = 0.20, SE = 0.10 (Caucasian)

	Author	Year	Country	Type of article	C or NC	Population	N	Age M(SD)	Gender	NSSI N (% of total sample)	Measure of NSSI	Measure of EA	Results
	Vorous	2009	USA	Thesis	C	Individuals with BPD attending mental health facilities	44	35.3 (12.6)	95 % F	44 (100 %)	SHI	AAQ	
#	Xavier et al.	2018	Portugal	Journal	NC	Adolescents - School	776	14.44 (1.76)	52.4 % F	171 (22 %)	RSIA - PORT	AFQ-Y	d = 0.85, SE = 0.15 (Male) d = 0.61, SE = 0.11 (Female)

Notes: # - included in meta-analysis; NC – Non-clinical,C- clinical; DSHI – Deliberate Self-harm Inventory, ISAS – Inventory of Statements about Self-injury, NSSQ – Non-suicidal Self-injury Questionnaire, RSIA - PORT - Risk-taking and Self-harm Inventory for Adolescents - Portuguese Version, SHI – Self-harm Inventory, NSM – Non-standardised Measure, m-DSHI – Modified version of Deliberate Self-harm Inventory, ANSBQ – Adolescent Nonsuicidal Self-injury Behaviour Questionnaire, AAQ -Acceptance and Action Questionnaire, AAQ -II – Acceptance and Action Questionnaire II, MEAQ – Multi-dimensional Experiential Avoidance Questionnaire, BEAQ – Brief Experiential Avoidance Questionnaire, RAFQY – Revised Avoidance and Fusion Questionnaire for Youth, EAQ – Emotional Avoidance Questionnaire, AFQ-Y – Avoidance and Fusion Questionnaire – Youth; All studies were correlational

Adults

Community

Two studies explored the association between experiential avoidance and NSSI among community samples (Nielsen et al., 2016, 2017). Nielsen and colleagues' (2016) initial study looked at history of NSSI, whereas the 2017 study explored the association between experiential avoidance and both recency and frequency of engagement in NSSI. Experiential avoidance was associated with history of engagement in NSSI but not recency or frequency.

Clinical samples

Vorous (2009) looked at the relationship between experiential avoidance and NSSI within clinical populations (participants recruited from mental health facilities). Frequency of engagement of NSSI was positively associated with experiential avoidance among participants with a diagnosis of borderline personality disorder.

Robust Bayesian Meta-analysis

Fourteen articles were included in the Bayesian meta-analysis. All studies were cross sectional and examined the relationship between experiential avoidance and history of engagement in self-injury and were of reasonable to good quality (Table 3.3). Whilst some studies did report on the link between experiential avoidance and recency (3; Anderson & Crowther, 2012; Nielsen et al., 2016), frequency (5; Gratz et al., 2010; Howe-Martin et al., 2012; Nielsen et al., 2016; Turner et al., 2015; Vorous, 2009), and severity (2; Anderson & Crowther, 2012; Hu et al., 2021) of self-injury, there were either too few studies or insufficient quantitative information to calculate pooled effect sizes. As such, analyses were only conducted to explore the relationship between experiential avoidance and history of NSSI.

Table 3.3

Document Quality Checks

Authors	Unbiased selection of sample	Adequate description of sample	Validated measure for determining NSSI	Validated measure for determining EA	Adequate handling of missing data
Anderson (2009)	Yes	Yes	Yes	Yes	Yes
Anderson & Crowther (2012)	Yes	Yes	Yes	Yes	Not reported
Anderson et al., (2018)	Yes	Yes	Yes	Yes	Yes
Bentley et al., (2015)	Yes	Yes	Yes	Yes	Not reported
Gratz et al., (2010)	Yes	Yes	Yes	Yes	Not reported
Greene et al., (2019)	Yes	Yes	Yes	Yes	Yes
Haywood et al., (2022)	Yes	Yes	Yes	Yes	Yes
Horgan & Martin (2016)	Yes	Yes	No	Yes	Not reported
Howe-Martin et al. (2012)	Yes	Yes	Partial	Yes	Partial
Hu et al., (2021)	Yes	Yes	Yes	Yes	Not reported
Liu et al., (2021)	Yes	Partial	Partial	Yes	Not reported
Nielsen (2016)	Yes	Yes	Yes	Yes	Partial

Authors	Unbiased selection of sample	Adequate description of sample	Validated measure for determining NSSI	Validated measure for determining EA	Adequate handling of missing data
Nielsen et al, (2017)	Yes	Yes	Yes	Yes	Partial
Singhal et al., (2021)	Yes	Yes	Yes	Yes	Yes
Steele (2016)	Yes	Yes	Partial	Yes	Partial
Turner et al., (2014)	Yes	Yes	Yes	Yes	Not reported
Xavier et al. (2018)	Yes	Yes	Yes	Partial	Yes

Weighted Related Outcomes

The output from the Robust Bayesian Meta-analysis demonstrated strong support for an association between experiential avoidance and history of NSSI (Bayes factor = 12.16), rather than for the alternative hypothesis that there is no association. Bayes factors were greater than 10, which as discussed previously indicate strong support for the proposed hypothesis (Jeffreys, 1939; see Table 3.4). The forest plot indicated a small to medium overall effect size (Figure 3.2; Cohen, 1988).

Table 3.4

Model summary table of Bayes Factors for effect size, heterogeneity, and publication bias

	P(M|data)[1]	**Inclusion BF**[2]
Effect	0.92	12.16
Heterogeneity	1.00	2.891e+102
Publication bias	0.71	2.45

[1] P(M|Data) is the level of certainty that we have in the model after we have included our data. Data close to 1 tells us that we can be confident in our results. For example, in the above instance we can be certain that there is an effect size and heterogeneity present in our meta-analysis. However, the publication bias is still ambiguous as it could still only slightly higher than the original prediction of .50.

[2] Inclusion Bayes factors are a continuous measure to the strength of evidence for the models.

Figure 3.2

Forest Plot of studies included in meta-analysis

Study:	Mean [95% CI]
Anderson (2009)	-0.10 [-0.12, -0.08]
Anderson & Crowther (2012)	0.43 [0.16, 0.70]
Anderson et al. (2018)	0.37 [0.19, 0.55]
Gratz et al. (2010)	0.32 [0.08, 0.56]
Greene et al. (2019)	0.40 [0.20, 0.60]
Haywood et al. (2022)	0.41 [0.23, 0.59]
Horgan & Martin (2016)	0.02 [-0.27, 0.31]
Howe Martin et al. (2012)	0.29 [0.00, 0.58]
Hu et al. (2021)	1.90 [1.61, 2.19]
Liu et al. (2021)	0.37 [0.31, 0.43]
Nielsen et al. (2016)	0.07 [0.01, 0.13]
Steele (2016)	2.92 [2.16, 3.68]
Turner et al. (Asian, 2014)	0.28 [0.08, 0.48]
Turner et al. (Causcasian, 2014)	0.20 [0.00, 0.40]
Xavier et al. (Female, 2018)	0.61 [0.39, 0.83]
Xavier et al. (Male, 2018)	0.85 [0.56, 1.14]
Overall	0.48 [0.00, 0.85]

μ (averaged)

There was strong evidence that heterogeneity was present within the pooled studies (Bayes

factor = 2.891e102). We are unable to say with certainty if publication bias was present

(Bayes factor = 2.39). Funnel plots have been reported to be an overall measure of small study effects, with publication bias being a component of that (Sterne & Harbord, 2004). Given this, in Bayesian meta-analysis the publication bias is assessed via the publication bias reported in the model output and not funnel plots. Average estimates for effect size and homogeneity are reported in Table 3.5.

Table 3.5

Model Averaged Estimates for effect size and heterogeneity

	Mean	Median	95% CI Lower	Upper
Effect size (μ)	0.48	0.50	0.00	0.85
Heterogeneity (τ)	0.68	0.65	0.44	1.05

Moderators

To assess potential moderators a meta-regression analysis using Hedges method was conducted, using traditional meta-analysis, to test if the measure of experiential avoidance, country of study (USA/Canada, UK/Europe, China, and Australia), population (university, adolescents, and community), and age (under 18, over 18) were moderators. Measure of NSSI[1] was not included as a moderator due to only using endorsement of history rather than the entire measure. Overall I^2 was 99.51% supporting the results of the Robust Bayesian Meta-analysis that there was a large percentage of heterogeneity present within the studies. No moderation effect was found for age, country, or population. Moderation effects were found for measure of experiential avoidance, specifically the AAQ-II demonstrated a stronger relationship. However, this only produced a minimal reduction to the I^2 value (98.90; see Table 3.4), therefore not substantially reducing the heterogeneity present across the studies. Moderating effects for gender were not tested as most participants were female.

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[1] Measures of NSSI that include checklists of NSSI methods often report higher prevalence of NSSI (Swannell et al., 2014), however for this study we generated a dichotomous variable based on endorsement of checklists or specifying prior engagement in NSSI .

Table 3.6
Moderation effects for Measure of Experiential Avoidance

	Estimate	Std Error	z	p	95% Confidence Interval	
					Lower	Upper
intercept	.21	.26	0.84	.404	-0.29	0.72
Acceptance and Action Questionnaire- II	.98	.44	2.25	**.024**	0.13	1.84
Brief Experiential Avoidance Questionnaire	.19	.55	0.34	.731	-0.89	1.26
Avoidance and Fusion Questionnaire - Youth	.37	.48	0.77	.440	-0.56	1.30

Note. Wald test. Acceptance and Action Questionnaire is the comparator. $I^2 = 98.90$, 95% CI [97.33, 99.59]

Discussion

The current systematic review and robust Bayesian meta-analysis extends previous reviews and provides additional support for the small to moderate association between experiential avoidance and NSSI (Angelakis & Gooding, 2021; Brereton & McGlinchey, 2020). We also found that these associations were moderated by measure of experiential avoidance (Acceptance and Action Questionnaire – II). Additionally, we were unable to rule out publication bias which may suggest that studies finding negative associations or no significant associations are not being published. However, while an association was found between experiential avoidance and NSSI, the findings also raise questions regarding our current understanding of the relationship between the two. Overall, our findings support the association between experiential avoidance and NSSI. However, they do highlight the need for more nuanced measures of capturing experiential avoidance within other populations (e.g., older adults, in-patients) to provide clarity regarding the role of experiential avoidance in the onset and maintenance of self-injury. These more nuanced ways of capturing the construct of experiential avoidance will allow for refinements of existing models of self-injury and thereby allow for the improvement of targeted interventions to reduce experiential avoidance.

The Experiential Avoidance Model of NSSI was published in 2006 (Chapman et al., 2006), and highlighted the central role that experiential avoidance is purported to play in the onset and maintenance of NSSI. However, only 19 studies investigating associations between experiential avoidance and NSSI have been published in the last 16 years. Although a strength of our study was the inclusion of grey literature, we were only able to find two such studies. Given we were unable to rule out publication bias, this raises the possibility that null findings are not being published.

Additionally, the two versions of the Acceptance and Avoidance Questionnaire (AAQ and AAQ-II; Bond et al., 2011; Hayes et al., 2004) were used in 70% of the studies. The AAQ and AAQ-II were developed out of Acceptance and Commitment therapy (Hayes et al., 1999; Hayes et al., 2004) and reportedly focus on experiential avoidance/psychological inflexibility (Bond et al., 2011; Hayes et al., 2004; Tyndall et al., 2019). The Acceptance and Avoidance Questionnaire (Hayes et al., 2004) has been criticised for not uniquely capturing experiential avoidance and low construct validity. However, the majority of studies included in the meta-analysis that identified an association between experiential avoidance and NSSI use this measure. The AAQ has also been criticised for not capturing experiential avoidance as a construct but rather being a more a general measure of Acceptance and Commitment Therapy processes (Chawla & Ostafin, 2007). Furthermore, Chawla and Ostafin (2007) highlighted that the issue was not only with that lack of specificity of the measure capturing experiential avoidance but also how experiential avoidance is conceptualised. The Revised Acceptance and Avoidance Questionnaire (AAQ-II) was created to address the limitations of the AAQ (Wolgast, 2014). However, this has also been critiqued for its lack of discriminant validity with the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988; Wolgast, 2014). Both the AAQ and the AAQ-II use a unidimensional score for the measure, which could be conflating psychological inflexibility and experiential avoidance (Wolgast, 2014).

Psychological inflexibility is defined as an individual's inability to fully connect to the present moment without the need for defences and to remain adaptable while in pursuit of their goals and values (Hayes et al., 2006). Thus, while experiential avoidance and psychological inflexibility are closely-related constructs, they are different and should not be grouped together in a unidimensional measure, as this prevents us from identifying whether it is the shared variance that explains the association or whether they are uniquely associated with NSSI. Items on the measure such as *"My painful memories prevent me from having a good life."* or *"Worries get in the way of my success."* do not appear to capture any form of experiential avoidance. Similar concerns regarding overlapping constructs have been recently raised in the broader emotion regulation literature (Haywood et al., 2022; Juarascio et al., 2020). If the AAQ-II is being used as a measure to capture experiential avoidance but it is actually a measure of psychological inflexibility, further studies are required with other measures of experiential avoidance, particularly studies that allow for comparisons between experiential avoidance and psychological inflexibility. Additionally, most of the measures assess experiential avoidance as a unidimensional construct (AAQ, AAQ-II, BEAQ, (Bond et al., 2011; Gámez et al., 2014; Hayes et al., 2004). Unfortunately, only one study by Bentley et al., (2015) utilised the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011) however did not report on data in a way that allowed inclusion in the meta-analysis. The authors found that only the subscale of procrastination was significantly associated with severity of engagement in NSSI.

Furthermore, of the studies analysed, 70% were conducted among university students. Sample of population did not have a moderating effect within this study, suggesting that the association holds true for all groups within the meta-analysis. However, as previously mentioned, we know that the rates of self-injury among clinical samples are elevated and yet none of the studies included in the meta-analysis were conducted within clinical populations

(inpatients in psychiatric units/mental health facilities). Only one study within clinical populations was found. Vorous (2009) found a significant, positive association between frequency of NSSI and experiential avoidance within individuals in a mental health facility with a diagnosis of borderline personality disorder. However, this study was not able to be included in the meta-analysis due to looking at frequency of NSSI rather than history of NSSI. This also highlights that perhaps the relationship may be dependent on the outcome of NSSI we are measuring such as history, frequency, recency, and severity.

Limitations

First, all included studies are cross sectional in design so temporal ordering of associations cannot be assumed; longitudinal research is clearly needed to drive the field forward. Additionally, there is a dearth of experimental research within the literature. This severely constrains any conclusions regarding causation, and future experimental work is needed to address this limitation. Second, most of the participants were university students; while self-injury is known to be prevalent in this population (Kiekens et al., 2019), we know that these associations are also reported to be high among individuals in clinical settings (Briere & Gil, 1998; Darche, 1990; DiClemente et al., 1991; Nock & Prinstein, 2004). Given elevated emotional distress among individuals seeking treatment, investigating experiential avoidance and NSSI within this population may be particularly important and should be a priority for future research. Third, a number of measures are used to assess experiential avoidance, and some of these have been criticised (e.g., AAQ and AAQ-II, Wolgast, 2014). The use of more specific and nuanced measures of experiential avoidance such as the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011) could shed light on the specific aspects of avoidance that are associated with NSSI. Finally, our review was limited to studies published in English. Given our analyses

were unable to rule out the possibility of publication bias, more research is needed to ensure confidence that the association between experiential avoidance and NSSI is robust.

Future directions and clinical implications

Future research within other samples including adolescents, older adults, and clinical populations will provide clarity around the role of experiential avoidance beyond the current study. Additionally, experimental studies are required to further advance our understanding of the mechanisms associated with experiential avoidance and its influence on NSSI. Furthermore, whilst engaging in NSSI is associated with risks, it is imperative the clinical/therapeutic interventions are person-focused and assess the client's needs. Clinical interventions should look at reducing experiential avoidance, which in turn may prevent or reduce engagement in NSSI. Techniques from Dialectical Behaviour Therapy (DBT; Linehan, 1993) including improving distress tolerance, radical acceptance, and mindfulness may assist in reducing experiential avoidance. Like NSSI, major depression has also been associated with suicide (Moitra et al., 2021). Interventions that focus on increasing exercise have been found to be effective in reducing depression (Murri et al., 2019).

Conclusion

In conclusion, we found support for a small to medium association between experiential avoidance and history of engagement in NSSI. However, findings also raised important questions to address moving forward. Additional research using more nuanced measures of experiential avoidance, in more varied populations (such as clinical and other age groups), will help provide further clarity on the role that experiential avoidance plays in of the onset and maintenance of NSSI. Furthermore, additional studies looking at the association between experiential avoidance and severity/frequency of NSSI and utilising experimental designs will also allow for a deeper understanding of the role of experiential avoidance. This will allow for further refinement of existing models of self-injury and

provide clarity around targeted intervention for reducing experiential avoidance. Overall, these finding support the role of experiential avoidance in self-injury, in community samples, but highlight the need for more nuanced ways of detailing the role of experiential avoidance in order to provide more specific models of NSSI and targeted interventions for clinicians working with individuals with high levels of experiential avoidance.

Chapter 4: Unidimensional and multidimensional measures of experiential avoidance associations with self-injury

Introduction to Chapter 4

In Chapter 3, I found that there was an overall small to medium pooled effect for the association between experiential avoidance and non-suicidal self-injury. However, there was considerable heterogeneity between studies and publication bias could not be ruled out. One of the issues raised with the included studies was that they all utilised unidimensional measures of experiential avoidance. However experiential avoidance is purported to be a multidimensional construct. The aim of this study was to explore both unidimensional and multidimensional measures of experiential avoidance and their associations with self-injury. Firstly, I wanted to establish that a global measure of experiential avoidance is able to differentiate between individuals who have no history of self-injury, history of self-injury but not in the last 12 months (past history), and history of self-injury in the last 12 months (recent history). Secondly, I wanted to analyse these relationships with a multidimensional measure of experiential avoidance to establish which aspects of experiential avoidance are associated with self-injury in the aforementioned groups.

This chapter is currently under review in a peer-reviewed journal. Ethical approval, a copy of the survey questionnaire (including the participant information sheet and informed consent) can be found in Appendices D and E.

Reference: Haywood, S. B., Hasking, P., & Boyes, M. E. (under review). Untangling the link between experiential avoidance and non-suicidal self-injury: A multidimensional approach. *Archives of Suicide Research*

Author contribution statement

Author	Contribution	Acknowledgement[*]
Sophie Haywood	Development of research question, data collection, data management, data analysis, interpretation of results and discussion, manuscript preparation, reviewing and editing of drafts.	
Penelope Hasking	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	
Mark Boyes	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	

[*]I acknowledge that these represent my contribution to the above research output

Abstract

Background: Experiential avoidance has been found to be associated with history of self-injury. This association is mainly found in studies that use global measures of experiential avoidance. However, experiential avoidance is purported to be a multidimensional construct. This study aims to test both unidimensional and multidimensional measures of experiential avoidance and their associations with self-injury. **Method:** University students ($n = 632$, $M = 25.01$, $SD = 7.13$, 78.8% female, 70.9% with lived experience of self-injury) completed well-validated self-report measures of NSSI, experiential avoidance (The Brief and the Multidimensional Experiential Avoidance Questionnaire). **Results:** As expected, all sub-scales of multidimensional measure of experiential avoidance were highly correlated with the global score for experiential avoidance. The global measure of experiential avoidance differentiated individuals with no history, with past history, and recent history of self-injury. When assessed using the multidimensional measure, only the sub-factors behavioural avoidance, and repression/denial, differentiated those with no history of self-injury from those with recent history and those with recent history from those with past history of self-injury. **Limitations:** Cross-sectional design rules out temporal sequencing. **Conclusion:** Findings raise the possibility that associations between experiential avoidance and self-injury may be down to two specific aspects of experiential avoidance, namely 1) behavioural avoidance and 2) repression/denial. If true, this will have important theoretical, clinical, and measurement implications for NSSI research.

Non-suicidal self-injury is the intentional and purposive damage to one's own body tissue without suicidal intent (International Society for the Study of Self-injury, 2022). Self-injury is pervasive across different age groups, with 17% of adolescents, 13% of young adults, and 5% of older adults reporting a history of self-injury (Swannell et al., 2014). Common methods of self-injury include, among other methods, cutting, scratching, and burning oneself (Klonsky & Muehlenkamp, 2007). The motivations for engaging in self-injury are diverse and multifaceted, including anti-disassociation, self-punishment, and most prominently, emotion regulation (Taylor et al., 2018).

Given that affect regulation is the most endorsed function of self-injury (Taylor et al., 2018), most models of NSSI focus on emotional experience and regulation of that experience (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Nock & Prinstein, 2004; Selby & Joiner, 2009). Across these models the experience and regulation of these emotions play an important role in whether someone is likely to start or continue to engage in self-injury. One such model is the Experiential Avoidance Model of Self-injury (Chapman et al., 2006). Experiential avoidance is an individual's unwillingness to or inability to sit with uncomfortable internal experiences such as emotions, feelings, and thoughts (Hayes et al., 1999). According to the Experiential Avoidance Model of Self-injury, all individuals vary in the extent to which they want to avoid these uncomfortable internal experiences (Chapman et al., 2006). The model outlines a sequence of events wherein the individual encounters a stimulus that elicits an internal experience, such as a thought, feeling, and/or emotion. Individuals with a greater propensity towards the avoidance of these internal experiences are more likely to engage in self-injury to distract from the experience (Chapman et al., 2006).

A recent meta-analysis examined the associations between experiential avoidance and self-injury (Haywood et al., 2023), finding a small to medium pooled effect. A consideration raised in the meta-analysis was that all the studies that reported significant associations

between experiential avoidance and self-injury used measures that were unidimensional (Haywood et al., 2023). Experiential avoidance has been conceptualised as a multidimensional construct consisting of behavioural avoidance, distress aversion, procrastination, distraction/ suppression, repression/ denial, and distress endurance (Chawla & Ostafin, 2007; Gámez et al., 2011). However, only two studies (out of 19) used a multidimensional measure. Unfortunately, they did not report on the information in a way that allowed for inclusion in the meta-analysis. None-the-less, Bentley et al. (2015) found a significant association between the procrastination subscale of the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011) and severity of NSSI. However, Nielsen et al. (2017) did not find any significant associations when using the same measure. These studies highlight the mixed findings regarding specific aspects of experiential avoidance that may be associated with self-injury. It may be important to consider that unidimensional measures could miss the unique aspects of experiential avoidance that are associated with self-injury. Understanding which specific aspects of experiential avoidance are associated with the onset and maintenance of self-injury may have important implications for both the theoretical understanding of the behaviour and interventions.

The aim of this study was to test both a unidimensional and multidimensional measure of experiential avoidance and their associations with self-injury. Based on previous research we expect there will be a significant association between experiential avoidance and self-injury when assessed using a unidimensional measure of experiential avoidance. Furthermore, when assessing this relationship using a multidimensional measure of experiential avoidance, we expect that only specific dimensions of experiential avoidance will be associated with self-injury.

Methods

Participants

Participants were Australian university students ($N = 632$) aged between 19 – 62 years ($M = 25.01$, $SD = 7.13$); 498 identified as women (78.8 %); 90 identified as men (14.2 %), and 44 self-described (7 %; 3 agender, 2 genderfluid/queer, 30 non-binary, 6 trans male, 2 did not specify gender). All participants were enrolled at Australian universities. Information was collected on age, gender, country of birth, and any mental health conditions, including the specific diagnosis.

Measures

Non-suicidal Self-injury

Information on NSSI was collected using Section 1 of the Inventory of Statements about Self-injury (ISAS; Klonsky & Glenn, 2009). Participants were provided with a definition of self-injury and were then asked if they had ever engaged in self-injury. Those who indicated they had engaged in self-injury were asked about the how many times they had engaged in the last year, main forms of self-injury, and the age at which they had first engaged in self-injury. The ISAS has good short-term test-retest reliability (1 – 4 weeks; $r = .85$; Glenn & Klonsky, 2011).

Experiential Avoidance

Experiential avoidance was captured using both a multidimensional and unidimensional measure. The Brief Experiential Avoidance Questionnaire (BEAQ; Gámez et al., 2014) is the short form of the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011). It is a 15 item, unidimensional scale. Participants respond to statements (e.g., *"I go out of my way to avoid uncomfortable situations"*) on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores range from 15 – 90, with higher scores indicating higher levels of experiential avoidance. The scale has good internal

consistency (α =. 86) and good convergent validity with the MEAQ (mean r = .62; Gámez et al., 2014). In the current sample, the internal consistency was good (α = .87; ω = .87).

The Multidimensional Experiential Avoidance Model (MEAQ; Gámez et al., 2011) is a 62 item measure that captures various types of experiential avoidance. The subscales include behavioural avoidance (e.g. "*I won't do something if I think it will make me uncomfortable*"), distress aversion (e.g. *"If I could magically remove all of my painful memories, I would"*), repression/denial (e.g. *"I sometimes have difficulty identifying how I feel"*), distraction/suppression (e.g. *"When something upsetting comes up, I try very hard to stop thinking about it"*), procrastination (e.g. *"I tend to put off unpleasant things that need to get done"*), and distress endurance (e.g. *"People should face their fears"*). Participants rated statements on a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). The measure can be scored as a total score or subscale scores. For this study the subscale scores were used. Scores for the subscales range from 11 - 66 for behavioural avoidance and distress endurance, 13 – 78 for distress aversion and repression/denial, and 7 – 42 for procrastination and distraction/suppression. Higher scores indicate higher levels of that construct. Internal consistency has been reported as adequate to good across community, student, and clinical (in-patient) samples (α = .76 - .95; Gámez et al., 2011). In the current study the internal consistency for the subscales was good (α = .86 - .89; ω = .86 - .89).

Procedure

Following approval from the University Human Research Ethics Committee, the study was advertised and made available on the University's online research participation pool, as well as being promoted on various social media platforms. Students recruited through the participation pool were awarded course credits. Students who completed the study online were not compensated for their time. Participants were provided with a link to the online survey that stated the objectives of the project, how their data would be stored,

confidentiality, and the nature of the survey. Surveys could be completed in participants' own time. Surveys took approximately 30 minutes to complete. Once the survey was completed, all participants were provided with a list of useful resources that included information relating to self-injury and counselling services.

Data Analysis

Participants were categorised into three groups based on their NSSI history: no history of self-injury; history of self-injury, but not in the last 12 months; and history of self-injury within the last 12 months. Correlations were conducted between all subscales on the Multidimensional Experiential Avoidance Questionnaire and the overall score of the Brief Experiential Avoidance Questionnaire. Multinominal logistic regression was used to assess the overall and unique contributions of unidimensional and multidimensional facets of experiential avoidance on history of self-injury.

<div align="center">

Results

</div>

Preliminary Results

All analysis were conducted in SPSS version 28. Two cases had more than 50% of data missing so they were removed from the dataset. Remaining missing data ($\leq 1.3\%$ across variables), was missing completely at random, $\chi^2(3413) = 3453.004. p = .312$. Expectation maximisation was used to impute the missing data (Tabachnick & Fidell, 2013).

Most participants were born in Australia ($n = 483$, 76.4%), 448 (70.9%) reported a lifetime history of self-injury, and 354 (56%) reported a diagnosis of a mental illness. The most commonly reported diagnoses were comorbid anxiety and depression (54%), anxiety disorder (20%), and depression (13.5%). Of the participants with a history of self-injury, 281 (44.5%) reported engaging in the behaviour in the last year. Age of onset of self-injury ranged from 10 – 36 years ($M = 13.32$, $SD = 3.79$). Most common methods of self-injury included cutting (36.6%), banging or hitting yourself (9.5%), and severe scratching (6.3%). More

females (71.9%) than males (51.1%), and all participants who self-reported their gender reported a history of self-injury, $\chi^2(2) = 35.37$, $p < .001$, V = .24. Younger participants reported higher levels of experiential avoidance across all subscales of the Multidimensional and Brief Experiential Avoidance Questionnaire (see Table 4.1). Therefore, age and gender were statistically controlled in the multinominal regression. Large, positive, correlations ($r > .80$) were observed between the total score of the Brief Experiential Avoidance Questionnaire and the behavioural avoidance and distress aversion subscales of the Multidimensional Experiential Avoidance Questionnaire.

Multinominal Logistic Regression

Unidimensional Experiential Avoidance and Non-suicidal Self-injury

A multinominal logistic regression, with the total score for the Brief Experiential Avoidance Questionnaire and controlling for age and gender, significantly differentiated participants with no history of self-injury from those who had previous history of self-injury but not in the last 12 months, and from participants who had self-injured in the last 12 months, $\chi^2(6) = 57.053$, $p < .001$, Cox and Snell $R^2 = .10$, Nagelkerke $R^2 = .11$. Experiential avoidance was significantly associated with previous and recent engagement in NSSI (see Table 4.2). A second multinominal logistic regression was conducted with recent history of NSSI as the reference category. Experiential avoidance differentiated participants who had never engaged in NSSI and those with a recent history of the behaviour. No significant differences were observed between those with a past and recent history of NSSI (see Table 4.2).

Multidimensional Experiential Avoidance and Non-suicidal Self-injury

A multinominal logistic regression, with all variables entered simultaneously (controlling for age and gender) and never engaged in self-injury as the reference category, significantly differentiated those with a recent history of self-injury from those with no

history and prior history of self-injury, $\chi^2(16) = 84.15$, $p < .001$, Cox and Snell $R^2 = .14$, Nagelkerke $R^2 = .16$. The subscales of behavioural avoidance and repression and denial significantly differentiated participants who had never self-injured and those with recent engagement in self-injury was significantly associated with a previous and recent history of engagement in self-injury (See Table 4.3). A second multinominal regression was conducted with recent history of NSSI as the reference category. The subscales of behavioural avoidance and repression/ denial differentiated those with a recent and previous history self-injury (see Table 4.3).

Table 4.1
Correlations between Variables in the Model

		Never N = 184		Previous History N = 167		Recent History N = 281		2	3	4	5	6	7	8
		M	*SD*	*M*	*SD*	*M*	*SD*							
1	Age	25.18	8.28	25.01	6.27	24.90	6.86	-.15***	-.17***	-.17***	-.11**	-.14***	.11**	-.17***
2	Behavioural Avoidance	37.98	9.39	40.22	9.40	39.82	10.15	-	.60***	.54***	.46***	.38***	-.44***	.81***
3	Distress Aversion	45.24	11.62	47.70	11.80	49.40	12.68		-	.42***	.50***	.44***	-.24***	.80***
4	Procrastination	27.59	6.78	29.75	7.07	30.74	7.26			-	.30***	.46***	-.44***	.68***
5	Distraction and Suppression	27.28	6.35	29.16	7.35	28.83	6.32				-	.36***	-.04	.60***
6	Repression and Denial	37.10	11.27	40.56	11.63	44.56	12.15					-	-.17***	.68***
7	Distress Endurance	46.61	7.24	44.85	8.35	43.61	8.78						-	-.42***
8	BEAQ	49.73	12.17	54.13	12.06	54.55	12.01							-

*$p < .05.$ **$p < .01.$ ***$p < .001.$

Table 4.2

Predictor Coefficients for the Model Predicting History of NSSI Using Unidimensional Measure

Regression Variable	Past History of NSSI[a]		Recent History of NSSI[a]		Past History of NSSI[b]	
	B (SE)	Exp (*B*) [95% CI]	*B (SE)*	Exp (*B*) [95% CI]	*B (SE)*	Exp (*B*) [95% CI]
Intercept	-3.23 (.86)***		-4.23 (.80)***		1.00 (.80)	
BEAQ	.03 (.01)**	1.03 [1.01, 1.05]	.04 (.01)***	1.05 [1.03, 1.06]	-.02 (.01)	.98 [.97, 1.00]
Age	.00 (.02)	1.00 [.97, 1.04]	.01 (.02)	1.01 [.98, 1.04]	-.00 (.02)	1.00 [.97, 1.03]
Gender	.89 (.26)***	2.42 [1.45, 4.05]	1.18 (.24)***	3.27 [2.03, 5.26]	-.30 (.24)	.74 [.46, 1.19]

[a]Reference category: Never Engaged. [b]Reference category: Recently Engaged. $p < .05.$ **$p < .01.$ ***$p < .001.$

Table 4.3

Predictor Coefficients for the Model Predicting History of NSSI Using Multidimensional Measure

Regression Variable	Past History of NSSI[a]		Recent History of NSSI[a]		Past History of NSSI[b]	
	B (SE)	Exp (*B*) [95% CI]	*B (SE)*	Exp (*B*) [95% CI]	*B (SE)*	Exp (*B*) [95% CI]
Intercept	-3.42(1.41)*		-2.69 (1.27)		-.73 (1.27)	
Age	.01 (.02)	1.01 [.97, 1.04]	.01 (.02)	1.01 [.98, 1.04]	-.01 (.02)	1.00 [.97, 103]
Gender	.89 (.27)***	2.43 [1.44, 4.12]	1.15 (.25)***	3.15 [1.94, 5.12]	-.26 (.25)	.77 [.48, 1.25]
Behavioural Avoidance	.01 (.02)	1.01 [.97, 1.04]	-.03 (.02)*	.97 [.94, 1.00]	.04 (.02)*	1.04 [1.01, 1.07]
Distress Aversion	.00 (.01)	1.00 [.98, 1.03]	.02 (.01)	1.02 [.99, 1.04]	-.02 (.01)	.98 [.96, 1.01]
Procrastination	.02 (.02)	1.02 [.98, 1.07]	.03 (.02)	1.03 [1.00, 1.07]	-.01 (.02)	.99 [.96, 1.03]
Distraction & Suppression	.02 (.02)	1.02 [.97, 1.06]	-.01 (.02)	.99 [.95, 1.03]	.03 (.02)	1.03 [.99, 1.07]
Repression & Denial	.01 (.01)	1.01 [.99, 1.04]	.05 (.01)***	1.05 [1.03, 1.07]	-.04 (.01)***	.97 [.95, .99]
Distress Endurance	-.00 (.02)	1.00 [.96, 1.03]	-.03 (.02)	.97 [.94, 1.01]	.02 (.02)	1.02 [.99, 1.06]

[a]Reference category: Never Engaged. [b]Reference category: Recently Engaged. $p < .05.$ **$p < .01.$ ***$p < .001.$

Discussion

The aim of this study was to explore the association between experiential avoidance and self-injury using both unidimensional and multidimensional measures of experiential avoidance. Overall, the unidimensional questionnaire differentiated individuals with no history of self-injury from those with a history but who had not engaged in the last 12 months, and those with a recent history (had engaged in the last 12 months). However, when analysed using the multidimensional subscales only behavioural avoidance (which was

highly correlated with the Brief Experiential Avoidance total score) and repression/denial

subscales differentiated those who had a recent history of engagement from those who had no

history of engagement and those who had a previous history of engagement. No subscales

differentiated those with no history and a previous history of engagement.

As expected, given that the Brief Experiential Avoidance Questionnaire (Gámez et al.,

2014) is a shortened version of the Multidimensional Experiential Avoidance Questionnaire

(Gámez et al., 2011), moderate to large correlations were found between measures. There

were large correlations between the behavioural avoidance and distress aversion subscales of

the Multidimensional Experiential Avoidance Questionnaire and the total score of the Brief

Experiential Avoidance Questionnaire, suggesting these could be responsible for the majority

of the associations observed when using the Brief Experiential Avoidance Questionnaire.

Items that load on to the behavioural avoidance subscale of the Multidimensional

Experiential Avoidance Questionnaire capture an individual's tendency to actively avoid

situations that they find uncomfortable or physically distressing (e.g. "*I go out of my way to

avoid uncomfortable situations*"; Gámez et al., 2011). When we consider the early definition

of experiential avoidance being the avoidance of uncomfortable *internal* experiences, this

subscale does not appear to be tapping into the construct of experiential avoidance. The

Experiential Avoidance Model (Chapman et al., 2006) suggests that a stimulus occurs that

elicits an emotional response. However, if individuals are avoiding the situations that evoke

the internal response it suggests that they would not have the resulting uncomfortable internal

experiences. The repression and denial subscale of the Multidimensional Experiential

Avoidance Questionnaire taps into an individual's attempt to mentally distance themselves

from distressing experiences or feelings, or a lack of awareness of one's feelings or distress

(Gámez et al., 2011). However, if individuals attempt to repress or deny an emotion that they

consider to be unpleasant, the emotion may actually intensify rather than subside (Amstadter, 2008). As such use of such a strategy may increase risk of self-injury.

Together these findings suggest that further refinement of our existing theoretical understanding of experiential avoidance and self-injury may be required. Our existing models tend to explore avoidance as a global construct (Chapman et al., 2006; Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009). Within these models the role of avoidance is purported to play different roles such as the avoidance of unpleasant things or situations (Nock & Prinstein, 2004), internal experiences (Chapman et al., 2006), emotional cascades (Selby & Joiner, 2009), as well as situations and emotions (Hasking et al., 2017). However, the current findings highlight that it may be specific aspects of experiential avoidance that are responsible for this association with self-injury. Additionally, while behavioural avoidance, changing our behaviour to avoid situations, people, or objects that lead to these uncomfortable internal experiences is part of Hayes' (1999) description of experiential avoidance, the Experiential Avoidance Model is more focused on avoidance of internal states (Chapman et al., 2006). By refining our models to examine the specific facets of avoidance or experiential avoidance that are associated with the onset and maintenance of self-injury we will improve our understanding of who is likely to engage in self-injury. More specific models will in turn improve our ability to provide more targeted interventions in clinical settings, so that our interventions are focused on the specific facets of avoidance that are associated with why people may engage in self-injury.

Limitations

When considering the findings of the current study it is important to do so with some limitations in mind. Firstly, due to the data being cross-sectional, we are unable to draw conclusions regarding the temporal sequencing of events. Secondly, as the survey was advertised as a study specifically exploring self-injury and participants self-selected to take

part, the generalisability of the study may be limited. Future research should consider replicating this study within clinical and other community samples.

Conclusion

Non-suicidal self-injury is a prevalent and widespread behaviour associated with adverse consequences, including a greater likelihood of future suicidal ideation and behaviours (Kiekens et al., 2018). It is therefore critical that we have a deeper understanding of the mechanisms associated with the onset and maintenance of self-injury. The findings of the current study suggest that conceptualising experiential avoidance as a global construct may be missing the specific facets of avoidance, such as behavioural avoidance and repression and denial, that are involved in why people engage in self-injury. In addition, taking this more fine-grained view highlights that aspects of experiential avoidance (as measured by the Multidimensional Experiential Avoidance Questionnaire) do not map very closely on to experiential avoidance as defined in the Experiential Avoidance Model. By refining our existing theoretical models to only focus on specific aspects of avoidance associated with self-injury, may improve and advance our understanding of who may engage in self-injury. This in turn can improve clinical interventions to support individuals who engage in self-injury. If other studies replicate these findings, it will have significant conceptual, methodological, and theoretical implications for our existing understanding of the role experiential avoidance plays in self-injury.

Chapter 5: A lived experience perspective on the role of experiential avoidance in non-suicidal self-injury

Introduction to Chapter 5

In the preceding chapters I established that there is an association between experiential avoidance and self-injury. In Chapter 2, I found that experiential avoidance was able to differentiate individuals with and without a history of self-injury over and above the shared variance between emotion-related constructs. In Chapter 3, I found only 19 studies that reported an association between experiential avoidance and self-injury had been published since 2006 (when the Experiential Avoidance Model of Self-injury was published; Chapman et al., 2006). However, for the studies included in the meta-analysis, there was only a small to moderate pooled effect and there was large heterogeneity between studies. Additionally, I was unable to rule out publication bias, most studies were conducted with university samples, and used unidimensional measures to capture the construct of experiential avoidance. Therefore, in Chapter 4, I explored the associations between experiential avoidance using both unidimensional and multidimensional measures of experiential avoidance. The unidimensional measure, The Brief Experiential Avoidance Questionnaire (Gámez et al., 2014), was able to differentiate between all three groups (those with no history of self-injury, those with past history of self-injury, and those with recent history of self-injury). However, when analysed with the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011), only the subscales of behavioural avoidance and repression/denial were able to differentiate those with no history of self-injury and those with recent history of self-injury and those with a past and recent history of self-injury.

Given the inconsistencies in these findings, in Chapter 5, I decided to ask people with lived experience of self-injury for their perspective on the role avoidance played in their engagement in self-injury. However, due the interchangeability of the terms experiential

avoidance and avoidance in the literature (Chapman et al., 2006; Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009), I framed the interviews around the broader construct of avoidance.

This chapter is under review in a peer-reviewed journal. Ethical approval, participant information sheet and informed consent, useful resources, interview guide, thematic map, and excerpts from reflexive journal can be found in Appendix D, F, G, H, I, and J respectively.

Reference: Haywood, S. B., Hasking, P., & Boyes, M. E. (under review). "It's not avoiding anything: Exploring avoidance in the context of self-injury". *Qualitative Research.*

Author contribution statement

Author	Contribution	Acknowledgement[*]
Sophie Haywood	Development of research question, data collection, data management, data analysis, interpretation of results and discussion, manuscript preparation, reviewing and editing of drafts.	
Penelope Hasking	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	
Mark Boyes	Assisted with development of research question, interpretation, and reviewing and editing of drafts.	

[*]I acknowledge that these represent my contribution to the above research output

Abstract

Introduction Non-suicidal self-injury is a concerning and prevalent behaviour, particularly among adolescents and university students. Many theoretical models focus on the role avoidance plays in self-injury but there is no consensus on what is being avoided. The aim of this study was to gain insight from individuals with lived experience of self-injury to better understand the role of avoidance in self-injury.

Methodology Thirty-five interviews were conducted with individuals with lived experience of self-injury (18 – 45 years). Data was analysed using Braun and Clarke's reflexive thematic analysis approach.

Analysis Three themes were developed to address our aim: Theme 1: Active not passive; Theme 2: A short term distraction; Theme 3: Internal and external. Our analysis suggests that avoidance is not a term that resonates with individuals with lived experience of self-injury. They see engaging in self-injury as an active way of engaging with what they are experiencing and a way of representing their internal pain. Furthermore, individuals are aware this is not a long-term solution but rather what they need in that moment, so they are able function/continue about their day.

Conclusion The theoretical and methodological implications of these findings are that we need to use language that resonate with individuals with lived experience and improve the way avoidance is conceptualised.

Non-suicidal self-injury (NSSI) is the intentional and purposeful damage an individual inflicts on their own body tissue, which is not associated with suicidal intent, and excludes culturally sanctioned behaviours such as tattooing and body piercing (International Society for the Study of Self-injury, 2022). Self-injury is a pervasive behaviour; within community samples, 17% of adolescents, 13% of young adults, and 5% of older adults report a history of self-injury (Swannell et al., 2014). Among in-patient populations the prevalence of self-injury is elevated, with 40 – 80% of adolescents and 20% of adults reporting a history of self-injury (Briere & Gil, 1998; Darche, 1990; DiClemente et al., 1991; Nock & Prinstein, 2004). Notably, this behaviour is particularly prevalent among university students, with one in five reporting a history of self-injury, and many reporting the onset of self-injury in their first year of university (Kiekens et al., 2019; Muehlenkamp et al., 2019). While there are a number of reasons individuals cite for their engagement in self-injury, the most commonly endorsed is to regulate their emotions (Taylor et al., 2018).

Given the emotion regulatory function of self-injury, most models of the self-injury focus on the experience and regulation of one's emotions (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Nock & Prinstein, 2004; Selby & Joiner, 2009). Across these models, a number highlight the role of avoidance in self-injury (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009); however, the terms used to describe avoidance as it relates to NSSI vary across these models. Some propose that the tendency to avoid unwanted emotional experiences heightens risk of NSSI (experiential avoidance, e.g., Chapman et al., 2006), some discuss avoidance of doing something unpleasant or avoidance of social situations (avoidance-escape; e.g., Nock & Prinstein, 2004), others state NSSI can be used to avoid both situations or emotions (Hasking et al., 2017), and some talk about NSSI being a distraction from emotional unpleasant emotional cascades (e.g., Selby & Joiner, 2009). Additionally, it has been suggested that self-injury itself may be a form of avoidance;

specifically engaging in self-injury could allow individuals to avoid distressing thoughts, emotional responses, and situations that may elicit these thoughts, emotions, and/or feelings (Chapman et al., 2006).

Although, from a theoretical standpoint, there does appear to be a link between avoidance and self-injury, it is clear there is no consensus on specifically what is being avoided in the context of self-injury. This is further compounded by the interchangeability of terminology relating to avoidance with some referring to it as avoidance and others as distraction. Findings are also currently limited by the use of measures that conflate a number of closely related constructs, such as psychological inflexibility (Acceptance and Action Questionnaire – I and II; Hayes et al., 1999), alexithymia and distress tolerance (Multidimensional Experiential Avoidance Questionnaire; Gámez et al., 2011). Gaining a deeper understanding of how individuals with lived experience of self-injury understand, conceptualise, and/or experience avoidance could help inform our theoretical models of self-injury, as well as our understanding and measurement of avoidance. In the current study we interviewed a sample of individuals with lived experience of self-injury, with the aim of better understanding the experience of avoidance, and the potential role it plays in NSSI.

Methodology

Participants

Thirty-five participants with a lived experience of self-injury (aged 18 – 44, 25 female, 8 male, 1 trans-male, and 1 non-binary) were interviewed. Most participants were born in Australia (63%) and reported a mental health difficulty/problem (69%). The most common diagnoses were comorbid anxiety and depression (67%), post-traumatic stress disorder (17%), and eating disorders (anorexia and/or bulimia; 12.5%).

Researcher Positionality

The first author is an outside researcher on the topic of NSSI however has been active in research in this area for four years. They hold a degree in psychology, so this may influence the lens through which they view the content. However, they have utilised reflexive practice to reflect and challenge any assumptions they may bring to the participants' experiences. Where there were reactions, these have been discussed with the co-authors and/or the broader research group, some of whom are inside researchers of this topic. The interview guide was developed in collaboration with inside researchers to ensure that questions were relevant and utilised appropriate language.

Data Analysis

Data was analysed in accordance with Braun and Clarke's reflexive thematic analysis approach (2022) using a critical realist/contextualism framework (Braun & Clarke, 2022). Reflexive thematic analysis was selected as we wanted to best represent the lived experience perspective of the role of avoidance in NSSI. As reflexive thematic analysis encourages a deep engagement with the data, and due to a constructionist/interpretivist approach guiding our analysis, we felt this was the preferred approach. Reflexive thematic analysis allows the identification of patterns and themes across a data set and we felt this would best allow us to acknowledge our participants' reality based in their own socio-cultural contexts and experiences (Braun & Clarke, 2022; Madill et al., 2000). It also allows for the acknowledgment and critical evaluation of the researchers' impact on the interpretation of the data and how this may impact or influence the findings (Braun & Clarke, 2022). Within our analysis we adopted an inductive and deductive approach to allow the experience of the participants to guide our findings. The inductive or "*bottom-up*" approach allowed us to identify patterns and themes within the data. Additionally, due to our specific interest in avoidance there were aspects of our analysis that were deductive or "*top-down*" as we were

specifically looking for instances or utterances of avoidance or descriptions of behaviour that theoretical may align with the definitions of avoidance. To maintain confidentiality, non-gendered pronouns have been used through the document.

During the interviewing, transcription, and analysis phases, the first author maintained field notes during, and a reflexive journal after, interviews. This ensured reflexivity and familiarisation with the data; Phase 1 of Braun and Clarke's (2022) guidelines. Familiarisation continued during the transcription process. Nineteen interviews were transcribed verbatim by the first author and 16 were transcribed by three trained undergraduate students. Transcribed data were uploaded into NVivo (v1) software. The first author coded all data inductively at a surface (semantic) and underlying (latent) level (Phase 2) and developed initial themes (Phase 3). Themes were reviewed and refined through discussion with all authors (Phase 4 and 5) and resulted in the final analysis and report (Phase 6).

Materials

A semi-structured interview (See Appendix G) was developed in accordance with our research aim and in conjunction with individuals with lived experience of self-injury. Prior to the interview questions, information was collected regarding the demographic information of the participant, including gender, age, country of birth, and if the participant had a mental health diagnosis. The interview started with broader questions regarding the participants' experiences of self-injury and then moved to more focused questions regarding avoidance, such as "*Tell me about your experience of self-injury*" and "*Sometimes people talk about self-injury being used as a form of avoidance. What are your thoughts on that*?". Additional prompts were included to further explore information provided by participants, to gain a deeper understanding of their experience. The interview guide was trialled with one participant (colleague of the first author with lived experience of self-injury) prior to

advertising for participants. After conducting two interviews, questions were amended to ask participants for demographic information, their motivation for taking part in the study, and to explicitly ask about the role distraction played in their engagement of NSSI. Distraction was included due to the interchangeability of avoidance and distraction within the literature (Chapman et al., 2006; Hasking et al., 2017; Nock, 2009; Selby & Joiner, 2009) and the use by participants.

Procedure

The study was approved by Curtin University's Human Research Ethics Committee in 2020 (HREC2020-0624). After receiving ethical approval, flyers were posted around Curtin University's campus. Participants with a history of self-injury were asked to contact the first author if they were interested in taking part in a face to face/online interview. All interviews were conducted between November 2020 and April 2021 either face to face or online, depending on the participant's preference. Thirty interviews were conducted face to face (only 1 was conducted off campus) and five interviews were conducted online. Participants were sent the information sheet prior to the interview and were asked to return the signed informed consent to the first author, prior to their interview. The first author conducted all the interviews (approximately 20 – 40 minutes each). All participants were reimbursed with a $20 gift voucher to thank them for their participation. Participants were also provided with a list of useful resources and a copy of the participant information sheet, at the conclusion of the interview. After interviews were transcribed, they were returned, encrypted, to participants for their approval. No follow-up interviews were conducted.

Analysis

The analysis developed three themes. Theme one **Active not passive** explores how participants do not see engaging in NSSI as an avoidance of feelings, thoughts, or emotions, but rather as an active way of dealing with what they are experiencing. Within this theme participants detailed their feeling of being in control, actively engaging with their experiences, and how NSSI can serve a pre-emptive function, preventing escalation of unwanted emotions. Theme 2, **A short-term distraction**, explores the importance of semantics and language related to how participants describe their experience of engaging in self-injury and their awareness that self-injury is not a long-term solution. Finally, Theme 3 **Internal and external** has a dual meaning in that participants view their reasons for engaging in self-injury as more than just dealing with internal feelings (experiential avoidance); it also allows them to deal with external experiences. This theme also illustrates that engagement in self-injury allows internal experiences to become external (physical) representations of what they are dealing with internally. Data extracts are included to substantiate each theme. Extracts have been edited to improve readability by including punctuation and removing utterances such as um or er. Additionally, irrelevant details have been removed, such as interviewer comments, and extracts from the same participants at different time points have been joined. This is indicated by [ ] in the report.

Theme 1: Active Not Passive

Avoidance is often discussed as being a "maladaptive", or not dealing with issues, or a passive or ineffective way of dealing with problems (D'Zurilla & Nezu, 1999; Ottenbreit & Dobson, 2004). When explicitly asked about avoidance, participants often stated the opposite to be true, in that they were actively engaging and doing something to resolve or reduce the intensity of their experience. As P35 stated "*When I'm engaging in the activity [self-injury], it's more like I feel like I'm getting a sense of control because I'm choosing to partake in the*

activity [self-injury]". This sentiment was reiterated by P16 who referred to it as a time to engage with their emotions "*time to deal with those emotions*". Likewise, P31 stated "*it's like a pause [ ] all you're doing is focusing on the act itself, so that's probably why it feels like a pause button*". The experience of engaging in self-injury allowed participants to actively deal with what they were experiencing such as overwhelming feelings or the chaos in their heads. These explanations align with current theoretical models, in that when experiences feel overwhelming or individuals have limited emotion regulation strategies they are likely to engage in self-injury in order to avoid or distract from the internal experience (Chapman et al., 2006; Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009).

An additional aspect to participants seeing engaging in self-injury as active was the pre-emptive function that NSSI served for some people. The Experiential Avoidance Model posits that a stimulus elicits an emotional response, which in turn prompts the individual to want to avoid these uncomfortable internal experiences (Chapman et al., 2006). However, a common experience among participants was engaging in self-injury *prior* to any stimulus. As P27 discussed "*if I hadn't done it in the morning then I wouldn't be able to concentrate in classes*". Similarly, P25 discusses their need to engage in self-injury prior to their practicum placement "*For placement I always did it in the morning before I start the day*". This was seen as the action of preparing themselves for anything that may arise during their day. Participant 14 discussed the parallels between how people started their days with coffee "*it is a way of coping with similar to like people would get up and start their day with coffee, I would get up and start my day by [self-injuring]*". Collectively this demonstrates how self-injury actively allows individuals to actively cope with their day rather than as an avoidance of emotions already elicited.

Theme 2: A Short-Term Distraction

Participants discussed being aware that engaging in self-injury was not resolving the issues they were experiencing but rather that it provided them with a temporary moment of respite from what they were experiencing at that time. This aligns more closely with definition of distraction (defined as a lack of attention; North, 2011), in that they just need to not pay attention to what they are experiencing in the moment by focusing on something else. Participant 31 stated *"It [self-injury] feels like a band-aid solution. It's not a solution. Feels like a very quick fix"*. Participant 30 substantiated "*it doesn't really help in a long-term, but it helps during that moment*".

Individuals are aware this is not a long-term solution, but it dampens or reduces the experience long enough for them to be able to function for the rest of the day or facilitates sleep. Participant 11 elaborates:

> *I know that I have done something about it, so I can go to sleep sort of thing and or just get on with my day [ ]. Those feelings have been just put to the back of your mind, they are always there, and they come back.*

Additionally, P24 stated "*after I did it, I guess I would still obviously feel like shit, you know, I would probably still be crying and stuff, but it did kind of sooth those feelings*".

When explicitly asked about self-injury being used as a form of avoidance, as part of our deductive approach, most participants had a visceral reaction - some recoiled, grimaced, or looked confused. Participate 34 responded "*I don't really know what you are avoiding by hurting yourself. I don't know what on earth you could be avoiding. You're obviously in a bad place, trying to find any possible way that helps you to cope. [ ] It's not avoiding anything.*"

While their descriptions of their reasons for engaging in self-injury and acknowledgment that is it a short-term fix that does not necessarily address the underlying issue do map on to our theoretical understanding of avoidance (Chapman et al., 2006;

Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009), it appeared that the word avoidance did not resonate with the participants. This illustrates the importance of language and including the voice of lived experience in our research. People do not resonate with the word avoidance. Yet, when explicitly asked if they considered self-injury to be a distraction from what they were experiencing, most participants endorsed this as an accurate description of their behaviour.

Theme 3: Internal and External

The theme of Internal and External explores how self-injury is viewed as being used to externally represent the extent of an individuals' internal pain as well as to cope with external experiences. Participants discussed how self-injury allowed them to make internal pain visible through external means. Participants discussed how internal experiences were not believed to be serious by significant others in their lives, whereas external or visible pain or injuries were. Participant 22 substantiates "*I was like turning emotional pain into something physical*". Similarly, P8 stated "*I still struggle to deal with the mental pain or psychological pain of shame or hurt and the physical pain it's just such an easy way to [ ] let that out*". Likewise, P14 discussed "*that manifestation of it into physical form is almost like it's flowing away, not that the emotion is going, but you're able to release the emotion in a physical form*".

External events, and their associated emotional response, that can lead to individuals engaging in self-injury include interpersonal issues such as conflict with friends or romantic partners. Our analysis captured how participants engaged in self-injury to avoid relationships ending, as P28 discussed:

> *I was in a relationship at the time, and I didn't want him to leave me, so I threatened to do it [self-injure], or do it [self-injure] and then they feel really bad and be like "oh, like I'll help you through this or whatever", and I felt cared about.*

Additional external situations such as attending school or interpersonal conflict with peers was detail by participants. Participant 7 elaborates "*being sad like about like social things, like school and not feeling like I fit in and having issues with friends*". This quote highlights the interconnectivity between the feeling and the situation. The participant identifies how the situation (the external) is eliciting the feeling of being sad (the internal). While P1 discussed the internal experience "*angry, sad distressed, not feeling worthwhile. Like just wanting someone to care*".

Conversely, rather than avoiding feelings our analysis showed how self-injury allowed engagement with the feelings when feeling numb. P14 elaborated:

There's been experiences where just wanting to feel something I was on a lot of meds that were making me feel really numb, [ ] couldn't cry, couldn't do anything, and I just wanted to feel something, I wanted to feel like I was still somewhat in touch with some sort of feeling 'cause everything was just numb

This also highlights that there is an incongruence between the way individuals conceptualise their reasons for engaging in self-injury and the way we theorise mechanisms underlying self-injury. Participants often reported the external event as the reason for their engagement and not the feelings that the stimuli elicited. While some theoretical models do include this avoidance of external events (Hasking et al., 2017; Nock & Prinstein, 2004), a number of models only focus on the avoidance of internal experiences (e.g., Chapman et al., 2006; Selby & Joiner, 2009).

Concluding Comments

Our aim was to gain a deeper understanding of the subjective experiences and perspectives of individuals who engage in self-injury and the role avoidance may or may not play in their self-injury. Providing clarity on the lived experience of avoidance could inform our theoretical understanding of both avoidance and self-injury, which in turn could inform

the way we measure avoidance as a construct. Without this it is difficult to fully understand or measure the construct of avoidance in relation to self-injury. The research conducted using a constructivist/interpretivist lens.

The findings of our study highlight that understanding avoidance in the context of self-injury is complicated. Participants did not resonate with the label of avoidance, but nonetheless when we look at their descriptions of how it distracts from the internal states and external experiences, their experiences do map on to existing theoretical explanations of why individuals may engage or continue to engage in self-injury (Chapman et al., 2006; Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009). The findings from this study have theoretical implications regarding how we differentiate avoidance and distraction.

Concerns around the inconsistencies in the way avoidance is conceptualised have been previously raised by Hasking and colleagues (2017). They detailed how some authors conceptualised this as thought suppression (Najmi et al., 2007), a propensity to avoid unwanted emotions (Howe-Martin et al., 2012), or assess it using constructs that are assumed to be closely related to avoidance such as alexithymia (difficulty in expressing or differentiating one's feelings; Nemiah & Sifneos, 1970; Anderson & Crowther, 2012). Relating to this interchangeability of language regarding avoidance, this lack of specific definitions around constructs has also been identified in the measures we use to assess emotion related constructs, which share considerable overlap (Haywood et al., 2022; Juarascio et al., 2020). Whilst, in the study by Haywood and colleagues (2022) experiential avoidance did differentiate individuals with and without a history of self-injury, when looking at the underlying factor structure all emotion related constructs loaded on to a single factor.

The findings of the current study also highlight the importance of the language we use to conceptualise these constructs, not only in research and theory but also in measurement. From a research perspective it raises the issue regarding how we can clearly delineate and

define avoidance, or the specific aspects of it, so that they are specific to avoidance and not overlapping with similar constructs such as thought suppression or experiential avoidance. From a theoretical perspective we need to consider refinement of our existing models. Rather than using the umbrella term avoidance as a "catch all" which could result in theoretical and measurement confusion, we need to be more specific in what aspects of avoidance are associated with why an individual may engage in self-injury. From a measurement perspective, questionnaires used to capture the construct of avoidance, should use language that resonates with individuals who engage in self-injury and items should be representative of their experience, as well as reflect our theoretical understanding of the constructs. Popular existing measures of experiential avoidance such as the Brief Experiential Avoidance Questionnaire (Gámez et al., 2014) include items that capture the external experience "*I go out of my way to avoid uncomfortable situations*", yet this avoidance of external situations is not represented in some of our theoretical models, which only focuses on the internal experience (Chapman et al., 2006; Selby & Joiner, 2009). Likewise, the above example uses the word avoid, which may resonate with individuals that do engage in self-injury to avoid external events but may not resonate with individuals who engage in self-injury as a way of avoiding their emotions. Most participants viewed their behaviour as distracting from their experience rather than avoiding it. They are aware this is not a long-term fix or solution and that the feelings will return but they just need something, in that moment, to help them to cope. The issue we face with items that do not resonate with an individual's experience is that they are likely to find measures confusing, or irrelevant, and are unlikely to endorse statements on the measure (Synodinos, 2003).

Limitations of our study include the self-selectiveness of our sample; it may be that we only have the perspective of individuals that are comfortable discussing their experiences. A second consideration is that some participants discussed events that had occurred several

years prior and therefore may be subject to potential memory errors or recall bias. Additionally, if participants had support from a mental health professional, increased emotional awareness may have influenced the lens through with they view their reasons for engagement in self-injury. While not a limitation for our study, as we were specifically interested in university students, future research should consider recruiting community and clinical samples to see if the negative view of avoidance is shared within those groups.

In conclusion, individuals with lived experience of self-injury see their reasons for engaging as more than avoidance or not as avoidance. When asked explicitly about engaging in self-injury as a way of avoiding their experiences most people did not agree with this statement. The experience of self-injury was seen as an active way of dealing with both internal and external experiences. Participants were cognizant that engaging in self-injury was not a long-term solution but rather a short-term distraction that allowed them to function in the moment. While the theoretical explanations of the role of avoidance in self-injury is in line with participants descriptions of their reasons for engaging in self-injury, the language we use does not appear to resonate with their experience or how they view their behaviour. We know that avoidance is a multifaceted construct however our existing models appear to use the word as a global catch-all definition. The findings of this study suggest that by using terminology such as avoidance, we may be missing the nuances of avoidance, which has implications for how we measure avoidance and our current understanding of why people may engage in self-injury.

Chapter 6: General Discussion

In this chapter, I will restate the primary objectives of the thesis and synthesise the key findings from across the studies. Drawing on the findings of my studies, I propose a new conceptual framework and discuss theoretical, measurement, and clinical implications. Limitations of the body of research and directions for future research are also discussed.

Summary of Aims and Findings

The overarching aim of this thesis was to explore the role of experiential avoidance in relation to self-injury. This was achieved across four studies. Study 1 explored the potential problem of shared variance in emotion-related constructs (Juarascio et al., 2020). Experiential avoidance was one of four predictors that uniquely differentiated between individuals with and without a history of self-injury. Once the unique contribution of experiential avoidance in differentiating individuals with and without a history of self-injury was established, in Study 2, I conducted a systematic review and Robust Bayesian Meta-analysis to identify existing literature that had also found an association between experiential avoidance and self-injury. Nineteen studies reported an association between experiential avoidance and history of self-injury, consistent with theory suggesting experiential avoidance plays a pivotal role in self-injury. Of the studies included in the meta-analysis, all used global, rather than multidimensional, measures of experiential avoidance to capture the construct.

Study 3 aimed to explore the relationship between the unidimensional and multidimensional measures of experiential avoidance and their associations with self-injury. When evaluating experiential avoidance as a unidimensional construct (The Brief Experiential Avoidance Questionnaire; Gámez et al., 2014) it differentiated individuals with no self-injury history, with a history but not in the last 12 months, and those with a history in the last twelve months. However, it did not differentiate those with a recent history and those with a prior history of self-injury. When exploring this relationship using a multidimensional

measure of experiential avoidance (The Multidimensional Experiential Avoidance Questionnaire; Gámez et al., 2011), only the factors of behavioural avoidance and repression/denial differentiated those with a recent history from those with who had never engaged in self-injury, and those with a previous history from those with a recent history of engagement in self-injury. No factors of experiential avoidance were able to differentiate between individuals with no history and past history of self-injury.

In Study 1, 2, and 3, I established that experiential avoidance appears to be a mechanism that is able to differentiate between individuals who have no history and people who report a history of self-injury but there appear to be inconsistent findings. Therefore, in Study 4, I sought to gather first-hand perspectives of experiential avoidance from individuals with lived experience of self-injury to help clarify how they understand this phenomenon. Three themes were identified across these interviews: *Active not Passive, A Short-term Distraction, and Internal and External.* Together these themes highlighted that while the way in which individuals describe their behaviour does map onto the Experiential Avoidance Model of Self-injury (Chapman et al., 2006), individuals do not view self-injury as avoidance, they do not view it as a long term solution, nor do they associate it with only internal experiences.

This thesis therefore contributes two key findings: firstly, across studies we found support for the role of experiential avoidance in being able to differentiate between individuals with and without a history of self-injury (Studies 1 – 3). However, despite experiential avoidance being recognised as a multidimensional construct, most studies use unidimensional measures to capture experiential avoidance. When we look at experiential avoidance as a multidimensional construct only two aspects of experiential avoidance, specifically behavioural avoidance and repression/denial, are able to differentiate those with and without a history of self-injury. Secondly, whilst individuals described experiences that

align with the notion of experiential avoidance as described in the Experiential Avoidance Model (Chapman et al., 2006), the language around avoidance does not resonate with individuals with lived experience of self-injury (Study 4).

The Language of Experiential Avoidance

The Experiential Avoidance Model of Self-injury (Chapman et al., 2006) was developed as a theoretical tool for researchers and academics to understand the processes associated with why an individual may or may not engage in self-injury. Consequently, this language has proliferated into the vernacular of mental health clinicians and those supporting clients who self-injure. Although providing a common language for researchers and mental health professionals, utilising complex psychological terminology may impede effective communications with individuals outside of the field. As a result, the intended message may not be effectively communicated to individuals in the general population. This may be problematic given that it does not resonate and may not accurately reflect the experience of people who self-injure. From talking with individuals with a history of self-injury the word avoidance is not representative of their experience.

Capturing the underlying mechanisms described in the Experiential Avoidance Model (Chapman et al., 2006) more accurately will improve the utility of our existing theoretical models and measures that we use to capture experiential avoidance, and importantly, will allow us to use language that reflects the reality of this experience. The findings of this body of research suggest that a more accurate way of capturing experiential avoidance is for it to be encompassed in the idea of emotion tolerance. Emotion tolerance is an individual's capacity to deal with internal sensations (emotions, thoughts, feelings) and the external experiences (situations, people, places, and things) that elicit these internal experiences. Emotion tolerance as a term was first coined by Siegel (1999) and he defined this as individual's ability to experience and regulate their emotions in an effective way. Siegel

(1999) suggested that people with high emotion tolerance are more accepting of their emotions, including negative ones, and find ways to cope with them. Emotion tolerance is an overarching concept that encompasses a range of emotion-related constructs such as distress tolerance and avoidance. As per Study 1, relating to the shared variance between emotion related constructs and the difficulty teasing apart the emotion related constructs, this overarching construct of emotion tolerance may be sufficient to capture all of the related constructs.

Building on this idea, I suggest that all individuals have a capacity to deal with their emotions but in the face of changing internal (e.g., sadness) and external (e.g., academic pressure) factors, this capacity may deplete. Conceptualising this process as tolerance, rather than avoidance, allows us to take a strengths-based perspective on how people may process their emotions at any given time. For example, one of the key components in the recovery framework of self-injury (Lewis & Hasking, 2021), is fostering self-efficacy. Focusing on predictors of self-injury that are considered deficits or weaknesses, such as experiential avoidance, is not in keeping with this. It may be more helpful, and more accurate, to view experiential avoidance as emotional tolerance where there are factors that impact upon the individual's capacity to experience and tolerate emotion. This fosters a sense that although there may be days where capacity to tolerate emotion is lower, there is also the possibility or scope for agency to respond to those factors affecting one's capacity for emotional tolerance.

Emotion Tolerance: A Conceptual Framework for Understanding Self-injury

Based on the work outlined in this thesis, and prior theoretical accounts of experiential avoidance and emotion tolerance, I propose a new conceptual framework (see Figure 6.1) that describes the function that self-injury may serve for the individual.

Figure 6.1
Conceptual Framework for when Individuals may Engage in Self-Injury
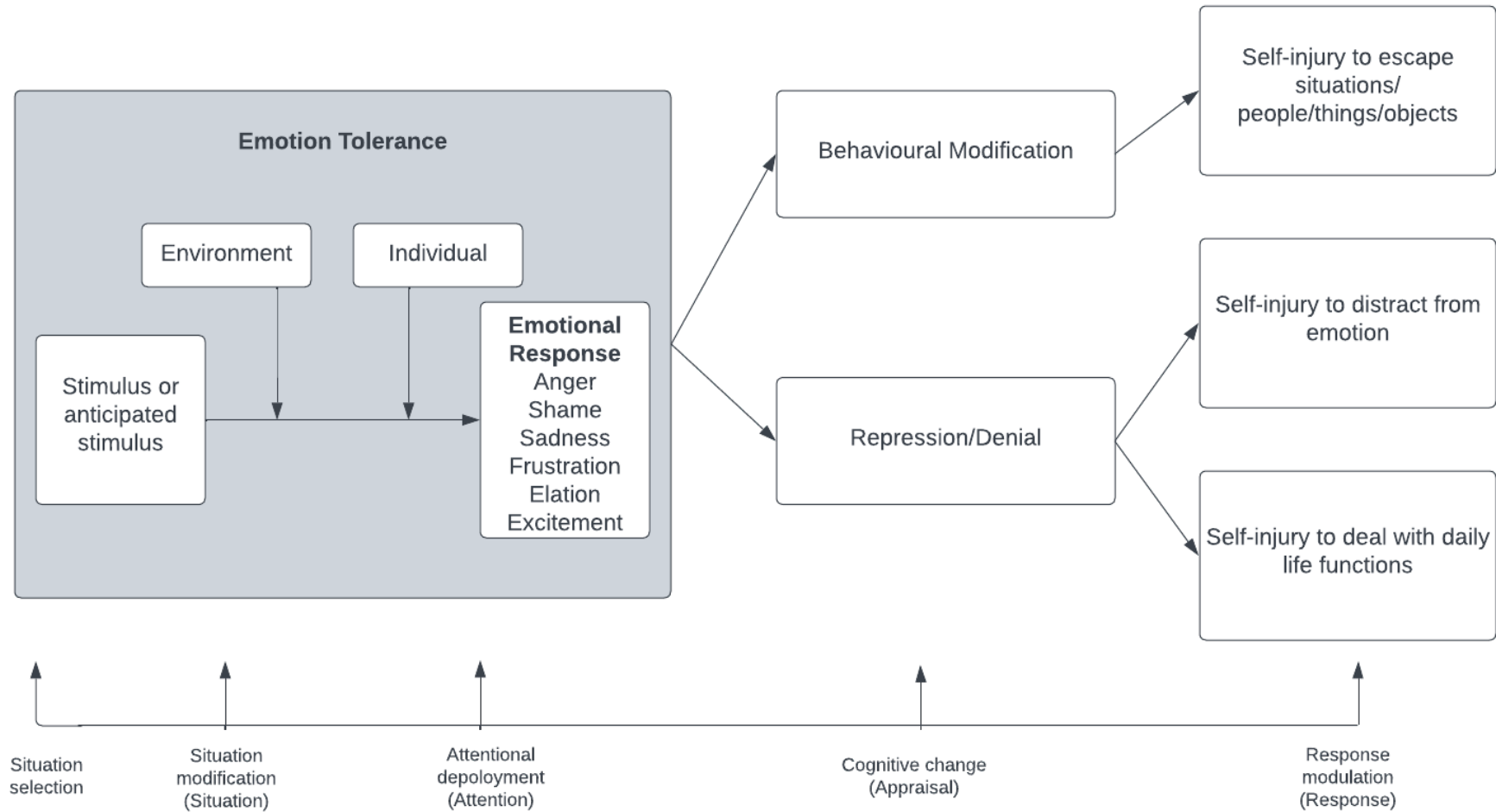
Specifically, my findings suggest that we be more specific about what aspects of experiential avoidance, specifically behavioural avoidance and repression/denial, are associated with self-injury and that the Experiential Avoidance Model could be adapted to reflect these aspects Although the Experiential Avoidance Model focuses on the avoidance of internal experiences, participants in Study 4 highlighted the importance of the external stimuli that lead to those internal experiences. Additionally, participants discussed that self-injury serves a pre-emptive function, in that it is not always avoidance of an emotion but a way of preparing for their day. Furthermore, the act of engaging in self-injury is seen as an active way of dealing with emotions rather than avoiding them. Therefore, I propose the first stage of the framework would be that the individual encounters a stimulus or perceives an anticipated stimulus which leads to an emotional response. These emotional responses can be negatively or positively valenced in nature. I then propose that the strength or direction of this relationship is moderated by the environment the individual is in as well as the individual's mood and expectations. This incorporates aspects of Zinberg's (1984) Interaction Model. This model suggests that the environment the individual is in, coupled with the individual's mood and/or expectations, will determine the course of action the individual takes. For example, if an individual has had a bad night's sleep, had a fight with a significant other, and are now in a lecture feeling overwhelmed, even though their emotion tolerance may be low and they know that engaging in self-injury may make them feel better, the current environment may prevent them from engaging in self-injury. However, if that same individual had the same challenges but was at home watching an online lecture, they may choose to engage in self-injury at that time. Likewise, if the individual had a good night's sleep, were not fighting with their significant other, but was feeling stressed during the lecture their capacity to tolerate emotion may be greater and therefore the thought of self-injury may not cross their mind in that moment in time.

Additionally, my proposed conceptual framework was informed by the Process Model of Emotion Regulation (Gross, 2008) to understand how this capacity to tolerate emotion may influence the decision to engage in self-injury. Whilst emotion regulation is the main reason individuals report for engaging in self-injury (Taylor et al., 2018), it has been highlighted that simply using a blanket term of emotion regulation tells us little of the processes that are associated with this regulation of emotion through self-injury (Mckenzie & Gross, 2014). Drawing on McKenzie and Gross' (2014) application of the process model of emotion regulation to self-injury, I suggest that reduced emotional tolerance impacts the individual's ability to navigate the cognitive and behavioural processes required to regulate emotion, which may increase risk of self-injury. These five points of regulation include: situation selection (e.g., choosing to avoid a situation that causes distress), the modification of the situation (e.g., to receive care giving), deployment of attention (e.g., to distract from intense thoughts), cognitive change (e.g., to reduce the intensity of the thoughts), and finally response modulation (e.g., suppressing behavioural expression of emotion). The first phases of emotion regulation (the situation and attentional deployment) underpin emotion tolerance, while the later phases (cognitive change, response modulation) are associated with the decision to self-injure.

In Study 4, I found only behavioural avoidance and repression/denial subscales of the Multidimensional Experiential Avoidance Questionnaire (Gámez et al., 2011) differentiated those with and without a history of self-injury. As such I propose that the focus on experiential avoidance be limited to those aspects. If an individual has experienced or anticipated a stimulus likely to evoke an emotional response they are in an appropriate environment, and their emotion tolerance is stretched to capacity, they make take one of two routes. If they are inclined to restrict their interaction with people, situations, objects, and/or things (behavioural modification) they may engage in self-injury to escape those experiences.

On the other hand, if the individual is more inclined to repress or deny their emotional experience, they may be more likely to engage in self-injury to either distract from the emotion or to cope with the functions of daily life.

Implications and Avenues for Future Research

Collectively, the findings of this thesis provide support for the role of experiential avoidance in self-injury. However, given that most of the measures used to capture the construct of experiential avoidance are unidimensional and not multidimensional, we should interpret these findings with caution. Furthermore, given that the term avoidance does not resonate with individuals who engage in self-injury, I have proposed a new framing of emotion tolerance as it relates to self-injury.

I have also provided a new conceptual framework that outlines instances where an individual may be more likely to engage in self-injury. This new framework comes from a strengths-based perspective, recognising individuals' capacity to tolerate emotions as well as times when this tolerance may be restricted. This new framework could also provide a good starting point for discussing self-injury in a clinical/therapeutic setting. However, this conceptual framework would need to be tested to see if the proposed relationships hold true. One way of testing this could be using the adapted version of the Emotional Image Tolerance task (Slabbert et al., 2021) or alternatively inducing stress in participants in a lab setting and assessing their emotion tolerance. This could be achieved by asking participants to perform stress inducing tasks (Robinson et al., 2023) and write about a time that their emotional capacity was overwhelmed. Alternatively, this could be assessed using ecological momentary assessment tasks. Ecological momentary assessment could allow us to assess the fluctuation of emotion in real time as well as an individual's emotion capacity at that time. This in turn could allow for assessment of an individual's thoughts around self-injury at that time. Collectively, assessing these constructs in the moment will provide a deeper insight into these

relationships and how they can fluctuate in the moment and how those fluctuation may be associated with self-injury.

Given that some of the measures we currently use to capture experiential avoidance use the word avoidance in their items (e.g., *"I avoid situations if there is any chance that I'll feel nervous."*), these may need to be modified to better capture the construct of experiential avoidance, using language that resonates with people who self-injure. Alternatively, it may be that we need to develop new measures to capture the construct of emotion tolerance, specific to self-injury. Example items could be "*Self-injury helps me to focus*", "*Self-injury allows me to feel in control*", and "*Self-injury prepares me for my day*".

From a clinical perspective, the findings of this thesis suggest that when working with individuals who want to reduce their engagement in self-injury it may be beneficial to work on acceptance of the emotion. Utilising strategies from acceptance and commitment therapy such as working with individuals to accept their emotions rather than attempting to repress/deny them may in turn allow individuals to become more accepting of their emotional experience (Hayes et al., 1999). Likewise, utilising aspects of dialectical behaviour therapy, such as radical acceptance can assist individuals to become more accepting of their emotions as part of the human experience and adapt the way they respond to the emotions (Linehan, 1993). Both strategies allow for the recognition of the strengths of the individual and build on their capacity to tolerate their emotions. Exploring the times or instances they are more likely to engage in self-injury can provide the individual with insight into the times where their capacity to deal with their emotions may have been exhausted. Early identification of the signs of emotion exhaustion may provide avenues to work on early interventions.

Limitations

Each chapter of this research addresses its primary limitations including the cross-sectional design of the studies and the retrospective reporting of self-injury (Chapter 2, 3, 4,

and 5). Whilst these studies provide insight into the associations being assessed, they do not provide insight into how these relationships unfold over time. Therefore, conclusions regarding the temporal nature of the relationship between experiential avoidance and self-injury cannot be drawn. While experiential avoidance is considered to be a predictor of self-injury, it is also possible that self-injury reinforces experiential avoidance. Engaging in self-injury and associating it with distracting from the internal experience can create a negative feedback loop (Chapman et al., 2006). Future studies should consider ecological momentary assessment methods and longitudinal studies to gain a deeper understanding of experiential avoidance and its association with self-injury in real-time and over time. Whilst demonstrating causal inference is challenging in the area of self-injury due to ethical considerations around randomisation, temporal ordering could be assessed through ecological momentary assessment. This would allow a deeper understanding of what aspects of avoidance/experiential avoidance precede and/or follow engagement in self-injury. Additionally, following individuals who engage in self-injury over time may provide a deeper insight into the way avoidance/experiential avoidance my transpire over time. Tracking the same individuals over a number of years will allow for insight into how emotion tolerance, experiential avoidance and self-injury may change over the years, and explore the patterns associated with this. Combining these studies with clinical interventions could also shed light on the most effective therapeutic interventions.

Another limitation is that whilst university students were our sample of interest, given the elevated rates of self-injury within this population (Swannell et al., 2014) and the negative outcomes associated with self-injury for those students (Kiekens et al., 2019), these findings may not be generalisable to other populations including clinical (inpatient) and adolescent samples. We know that individuals within these populations also report higher rates of self-injury (17% adolescents, 20 -80% of adolescent and adult inpatients; Briere &

Gil, 1998; Darche, 1990; DiClemente et al., 1991; Nock & Prinstein, 2004; Swannell et al., 2014). Looking at the role of emotion tolerance and experiential avoidance in self-injury within these populations allows for the exploration of how these processes may differ. For example, exploring the development of emotion regulation strategies across adolescence would allow mapping of these developmental changes on to the new conceptual framework. This could improve the utility of the framework.

This body of research is grounded in the Experiential Avoidance Model (Chapman et al., 2006). Given that other theoretical models such as the Four Factor Model, The Emotional Cascade Model, and the Cognitive-Emotional Model (Hasking et al., 2017; Nock & Prinstein, 2004; Selby & Joiner, 2009) all detail a role for avoidance/experiential avoidance, the role of emotion tolerance should be tested within these theoretical models. Future research exploring the applicability of emotion tolerance in these models of self-injury could potentially improve the utility and accuracy of these models. For example, inclusion of emotion tolerance and refinement of the aspects of experiential avoidance (behavioural avoidance and repress/deny) could improve the predictive utility of the models. Additionally, inclusion of the environmental and individual moderators could provide a more nuanced perspective of when individuals are more likely to engage in self-injury. Furthermore, modifying the existing models to use language that is reflective of the language used by individuals lived experience of self-injury could improve the clinical utility of the models. This may mean that the models can become effective tools for providing insight to clients on the reasons/times for engaging in self-injury.

Final Conclusion

This thesis makes a significant and novel contribution to the field of research on experiential avoidance, and our understanding of the role experiential avoidance plays in self-injury. By reconceptualising experiential avoidance as a component of emotion tolerance, it

provides a clearer representation of the of the processes relating to when an individual may or may not engage in self-injury. Furthermore, the proposed conceptual framework builds on the Experiential Avoidance Model of Self-injury to further refine the specific aspects of experiential avoidance, namely behavioural avoidance and repression/denial that may be associated with when and individuals is likely to engage in self-injury. Likewise, our existing measures used to capture experiential avoidance also need to be reflective of these changes and use language and items that are representative of the individuals who have lived experience of self-injury. Alternatively, new measures specific to capturing the construct of emotion tolerance in relation to self-injury should be developed. Addressing these suggestions will improve and advance our understanding of the role of emotion tolerance and experiential avoidance in self-injury.

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Appendix A: Ethics Approval Letter – Study 1

Curtin University
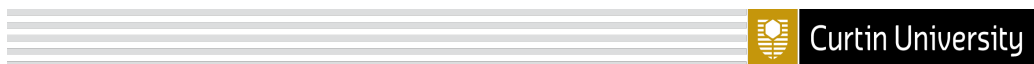
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20-Aug-2018

Name: Penelope Hasking
Department/School: School of Psychology
Email: Penelope.Hasking@curtin.edu.au

Dear Penelope Hasking

RE: Ethics approval
Approval number: HRE2018-0536

Thank you for submitting your application to the Human Research Ethics Office for the project **Social, emotional, and cognitive factors associated with health risk behaviours**.

Your application was reviewed by the Curtin University Human Research Ethics Committee at their meeting on **07-Aug-2018**.

The review outcome is: **Approved**.

Your proposal meets the requirements described in National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007)*.

Approval is granted for a period of one year from **20-Aug-2018** to **20-Aug-2019**. Continuation of approval will be granted on an annual basis following submission of an annual report.

Personnel authorised to work on this project:

Name	Role
Dawkins, Jessica	Student
Hasking, Penelope	CI
Boyes, Mark	Co-Inv
Slabbert, Ashley	Student
Tonta, Kate	Student
Greene, Danyelle	Student
Howell, Joel	Co-Inv

Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
   - proposed changes to the approved proposal or conduct of the study
   - unanticipated problems that might affect continued ethical acceptability of the project
   - major deviations from the approved proposal and/or regulatory guidelines
   - serious adverse events
3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised
6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
8. Data and primary materials must be retained and stored in accordance with the Western Australian University Sector Disposal Authority (WAUSDA) and the Curtin University Research Data and Primary Materials policy
9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
11. Ethics approval is dependent upon ongoing compliance of the research with the Australian Code for the Responsible Conduct of Research, the National Statement on Ethical Conduct in Human Research, applicable legal requirements, and with Curtin University policies, procedures and governance requirements
12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

Special Conditions of Approval

This letter constitutes ethical approval only. This project may not proceed until you have met all of the Curtin University research governance requirements.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at hrec@curtin.edu.au or on 9266 2784.

Yours sincerely

Professor Peter O'Leary
Chair, Human Research Ethics Committee

Appendix B: Information Sheet, Consent, and Questionnaire – Study 1

Information sheet and consent

PARTICIPANT INFORMATION STATEMENT

HREC Project Number:	HRE2018-0536
Project Title:	Social, Cognitive, and Emotional Factors Associated with Health Risk Behaviours
Principal Investigator:	Associate Prof. Penelope Hasking
Co-investigators:	Dr. Mark Boyes, Dr. Joel Howell, Jessica Dawkins, Danyelle Greene, Ashley Slabbert, & Kate Tonta
Version Number:	1
Version Date:	21/05/2018

What is the Project About?

Health risk behaviours such as alcohol use and nonsuicidal self-injury (e.g. cutting, burning, punching walls, without suicidal intent) are prevalent in university populations. How people understand, express, and regulate their emotions can play a critical role in their psychological health outcomes including whether they engage in health risk behaviours such as drinking alcohol and engaging in self-injurious behaviours. In this study, we will explore how multiple social, cognitive, and emotional factors are related to these behaviours and how they might be used to regulate emotional experiences.

Please read this information sheet fully before consenting to participate in the study.

Who is doing the Research?

This study is being conducted by a group of researchers at Curtin, including several PhD students being supervised by A/Prof Penelope Hasking, Dr Mark Boyes and Dr Joel Howell. All PhD students are funded by the Australian Government through the Research Training Program. This project is funded by Curtin University.

Who can participate?

You can participate in this study if you are aged 18-25 and currently studying at an Australian University.

What does participation involve?

If you agree to participate, you will be asked to answer an online survey at a time and place convenient for you. The survey includes questions about your social connections as well as how you cope with and deal with emotions and your experience with alcohol. If you have ever engaged in self-injury you will be asked about these experiences.

The survey will take around 60 minutes to complete. You do not have to complete the study in one sitting. Once you begin the questionnaire you will have one week to complete the study. You can log back in as many times as you like within a week.

Are there any benefits to being in the research project?

There may be no direct benefit to you from participating in this research.
However, the current study will add to scientific knowledge about factors related to self-injury and alcohol use in university students. This knowledge may also benefit people in the future by informing prevention and treatment.

If you are completing the study for course credits at Curtin University you will receive 4 SONA points. If you are not participating for credit points you will be placed in the draw to win an iPad or 1 of 10 $25 Coles/Myer gift cards.

Are there any risks, side-effects, discomforts or inconveniences from being in the research project?

Participating in this survey is unlikely to have any risks beyond everyday living. However, it is possible that some questions in the survey may trigger upsetting thoughts and memories for some individuals. Remember that taking part in this study is voluntary and you are not obliged to participate. If you do consent to participate but change your mind at any point in the survey, you can withdraw by simply closing the survey. However, any questions you have answered prior to closing the survey may be used in the overall analysis.

We suggest taking a break or stopping the survey if you become upset whilst answering the questions. You will be provided with a list of counselling services and resources at the bottom of this information sheet and again upon competition of the questionnaire.

Confidentiality and data access

You will be asked for your name and student ID if you are participating for course credits at Curtin University. This will allow us to match your responses to your record on SONA, so we can award you points. However, at the end of the semester when your grades have been finalised all identifying information will be removed from the data, making the data anonymous from that point on.

For other participants, we will ask for your name and email address to contact you if you win a prize. Once the prizes are drawn all identifying information will be removed making your responses unidentifiable from that point on.

The following people will have access to the information we collect in this research: the research team and, in the event of an audit or investigation, staff from the Curtin University Office of Research and Development. The information in this research is electronic and will be stored on a password-protected computer. Anonymous data may be stored in an open access repository if required by a journal. The data we collect in this study will be kept under secure conditions at Curtin University for 7 years after the research has ended and then it will be destroyed.

Will you tell me the results of the research?

The results from this study may be presented at a conference or published in a journal but you will not be identifiable in any publications or presentations. If you wish to have a copy of the final results or have any questions, please contact us:

Penelope Hasking: Penelope.Hasking@curtin.edu.au
Mark Boyes: Mark.Boyes@curtin.edu.au
Joel Howell: Joel.Howell@curtin.edu.au
Danyelle Greene: Danyelle.greene@postgrad.curtin.edu.au
Jessica Dawkins: Jessica.C.Dawkins@postgrad.curtin.edu.au
Ashley Slabbert: Ashley.Slabbert@postgrad.curtin.edu.au
Kate Tonta: Kate.Tonta@postgrad.curtin.edu.au

Self injury fact sheet
Alcohol fact sheet
Useful resources

If you decide to take part in this research tick the consent box at the start of the Qualtrics survey.
By doing this you indicate you have understood the information provided here in the information sheet.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HRE2018-0536). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

> I have received information regarding this research and had an opportunity to ask questions. I believe I understand the purpose, extent and possible risks of my involvement in this project and I voluntarily consent to take part.

○ I agree

○ I do not agree

Demographics

Are you a Curtin student participating for SONA points?

○ Yes

○ No

What is your date of birth? (dd/mm/yyyy)

What is your sex?

◯ Male

◯ Female

◯ Another gender, please specify?

◯ Prefer not to say

Do you consider yourself to be:

◯ Heterosexual

◯ Homosexual

◯ Bisexual

◯ Another orientation, please specify?

◯ Prefer not to say

What is your postcode?

What country were you born in?

Do you identify as Aboriginal or Torres Strait Islander?

◯ Yes

◯ No

Which Australian university are you currently enrolled in?

What course are you currently studying?

At what level are you currently studying?

◯ Associate Degree

◯ Bachelor Degree

◯ Graduate Certificate

◯ Graduate Diploma

◯ Master Degree

◯ Doctoral Degree

Have you ever been diagnosed with a mental disorder?

◯ Yes (please specify)

○ No

NSSI

Nonsuicidal Self-Injury
This questionnaire asks about a variety of nonsuicidal self-injury behaviours.
Nonsuicidal self-injury is defined as the deliberate physical self-damage or self-harm that is <u>not</u> accompanied by <u>suicidal intent</u> or ideation. Although cutting is one of the most well-known nonsuicidal self-injury behaviours, it can take many forms including but not limited to biting, burning, scratching, self-bruising or swallowing dangerous substances if undertaken with intent to injure oneself.

Have you ever thought about engaging in self-injury?

○ Yes

○ No

Have you ever engaged in nonsuicidal self-injury?

○ Yes

○ No

How many times have you self-injured in the last year?

None	Once	Twice	Three times	Four times	5 or more times
○	○	○	○	○	○

Please estimate the number of times in your life you have intentionally (i.e., on purpose) performed each type of non-suicidal self-injury (e.g., 0, 10, 100, 500):

	Click to write
Cutting	_____
Biting	_____
Burning	_____
Carving	_____
Pinching	_____
Pulling hair	_____
Severe scratching	_____
Banging or hitting yourself	_____
Interfering with wound healing	_____
Rubbing skin against rough surface	_____
Sticking yourself with needles	_____
Swallowing dangerous substances	_____
Other	_____

If you feel that you have a *main* form of self-injury, please indicate from the list below the behaviour you consider to be your main form of self-injury

- ○ Cutting
- ○ Biting
- ○ Burning
- ○ Carving
- ○ Pinching
- ○ Pulling hair
- ○ Severe scratching
- ○ Banging or hitting yourself
- ○ Interfering with wound healing
- ○ Rubbing skin against rough surface
- ○ Sticking yourself with needles
- ○ Swallowing dangerous substances
- ○ Other

At what age did you (please write a number):

	Click to write
First injure yourself?	
Most recently injure yourself?	

Do you experience physical pain during self-injury?

Yes	Sometimes	No
○	○	○

When you self-injure are you alone?

Yes	Sometimes	No
○	○	○

Typically, how much time elapses from the time you have the urge to self-injure until you act on the urge?

<1 hour	1-3 hours	3-6 hours	6-12 hours	12-24 hours	>1 day
○	○	○	○	○	○

Do/did you want to stop self-injuring?

- ○ Yes
- ○ No

This inventory was written to help us better understand the experience of nonsuicidal self-injury. Below is a list of statements that may or may not be relevant to your experience of self-injury.
Please identify the statements that are most relevant for you.

When I self-injure I am...

	Not relevant	Somewhat relevant	Very relevant
calming myself down	○	○	○
creating a boundary between myself and others	○	○	○
punishing myself	○	○	○
giving myself a way to care for myself (by attending to the wound)	○	○	○

causing pain so I will stop feeling numb	○	○	○
avoiding the impulse to attempt suicide	○	○	○
doing something to generate excitement or exhilaration	○	○	○
bonding with peers	○	○	○
letting others know the extent of my emotional pain	○	○	○
seeing if I can stand the pain	○	○	○
creating a physical sign that I feel awful	○	○	○
getting back at someone	○	○	○
ensuring I am self-sufficient	○	○	○
releasing emotional pressure that has built up inside of me	○	○	○
demonstrating that I am separate from other people	○	○	○
expressing anger towards myself for being worthless or stupid	○	○	○
creating a physical injury is easier to care for than my emotional distress	○	○	○
trying to feel something (as opposed to nothing) even if it is physical pain	○	○	○
responding to suicidal thoughts without actually attempting suicide	○	○	○
entertaining myself or others by doing something extreme	○	○	○
fitting in with others	○	○	○
seeking care or help from others	○	○	○
demonstrating I am tough or strong	○	○	○
proving to myself that emotional pain is real	○	○	○
getting revenge against others	○	○	○
demonstrating that I do not need to rely on others for help	○	○	○
reducing anxiety, frustration, anger, or other overwhelming emotions	○	○	○
establishing a barrier between myself and others	○	○	○
reacting to feeling unhappy with myself or disgusted with myself	○	○	○
allowing myself to focus on treating the injury, which can be gratifying or satisfying	○	○	○
making sure I am alive when I don't feel real	○	○	○
putting a stop to suicidal thoughts	○	○	○
pushing my limits in a manner akin to skydiving or other extreme activities	○	○	○
creating a sign of friendship or kinship with friends or loved ones	○	○	○
keeping a loved one from leaving or abandoning me	○	○	○
proving I can take the physical pain	○	○	○
signifying the emotional distress I'm experiencing	○	○	○
trying to hurt someone close to me	○	○	○
establishing that I am autonomous/independent	○	○	○

We are interested in your thoughts about what might happen if someone engages in self-injury. If you personally have self-injured think about what you might expect the outcome to be when you self-injure. If you do not self-injure, think about what the outcome might be if you did.

How likely is it that after self-injuring:

	Extremely unlikely	Somewhat unlikely	Somewhat likely	Extremely likely
I would feel less frustrated with the world	○	○	○	○
My friends would be disgusted	○	○	○	○
I could make people do things for me	○	○	○	○

I would feel physical pain	○	○	○	○
I would feel like a failure	○	○	○	○
I would feel better about myself	○	○	○	○
My friends would not approve of me	○	○	○	○
It would be easier to get what I want from others	○	○	○	○
It would hurt	○	○	○	○
I would feel ashamed	○	○	○	○
I would feel calm	○	○	○	○
My family would be disgusted	○	○	○	○
Other people would notice and offer sympathy	○	○	○	○
I would not be aware of my physical pain	○	○	○	○
I would feel numb	○	○	○	○
The future would seem more optimistic	○	○	○	○
My parents would be angry	○	○	○	○
I would feel that it would be easier to open up and express my feelings	○	○	○	○
I would not feel any pain	○	○	○	○
I would feel emotionally drained	○	○	○	○
I would feel relieved	○	○	○	○
Other people would notice and think I was a freak	○	○	○	○
I would get care from others	○	○	○	○
The pain would be intense	○	○	○	○
I would hate myself	○	○	○	○

Please answer 3 to this question.

	1	2	3	4	5
	○	○	○	○	○

Below is a list of contexts in which people may or may not find it difficult to resist engaging in NSSI.
Please rate how confident you are that you could resist the urge to self-injure given the situation below.
Some items are repetitive however please respond to all statements.

	Not at all confident	Somewhat confident	Moderately confident	Extremely confident
1. When I feel angry	○	○	○	○
2. When I feel sad	○	○	○	○
3. When I feel depressed	○	○	○	○
4. When I feel worthless	○	○	○	○
5. When I feel hopeless	○	○	○	○
6. When I feel ashamed	○	○	○	○
7. When I feel lonely	○	○	○	○
8. When I feel embarrassed	○	○	○	○
9. When I feel guilty	○	○	○	○
10. When I feel frustrated	○	○	○	○

11. When I feel like everything I do is pointless	○	○	○	○
12. When I feel fed up	○	○	○	○
13. When I feel in control of my situation	○	○	○	○
14. When I feel calm	○	○	○	○
15. When I feel relaxed	○	○	○	○
16. When I feel nothing at all	○	○	○	○
17. When I feel alienated	○	○	○	○
18. When I feel different from everyone else	○	○	○	○
19. When I feel numb	○	○	○	○
20. When I feel disconnected from my body	○	○	○	○
21. When I feel connected to my body	○	○	○	○
22. After having an argument with a friend	○	○	○	○
23. After arguing with a family member/s	○	○	○	○
24. When someone reassures me	○	○	○	○
25. When I know I can talk to a friend about my problem	○	○	○	○
26. When I feel abandoned	○	○	○	○
27. When a friend abandons me	○	○	○	○
28. When someone I love is angry with me	○	○	○	○
29. When someone I love is there to support me	○	○	○	○
30. When I am by myself	○	○	○	○
31. When I am at home	○	○	○	○
32. When I am in the shower	○	○	○	○
33. When I am in the bathroom	○	○	○	○
34. When I am out with friends	○	○	○	○
35. When I am in a group	○	○	○	○
36. When I know no one will find out	○	○	○	○
37. When other people are around	○	○	○	○
38. When it's the middle of the night and I can't sleep	○	○	○	○
39. When I think I am not good enough	○	○	○	○
40. When I think I am a burden to someone else	○	○	○	○
41. When I think I am not loveable	○	○	○	○
42. When I have no control over a situation	○	○	○	○
43. When I have no other option	○	○	○	○
44. When I feel powerless	○	○	○	○
45. When other people don't understand me	○	○	○	○
46. When I don't want to live	○	○	○	○
47. When I think I have no other options	○	○	○	○
48. When I think I have a better way to cope	○	○	○	○
49. When I keep busy	○	○	○	○
50. When I have been crying	○	○	○	○
51. When I have been drinking	○	○	○	○
52. When I am drunk	○	○	○	○
53. When I am motivated to resist self-injury	○	○	○	○
54. When I have been thinking about self-injury for a long time	○	○	○	○

55. When I have been trying to resist the urge for a long time	○	○	○	○
56. When I have been avoiding suicidal thoughts	○	○	○	○
57. When I have been taking drugs	○	○	○	○
58. When I withdraw myself from others	○	○	○	○
59. When I have just engaged in self-injury	○	○	○	○
60. When I am feeling pressure from work/school/university	○	○	○	○
61. When I have hurt someone I care about	○	○	○	○
62. When I cannot help someone I care about	○	○	○	○
63. When I feel I have control over a situation	○	○	○	○
64. When I feel like others aren't listening to me	○	○	○	○
65. When others don't take my opinion seriously	○	○	○	○
66. When I am worried other people will see my scars	○	○	○	○
67. When I have seen someone else has self-injury scars	○	○	○	○
68. When I have seen a post online about self-injury	○	○	○	○
69. When I am having trouble with my friends/parents/partner	○	○	○	○
70. When I have no viable means to self-injure	○	○	○	○
71. When I believe I can resist the urge to self-injure	○	○	○	○
72. If I have other coping strategies I can use	○	○	○	○
73. When I focus on my inner strength	○	○	○	○
74. When I reach out for support	○	○	○	○
75. If I feel alone	○	○	○	○
76. When I have other coping strategies	○	○	○	○
77. When I have someone I can talk to	○	○	○	○
78. When I do not have the preferred means to do so	○	○	○	○
79. When I can't think of any other strategies	○	○	○	○
80. When I have a strong urge	○	○	○	○
81. When I am in a supportive environment	○	○	○	○
82. When I have a supportive person available	○	○	○	○
83. When I want to feel a sense of belonging	○	○	○	○
84. When I consider self-injury a part of who I am	○	○	○	○
85. When I am distracted by other things	○	○	○	○
86. When I am watching T.V.	○	○	○	○
87. When I can't stop going over and over things in my mind	○	○	○	○
88. When it has become a ritual	○	○	○	○
89. When I am reminded of self-injury through a video or song	○	○	○	○
90. When I see images of self-injury	○	○	○	○
91. When I feel a sense of control over my self-injury	○	○	○	○
92. When I feel I have no control over my self-injury	○	○	○	○
93. When I want to distract myself from my emotional pain	○	○	○	○
94. If I started a new job/school	○	○	○	○
95. When I want to show someone else that I am in pain	○	○	○	○
96. When I have no privacy	○	○	○	○
97. When I need comfort	○	○	○	○
	○	○	○	○

98. When it seems like no one cares about me				
99. When I overthink a situation	○	○	○	○
100. When I am in my bedroom	○	○	○	○
101. When I am at work/school	○	○	○	○
102. When I feel anxious	○	○	○	○
103. When I feel scared	○	○	○	○
104. When I feel nervous	○	○	○	○
105. When I am worried	○	○	○	○
106. After arguing with people at work/school	○	○	○	○
107. After arguing with a romantic partner	○	○	○	○
108. When someone I love is disappointed in me	○	○	○	○
109. When I am out in public	○	○	○	○
110. In the morning	○	○	○	○
111. In the afternoon	○	○	○	○
112. In the evening	○	○	○	○
113. Late at night	○	○	○	○
114. When I feel bored	○	○	○	○
115. When I am high	○	○	○	○
116. When I am worried other people will see my injuries/wounds	○	○	○	○
117. When I see someone else has self-injury wounds	○	○	○	○
118. When I have access to means to self-injure	○	○	○	○
119. When I hate myself	○	○	○	○
120. When I want to punish myself	○	○	○	○
121. When I see a reminder of a past time I self-injured	○	○	○	○
122. When I see my own scars	○	○	○	○
123. Before social situations	○	○	○	○
124. After social situations	○	○	○	○
125. When I see my own injuries	○	○	○	○

Please read each of the statements below carefully and select the answer which best fits how certain you are about how you would act in each of the following situations.

	Very uncertain					Very certain
How certain are you that you will not self-injure in the future?	○	○	○	○	○	○
If at some point in the future you had self-injurious thoughts, how certain are you that you could resist self-injury?	○	○	○	○	○	○
If at some point in the future you had self-injurious thoughts, how certain are you that you could resist self-injury if you were using alcohol or other drugs?	○	○	○	○	○	○
How certain are you that you could control future thoughts of self-injury if you were experiencing physical pain?	○	○	○	○	○	○
How certain are you that you could control future self-injurious thoughts if you lost an important relationship?	○	○	○	○	○	○
How certain are you that you could control future self-injurious thoughts if you lost a job, could not find employment, or suffered a financial crisis?	○	○	○	○	○	○

Are you aware of either of your parents having engaged in self-injury?

	Yes	No
	○	○

Which parent/s have engaged in self-injury?

Mother	Father	Both parents
○	○	○

At what age did your parent/s engage in self-injury?

_____

If you were born at the time, what age were you when your parent/s engaged in self-injury?

_____

Alcohol

The following questions are related to your use of alcohol.

| Full Strength Beer 285ml 4.8% Alcohol | Low Strength Beer 425ml 2.7% Alcohol | Pre-mix Spirits 275ml 5% Alcohol | Wine 100ml 13.5% Alcohol | Spirits 30ml 40% Alcohol | Full Strength Beer Can or Stubbie 375ml 4.8% Alcohol |

This guide contains examples of one standard drink. A full strength can or stubbie contains one and a half standard drinks.

Because alcohol use can affect health and interfere with certain medications and treatments, it is important that we ask you some questions about your use of alcohol. Your answers will remain confidential, so please be as accurate as possible. Try to answer the questions in terms of 'standard drinks'.

	never	monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
1. How often do you have a drink containing alcohol?	○	○	○	○	○

	1-2	3-4	5-6	7-9	10 or more
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	○	○	○	○	○

	never	less than monthly	monthly	weekly	daily or almost daily

3. How often do you have six or more drinks on one occasion?	○	○	○	○	○
4. How often during the last year have you found that you were not able to stop drinking once you had started?	○	○	○	○	○
5. How often in the last year have you failed to do what was normally expected of you because of drinking?	○	○	○	○	○
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	○	○	○	○	○
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	○	○	○	○	○
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	○	○	○	○	○

	No	Yes, but not in the last year	Yes, during the last year
9. Have you or someone else been injured because of your drinking?	○	○	○
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	○	○	○

The purpose of these questions is to find out about YOUR thoughts, feelings and beliefs about drinking. Please select the most appropriate response.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I do not need alcohol to help me unwind after a hard day or week at work	○	○	○	○	○
Little things annoy me less when I'm drinking	○	○	○	○	○
Drinking makes me feel outgoing and friendly	○	○	○	○	○
Drinking alcohol makes me tense	○	○	○	○	○
I have more self-confidence when I am drinking	○	○	○	○	○
Drinking makes me more sexually responsive	○	○	○	○	○
When I am anxious or tense I do not feel the need for alcohol	○	○	○	○	○
Drinking makes the future brighter	○	○	○	○	○
I drink alcohol because it's a habit	○	○	○	○	○
Drinking makes me bad tempered	○	○	○	○	○
I am more aware of what I say and do if I am drinking	○	○	○	○	○
I feel that drinking hinders me in getting along with other people	○	○	○	○	○
I feel restless when drinking alcohol	○	○	○	○	○
I am more sullen and depressed when drinking alcohol	○	○	○	○	○
I cannot always control my drinking	○	○	○	○	○
I am less concerned about my actions when I am drinking	○	○	○	○	○
If I am drinking it is easier to express my feelings	○	○	○	○	○
I often feel sexier after I've been drinking	○	○	○	○	○
Drinking does not help to relieve any tension I feel about recent concerns and interests	○	○	○	○	○

Drinking increases my aggressiveness	○	○	○	○	○
Drinking makes me feel like a failure	○	○	○	○	○
Drinking helps me to be more mentally alert	○	○	○	○	○
Drinking alcohol removes most thoughts of sex from my mind	○	○	○	○	○
I tend to adopt a "who cares" attitude when I'm drinking	○	○	○	○	○
I am addicted to alcohol	○	○	○	○	○
Drinking brings out the worst in me	○	○	○	○	○
I feel less shy when I am drinking	○	○	○	○	○
Drinking makes me feel more violent	○	○	○	○	○
I am less discreet if I drink alcohol	○	○	○	○	○
When I am drinking it's easier to open up and express my feelings	○	○	○	○	○
I am powerless in the face of alcohol	○	○	○	○	○
When I am drinking I avoid other people or situations for fear of embarrassment	○	○	○	○	○
Drinking alcohol sharpens my mind	○	○	○	○	○
I feel disappointed in myself when drinking	○	○	○	○	○
I tend to avoid sex when drinking	○	○	○	○	○
I lose most feelings of sexual interest after I have been drinking	○	○	○	○	○
I am clumsier when drinking alcohol	○	○	○	○	○

Listed below are 20 reasons people might be inclined to drink alcoholic beverages. Using the five-point scale below, decide how frequently your own drinking is motivated by each of the reasons listed.

	Almost Never/ Never	Some of the time	Half of the time	Most of the time	Almost Always/ Always
To forget your worries.	○	○	○	○	○
Because your friends pressure you to drink.	○	○	○	○	○
Because it helps you enjoy a party.	○	○	○	○	○
Because it helps you when you feel depressed or nervous.	○	○	○	○	○
To be sociable.	○	○	○	○	○
To cheer up when you are in a bad mood.	○	○	○	○	○
Because you like the feeling.	○	○	○	○	○
	Almost Never/ Never	Some of the time	Half of the time	Most of the time	Almost Always/ Always
So that others won't kid you about not drinking	○	○	○	○	○
Because it's exciting.	○	○	○	○	○
To get high.	○	○	○	○	○
Because it makes social gatherings more fun.	○	○	○	○	○
To fit in with a group you like.	○	○	○	○	○
Because it gives you a pleasant feeling.	○	○	○	○	○
Because it improves parties and celebrations.	○	○	○	○	○
	Almost Never/ Never	Some of the time	Half of the time	Most of the time	Almost Always/ Always
Because you feel more self-confident and sure of yourself.	○	○	○	○	○

To celebrate a special occasion with friends.	○	○	○	○	○
To forget about your problems.	○	○	○	○	○
Because it's fun.	○	○	○	○	○
To be liked.	○	○	○	○	○
So you won't feel left out.	○	○	○	○	○

For the following situations please indicate how easy it would be for you to refuse a drink containing alcohol.

	I am very sure I would drink					I am very sure I would not drink
When I am out to dinner	○	○	○	○	○	○
When I am watching TV	○	○	○	○	○	○
When I am angry	○	○	○	○	○	○
When someone offers me a drink	○	○	○	○	○	○
When I am at lunch	○	○	○	○	○	○
When I feel frustrated	○	○	○	○	○	○
When I am worried	○	○	○	○	○	○
When I feel upset	○	○	○	○	○	○
When I feel down	○	○	○	○	○	○
When I feel nervous	○	○	○	○	○	○
When I am on the way home from work	○	○	○	○	○	○
when I feel sad	○	○	○	○	○	○
When my spouse or partner is drinking	○	○	○	○	○	○
When I am listening to music or reading	○	○	○	○	○	○
When my friends are drinking	○	○	○	○	○	○
When I am by myself	○	○	○	○	○	○
When I have just finished playing sports	○	○	○	○	○	○
When I am at a pub or club	○	○	○	○	○	○
When I first arrive home	○	○	○	○	○	○

Emotion

Emotion
Everyone gets confronted with negative or unpleasant events now and then and everyone responds to them in his or her own way. By the following questions you are asked to indicate what you generally think, when you experience negative or unpleasant events.

	(almost) Never	Sometimes	About half the time	Most of the time	(almost) Always
I feel I am the one to blame for it	○	○	○	○	○
I think of something nice instead of what has happened	○	○	○	○	○
I think about the mistakes others have made in this matter	○	○	○	○	○
I think that I must learn to live with it	○	○	○	○	○
I want to understand why I feel the way I do about what I have experienced	○	○	○	○	○
I continually think how horrible the situation has been	○	○	○	○	○
I feel that am the only one who is responsible for what has happened	○	○	○	○	○
I think that it all could have been much worse	○	○	○	○	○

I look for the positive sides to the matter	○	○	○	○	○
I think that other people go through much worse experiences	○	○	○	○	○
I dwell upon the feelings the situation had evoked in me	○	○	○	○	○
I think of what I can do best	○	○	○	○	○
I feel that others are to blame for it	○	○	○	○	○
I think that I cannot change anything about it	○	○	○	○	○
I often think that what I have experienced is the worst that could happen to a person	○	○	○	○	○
I think about the mistakes I have made in this matter	○	○	○	○	○
I think that it hasn't been too bad compared to other things	○	○	○	○	○
I think about pleasant experiences	○	○	○	○	○
I think that basically the cause must lie within myself	○	○	○	○	○
I keep thinking about how terrible it is what I have experienced	○	○	○	○	○
I think that I can learn something from the situation	○	○	○	○	○
I feel that basically the cause lies with others	○	○	○	○	○
I tell myself that there are worse things in life	○	○	○	○	○
I feel that others are responsible for what has happened	○	○	○	○	○
I think that I have to accept that this has happened	○	○	○	○	○
I think of pleasant things that have nothing to do with it	○	○	○	○	○
I think about how I can best cope with the situation	○	○	○	○	○
I often think about how I feel about what I have experienced	○	○	○	○	○
I think that I can become a stronger person as a result of what has happened	○	○	○	○	○
I think about how to change the situation	○	○	○	○	○
I often think that what I have experienced is much worse than what others have experienced	○	○	○	○	○
I think that I have to accept the situation	○	○	○	○	○
I think of nicer things than what I have experienced	○	○	○	○	○
I think about a plan of what I can do best	○	○	○	○	○
I think that the situation also has it's positive sides	○	○	○	○	○
I am preoccupied with what I think and feel about what I have experienced	○	○	○	○	○

In the last 30 days how often...

	none of the time	a little of the time	some of the time	most of the time	all of the time
Did you feel tired out for no good reason.	○	○	○	○	○
Did you feel nervous.	○	○	○	○	○
Did you feel so nervous that nothing could calm you down.	○	○	○	○	○
Did you feel hopeless.	○	○	○	○	○
Did you feel restless or fidgety.	○	○	○	○	○
Did you feel so restless that you could not sit still.	○	○	○	○	○
Did you feel depressed.	○	○	○	○	○
Did you feel that everything is an effort.	○	○	○	○	○
Did you feel so sad that nothing could cheer you up.	○	○	○	○	○
Did you feel worthless.	○	○	○	○	○

These items deal with ways you've been coping with stress and problems in your life. There are many ways to try to deal with problems. These items ask what you've been doing to cope in general with problems in your life. Try to rate each item separately in your mind from others. Make your answers as true FOR YOU as you can.

	I haven't been doing this at all	I've been doing this a little bit	I've been doing this a medium amount	I've been doing this a lot
I've been turning to work or other activities to take my mind off things	○	○	○	○
I've been concentrating my efforts on doing something about the situation I'm in	○	○	○	○
I've been saying to myself "this isn't real"	○	○	○	○
I've been using alcohol or other drugs to make myself feel better	○	○	○	○
I've been getting emotional support from others	○	○	○	○
I've been giving up trying to deal with it	○	○	○	○
I've been taking action to try and make the situation better	○	○	○	○
I've been refusing to believe that it has happened	○	○	○	○
I've been saying things to let my unpleasant feelings escape	○	○	○	○
I've been getting help and advice from other people	○	○	○	○
I've been using alcohol or drugs to get me through it	○	○	○	○
I've been trying to see it in a different light, to make it seem more positive	○	○	○	○
I've been criticizing myself	○	○	○	○
I've been trying to come up with a strategy about what to do	○	○	○	○
I've been getting comfort and understanding from someone	○	○	○	○
I've been giving up the attempt to cope	○	○	○	○
I've been looking for something good in what is happening	○	○	○	○
I've been making jokes about it	○	○	○	○
I've been doing something to think about it less, such as going to the movies, watching TV, reading, daydreaming, sleeping, or shopping	○	○	○	○
I've been accepting the reality of the fact that it has happened	○	○	○	○
I've been expressing my negative feelings	○	○	○	○
I've been trying to find comfort in my religion or spiritual beliefs	○	○	○	○
I've been trying to get advice or help from other people about what to do	○	○	○	○
I've been learning to live with it	○	○	○	○
I've been thinking hard about what steps to take	○	○	○	○
I've been blaming myself for the things that happened	○	○	○	○
I've been praying or meditating	○	○	○	○
I've been making fun of the situation	○	○	○	○

Please read each statement carefully and indicate how closely it resembles you.

	Not at all like me				Completely like me
When something happens that upsets me, it's all I can think about it for a long time.	○	○	○	○	○
My feelings get hurt easily.	○	○	○	○	○
When I experience emotions, I feel them very strongly/intensely.	○	○	○	○	○
When I'm emotionally upset, my whole body gets physically upset as well.	○	○	○	○	○

I tend to get very emotional very easily.	○	○	○	○	○
I experience emotions very strongly.	○	○	○	○	○
I often feel extremely anxious.	○	○	○	○	○
When I feel emotional, it's hard for me to imagine feeling any other way.	○	○	○	○	○
Even the littlest things make me feel emotional.	○	○	○	○	○
If I have a disagreement with someone, it takes a long time for me to get over it.	○	○	○	○	○
When I am angry/upset, it takes me much longer than most people to calm down.	○	○	○	○	○
I get angry at people very easily.	○	○	○	○	○
I am often bothered by things that other people don't react to.	○	○	○	○	○
I am easily agitated.	○	○	○	○	○
My emotions go from neutral to extreme in an instant.	○	○	○	○	○
When something bad happens, my mood changes very quickly. People tell me I have a very short fuse.	○	○	○	○	○
People tell me that my emotions are too intense for the situation.	○	○	○	○	○
I am a very sensitive person.	○	○	○	○	○
My moods are very strong and powerful.	○	○	○	○	○
I often get so upset it's hard for me to think straight.	○	○	○	○	○
Other people tell me I'm overreacting.	○	○	○	○	○

Please answer 3 to this question.

Next we are interested in how you manage your emotions and how you cope with stress

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
When I want to feel more positive emotion (such as joy or amusement), I change what I am thinking about	○	○	○	○	○	○	○
I keep my emotions to myself	○	○	○	○	○	○	○
When I want to feel less negative emotion (such as sadness or anger), I change what I think about	○	○	○	○	○	○	○
When I am feeling positive emotions I am careful not to express them	○	○	○	○	○	○	○
When I am faced with a stressful situation, I make myself think about it in a way that helps me stay calm	○	○	○	○	○	○	○
I control my emotions by not expressing them	○	○	○	○	○	○	○
When I want to feel more positive emotion I change the way I am thinking about the situation	○	○	○	○	○	○	○
I control my emotions by changing the way I think about the situation I am in	○	○	○	○	○	○	○
When I am feeling negative emotions, I make sure not to express them	○	○	○	○	○	○	○
When I want to feel less negative emotion, I change the way I am thinking about the situation	○	○	○	○	○	○	○

Please indicate below how often the following statements apply to you.

	almost never (0-	sometimes (11-	about half the	most of the	almost always

	10%)	35%)	time (36-65%)	time (66-90%)	(91-100%)
I am clear about my feelings	○	○	○	○	○
I pay attention to how I feel	○	○	○	○	○
I experience my emotions as overwhelming and out of control	○	○	○	○	○
I have no idea how I am feeling	○	○	○	○	○
I have difficulty making sense out of my feelings	○	○	○	○	○
I am attentive to my feelings	○	○	○	○	○
I know exactly how I am feeling	○	○	○	○	○
I care about what I am feeling	○	○	○	○	○
I am confused about how I feel	○	○	○	○	○
When I'm upset, I acknowledge my emotions	○	○	○	○	○
When I'm upset, I become angry at myself for feeling that way	○	○	○	○	○
When I'm upset, I become embarrassed for feeling that way	○	○	○	○	○
When I'm upset, I have difficulty getting work done	○	○	○	○	○
When I'm upset, I become out of control	○	○	○	○	○
When I'm upset, I believe that I will remain that way for a long time	○	○	○	○	○
When I'm upset, I believe that I will end up feeling very depressed	○	○	○	○	○
When I'm upset, I believe that my feelings are valid and important	○	○	○	○	○
When I'm upset, I have difficulty focusing on other things	○	○	○	○	○
When I'm upset, I feel out of control	○	○	○	○	○
When I'm upset, I can still get things done	○	○	○	○	○
When I'm upset, I feel ashamed of myself for feeling that way	○	○	○	○	○
When I'm upset, I know that I can find a way to eventually feel better	○	○	○	○	○
When I'm upset, I feel like I am weak	○	○	○	○	○
When I'm upset, I feel like I can remain in control of my behaviours	○	○	○	○	○
When I'm upset, I feel guilty for feeling that way	○	○	○	○	○
When I'm upset, I have difficulty concentrating	○	○	○	○	○
When I'm upset, I have difficulty controlling my behaviours	○	○	○	○	○
When I'm upset, I believe there is nothing I can do to make myself feel better	○	○	○	○	○
When I'm upset, I become irritated at myself for feeling that way	○	○	○	○	○
When I'm upset, I start to feel very bad about myself	○	○	○	○	○
When I'm upset, I believe that wallowing in it is all I can do	○	○	○	○	○
When I'm upset, I lose control over my behaviour	○	○	○	○	○
When I'm upset, I have difficulty thinking about anything else	○	○	○	○	○
When I'm upset, I take time to figure out what I'm really feeling	○	○	○	○	○
When I'm upset, it takes me a long time to feel better	○	○	○	○	○
When I'm upset, my emotions feel overwhelming	○	○	○	○	○

This scale consists of a number of words that describe different feelings and emotions. Read each item and then indicate to what

extent you generally feel this way, that is, how you feel on the average

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	○	○	○	○	○
Disinterested	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

You have just completed a questionnaire which indicated how often you tend to have certain feelings or emotional experiences. In the following questionnaire you will be shown a list of the same feelings, but you are asked to make the following judgment:

When exposed to a situation that would make the "average" person experience this feeling, how likely is it that you will experience this particular feeling? Please rate this using the five options provided.

	Not at all likely	Slightly likely	Moderately likely	Very likely	Extremely likely
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
	Not at all likely	Slightly likely	Moderately likely	Very likely	Extremely likely
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○

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	Not at all likely	Slightly likely	Moderately likely	Very likely	Extremely likely
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

You have just completed a questionnaire which indicated how likely you are to have certain feelings or emotional experiences. In the following questionnaire you will be shown a list of the same feelings, but you are asked to make the following judgment:

When you are experiencing a situation that does make you feel this way, <u>how intense</u> is the feeling compared to how other people feel?

	Not at all intense	Slightly intense	Moderately intense	Very intense	Extremely intense
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
	Not at all intense	Slightly intense	Moderately intense	Very intense	Extremely intense
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
	Not at all intense	Slightly intense	Moderately intense	Very intense	Extremely intense
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

You have just completed a questionnaire which indicated how likely you are to have certain feelings or emotional experiences. In the following questionnaire you will be shown a list of the same feelings, but you are asked to make the following judgment:

When you are experiencing a situation that does make you feel this way, <u>how long is this feeling likely to persist</u>? The longer a feeling lasts the more persistent it is. Please rate this using the five options provided.

	Not at all persistent	Slightly persistent	Moderately persistent	Very persistent	Extremely persistent

Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○

	Not at all persistent	Slightly persistent	Moderately persistent	Very persistent	Extremely persistent
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○

	Not at all persistent	Slightly persistent	Moderately persistent	Very persistent	Extremely persistent
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

In this section we are interested in your emotional well being
Read each statement tick which response best indicates how much the statement applied to you <u>over the past week.</u> There are no right or wrong answers. Do not spend too much time on any statement.

	Never	Sometimes	Often	Almost Always
I found it hard to wind down	○	○	○	○
I was aware of dryness of my mouth	○	○	○	○
I couldn't seem to experience any positive feelings at all	○	○	○	○
I experienced breathing difficulties (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	○	○	○	○
I found it difficult to work up the initiative to do things	○	○	○	○
I tended to over-react to situations	○	○	○	○
I experienced trembling (e.g. in the hands)	○	○	○	○
I felt that I was using a lot of nervous energy	○	○	○	○
I was worried about situations in which I might panic and make a fool of myself	○	○	○	○
I felt I had nothing to look forward to	○	○	○	○
I found myself getting agitated	○	○	○	○
I found it difficult to relax	○	○	○	○
I felt down-hearted and blue	○	○	○	○
I was intolerant of anything that kept me from getting on with what I was doing	○	○	○	○
I felt I was close to panic	○	○	○	○

I was unable to become enthusiastic about anything	○	○	○	○
I felt I wasn't worth much as a person	○	○	○	○
I felt that I was rather touchy	○	○	○	○
I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	○	○	○	○
I felt scared without any good reason	○	○	○	○
I felt that life was meaningless	○	○	○	○

Think of times that you feel distressed or upset. Select the item from the options (strongly agree to strongly disagree) that best describes your beliefs about feeling distressed or upset

	Strongly agree	Mildly agree	Agree and disagree equally	Mildly disagree	Strongly Disagree
Feeling distressed or upset is unbearable to me.	○	○	○	○	○
When I feel distressed or upset, all I can think about is how bad I feel.	○	○	○	○	○
I can't handle feeling distressed or upset.	○	○	○	○	○
My feelings of distress are so intense that they completely take over.	○	○	○	○	○
There's nothing worse than feeling distressed or upset.	○	○	○	○	○

	Strongly agree	Mildly agree	Agree and disagree equally	Mildly disagree	Strongly Disagree
I can tolerate being distressed or upset as well as most people.	○	○	○	○	○
My feelings of distress or being upset are not acceptable.	○	○	○	○	○
I'll do anything to avoid feeling distressed or upset.	○	○	○	○	○
Other people seem to be able to tolerate feeling distressed or upset better than I can.	○	○	○	○	○
Being distressed or upset is always a major ordeal for me.	○	○	○	○	○

	Strongly agree	Mildly agree	Agree and disagree equally	Mildly disagree	Strongly Disagree
I am ashamed of myself when I feel distressed or upset.	○	○	○	○	○
My feelings of distress or being upset scare me.	○	○	○	○	○
I'll do anything to stop feeling distressed or upset.	○	○	○	○	○
When I feel distressed or upset, I must do something about it immediately.	○	○	○	○	○
When I feel distressed or upset, I cannot help but concentrate on how bad the distress actually feels.	○	○	○	○	○

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements. Give only one answer for each statement.

	Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
I am often confused about what emotion I am feeling.	○	○	○	○	○
It is difficult for me to find the right words for my feelings.	○	○	○	○	○
I have physical sensations that even doctors don't understand.	○	○	○	○	○
I am able to describe my feelings easily.	○	○	○	○	○
I prefer to analyze problems rather than just describe them.	○	○	○	○	○
When I am upset, I don't know if I am sad, frightened, or angry.	○	○	○	○	○
I am often puzzled by sensations in my body.	○	○	○	○	○
I prefer to just let things happen rather than to understand why					

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they turned out that way.	○	○	○	○	○
I have feelings that I can't quite identify.	○	○	○	○	○
Being in touch with emotions is essential.	○	○	○	○	○
I find it hard to describe how I feel about people.	○	○	○	○	○
People tell me to describe my feelings more.	○	○	○	○	○
I don't know what's going on inside me.	○	○	○	○	○
I often don't know why I am angry.	○	○	○	○	○
I prefer talking to people about their daily activities rather than their feelings.	○	○	○	○	○
I prefer to watch "light" entertainment shows rather than psychological dramas.	○	○	○	○	○
It is difficult for me to reveal my innermost feelings, even to close friends	○	○	○	○	○
I can feel close to someone, even in moments of silence.	○	○	○	○	○
I find examination of my feelings useful in solving personal problems.	○	○	○	○	○
Looking for hidden meanings in movies or plays distracts from their enjoyment.	○	○	○	○	○

This questionnaire asks about how you perceive and experience your emotions. Please score the following statements according to how much you agree or disagree that the statement is true of you.

Some questions mention bad or unpleasant emotions, this means emotions like sadness, anger, or fear. Some questions mention good or pleasant emotions, this means emotions like happiness, amusement, or excitement.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. When I'm feeling bad (feeling an unpleasant emotion), I can't find the right words to describe those feelings	○	○	○	○	○	○	○
2. When I'm feeling bad, I can't tell whether I'm sad, angry, or scared.	○	○	○	○	○	○	○
3. I tend to ignore how I feel.	○	○	○	○	○	○	○
4. When I'm feeling good (feeling a pleasant emotion), I can't find the right words to describe those feelings.	○	○	○	○	○	○	○
5. When I'm feeling good, I can't tell whether I'm happy, excited, or amused.	○	○	○	○	○	○	○
6. I prefer to just let my feelings happen in the background, rather than focus on them.	○	○	○	○	○	○	○
7. When I'm feeling bad, I can't talk about those feelings in much depth or detail.	○	○	○	○	○	○	○
8. When I'm feeling bad, I can't make sense of those feelings.	○	○	○	○	○	○	○
9. I don't pay attention to my emotions.	○	○	○	○	○	○	○
10. When I'm feeling good, I can't talk about those feelings in much depth of detail.	○	○	○	○	○	○	○
11. When I'm feeling good, I can't make sense of those feelings.	○	○	○	○	○	○	○
12. Usually, I try to avoid thinking about what I'm feeling.	○	○	○	○	○	○	○
13. When something bad happens, it's hard for me to put into words how I'm feeling.	○	○	○	○	○	○	○
14. When I'm feeling bad, I get confused about what emotion it is.	○	○	○	○	○	○	○
15. I prefer to focus on things I can actually see or touch, rather than my emotions.	○	○	○	○	○	○	○
16. When something good happens, it's hard for me to put into words how I'm feeling.	○	○	○	○	○	○	○
17. When I'm feeling good, I get confused about what emotion it is.	○	○	○	○	○	○	○

18. I don't try to be 'in touch' with my emotions.	○	○	○	○	○	○	○
19. When I'm feeling bad, if I try to describe how I'm feeling I don't know what to say.	○	○	○	○	○	○	○
20. When I'm feeling bad, I'm puzzled by those feelings	○	○	○	○	○	○	○
21. It's not important for me to know what I'm feeling.	○	○	○	○	○	○	○
22. When I'm feeling good, if I try to describe how I'm feeling I don't know what to say.	○	○	○	○	○	○	○
23. When I'm feeling good, I'm puzzled by those feelings.	○	○	○	○	○	○	○
24. It's strange for me to think about my emotions.	○	○	○	○	○	○	○

Please indicate the extent to which you agree or disagree with each of the following statements

	Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree
The key to a good life is never feeling any pain.	○	○	○	○	○	○
I'm quick to leave any situation that makes me feel uneasy.	○	○	○	○	○	○
When unpleasant memories come to me, I try to put them out of my mind.	○	○	○	○	○	○
I feel disconnected from my emotions.	○	○	○	○	○	○
I won't do something until I absolutely have to.	○	○	○	○	○	○
Fear or anxiety won't stop me from doing something important.	○	○	○	○	○	○
I would give up a lot not to feel bad.	○	○	○	○	○	○
I rarely do something if there is a chance that it will upset me.	○	○	○	○	○	○
It's hard for me to know what I'm feeling.	○	○	○	○	○	○
I try to put off unpleasant tasks for as long as possible.	○	○	○	○	○	○
I go out of my way to avoid uncomfortable situations.	○	○	○	○	○	○
One of my goals is to be free from painful emotions.	○	○	○	○	○	○
I work hard to keep out upsetting feelings.	○	○	○	○	○	○
If I have any doubts about doing something, I just won't do it.	○	○	○	○	○	○
Pain always leads to suffering.	○	○	○	○	○	○

The following questions refer to emotional reactions to typical life events. Please indicate how YOU react to these events. Please base your answers on how YOU react, not on how you think others react or how you think a person should react

	Never	Almost never	Occasionally	Usually	Almost always	Always
When I feel happiness, it is a quiet type of contentment.	○	○	○	○	○	○
When a person in a wheelchair can't get through a door, I have strong feelings of pity.	○	○	○	○	○	○
I get upset easily.	○	○	○	○	○	○
When I succeed at something, my reaction is calm contentment.	○	○	○	○	○	○
I get really happy or really unhappy.	○	○	○	○	○	○
I'm a fairly quiet person.	○	○	○	○	○	○
When I'm happy, I feel energetic.	○	○	○	○	○	○
Seeing a picture of some violent car accident in a newspaper makes me feel sick to my stomach.	○	○	○	○	○	○
When I'm happy, I feel like I'm bursting with joy.	○	○	○	○	○	○
I would be very upset if I got a traffic ticket.	○	○	○	○	○	○

Looking at beautiful scenery really doesn't affect me much.	○	○	○	○	○	○
The weather doesn't affect my mood.	○	○	○	○	○	○
Others tend to get more excited about things than I do.	○	○	○	○	○	○
I am not an extremely enthusiastic person.	○	○	○	○	○	○
'Calm and cool' could easily describe me.	○	○	○	○	○	○
When I'm feeling well it's easy for me to go from being in a good mood to being really joyful.	○	○	○	○	○	○
When I worry, it is so mild that I hardly notice it.	○	○	○	○	○	○
I get overly enthusiastic.	○	○	○	○	○	○
My happy moods are so strong that I feel like I'm 'in heaven'.	○	○	○	○	○	○
When something bad happens, others tend to be more unhappy than I.	○	○	○	○	○	○

Cognitions

Indicate how true each of the following statements are of you.

	Not at all true	Hardly true	Moderately true	Exactly true
I can always manage to solve difficult problems if I try hard enough	○	○	○	○
If someone opposes me, I can find the means and ways to get what I want	○	○	○	○
It is easy for me to stick to my aims and accomplish my goals	○	○	○	○
I am confident that I could deal efficiently with unexpected events	○	○	○	○
Thanks to my resourcefulness, I know how to handle unforeseen situations	○	○	○	○
I can solve most problems if I invest the necessary effort	○	○	○	○
I can remain calm when facing difficulties because I can rely on my coping abilities	○	○	○	○
When I am confronted with a problem, I can usually find several solutions	○	○	○	○
If I am in trouble, I can usually think of a solution	○	○	○	○
I can handle whatever comes my way	○	○	○	○

In this section we are interested in understanding how you respond to distressing situations. Please recall how you tend to respond when you feel distressed or upset.

How true are each of these statements with respect to your experience when you are distressed or upset?

	Not at all true		Somewhat true		Very true
I have thoughts or images about all my shortcomings, failings, faults, mistakes	○	○	○	○	○
I have thoughts or images about events that come into my head even when I do not wish to think about them again	○	○	○	○	○
I have thoughts or images that "I won't be able to do my job/work because I feel so badly."	○	○	○	○	○
I have thoughts or images that are difficult to forget.	○	○	○	○	○
Once I start thinking about the situation, I can't stop	○	○	○	○	○

	Not at all true		Somewhat true		Very true
I notice that I think about the situation.	○	○	○	○	○
I have thoughts or images of the situation that I try to resist thinking about.	○	○	○	○	○
I think about the situation all the time.	○	○	○	○	○

I know I shouldn't think about the situation, but can't help it	○	○	○	○	○
I have thoughts or images about the situation and wish it would go better.	○	○	○	○	○

How well can you?

	Not at all well				Very well
Express joy when good things happen to you?	○	○	○	○	○
Feel gratified over achieving what you set out to do?	○	○	○	○	○
Rejoice over your successes?	○	○	○	○	○
Express enjoyment freely at parties?	○	○	○	○	○
Keep from getting dejected when you are lonely?	○	○	○	○	○
Keep from getting discouraged by strong criticism?	○	○	○	○	○
Reduce your upset when you don't get the appreciation you feel you deserve?	○	○	○	○	○
Keep from getting discouraged in the face of difficulties?	○	○	○	○	○
Manage negative feelings when reprimanded by your parents or significant others?	○	○	○	○	○
Avoid getting upset when others keep giving you a hard time?	○	○	○	○	○
Get over irritation quickly for wrongs you have experienced?	○	○	○	○	○
Avoid flying off the handle when you get angry?	○	○	○	○	○
	Not at all well				Very well

For each of the items below rate how accurately it describes you.

	Very inaccurate	Mostly inaccurate	Somewhat inaccurate	Neither accurate nor inaccurate	Somewhat accurate	Mostly accurate	Very accurate
I find that my mind often goes over things again and again	○	○	○	○	○	○	○
When I have a problem, it will gnaw on my mind for a long time	○	○	○	○	○	○	○
I find that some thoughts come to mind over and over throughout the day	○	○	○	○	○	○	○
I can't stop thinking about some things	○	○	○	○	○	○	○
When I am anticipating an interaction, I will imagine every possible scenario and conversation	○	○	○	○	○	○	○
I tend to replay past events as I would have liked them to happen	○	○	○	○	○	○	○
I find myself daydreaming about things I wish I had done.	○	○	○	○	○	○	○
	Very inaccurate	Mostly inaccurate	Somewhat inaccurate	Neither accurate nor inaccurate	Somewhat accurate	Mostly accurate	Very accurate
When I feel I have had a bad interaction with someone, I tend to imagine various scenarios where I would have acted differently.	○	○	○	○	○	○	○
When trying to solve a complicated problem, I find that I just keep coming back to the beginning without ever finding a solution	○	○	○	○	○	○	○
If there is an important event coming up, I think about it so much that I work myself up.	○	○	○	○	○	○	○
I have never been able to distract myself from unwanted thoughts	○	○	○	○	○	○	○
Even if I think about a problem for hours, I still have a hard time coming to a clear understanding	○	○	○	○	○	○	○
It is very difficult for me to come to a clear conclusion about	○	○	○	○	○	○	○

some problems,no matter how much I think about it

	Very inaccurate	Mostly inaccurate	Somewhat inaccurate	Neither accurate nor inaccurate	Somewhat accurate	Mostly accurate	Very accurate
Sometimes I realize I have been sitting and thinking about something for hours	○	○	○	○	○	○	○
When I am trying to work out a problem, it is like I have a long debate in my mind where I keep going over different points	○	○	○	○	○	○	○
I like to sit and reminisce about pleasant events from the past	○	○	○	○	○	○	○
When I am looking forward to an exciting event, thoughts of it interfere with what I am working on	○	○	○	○	○	○	○
Sometimes even during a conversation, I find unrelated thoughts popping into my head	○	○	○	○	○	○	○
When I have an important conversation coming up, I tend to go over it in my mind again and again	○	○	○	○	○	○	○
If I have an important event coming up, I can't stop thinking about it.	○	○	○	○	○	○	○

For each of the items below, rate how often you experience the corresponding statement.

	Almost never	Sometimes	Often	Always
It's very hard for me to concentrate on a difficult task when there are noises around.	○	○	○	○
When I need to concentrate and solve a problem, I have trouble focusing my attention.	○	○	○	○
When I am working hard on something, I still get distracted by events around me.	○	○	○	○
My concentration is good even if there is music in the room around me.	○	○	○	○
When concentrating, I can focus my attention so that I become unaware of what's going on in the room around me.	○	○	○	○
When I am reading or studying, I am easily distracted if there are people talking in the same room.	○	○	○	○
When trying to focus my attention on something, I have difficulty blocking out distracting thoughts.	○	○	○	○
I have a hard time concentrating when I'm excited about something.	○	○	○	○
When concentrating I ignore feelings of hunger or thirst.	○	○	○	○
I can quickly switch from one task to another.	○	○	○	○
It takes me a while to get really involved in a new task.	○	○	○	○
It is difficult for me to coordinate my attention between the listening and writing required when taking notes during lectures.	○	○	○	○
I can become interested in a new topic very quickly when I need to.	○	○	○	○
It is easy for me to read or write while I'm also talking on the phone.	○	○	○	○
I have trouble carrying on two conversations at once.	○	○	○	○
I have a hard time coming up with new ideas quickly.	○	○	○	○
After being interrupted or distracted, I can easily shift my attention back to what I was doing before.	○	○	○	○
When a distracting thought comes to mind, it is easy for me to shift my attention away from it.	○	○	○	○
It is easy for me to alternate between two different tasks.	○	○	○	○
It is hard for me to break from one way of thinking about something and look at it from another point of view.	○	○	○	○

Please read each statement carefully before answering. Indicate how often you behave in the stated manner, using the following scale.

	Almost never	Occasionally	About half of the time	Fairly often	Almost always
I try to be understanding and patient towards those aspects of my personality I don't like.	○	○	○	○	○
I'm kind to myself when I'm experiencing suffering.	○	○	○	○	○
When I'm going through a very hard time, I give myself the caring and tenderness I need.	○	○	○	○	○
I'm tolerant of my own flaws and inadequacies.	○	○	○	○	○
I try to be loving towards myself when I'm feeling emotional pain.	○	○	○	○	○
When I see aspects of myself that I don't like, I get down on myself.	○	○	○	○	○
When times are really difficult, I tend to be tough on myself.	○	○	○	○	○
I can be a bit cold-hearted towards myself when I'm experiencing suffering.	○	○	○	○	○
I'm disapproving and judgmental about my own flaws and inadequacies.	○	○	○	○	○
I'm intolerant and impatient towards those aspects of my personality I don't like.	○	○	○	○	○
When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	○	○	○	○	○
I try to see my failings as part of the human condition.	○	○	○	○	○
When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.	○	○	○	○	○
When things are going badly for me, I see the difficulties as part of life that everyone goes through.	○	○	○	○	○
When I fail at something that's important to me I tend to feel alone in my failure.	○	○	○	○	○
When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world.	○	○	○	○	○
When I'm feeling down I tend to feel like most other people are probably happier than I am.	○	○	○	○	○
When I'm really struggling I tend to feel like other people must be having an easier time of it.	○	○	○	○	○
When something upsets me I try to keep my emotions in balance.	○	○	○	○	○
When I'm feeling down I try to approach my feelings with curiosity and openness.	○	○	○	○	○
When something painful happens I try to take a balanced view of the situation.	○	○	○	○	○
When I fail at something important to me I try to keep things in perspective.	○	○	○	○	○
When something upsets me I get carried away with my feelings.	○	○	○	○	○
When I'm feeling down I tend to obsess and fixate on everything that's wrong.	○	○	○	○	○
When something painful happens I tend to blow the incident out of proportion.	○	○	○	○	○
When I fail at something important to me I become consumed by feelings of inadequacy.	○	○	○	○	○

You will find below a series of statements which describe how people may react to the uncertainties of life. Please use the scale below to describe to what extent each item is characteristic of you.

	Not at all characteristic of me		Somewhat characteristic of me		Entirely characteristic of me
Uncertainty stops me from having a firm opinion.	○	○	○	○	○

Being uncertain means that a person is disorganised.	○	○	○	○	○
Uncertainty makes life intolerable.	○	○	○	○	○
It's unfair having no guarantees in life.	○	○	○	○	○
My mind can't be relaxed if I don't know what will happen tomorrow.	○	○	○	○	○
Uncertainty makes me uneasy, anxious, or stressed.	○	○	○	○	○
Unforeseen events upset me greatly.	○	○	○	○	○
It frustrates me not having all the information I need.	○	○	○	○	○
Uncertainty keeps me from living a full life.	○	○	○	○	○
One should always look ahead so as to avoid surprises.	○	○	○	○	○
A small unforeseen event can spoil everything, even with the best planning.	○	○	○	○	○
When it's time to act, uncertainty paralyses me.	○	○	○	○	○
Being uncertain means that I am not first rate.	○	○	○	○	○
When I am uncertain, I can't go forward.	○	○	○	○	○
When I am uncertain, I can't function very well.	○	○	○	○	○
Unlike me, others seem to know where they are going with their lives.	○	○	○	○	○
Uncertainty makes me vulnerable, unhappy, or sad.	○	○	○	○	○
I always want to know what the future has in store for me.	○	○	○	○	○
I can't stand being taken by surprise.	○	○	○	○	○
The smallest doubt can stop me from acting.	○	○	○	○	○
I should be able to organize everything in advance.	○	○	○	○	○
Being uncertain means that I lack confidence.	○	○	○	○	○
I think it's unfair that other people seem to be sure about their future.	○	○	○	○	○
Uncertainty keeps me from sleeping soundly.	○	○	○	○	○
I must get away from all uncertain situations.	○	○	○	○	○
The ambiguities in life stress me.	○	○	○	○	○
I can't stand being undecided about my future.	○	○	○	○	○

When things go wrong for me...

	Not at all like me				Extremely like me
I am easily disappointed with myself	○	○	○	○	○
There is a part of me that puts me down	○	○	○	○	○
I am able to remind myself of positive things about myself	○	○	○	○	○
I find it difficult to control my anger and frustration at myself	○	○	○	○	○
I find it easy to forgive myself	○	○	○	○	○
There is a part of me that feels I am not good enough	○	○	○	○	○
I feel beaten down by my own self-critical thoughts	○	○	○	○	○
I still like being me	○	○	○	○	○
I have become so angry with myself that I want to hurt or injure myself	○	○	○	○	○
I have a sense of disgust with myself	○	○	○	○	○
I can feel lovable and acceptable	○	○	○	○	○
I stop caring about myself	○	○	○	○	○

I find it easy to like myself	○	○	○	○	○
I remember and dwell on my failings	○	○	○	○	○
I call myself names	○	○	○	○	○
I am gentle and supportive with myself	○	○	○	○	○
I can't accept failures and setbacks without feeling inadequate	○	○	○	○	○
I think I deserve my self-criticism	○	○	○	○	○
I am able to care and look after myself	○	○	○	○	○
There is a part of me that wants to get rid of the the bits I don't like	○	○	○	○	○
I encourage myself for the future	○	○	○	○	○
I do not like being me	○	○	○	○	○

I get critical and angry at myself...

	not at all like me				Extremely like me
To make sure I keep up my standards	○	○	○	○	○
To stop myself being happy	○	○	○	○	○
To show I care about my mistakes	○	○	○	○	○
Because if I punish myself I feel better	○	○	○	○	○
To stop me being lazy	○	○	○	○	○
To harm part of myself	○	○	○	○	○
To keep myself in check	○	○	○	○	○
To punish myself for my mistakes	○	○	○	○	○
To cope with feelings of disgust with myself	○	○	○	○	○
To take revenge on part of myself	○	○	○	○	○
To stop me getting over confident	○	○	○	○	○
To stop me being angry with others	○	○	○	○	○
To destroy a part of me	○	○	○	○	○
To make me concentrate	○	○	○	○	○
To gain reassurance from others	○	○	○	○	○
To stop me becoming arrogant	○	○	○	○	○
To prevent future embarrressments	○	○	○	○	○
To remind me of my past failures	○	○	○	○	○
To keep me from making minor mistakes	○	○	○	○	○
To remind me of my responsibilities	○	○	○	○	○
To get at the things I hate in myself	○	○	○	○	○

Social/Personality

Social/Personality

Rate yourself on each item, on a scale from 1 (almost never true) to 7 (almost always true).

	Almost never true	Rarely true	Less than half the time true	Neutral	More than half the time true	Often true	Almost always true
Defends own beliefs	○	○	○	○	○	○	○
Independent	○	○	○	○	○	○	○

Assertive	○	○	○	○	○	○	○
Strong personality	○	○	○	○	○	○	○
Forceful	○	○	○	○	○	○	○
Have leadership abilities	○	○	○	○	○	○	○
Willing to take risks	○	○	○	○	○	○	○
Dominant	○	○	○	○	○	○	○
Willing to take a stand	○	○	○	○	○	○	○
Aggressive	○	○	○	○	○	○	○

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
There is a special person who is around when I am in need.	○	○	○	○	○	○	○
There is a special person with whom I can share joys and sorrows.	○	○	○	○	○	○	○
My family really tries to help me.	○	○	○	○	○	○	○
I get the emotional help and support I need from my family.	○	○	○	○	○	○	○
I have a special person who is a real source of comfort to me.	○	○	○	○	○	○	○
My friends really try to help me.	○	○	○	○	○	○	○
I can count on my friends when things go wrong.	○	○	○	○	○	○	○
I can talk about my problems with my family.	○	○	○	○	○	○	○
I have friends with whom I can share my joys and sorrows.	○	○	○	○	○	○	○
There is a special person in my life who cares about my feelings.	○	○	○	○	○	○	○
My family is willing to help me make decisions.	○	○	○	○	○	○	○
I can talk about my problems with my friends.	○	○	○	○	○	○	○

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly Disagree	Disagree	Agree	Strongly Agree
On the whole I am satisfied with myself.	○	○	○	○
At times I think I am no good at all.	○	○	○	○
I feel that I have a good number of qualities.	○	○	○	○
I am able to do thinks as well as most other people.	○	○	○	○
I feel I do not have much to be proud of.	○	○	○	○
I certainly feel useless at times.	○	○	○	○
I feel that I'm a person of worth, at least on equal plane with others.	○	○	○	○
I wish I could have more respect for myself.	○	○	○	○
All in all, I am inclined to feel that I am a failure.	○	○	○	○
I take a positive attitude towards myself.	○	○	○	○

Below are a number of statements about how various topics affect your personal beliefs. There are no right or wrong answers. For every item there are a large number of people who agree and disagree. Could you please put in the appropriate bracket the choice you believe to be true? Answer all the questions.

	Strongly disagree	Generally disagree	Somewhat disagree	Somewhat agree	Generally agree	Strongly agree
I can anticipate difficulties and take action to avoid them.	○	○	○	○	○	○
A great deal of what happens to me is probably just a matter of chance.	○	○	○	○	○	○
Everyone knows that luck or chance determines one's future.	○	○	○	○	○	○
I can control my problem(s) only if I have outside support.	○	○	○	○	○	○
When I make plans, I am almost certain that I can make them work.	○	○	○	○	○	○
My problem(s) will dominate me all my life.	○	○	○	○	○	○
My mistakes and problems are my responsibility to deal with.	○	○	○	○	○	○
Becoming a success is a matter of hard work, luck has little or nothing to do with it.	○	○	○	○	○	○
My life is controlled by outside actions and events.	○	○	○	○	○	○
People are victims of circumstance beyond their control.	○	○	○	○	○	○
To continually manage my problems I need professional help.	○	○	○	○	○	○
When I am under stress, the tightness in my muscles is due to things outside my control.	○	○	○	○	○	○
I believe a person can really be the master of his fate.	○	○	○	○	○	○
It is impossible to control my irregular fast breathing when I am having difficulties.	○	○	○	○	○	○
I understand why my problem(s) varies so much from one occasion to the next.	○	○	○	○	○	○
I am confident of being able to deal successfully with future problems.	○	○	○	○	○	○
In my case maintaining control over my problem(s) is mostly due to luck.	○	○	○	○	○	○

Please consider each statement and select the corresponding number which bests reflects your agreement with the statement. Please be sure to read each statement carefully.

Over the past month...

	Not at all	Some of the time	Most of the time	All of the time
Have you pushed yourself really hard to meet your goals?	○	○	○	○
Have you tended to focus on what you have achieved, rather than on what you have not achieved?	○	○	○	○
Have you been told your standards are too high?	○	○	○	○
Have you felt a failure as a person because you have not succeeded in meeting your goals?	○	○	○	○
Have you been afraid that you might not reach your standards?	○	○	○	○
Have you raised your standards because you thought they were too easy?	○	○	○	○
Have you judged yourself on the basis of your ability to achieve high standards?	○	○	○	○
Have you done just enough to get by?	○	○	○	○
Have you repeatedly checked how well you are doing at meeting your standards (for example, by comparing your performance with that of others)?	○	○	○	○

Do you think that other people would have thought of you as a "perfectionist"?	○	○	○	○
Have you kept trying to meet your standards, even if this has meant that you have missed out on things?	○	○	○	○
Have you avoided any tests of your performance (at meeting your goals) in case you failed?	○	○	○	○

For the following statements, please indicate to what extent you agree or disagree with the statement. Please be sure to read each statement carefully.

	Strongly disagree	Disagree	Neither agree not disagree	Agree	Strongly agree
If I fail at work/school, I am a failure as a person	○	○	○	○	○
If someone does a task at work/school better than me, then I feel like I failed at the whole task	○	○	○	○	○
If I do not do well all the time, people will not respect me	○	○	○	○	○
The fewer mistakes I make, the more people will like me	○	○	○	○	○
I set higher goals for myself than most people	○	○	○	○	○
I have extremely high goals	○	○	○	○	○
Other people seem to accept lower standards from themselves than I do	○	○	○	○	○
I expect higher performance in my daily tasks than most people	○	○	○	○	○

Read each of the following statements carefully and indicate how characteristic it is of you according to the scale.

	Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extremely characteristic of me
I worry about what other people will think of me even when I know it doesn't make any difference.	○	○	○	○	○
I am unconcerned even if I know people are forming an unfavourable impression of me.	○	○	○	○	○
I am frequently afraid of other people noticing my shortcomings.	○	○	○	○	○
I rarely worry about what kind of impression I am making on someone.	○	○	○	○	○
I am afraid others will not approve of me.	○	○	○	○	○
I am afraid that people will find fault with me.	○	○	○	○	○
Other people's opinions of me do not bother me.	○	○	○	○	○
When I am talking to someone, I worry about what they may be thinking about me.	○	○	○	○	○
I am usually worried about what kind of impression I make.	○	○	○	○	○
If I know someone is judging me, it has little effect on me.	○	○	○	○	○
Sometimes I think I am too concerned with what other people think of me.	○	○	○	○	○
I often worry that I will say or do the wrong things.	○	○	○	○	○

IPIP-short
How much do you agree with each statement about you as you generally are now, not as yo wish to be in the future?

	Strongly agree		Neither agree nor disagree		Strongly disagree
Am the life of the party.	○	○	○	○	○
Sympathize with others' feelings.	○	○	○	○	○

Get chores done right away.	○	○	○	○	○
Have frequent mood swings.	○	○	○	○	○
Have a vivid imagination.	○	○	○	○	○
Don't talk a lot.	○	○	○	○	○
Am not interested in other people's problems.	○	○	○	○	○
Often forget to put things back in their proper place.	○	○	○	○	○
Am relaxed most of the time.	○	○	○	○	○
Am not interested in abstract ideas.	○	○	○	○	○
Talk to a lot of different people at parties.	○	○	○	○	○
Feel others' emotions.	○	○	○	○	○
Like order.	○	○	○	○	○
Get upset easily.	○	○	○	○	○
Have difficulty understanding abstract ideas.	○	○	○	○	○
Keep in the background.	○	○	○	○	○
Am not really interested in others.	○	○	○	○	○
Make a mess of things.	○	○	○	○	○
Seldom feel blue.	○	○	○	○	○
Do not have a good imagination.	○	○	○	○	○

It is important for research that only valid responses are used. Would you recommend that your responses be used for this research? There will be no consequence for answering no to this question, because it is most important the data is valid

○ Yes

○ No

Contact details

Please enter your name and student ID so we can award you points in SONA. These details will be removed from the data set after grades are ratified at the end of semester, at which point your responses to this survey will be anonymous.

☐ Name:

☐ Student ID

Please enter your name and email address so we can contact you if you win a prize. These details will be removed from the data set after prizes are drawn.

☐ Name:

☐ Email:

Thank you for taking the time to complete this survey. We realize some of the questions might have raised some uncomfortable memories for some people. You might find the following resources helpful.

Self injury fact sheet
Alcohol fact sheet
Stress management

Appendix C: Factor Structure Eigenvalues

Initial Eigenvalues

Factor	Eigenvalue
1	5.77011
2	0.57986
3	0.13537
4	0.11579
5	0.02147
6	0.00139
7	−0.05003
8	−0.10714
9	−0.12795
10	−0.18269
11	−0.41876

Scree Plot
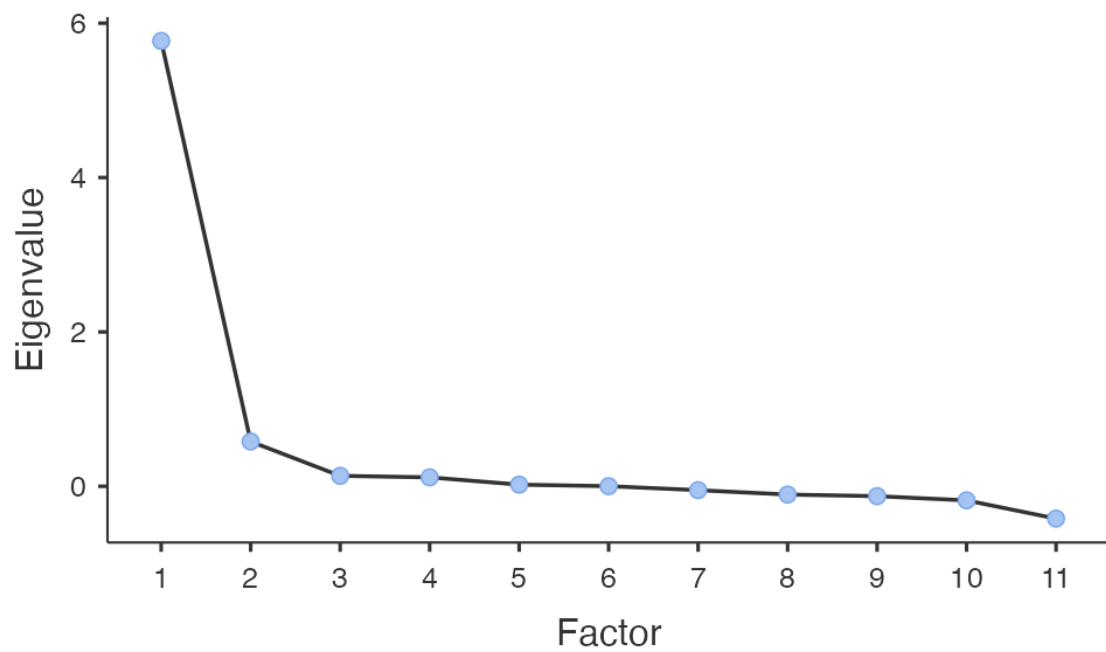
Appendix D: Ethics Approval Letter – Study 3 and 4

Curtin University

Research Office at Curtin

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Perth Western Australia 6845

Telephone +61 8 9266 7863
Facsimile +61 8 9266 3793
Web research.curtin.edu.au

23-Oct-2020

Name: Penelope Hasking
Department/School: School of Psychology
Email: Penelope.Hasking@curtin.edu.au

Dear Penelope Hasking

RE: Ethics approval
Approval number: HRE2020-0624

Thank you for submitting your application to the Human Research Ethics Office for the project **Avoidance and Non-suicidal Self-injury: Scale development and validation**.

Your application was reviewed by the Curtin University Human Research Ethics Committee at their meeting on **06-Oct-2020**.

The review outcome is: **Approved**.

Your proposal meets the requirements described in National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007)*.

Approval is granted for a period of one year from to . Continuation of approval will be granted on an annual basis following submission of an annual report.

Personnel authorised to work on this project:

Name	Role
Haywood, Sophie	Student
Boyes, Mark	Co-Inv
Hasking, Penelope	CI

Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
    - proposed changes to the approved proposal or conduct of the study
    - unanticipated problems that might affect continued ethical acceptability of the project
    - major deviations from the approved proposal and/or regulatory guidelines
    - serious adverse events
3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised

6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
8. Data and primary materials must be retained and stored in accordance with the Western Australian University Sector Disposal Authority (WAUSDA) and the Curtin University Research Data and Primary Materials policy
9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
11. Ethics approval is dependent upon ongoing compliance of the research with the Australian Code for the Responsible Conduct of Research, the National Statement on Ethical Conduct in Human Research, applicable legal requirements, and with Curtin University policies, procedures and governance requirements
12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

Special Conditions of Approval

This letter constitutes ethical approval only. This project may not proceed until you have met all of the Curtin University research governance requirements.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at hrec@curtin.edu.au or on 9266 2784.

Yours sincerely

Sharyn Burns

Associate Professor Sharyn Burns
Chair, Human Research Ethics Committee

Appendix E: Information Sheet, Consent, and Questionnaire – Study 3 and 4

PARTICIPANT INFORMATION STATEMENT

HREC Project Number: HREC2020-0624-05

Project Title: *Avoidance and Non-suicidal Self-injury*

Chief Investigator: *Professor Penelope Hasking*

Co-investigators: *Associate Professor Mark Boyes and Sophie Haywood*

Version Number: *3.0*

Version Date: *07/02/2022*

What is the study about?

Non-suicidal self-injury involves deliberate damage to one's self, without suicidal intent. This includes behaviours such as cutting, burning, and punching walls. Self-injury is a behaviour that occurs across all ages.

This study is looking at the role avoidance plays in the lives of individuals who engage in self-injury as well as alcohol and other substances. You will be asked to rate how relevant certain statements are, in relation to your experiences of self-injury, alcohol, and other substances. Our findings will contribute to the literature on non-suicidal self-injury and avoidance. This will allow for a deeper understanding of the role avoidance plays in non-suicidal self-injury, alcohol, and other substances. This will help to guide future research as well as inform possible interventions.

Who is doing the research?

This research is being conducted by Sophie Haywood, a PhD candidate in the School of Population Health at Curtin University. The research will be supervised by Professor Penelope Hasking and Associate Professor Mark Boyes. This research will be used to obtain a Doctor of Philosophy – Psychology at Curtin University, and is funded by the university.

There will be no costs involved in participating.

What will I have to do?

Your participation will involve completing a questionnaire. The questionnaire will ask questions regarding your demographic information and your experiences with self-injury, alcohol, other substances, and emotions. All questionnaires should take about 40 minutes to complete. This questionnaire can be completed whenever convenient for you.

Are there any benefits' to being in the research project?

There may be no personal benefits to you from participating however the results will assist in contributing to our understand of the role avoidance plays in non-suicidal self-injury. We hope that the results of this research will allow us to add to the knowledge we have about non-suicidal self-injury.

Reimbursement

Curtin participants, from the SONA pool, will receive 3 SONA points upon completion of the questionnaire.

Are there any risks, side-effects, discomforts or inconveniences from being in the research project?

Participating in this study is unlikely to have any risks beyond everyday living. However, it is possible that some questions in the survey may trigger upsetting thoughts and memories for some individuals. Remember that taking part in this study is voluntary and you are not obliged to participate.

We suggest taking a break or stopping the questionnaire if you become upset whilst answering the questions. Your participation is voluntary and if you feel that the questionnaire is too distressing for you, you have the right to withdraw. You will be provided with a list of counselling and support resources at the bottom of this information sheet.

If you have any responses, questions or complaints regarding the research please contact the

Graduate Research School – Curtin University on +61 (8) 9266 9266 (GMT +8).

Who will have access to my information?

You will be asked to provide your name and student ID at the end of the survey, so that we can award you the SONA points. When entering this information, you will be directed to a separate database, this will ensure that no identifying information will be linked to the information you provide. The following people will have access to the information we collect in this research: the research team and, in the event of an audit or investigation, staff from the Research Office at Curtin. The information in this research is electronic and will be stored on a password-protected computer. The data collected in this study will be kept under secure conditions at Curtin University for 7 years after the research has ended and then it will be destroyed.

De-identified data may also be stored on a public repository in future and made available to other researchers or made available as supplemental material, if required by publications. No identifiable information will ever be released to third parties or made public in anyway.

Will you tell me the results of the research?

The results from this study may be presented at a conference or published in a journal but you will not be identifiable in any publications or presentations. If you wish to have a copy of the final results or have any questions, please contact us:

Sophie Haywood: s.haywood@postgrad.curtin.edu.au

Penelope Hasking: Penelope.Hasking@curtin.edu.au

Mark Boyes: Mark.Boyes@curtin.edu.au

Do I have to take part in the research project?

Taking part in a research project is voluntary. It is your choice to take part or not. You do not have to agree if you do not want to. If you decide to take part and then change your mind, that is okay, you can withdraw from the project by simply closing your browser. If you

choose not to take part or start and then stop the study, it will not affect your relationship with the research team. Once data has been submitted we will be unable to destroy your information as it will be anonymous and unidentifiable.

What happens next and who can I contact about the research?

If you decide to take part in this research, we will ask you to provide your consent. By providing your consent, you are telling us that you understand what you have read and what has been discussed. Checking the consent box below indicates that you agree to be in the research project, and have your information used as described.

If you have any further questions, please contact Sophie Haywood by email at s.haywood@postgrad.curtin.edu.au. Alternatively, you may also contact any of the research supervisors using the contact details provided above.

Thank you for taking time to complete this survey.

Sophie Haywood: s.haywood@postgrad.curtin.edu

Prof Penelope Hasking: penelope.hasking@curtin.edu.au

Ass. Prof. Mark Boyes: mark.boyes@curtin.edu.au

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 2020-0624). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

Below you will find some international resources you may find helpful in managing stress if you are feeling distressed or to learn more about self-injury. Additionally, a link to alcohol

and drug support services is provided.

https://checkpointorg.com/global/

https://www.mhc.wa.gov.au/about-us/our-services/alcohol-and-drug-support-service/

Q15   I have received information regarding this research and had an opportunity to ask questions. I believe I understand the purpose, extent and possible risks of my involvement in this project and I voluntarily consent to take part.

○ I agree

○ I do not agree

Q35 Are you currently studying at university?

○ Yes

○ No

End of Block: Information sheet and consent

Q37 What Australian university are you currently enrolled at?

Please select your University

▼ Australian Catholic University ... Western Sydney University

Q38 If your university is not listed, please specify below:

_____

Q39 What year of university are you currently in?

○ First year

○ Second year

○ Third year

○ Fourth year

○ Postgrad

Start of Block: Demographics

✱

Q4 What is your date of birth? (dd/mm/yyyy)

_____

Q5 What is your gender?

○ Man

○ Woman

○ Self-describe _____

Q6 Do you consider yourself to be:

○ Heterosexual

○ Homosexual

○ Bisexual

○ Self-specify _____

○ Prefer not to say

Q8 What country were you born in?

_____

Q13 Have you ever been diagnosed with a mental illness?

○ Yes (please specify)

_____

○ No

End of Block: Demographics

Start of Block: NSSI

Q16

Nonsuicidal Self-Injury

This questionnaire asks about a variety of nonsuicidal self-injury behaviours.

Nonsuicidal self-injury is defined as the deliberate physical self-damage or self-harm that is

not accompanied by suicidal intent or ideation. Although cutting is one of the most well-

known nonsuicidal self-injury behaviours, it can take many forms including but not limited to

biting, burning, scratching, self-bruising or swallowing dangerous substances if undertaken

with intent to injure oneself.

Q17 Have you ever thought about engaging in self-injury?

○ Yes

○ No

Q18 Have you ever engaged in nonsuicidal self-injury?

○ Yes

○ No

Q19 How many times have you self-injured in the last year?

○ None

○ Once

○ Twice

○ Three times

○ Four times

○ 5 or more times

Q20

Please estimate the number of times in your life you have intentionally (i.e., on purpose)
performed each type of non-suicidal self-injury (e.g., 0, 10, 100, 500):

	Click to write
Cutting	
Biting	

Burning

Carving

Pinching

Pulling hair

Severe scratching

Banging or hitting self

Interfering with wound healing

Rubbing skin against rough surface

Sticking self with needles

Swallowing dangerous substances	
Other	

Q21 If you feel that you have a *main* form of self-injury, please indicate from the list below the behaviour you consider to be your main form of self-injury

- ○ Cutting

- ○ Biting

- ○ Burning

- ○ Carving

- ○ Pinching

- ○ Pulling hair

- ○ Severe scratching

- ○ Banging or hitting yourself

- ○ Interfering with wound healing

- ○ Rubbing skin against rough surface

- ○ Sticking yourself with needles

- ○ Swallowing dangerous substances

○ Other

Q22 At what age did you (please write a number):

	Click to write
First injure yourself?	
Most recently injure yourself?	

Q23 Do you experience physical pain during self-injury?

○ Yes

○ Sometimes

○ No

Q24 When you self-injure are you alone?

○ Yes

○ Sometimes

○ No

Q25 Typically, how much time elapses from the time you have the urge to self-injure until you act on the urge?

○

○ 1-3 hours

○ 3-6 hours

○ 6-12 hours

○ 12-24 hours

○ >1 day

Q26 Do/did you want to stop self-injuring?

○ Yes

○ No

Q27 This inventory was written to help us better understand the experience of nonsuicidal self-injury. Below is a list of statements that may or may not be relevant to your experience of self-injury.

Please identify the statements that are most relevant for you.

When I self-injure I am...

	Not relevant	Somewhat relevant	Very relevant
calming myself down	○	○	○

creating a boundary between myself and others	○	○	○
punishing myself	○	○	○
giving myself a way to care for myself (by attending to the wound)	○	○	○
causing pain so I will stop feeling numb	○	○	○
avoiding the impulse to attempt suicide	○	○	○
doing something to generate excitement or exhilaration	○	○	○
bonding with peers	○	○	○
letting others know the extent of my emotional pain	○	○	○
seeing if I can stand the pain	○	○	○
creating a physical sign that I feel awful	○	○	○

getting back at someone	○	○	○
ensuring I am self-sufficient	○	○	○
releasing emotional pressure that has built up inside of me	○	○	○
demonstrating that I am separate from other people	○	○	○
expressing anger towards myself for being worthless or stupid	○	○	○
creating a physical injury is easier to care for than my emotional distress	○	○	○
trying to feel something (as opposed to nothing) even if it is physical pain	○	○	○
responding to suicidal thoughts without actually attempting suicide	○	○	○

entertaining myself or others by doing something extreme	○	○	○
fitting in with others	○	○	○
seeking care or help from others	○	○	○
demonstrating I am tough or strong	○	○	○
proving to myself that emotional pain is real	○	○	○
getting revenge against others	○	○	○
demonstrating that I do not need to rely on others for help	○	○	○
reducing anxiety, frustration, anger, or other overwhelming emotions	○	○	○
establishing a barrier between myself and others	○	○	○

reacting to feeling unhappy with myself or disgusted with myself	○	○	○
allowing myself to focus on treating the injury, which can be gratifying or satisfying	○	○	○
making sure I am alive when I don't feel real	○	○	○
putting a stop to suicidal thoughts	○	○	○
pushing my limits in a manner akin to skydiving or other extreme activities	○	○	○
creating a sign of friendship or kinship with friends or loved ones	○	○	○
keeping a loved one from leaving or abandoning me	○	○	○
proving I can take the physical pain	○	○	○

signifying the emotional distress I'm experiencing	○	○	○
trying to hurt someone close to me	○	○	○
establishing that I am autonomous/independent	○	○	○

End of Block: NSSI

Start of Block: MEAQ

Q104 MEAQ

Please indicate the extent to which you agree or disagree with each of the following statements.

	Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree
1. I won't do something if I think it will make me uncomfortable		○			○	
2. If I could magically remove all of my painful		○			○	

memories, I would

3. When something upsetting comes up, I try very hard to stop thinking about it.

((

4. I sometimes have difficulty identifying how I feel.

((

5. I tend to put off unpleasant things that need to get done.

((

6. People should face their fears.

((

7. Happiness means never feeling any pain or disappointment.

((

8. I avoid activities if there is even a small possibility of getting hurt.

○ ○

9. When negative thoughts come up, I try to fill my head with something else.

○ ○

10. At times, people have told me I'm in denial.

○ ○

11. I sometimes procrastinate to avoid facing challenges.

○ ○

12. Even when I feel uncomfortable, I don't give up working toward things I value.

○ ○

13. When I am hurting, I would do anything to feel better.

14. I rarely do something if there is a chance that it will upset me.

15. I usually try to distract myself when I feel something painful.

16. I am able to "turn off" my emotions when I don't want to feel.

17. When I have something important to do I find myself doing a lot of

other things instead.

18. I am willing to put up with pain and discomfort to get what I want.

19. Happiness involves getting rid of negative thoughts.

20. I work hard to avoid situations that might bring up unpleasant thoughts and feelings in me.

21. I don't realise I'm anxious until other people tell me.

22. When upsetting memories come up, I try to focus on other things.

         ((

23. I am in touch with my emotions.

         ((

24. I am willing to suffer for the things that matter to me.

         ((

25. One of my big goals is to be free from painful memories.

         ((

26. I prefer to stick to what I am comfortable with, rather than try new activities.

         ((

27. I work hard to keep out upsetting feelings.

28. People have said that I don't own up to my problems.

29. Fear or anxiety won't stop me from doing something important.

30. I try to deal with problems right away.

31. I'd do anything to feel less stressed.

32. If I have any doubts about doing something, I just won't do it.

33. When unpleasant memories come to me, I try to put them out of my mind.

34. In this day and age people should not have to suffer.

35. Others have told me that I suppress my feelings.

36. I try to put off unpleasant tasks for as long as possible.

37. When I am hurting, I still do what needs to be done.

38. My life would be great

if I never felt anxious.

39. If I am starting to feel trapped, I leave the situation immediately.

40. When a negative thought comes up, I immediately try to think of something else.

41. It's hard for me to know what I'm feeling.

42. I won't do something until I absolutely have to.

43. I don't let pain and discomfort stop

me from getting what I want.

44. I would give up a lot not to feel bad.

45. I go out of my way to avoid uncomfortable situations.

46. I can numb my feelings when they are too intense.

47. Why do today what you can put off until tomorrow.

48. I am willing to put up with sadness to get what I want.

49. Some people have

told me that I "hide my head in the sand"

50. Pain always leads to suffering.

51. If I am in a slightly uncomfortable situation, I try to leave right away.

52. It takes me awhile to realise when I'm feeling bad.

53. I continue working toward my goals even if I have doubts.

54. I wish I could get rid of all my negative emotions.

55. I avoid situations if there is a chance I'll feel nervous.

56. I feel disconnected from my emotions.

57. I don't let gloomy thoughts stop me from doing what I want.

58. The key to a good life is never feeling any pain.

59. I'm quick to leave any situation that makes me feel uneasy.

60. People have told me that I'm

not aware of my problems.		
61. I hope to live without any sadness and disappointment.	(	(
62. When working on something important, I won't quit even if things get difficult.	(	(

End of Block: MEAQ

Start of Block: PAQ

Q84

PAQ This questionnaire asks about how you perceive and experience your emotions. Please score the following statements according to how much you agree or disagree that the statement is true of you.

Select one answer for each statement. Some questions mention bad or unpleasant emotions, this means emotions like sadness, anger, or fear. Some questions mention good or pleasant emotions, this means emotions like happiness, amusement, or excitement.

	Strongly disagree	-	-	Neither agree nor disagree	-	-	Strongly agree
When I'm feeling bad(feeling an unpleasant emotion), I can't find the right words to describe those feelings.							
When I'm feeling bad, I can't tell whether I'm sad, angry or scared.							
I tend to ignore how I feel.							
When I'm feeling							

good

(feeling a

pleasant

emotion), I

can't find

the right

words to

describe

those

feelings.

When I'm

feeling

good, I

can't tell

whether I'm

happy,

excited, or

amused.

I prefer to

just let my

feelings

happen in

the

background,

rather than

focus on them.

When I'm feeling bad, I can't talk about those feelings in much depth or detail.

When I'm feeling bad, I can't make sense of those feelings.

I don't pay attention to my emotions

When I'm feeling good, I can't talk about those feelings in

much depth
or detail.

When I'm
feeling
good, I
can't make
sense of
those
feelings.

Usually, I
try to avoid
thinking
about what
I'm feeling.

When
something
bad
happens,
it's hard for
me to put
into words
how I'm
feeling.

When I'm
feeling bad,
I get

confused about what emotion it is.

I prefer to focus on things I can actually see or touch, rather than my emotions

When something good happens, it's hard for me to put into words how I'm feeling.

When I'm feeling good, I get confused about what

emotion it is.

I don't try to be 'in touch' with my emotions.

When I'm feeling bad, if I try to describe how I'm feeling I don't know what to say.

When I'm feeling bad, I'm puzzled by those feelings.

It's not important for me to know what I'm feeling.

When I'm feeling good, if I try to describe how I'm feeling I don't know what to say.
When I'm feeling good, I'm puzzled by those feelings.
It's strange for me to think about my emotions.

Q89

TAS-20

Using the scale provided as a guide, indicate how much you agree or disagree with each of the following statements. Give only one answer for each statement.

	Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
I am often confused about what emotion I am feeling.	○	○	○	○	○
It is difficult for me to find the right words for my feelings.	○	○	○	○	○
I have physical sensations that even doctors don't understand.	○	○	○	○	○
I am able to describe my feelings easily.	○	○	○	○	○
I prefer to analyze problems	○	○	○	○	○

rather than just describe them.

When I am upset, I don't know if I am sad, frightened, or angry.

○　　　○　　　○　　　○　　　○

I am often puzzled by sensations in my body.

○　　　○　　　○　　　○　　　○

I prefer to just let things happen rather than to understand why they turned out that way.

○　　　○　　　○　　　○　　　○

I have feelings that I can't quite identify.

○　　　○　　　○　　　○　　　○

Being in touch with emotions is essential.	○	○	○	○	○
I find it hard to describe how I feel about people.	○	○	○	○	○
People tell me to describe my feelings more.	○	○	○	○	○
I don't know what's going on inside me.	○	○	○	○	○
I often don't know why I am angry.	○	○	○	○	○
I prefer talking to people about their daily activities rather than their feelings.	○	○	○	○	○
I prefer to watch "light" entertainment	○	○	○	○	○

shows rather than psychological dramas.

It is difficult for me to reveal my innermost feelings, even to close friends

○ ○ ○ ○ ○

I can feel close to someone, even in moments of silence.

○ ○ ○ ○ ○

I find examination of my feelings useful in solving personal problems.

○ ○ ○ ○ ○

Looking for hidden meanings in

○ ○ ○ ○ ○

movies or
plays distracts
from their
enjoyment.

Q90

DTSThink of times that you feel distressed or upset. Select the item from the options
(strongly agree to strongly disagree) that best describes your beliefs about feeling distressed
or upset

	Strongly agree	Mildly agree	Agree and disagree equally	Mildly disagree	Strongly Disagree
Feeling distressed or upset is unbearable to me.	○	○	○	○	○
When I feel distressed or upset, all I can think about is how bad I feel.	○	○	○	○	○
I can't handle feeling	○	○	○	○	○

distressed or upset.

My feelings of distress are so intense that they completely take over.

○   ○   ○   ○   ○

There's nothing worse than feeling distressed or upset.

○   ○   ○   ○   ○

I can tolerate being distressed or upset as well as most people.

○   ○   ○   ○   ○

My feelings of distress or being upset are not acceptable.

○   ○   ○   ○   ○

I'll do anything to avoid feeling distressed or upset.

○　　　○　　　○　　　○　　　○

Other people seem to be able to tolerate feeling distressed or upset better than I can.

○　　　○　　　○　　　○　　　○

Being distressed or upset is always a major ordeal for me.

○　　　○　　　○　　　○　　　○

I am ashamed of myself when I feel distressed or upset.

○　　　○　　　○　　　○　　　○

My feelings of distress or

○　　　○　　　○　　　○　　　○

being upset scare me.	○	○	○	○	○
I'll do anything to stop feeling distressed or upset.	○	○	○	○	○
When I feel distressed or upset, I must do something about it immediately.	○	○	○	○	○
When I feel distressed or upset, I cannot help but concentrate on how bad the distress actually feels.	○	○	○	○	○

Q91 PANAS Indicate the extent you have felt this way over the past week.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely

Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○

Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

Q102 ERIPS – Reactivity You have just completed a questionnaire which indicated how likely you are to have certain feelings or emotional experiences. In the following questionnaire you will be shown a list of the same feelings, but you are asked to make the following judgment: When you are exposed to a situation that would make the "average" person experience this feeling, how likely is it that you will experience this particular feeling? Please rate this using the five options provided.

	Not at all likely	Slightly likely	Moderately likely	Very likely	Extremely likely
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○

Not at all likely	Slightly likely	Moderately likely	Very likely	Extremely likely

Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

Q103 ERIPS - Perseveration You have just completed a questionnaire that indicated how likely you are to have certain feelings or emotional experiences. In the following questionnaire, you will be shown a list of the same feelings, but you are asked to make the

following judgment: When you are experiencing a situation that does make you feel this way, **how long is this feeling likely to persist**? The longer a feeling lasts the more persistent it is. Please rate this using the five options provided.

	Not at all persistent	Slightly persistent	Moderately persistent	Very persistent	Extremely persistent
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○

Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

Q92 ERIPS - Intensity You have just completed a questionnaire that indicated how likely you are to have certain feelings or emotional experiences. In the following questionnaire, you will

be shown a list of the same feelings, but you are asked to make the following judgment:

When you are experiencing a situation that does make you feel this way, **how intense** is the

feeling compared to how other people feel?

	Not at all intense	Slightly intense	Moderately intense	Very intense	Extremely intense
Interested	○	○	○	○	○
Distressed	○	○	○	○	○
Excited	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Scared	○	○	○	○	○
Hostile	○	○	○	○	○
Enthusiastic	○	○	○	○	○

Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Alert	○	○	○	○	○
Ashamed	○	○	○	○	○
Inspired	○	○	○	○	○
Nervous	○	○	○	○	○
Determined	○	○	○	○	○
Attentive	○	○	○	○	○
Jittery	○	○	○	○	○
Active	○	○	○	○	○
Afraid	○	○	○	○	○

Q94

DERS

Please indicate below how often the following statements apply to you.

	almost never (0-10%)	sometimes (11-35%)	about half the time (36-65%)	most of the time (66-90%)	almost always (91-100%)
I am clear about my feelings	○	○	○	○	○
I pay attention to how I feel	○	○	○	○	○
I experience my emotions as overwhelming and out of control	○	○	○	○	○
I have no idea how I am feeling	○	○	○	○	○
I have difficulty making sense out of my feelings	○	○	○	○	○

I am attentive to my feelings	○	○	○	○	○
I know exactly how I am feeling	○	○	○	○	○
I care about what I am feeling	○	○	○	○	○
I am confused about how I feel	○	○	○	○	○
When I'm upset, I acknowledge my emotions	○	○	○	○	○
When I'm upset, I become angry at myself for feeling that way	○	○	○	○	○
When I'm upset, I become embarrassed	○	○	○	○	○

for feeling that way					
When I'm upset, I have difficulty getting work done	○	○	○	○	○
When I'm upset, I become out of control	○	○	○	○	○
When I'm upset, I believe that I will remain that way for a long time	○	○	○	○	○
When I'm upset, I believe that I will end up feeling very depressed	○	○	○	○	○
When I'm upset, I believe that my	○	○	○	○	○

feelings are valid and important

When I'm upset, I have difficulty focusing on other things

○ ○ ○ ○ ○

When I'm upset, I feel out of control

○ ○ ○ ○ ○

When I'm upset, I can still get things done

○ ○ ○ ○ ○

When I'm upset, I feel ashamed of myself for feeling that way

○ ○ ○ ○ ○

When I'm upset, I know that I can find a way to

○ ○ ○ ○ ○

eventually feel better

When I'm upset, I feel like I am weak ○ ○ ○ ○ ○

When I'm upset, I feel like I can remain in control of my behaviours ○ ○ ○ ○ ○

When I'm upset, I feel guilty for feeling that way ○ ○ ○ ○ ○

When I'm upset, I have difficulty concentrating ○ ○ ○ ○ ○

When I'm upset, I have difficulty controlling my behaviours ○ ○ ○ ○ ○

When I'm upset, I believe there is nothing I can do to make myself feel better	○	○	○	○	○
When I'm upset, I become irritated at myself for feeling that way	○	○	○	○	○
When I'm upset, I start to feel very bad about myself	○	○	○	○	○
When I'm upset, I believe that wallowing in it is all I can do	○	○	○	○	○
When I'm upset, I lose	○	○	○	○	○

control over
my behaviour

When I'm
upset, I have
difficulty
thinking about
anything else

○ ○ ○ ○ ○

When I'm
upset, I take
time to figure
out what I'm
really feeling

○ ○ ○ ○ ○

When I'm
upset, it takes
me a long time
to feel better

○ ○ ○ ○ ○

When I'm
upset, my
emotions feel
overwhelming

○ ○ ○ ○ ○

Q95

ERS

Please read each statement carefully and indicate how closely it resembles you.

	Not at all like me				Completely like me
When something happens that upsets me, it's all I can think about it for a long time.	○	C	C	C	○
My feelings get hurt easily.	○	C	C	C	○
When I experience emotions, I feel them very strongly/intensely.	○	C	C	C	○
When I'm emotionally upset, my whole body gets physically upset as well.	○	C	C	C	○
I tend to get very emotional very easily.	○	C	C	C	○

I experience emotions very strongly.	○	○	○	○	○
I often feel extremely anxious.	○	○	○	○	○
When I feel emotional, it's hard for me to imagine feeling any other way.	○	○	○	○	○
Even the littlest things make me feel emotional.	○	○	○	○	○
If I have a disagreement with someone, it takes a long time for me to get over it.	○	○	○	○	○
When I am angry/upset, it takes me much longer than most people to calm down.	○	○	○	○	○

I get angry at people very easily.	○	○	○	○	○
I am often bothered by things that other people don't react to.	○	○	○	○	○
I am easily agitated.	○	○	○	○	○
My emotions go from neutral to extreme in an instant.	○	○	○	○	○
When something bad happens, my mood changes very quickly. People tell me I have a very short fuse.	○	○	○	○	○
People tell me that my emotions are too intense for the situation.	○	○	○	○	○

I am a very sensitive person.	○	○	○	○	○
My moods are very strong and powerful.	○	○	○	○	○
I often get so upset it's hard for me to think straight.	○	○	○	○	○
Other people tell me I'm overreacting.	○	○	○	○	○

End of Block: PAQ

Start of Block: DERS - Positive

Q106 Please indicate below how often the following statements apply to you.

	Almost Never (0 - 10%)	Sometimes (11 - 35%)	About half the time (36 - 65%)	Most of the time (66 - 90%)	Almost always (91 - 100%)
1. When I'm happy, I have difficulty focusing on other things.	○	○	○	○	○

2. When I'm happy, I feel like I can remain in control of my behaviours.

○   ○   ○   ○   ○

3. When I'm happy, I become angry with myself for feeling that way.

○   ○   ○   ○   ○

4. When I'm happy, I worry that I will lose control.

○   ○   ○   ○   ○

5. When I'm happy, I feel ashamed with myself for feeling that way.

○   ○   ○   ○   ○

6. When I'm happy, I become out of control.

○   ○   ○   ○   ○

7. When I'm happy, I become scared and fearful of those feelings.

○ ○ ○ ○ ○

8. When I'm happy, I have difficulty concentrating.

○ ○ ○ ○ ○

9. When I'm happy, I have difficulty controlling my behaviours.

○ ○ ○ ○ ○

10.When I'm happy, I can still get things done.

○ ○ ○ ○ ○

11. When I'm happy, I have difficulty thinking about anything else.

○ ○ ○ ○ ○

12. When I'm happy, I feel out of control.	○	○	○	○	○
13. When I'm happy, I have difficulty getting work done.	○	○	○	○	○
14. When I'm happy, I feel guilty for feeling that way.	○	○	○	○	○
15. When I'm happy, I lose control over my behaviours.	○	○	○	○	○

End of Block: DERS - Positive

Start of Block: Perth Emotional Reactivity Scale

Q107 This questionnaire is designed to measure different aspects of how you typically react to experiencing emotional events. Please score the following statements according to how much they apply or do not apply to you on a typical day.

	Very unlike me	Somewhat unlike me	Neither like or unlike me	Somewhat like me	Very like me
1. I tend to get happy very easily.	○	○	○	○	○
2. I tend to get upset very easily.	○	○	○	○	○
3. When I'm happy, the feeling stays with me for quite a while.	○	○	○	○	○
4. When I'm upset, it takes me quite a while to snap out of it.	○	○	○	○	○
5. I think I experience happiness	○	○	○	○	○

more intensely than my friends.

6. If I'm upset, I feel it more intensely than everyone else.

○   ○   ○   ○   ○

7. My emotions go automatically from neutral to positive.

○   ○   ○   ○   ○

8. I tend to get disappointed very easily.

○   ○   ○   ○   ○

9. When I'm feeling positive, I can stay like that for a good part of the day.

○   ○   ○   ○   ○

10. It takes me longer than other people to

○   ○   ○   ○   ○

get over an anger episode.

11. When I am joyful, I tend to feel it very deeply.

○ ○ ○ ○ ○

12. I experience the feeling of frustration very deeply.

○ ○ ○ ○ ○

13. I tend to get enthusiastic about things very quickly.

○ ○ ○ ○ ○

14. I tend to get frustrated very easily.

○ ○ ○ ○ ○

15. I can remain enthusiastic for quite a while.

○ ○ ○ ○ ○

16. It's hard for me to recover from frustration.

○　　　　○　　　　○　　　　○　　　　○

17. I experience positive mood very strongly.

○　　　　○　　　　○　　　　○　　　　○

18. Normally, when I'm unhappy I feel it very strongly.

○　　　　○　　　　○　　　　○　　　　○

19. I feel good about positive things in an instant

○　　　　○　　　　○　　　　○　　　　○

20. My emotions go from neutral to negative very quickly.

○　　　　○　　　　○　　　　○　　　　○

21. I stay happy for a while if I

receive
pleasant news.

22. Once in a
negative
mood, it's hard   ○   ○   ○   ○   ○
to snap out of
it.

23. When I'm
enthusiastic
about
something, I   ○   ○   ○   ○   ○
feel it very
powerfully.

24. When I'm
angry I feel it
very   ○   ○   ○   ○   ○
powerfully.

25. I react to
good news   ○   ○   ○   ○   ○
very quickly.

26. I tend to
get pessimistic
about negative   ○   ○   ○   ○   ○
things very
quickly.

27. If someone pays me a compliment, it improves my mood for a long time.

○　　　　○　　　　○　　　　○　　　　○

28. When annoyed about something, it ruins my entire day.

○　　　　○　　　　○　　　　○　　　　○

29. I experience positive feelings more deeply than my relatives and friends.

○　　　　○　　　　○　　　　○　　　　○

30. My negative feelings feel very intense.

○　　　　○　　　　○　　　　○　　　　○

End of Block: Perth Emotional Reactivity Scale

Start of Block: Block 9

AUDIT This section will ask you questions about your consumption of alcohol in the **past year**. Answers relate to "standard drinks". If you are unsure of what a standard drink is, details can be located

Standard drink guide

Please answer questions to the best of your ability.

Q1

How often do you have a drink containing alcohol?

◯ Never

◯ Monthly or less

◯ 2 to 4 times a month

◯ 2 to 3 times a week

◯ 4 or more times a week

Q2 How many drinks containing alcohol do you have on a typical day when you are drinking?

◯ 1 or 2

◯ 3 or 4

◯ 5 or 6

◯ 7, 8, or 9

◯ 10 or more

Q3 How often do you have six or more drinks on one occasion?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q4 How often during the last year have you found that you were not able to stop drinking once you had started?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q5 How often during the last year have you failed to do what was normally expected from you because of drinking?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q6 How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q7 How often during the last year have you had a feeling of guilt or remorse after drinking?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q8 How often during the last year have you been unable to remember what happened the night before because you had been drinking?

○ Never

○ Less than monthly

○ Monthly

○ Weekly

○ Daily or almost daily

Q9 Have you or someone else been injured as a result of your drinking?

○ No

○ Yes, but not in the last year

○ Yes, during the last year

Q10 Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggest you cut down?

○ No

○ Yes, but not in the last year

○ Yes, during the last year.

End of Block: Block 9

Start of Block: Substance Use

Substance Use This section will ask if you have tried drugs (other than alcohol) such as narcotic or prescribed drugs for an intoxicating effect (that you have taken prescribed medication beyond its recommended use) in the **last year** .

Q12 Please select the substances you have used in the **past year** in order to obtain an intoxicating effect. When selecting how often you have used them this would be on a single day, regardless of quantity.

	Never	1 time	2 - 4 times	5 - 50 times	More than 50 times
Amphetamine/methamphetamine					

Benzodiazepines (including Valium, Temazepam, Diazepam)

Ecstasy

Gamma-hydroxybutyrate (GHB)

Heroin

Cocaine

LSD

Psilocybin

MDMA

Ritalin - without a prescription/other than its prescribe dose

Dexamphetamine - without a prescription/other than its prescribe dose

Relevin

Cannabis (hydro/bush)

Nitrous Oxide (nangs)

DMT

Synthetic cannabinoids (spice)

Buprenophrine

Oxycodone

Pregabalin (Lyrica)

Ketamine

Tramadol

Codeine - without a prescription/other than its prescribe dose

Q13 Have you taken any others substance (excluding alcohol and nicotine) for the intoxicating effect, in the past year? If so please specify below and indicate the number of times within the last year.

_____

_____

_____

_____

_____

End of Block: Substance Use

Start of Block: DAST

Q14 Below are a number of questions regarding you potential involvement with drugs, excluding alcohol and nicotine, during the past 12 months.

When the words "drug abuse" are used, they mean the use of prescribed or over-the-counter medications/drugs in excess of the directions and any non-medical use of drugs. The various classes of drugs may include: cannabis (e.g., marijuana, hash), solvents, tranquillisers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics (e.g., heroin). Remember that the questions do not include alcohol or tobacco.

If you have difficulty with a statement, then choose the response that is mostly right. You may choose to answer or not answer any of the questions in this section.

	Yes	No
Have you used drugs other than those required for medical reasons?	○	○
Do you abuse more than one drug at a time?	○	○
Are you always able to stop using drugs when you want to? (If never use drugs, answer "Yes."	○	○
Have you had "blackouts" or "flashbacks" as a result of drug use?	○	○
Do you ever feel bad or guilty about your drug use? If never use drugs, choose "No."	○	○
Does your partner (or parents) ever complain about your involvement with drugs?	○	○
Have you neglected your family because of your use of drugs?	○	○

Have you engaged in illegal activities in order to obtain drugs?	○	○
Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	○	○
Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	○	○

End of Block: DAST

Start of Block: Frost FMPS-Brief

Q1 For the following statements, please indicate to what extent you agree or disagree with the statement. Please be sure to read each statement carefully.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
If I fail at work/school, I am a failure as a person.	○	○	○	○	○
I set higher goals for	○	○	○	○	○

myself than most people.

If someone does a task at work/school better than me, then I feel like I failed a the whole task.

○   ○   ○   ○   ○

I have extremely high goals.

○   ○   ○   ○   ○

Other people seem to accept lower standards from themselves than I do.

○   ○   ○   ○   ○

If I do not do well all the time, people will not respect me.

○   ○   ○   ○   ○

I expect higher performance

○   ○   ○   ○   ○

in my daily tasks than most people.					
The fewer mistakes I make, the more people will like me.	○	○	○	○	○

End of Block: Frost FMPS-Brief

Start of Block: Useful resources

Q70 Thank you for taking the time to complete this survey. We realise some of the questions might have raised some uncomfortable memories for some people. You might find the following resources helpful.

Useful resources

https://www.mhc.wa.gov.au/about-us/our-services/alcohol-and-drug-support-service/

End of Block: Useful resources

Start of Block: SONA

Q66 Are you a Curtin Student completing this for SONA points?

○ Yes

○ No

End of Block: SONA

Start of Block: SONA details

Q67

Please click on the following link in order to complete your student details for SONA. This
will take you to a separate survey. This information will not be saved with your questionnaire
data.

https://curtin.au1.qualtrics.com/jfe/form/SV_bI9CLdZMRvi7ZEW

Appendix F: Participant Information Sheet and Informed Consent - Study 4

Curtin University

Non-suicidal Self-injury: a Lived Experience Perspective

PARTICIPANT INFORMATION STATEMENT

HREC Project Number:	HREC2020-0624
Project Title:	*Perspective of individuals with lived experience of non-suicidal self-injury.*
Chief Investigator:	*Professor Penelope Hasking*
Co-investigators:	*Associate Professor Mark Boyes and Sophie Haywood*
Version Number:	*1.0*
Version Date:	*03/11/2020*

What is the Project About?

Non-suicidal self-injury involves deliberate damage to the self, without suicidal intent. This includes behaviours such as cutting, burning, and punching walls. Self-injury is a behaviour that occurs across ages, but is particularly common among university students. This project will explore the function self-injury plays in the life of individuals who have a history of self-injury. The findings will contribute to our understanding of the factors that may be involved in the onset and maintenance of non-suicidal self-injury. It will also help to guide future research as well as inform possible interventions.

Who is doing the Research?

This research is being conducted by Sophie Haywood, a PhD candidate in the School of Psychology at Curtin University. The research will be supervised by Professor Penelope Hasking and Associate Professor Mark Boyes. This research will be used to obtain a Doctor of Philosophy – Psychology at Curtin University, and is funded by the university. There will be no costs to you for participating in this study. Participants will be reimbursed with a gift card for their participation.

What will I have to do?

Your participation will involve a face to face or online interview regarding your experience of self-injury. Interviews will take place in a room at the Curtin Library, a public location of your choice, or alternatively the interview can be conducted online. The interview will explore the function self-injury plays in your life. You may be asked to participate in a second interview in the future, to clarify your responses, and will be asked to provide your consent to allow us to contact you in the future, should this be required.

Are there any benefits' to being in the research project?

There may be no direct benefits to you from participating in this research. Although, sometimes, people appreciate the opportunity to discuss their feelings and experiences. We hope that the results of this research will allow us to add to the knowledge we have about non-suicidal self-injury.

Are there any risks, side-effects, discomforts or inconveniences from being in the research project?

Participating in this study is unlikely to have any risks beyond everyday living. However, it is possible that some questions in the interview may trigger upsetting thoughts and memories for some individuals. Remember that taking part in this study is voluntary and you are not obliged to participate. You have the right to withdraw at any time up until the data has been analysed.

We suggest taking a break or stopping the interview if you become upset whilst answering the questions. Your participation is voluntary and if you feel that the interview is distressing for you, you have the right to withdraw at any time. This includes if you do not feel distressed but decide you would rather not take part. You will be provided with a list of counselling services and resources at the bottom of this information sheet.

If you have any responses, questions or complaints regarding the research please contact the Graduate Research School – Curtin University on +61 (8) 9266 9266 (GMT +8).

Who will have access to my information?

Initially the information you provide when you contact me to participate in this study and your audio recording will be linked with your name. This is so that I can transcribe your information and send it back to you for your comments. However, this information will be stored in a secure, password protected location that only the research team will have access to. Once your interview has been transcribed I will send it back to you, for your approval. Once you have approved your transcript and returned it to me, I will delete the audio recording and remove any identifiable data from the transcript in order to maintain your anonymity . At this point your transcript will still be stored in a secure location but I will be unable to remove it from the study as it will be unidentifiable.

The following people will have access to the information we collect in this research: the research team and, in the event of an audit or investigation, staff from the Research Office at Curtin. The information in this research is electronic and will be stored on a password-protected computer. Anonymous data may be stored in an open access repository if required by a journal. The data we collect in this study will be kept under secure conditions at Curtin University for 7 years after the research has ended and then it will be destroyed.

Will you tell me the results of the research?

The results from this study may be presented at a conference or published in a journal but you will not be identifiable in any publications or presentations. If you wish to have a copy of the final results or have any questions, please contact us:

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Non-suicidal Self-injury: a Lived Experience Perspective

Sophie Haywood: s.haywood@postgrad.curtin.edu.au

Prof Penelope Hasking: Penelope.Hasking@curtin.edu.au

Associate Prof Mark Boyes: Mark.Boyes@curtin.edu.au

Do I have to take part in the research project?

Taking part in a research project is voluntary. It is your choice to take part or not. You do not have to agree if you do not want to. If you decide to take part and then change your mind, that is okay, you can withdraw from the project. If you choose not to take part or start and then stop the study, it will not affect your relationship with the university, staff or colleagues. Once data has been deidentified we will be unable to destroy your information as it will be anonymous and unidentifiable.

What happens next and who can I contact about the research?

If you decide to take part in this research, we will ask you to provide your consent. By providing your consent, you are telling us that you understand what you have read and what has been discussed. Checking the consent box below indicates that you agree to be in the research project, and have your information used as described. Please take your time and ask any questions you have before you decide what to do.

If you have any further questions, please contact Sophie Haywood by email at s.haywood@postgrad.curtin.edu.au. Alternatively, you may also contact any of the research supervisors using the contact details provided above.

I have received information regarding this research. I believe I understand the purpose of this study and I voluntarily consent to take part in this study.

☐   I agree

☐   I do not agree

Signed   _____   Date   _____

I consent to being contacted in the future for a follow up interview, if required.

☐   I agree

☐   I do not agree

Signed   _____   Date   _____

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Non-suicidal Self-injury: a Lived Experience Perspective

We may like to invite you to participate in future interviews. If you would be willing to be invited for an interview please leave your contact details below. These details will only be used to contact you for an interview and will be stored separately from your participation information sheet.

Name

Email address

Mobile

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HREC2020-0624). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

Appendix G: Useful Resources

Curtin University

Non-suicidal Self-injury: a Lived Experience Perspective

USEFUL RESOURCES

Crisis & Telephone Counselling Services:

1. **Beyond Blue**
   Web: http://www.beyondblue.org.au
   Phone: 1300 22 4636

   When you call the *beyondblue* info line, you will speak to a qualified mental health professional who can provide information on depression, anxiety and related disorders, and can discuss a range of referral options, for example where you can access treatment services in your area.

   The *beyondblue* info line service is available 24 hours a day, 7 days a week. Depending on your circumstances and reason for your call, the outcome may vary.

   You may be given:
   - Relevant local crisis or psychiatric triage service details or
   - The numbers of other relevant telephone counselling services or
   - Alternative referral options for assistance.

   The *beyondblue* info line is an information and referral service. It is not a crisis or a telephone counselling support service, however, staff can help you with referral options, and relevant information about how to access mental health services in Australia.

   All *beyondblue* info line staff members are professionally qualified with relevant tertiary education and or postgraduate degrees either in psychology, counselling or social work. *beyondblue* info line staff members also have relevant experience in mental health.

2. **Kids Helpline (<25 years old)**
   Web: http://www.kidshelp.com.au/
   Phone: 1800 55 1800

   When you contact Kids Helpline, you will talk directly with one of their counsellors. They are available 24 hours a day, 7 days a week. Web and email counselling is also available. Kids Helpline counsellors are trained to work with young people and any issues they may be facing. They are specialised in:

   - Talking with you about what has been happening and how you think or feel about it.
   - Listening to and understanding things from your point of view.
   - Helping you to figure out some ideas of how you might be able to handle things.
   - Helping you to decide what to do.
   - Providing you with information and support to find other services that can help.

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When you call, you can choose to speak to either a male or female counsellor. If you call more than once, you can ask to talk to the same counsellor again.

3. **Lifeline**
Web: http://www.lifeline.org.au/
Phone: 13 11 14 (24 hrs)

Lifeline is a confidential telephone crisis support service available 24/7 from a landline, payphone or mobile. Anyone across Australia experiencing a personal crisis or thinking about suicide can contact Lifeline. Regardless of age, gender, ethnicity, religion or sexual orientation trained volunteers are ready to listen, provide support and referrals. Trained Telephone Crisis Supporters will answer your call and:
- Listen to your situation.
- Provide immediate support.
- Assist to clarify options and choices available to you.
- Provide you with referral information for other services in your local area.

4. **Black Dog Institute**
Web: http://www.blackdoginstitute.org.au/

The Black Dog Institute website provides information on mood and anxiety disorders, and suggestions of how to ask for help and where to go to get it. It also includes information regarding what to do if you think someone you care about needs help.

5. **See your psychologist, or your GP for a psychological referral.**

Your GP can place you on a mental health care plan that can fully cover or subsidise, 10 sessions with a psychologist per year.

6. **Mental Health Emergency Response Line (MHERL).**
Web: https://emhs.health.wa.gov.au/Hospitals-and-Services/Mental-Health
Phone: 1300 555 788 (Metro)
        1800 676 822 (Peel)

If you are in need of emergency, rapid mental health services. MHERL clinicians provide assessment, specialist intervention, and can refer to local mental health services. A mental health emergency can include:

- When you feel you need urgent assistance.
- Significant others of individuals experiencing mental health issues.
- Members of the public who have witness a traumatic, mental health related, event and require assistance.

You can also contact the local mental health services listed, if it is not an emergency. For any life threatening situations, you should always contact 000 first.

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Non-suicidal Self-injury: a Lived Experience Perspective

Self-help Books:

- Feeling Better: A Guide to Mood Management. By Anthony Kidman, PhD, available via website: http://w.w.w.science.uts.edu.au/centres/psych/hpubooks/feelbetr.html and other local booksellers. Cost $14.95.
- Behind Happy Faces: Taking Charge of Your Mental Health - A Guide for Young Adults by Ross Szabo and Melanie Hall (Volt Press, 2007). Cost: $10 from www.fishpond.com
- Thoughts & Feelings: Taking Control of Your Moods and Your Life: A Workbook of Cognitive Behavioural Techniques by Matthew McKay, Patrick Fanning, Martha Davis

Websites:

- Shedding Light on Self-Injury: www.self-injury.org.au
- Cornell Research Program: http://www.selfinjury.bctr.cornell.edu/index.html
- Self-Injury Outreach & Support: http://sioutreach.org/
- S.A.F.E Alternatives®: www.selfinjury.com
- Life Signs: www.selfharm.org

Appendix H: Interview Guide

Draft Interview Guide
Understanding the lived experience of self-injury

_____Hi_____ _, thank you so much for taking the time to come in today. Did you manage to find it okay? As you will know from the advertisement on SONA, the interview is about your lived experience of non-suicidal self-injury. Rather than think of it as an interview though, consider it more of a conversation about your experience._

Before we get started I just need to run through a couple of things with you. Firstly, did you get an opportunity to read through the information sheet? **[if yes]**, do you have any questions about the study? **[if no]** I will give you the opportunity now to have a read through it **[then]** Do you have any questions regarding the study?

To clarify, you are not obligated in any way to take part in this study. It is completely voluntary. If you do decide to go ahead with the interview and during the interview change your mind, that is completely okay. You are free to stop the interview at any time and it will not impact your relationship with the university. I understand how difficult it can be to talk about these topics but we have found that people often report enjoying the experience. If at any point you do not want to answer a question simply state, "I do not want to answer that question" and we will move on. If you need to take a break at any point, please let me know and we will pause the recording. Also, if at any point it looks like you are becoming distressed or overwhelmed, I will check in with you and offer you a break.

Once you have given permission to go ahead with the interview, I will start the recording. During the interview, I may take some notes. These will just be prompts of things I want to come back to, as I do not want to interrupt you whilst you are talking. There will be not identifying information and I will destroy the paper after the interview has concluded. Once we have finished the interview I will type up our conversation and send it to you. If you wish to change or add anything in to the conversation, that is fine. If you feel that you have more information to add and would like to meet again for another interview, we can arrange that. If after reading the transcript you decide that you would like to withdraw your interview, just let me know by emailing me and I will remove it. After I have received your transcript back, I will remove any identifying information and delete the audio recording. Once I have analysed the data and started to identify themes, I will not be in a position to remove your data as I will not be able to identify specifically what has come from your interview as all

identifiable information will have been removed. How does that sound? Do you have any questions?

Are you still happy to participate in the study? Okay, let's get started. I am going to press record now.

1. Before I ask you about your experiences of non-suicidal self-injury. Everyone has an idea of what they define self-injury to be, I wanted to understand what self-injury means to you. ?

   Prompts: If participant details methods of self-injury elaborate on the difference between self-harm and self-injury.

2. What prompted you to take part in the interview?

3. What is your gender?

4. Tell me about your experience of self-injury.

   Prompts:

   a. *If you were to think of a "typical" time that you have engaged in self-injury and I understand these can all be different, what might/often be happening around that time?*

   b. *Are you able to elaborate on a recent time that you engaged in self-injury?*

   c. *If participants talk of ==coping==, explore how self-injury helps them to cope.*

   d. *If participants mention engaging in self-injury when ==upset==, explore how self-injury helps them when they are upset.*

   e. *If participants discuss self-injury helping when they are ==experiencing depression or anxiety==, explore how self-injury helps them when they are feeling this way.*

   f. *If people mention ==distraction, avoidance, or escape==, explore what it is self-injury is providing that from. Explore by stating*

      "it's interesting you mention avoidance/escape/distraction some people say that self-injury is used to avoid places/feelings/people. What are your thoughts on that?"

      Additional Prompts:

   g. *Help me understand how it helps you to cope? (if coping is relevant).*

   h. *Help me understand how it helps you.*

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5. Sometimes people talk about self-injury being used as a form of avoidance. What are your thoughts on that?

    Prompts:

    a. *If participant states they would not call it avoidance, explore what they would call it.*

    b. *What do you think about when you think of avoidance?*

    We are nearly at the end of our interview now. To finish off is there anything else you would like to share with me.

    Thank you for your time today. As I mentioned earlier, once I have transcribed the interview I will send it back to you for your approval. I'm going to end the recording now.

Appendix I: Initial Thematic Map
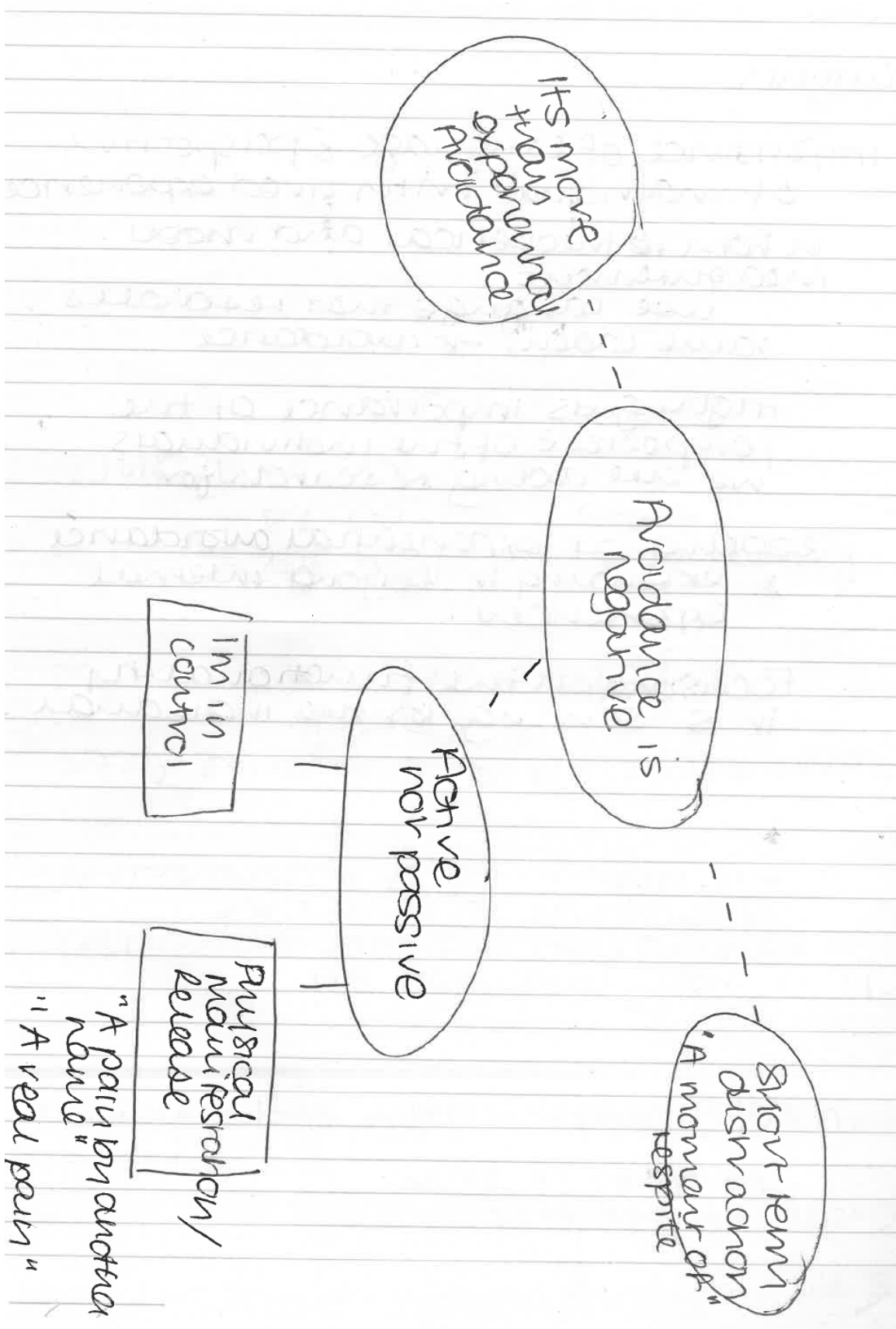
Appendix J: Reflexive Journal Excerpts

28/02/22

(Reflecting on my positionality – As per Braun and Clarke recommended exercises)

Specific Topic Reflexivity

[redacted for privacy]

27/7/22

(during coding)

[redacted for privacy]

6 January 2023

(Whilst writing up findings)

[redacted for privacy]