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The functions of self-injury

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The Functions of Self-Injury

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A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Clinical Psychology

North Wales Clinical Psychology Programme
Bangor University
And
Betsi Cadwaladr University Health Board

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Thesis Summary

A methodological review was conducted to critically analyse the strengths and weaknesses of distinct research designs employed with a variety of populations to investigate the functions of self-injury. Identified designs included: retrospective self-report; retrospective informant report; qualitative phenomenological interviews; direct observation; ecological momentary assessment; experimental functional analysis; and lab-based self-injury proxy studies. The inclusion of multiple functional assessment methods within future studies was strongly supported.

The empirical and discussion papers focused on the functions of suicidal and nonsuicidal self-injury within clinical populations of adults and adolescents. Participants completed the Suicide Attempt Self-Injury Inventory (Linehan, Comtois, Brown, Wagner, & Heard, 2006) to assess the reasons, antecedents, and consequences associated with different methods of self-injury. Multiple methods of self-injury, serving multiple functions, were reported by all participants. Within-person analyses found that individuals' nonsuicidal acts were intended to relieve negative emotions and punish themselves, more than their suicidal acts, and resulted in greater reductions in feeling numb/dead. Suicidal acts were intended to benefit others, preceded by intense feelings of burdensomeness, and resulted in receiving help, more than nonsuicidal acts. Within-person comparisons for individual methods of self-injury found that cutting was intended to relieve negative emotions, occurred following an argument, and resulted in the generation of pain and/or normal feelings, more than self-injury involving hitting the body.

The experience of conducting the research, and the motivation behind it, were reflected on. When considering the contribution of the findings to future theory and research, two areas were focused on: evidence for conceptualising suicidal and nonsuicidal self-injury along a continuum of experiential avoidance behaviours; and evidence regarding the stability of self-injury functions across different methods, situations, and time. Specific implications were highlighted for clinical interventions aimed at addressing underlying vulnerabilities, and the multiple triggers and reinforcing consequences, of these life-threatening behaviours.

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Section One: Literature Review

A Critical Analysis of Different Methodologies Used to Investigate the Functions of Self-Injury

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Abstract

Research studies investigating the functions of self-injury have employed a variety of methodologies. A thorough search of the literature identified seven distinct research designs used to investigate functions of self-injury across a variety of populations. This review aimed to critically analyse each of these research designs in relation to the following methodological characteristics: philosophical and theoretical underpinnings; operationalization and measurement of self-injury and its functions; potential inclusivity of the method for use with diverse populations; potential impact of bias; and ethical issues.

Retrospective self- and informant- report designs show good ecological validity, and are the least arduous of methods, but are subject to reporting and recall biases. Qualitative phenomenological designs provide insight into the experience of self-injury, but do not produce generalisable findings about function. Observational and ecological momentary assessment methods show good ecological validity, and do not rely on retrospective recall. However, they are time-consuming and demanding for participants. Experimental functional analysis and lab-based self-injury proxy studies allow for causal inferences about antecedents and consequences of self-injury, but show poor ecological validity. Further information about the reliability and validity of all designs are required. The implications of these findings for the interpretation of research investigating the functions of self-injury are discussed.

Keywords

- Self-injury
- Function
- Methodological review

Self-injury is defined here in line with Brown, Comtois and Linehan (2002) as any intentional act resulting in physical harm to the self. This includes self-injurious acts with and without suicidal intent. Estimates of lifetime prevalence rates for self-injury often separate suicidal and nonsuicidal self-injury. These estimates report that 4-17% of individuals in the general population have engaged in nonsuicidal self-injury (Klonsky, 2011; Whitlock, Eckenrode & Silverman, 2006; Hawton, Rodham, Evans & Weatherall, 2002), with significantly higher rates in individuals with mental health problems (20-60%; Klonsky, 2011; Klonsky & Muehlenkamp, 2007) and developmental and intellectual disabilities (15-25%; Petty, Allen & Oliver, 2009). Approximately 2.7% of the general population report engaging in self-injury with the intent to die (Nock & Kessler, 2006). Self-injury, as well as its immediate threat to an individual's health and life, can have considerable negative impacts on their physical, social and psychological functioning and well-being.

Over the last three decades, research and understanding into self-injury has grown considerably. Theoretical and empirical evidence has led to a consensus that self-injury should be conceptualised as a maladaptive coping strategy, which serves particular functions for the individual and therefore is repeated (Klonsky, 2007; Nock, 2010). Individuals may or may not be consciously aware of the function, or purpose, of the behaviour. Understanding the functions of self-injury is crucial for developing effective prevention and treatment approaches, as well as guiding policies and procedures for health and social care professionals responding to incidents of self-injury.

Current treatment methods employ a functional approach to preventing self-injury. Applied Behaviour Analysis techniques are widely used in the intellectual disabilities field, and interventions such as Dialectical Behaviour Therapy have been shown to be effective for individuals displaying self-injury in the context of borderline personality disorder and other psychiatric conditions (see Tarrier, Taylor & Gooding, 2008 for systematic review). Therapeutic approaches emphasise the importance of identifying intrapersonal and interpersonal triggers, promoting alternative adaptive coping strategies (functionally equivalent behaviours), and altering internal and external reinforcement contingent on self-injury occurring. Research with particular populations of self-injuring individuals has attempted to identify functions specifically related to the difficulties experienced by particular clinical populations. This has led to an emphasis on the social functions of self-injury for individuals with social and communication difficulties (e.g. Petty et al., 2009), and emotion relief functions for individuals with difficulty regulating emotions (e.g. Brown, Comtois & Linehan, 2002).

Studies investigating the functions of maladaptive behaviour, including self-injury, have employed a range of methods. Herzinger and Campbell (2007) categorise these methodologies into indirect assessment, descriptive assessment, and experimental assessment methods. Indirect assessments include questionnaires, ratings scales and interviews about function. Descriptive assessments involve real-time recording of functions within the individual's natural environment, with no experimental manipulation. Experimental assessments involve the simulation of a natural environment, with conditions manipulated in order to discern function and infer causality (Herzinger & Campbell, 2007).

The actual findings of studies investigating functions of self-injury are not the focus of this paper, but have been reviewed elsewhere (Furniss & Biswas, 2012; Klonsky, 2007). The aim of this review is to critically consider the different methodologies that have been employed to investigate the functions of self-injury, weighing up the strengths and weaknesses of each. The results of the review will aid in the critical interpretation of current empirical evidence, and the theories and treatment approaches based on this evidence, as well as identifying opportunities for future research to address current limitations and gaps in the literature.

Method

Search Strategy

A thorough search of the literature was conducted to identify all methodologies used to investigate the functions of self-injury prior to December 2012. The Psycinfo database was used with the following search terms: 'self-injury', 'self-harm', 'self-mutilation', 'suicidal behaviour', 'parasuicide', 'function', 'purpose', 'antecedent', 'consequence', 'reinforcement'. The reference and citation lists of review articles and empirical papers were also searched for relevant articles. A research design was included if an English-language article was identified describing a method for investigating the functions of self-injury.

Critical Analysis of Methodological Strengths and Weaknesses

Methods employed by identified studies for investigating function were categorised as indirect assessment, descriptive assessment, or experimental assessment, in line with Herzinger and Campbell (2007). Distinct research designs identified within each of these categories were critically analysed in relation to: philosophical and theoretical underpinnings; operationalization and measurement of self-injury and its functions; potential inclusivity of the method for use with diverse populations; potential impact of bias; and ethical issues (see Table 1 for description of methodological characteristics).

Insert Table 1 here

Results

Seven distinct research designs investigating the functions of self-injury were identified. Indirect assessment methods included: retrospective self-report; retrospective informant report; and qualitative phenomenological interviews. Descriptive assessment methods included: direct observation and ecological momentary assessment. Experimental assessment methods included: experimental functional analysis and lab-based self-injury proxy studies. The general structure of each research design is described using an example study. Example studies were chosen simply to illustrate the application of the research design. Studies were chosen that represented a typical use of the methodology, where measures used included reliability and validity estimates. The findings, strengths, and weaknesses of individual studies are not within the scope of this paper, and are not discussed. A summary of the previously mentioned methodological characteristics of each research design are presented in Table 2. The most important strengths and weaknesses of each design are discussed in more detail below.

Indirect Assessment

Retrospective self-report designs

Within retrospective self-report designs, participants are asked to report the reasons they have engaged in self-injury i.e. to name what they believe to be the functions of the behaviour. They may also be asked to report the antecedents and consequences of the act, although this is less common. There are a number of standardised semi-structured interviews developed for use with clinical populations, including: Suicide Attempt & Self-Injury Interview (SASII; Linehan, Comtois, Brown, Heard & Wagner, 2006); Functional Assessment of Self-Mutilation (Lloyd, Kelly & Hope, 1997); Self-Injurious Thoughts and Behaviours Interview, (Nock, Holmberg, Photos & Michel 2007); Inventory of Statements about Self-Injury (Klonsky & Glenn, 2009). All of these measures have been developed with clinical samples of individuals engaging in self-injury and are based on theoretical models that assume emotion regulation as the primary function of self-injury.

An example of this methodology investigated reasons for self-injury reported by women with Borderline Personality Disorder using a previous version of the SASII (Parasuicide History Interview; Brown, et al., 2002). This semi-structured interview included participant and interviewer ratings, and yes/no questions, about reasons for self-injury. Responses to these items were used to infer functions of self-injury. Participant and interviewer ratings on the frequency and severity of self-injury showed good test-retest and inter-rater reliability. Good convergent validity has been found between self-reports of the frequency and severity of self-injury using the SASII and medical records, therapist notes, and weekly self-injury diary cards (Linehan et al., 2006).

The strengths of a retrospective self-report methodology include the fact that it involves reporting on actual self-injury within the individual's natural environment. Standardised measures include an assessment of self-injury topography and intent, and can assess for multiple functions of self-injury. The research design is not time-consuming, requires limited experimenter training, and does not place high demands on participants. Reliability and validity estimates suggest individuals are able to accurately report the frequency and severity of self-injury (Linehan et al., 2006).

General weaknesses of this methodology include the lack of information regarding individuals' ability to understand and communicate the functions of their self-injury. The validity of individuals' reported reasons for self-injury have not been assessed. Reasons may not equate to the actual functions of the behaviour (Brown, et al., 2002). There is significant stigma attached to self-injury, and participants may be less likely to report social functions of

the behaviour for fear of being perceived as "attention-seeking" or "manipulative" (Nock, 2010). Retrospective reports of the antecedents and consequences of self-injury may provide a better estimation of function than reasons. Comparisons between self-reported reasons, antecedents and consequences would provide further information on the accuracy of self-reported functions. This methodology is limited for use with diverse populations, due to the lack of adapted measures for individuals with communication and/or literacy difficulties, and translations into other languages.

The theoretical background to the measures used in these designs may have led to inherent biases within the measures towards emotion regulation functions. For example, within the SASII list of reasons for self-injury there are 8 items relating to the relief or expression of emotions, but only one item relating to relieving or escaping negative thoughts. There is also some ambiguity in the reasons included within the SASII Emotion Relief subscale. For example, the reason 'to obtain relief from a terrible state of mind' does not distinguish between emotional or cognitive state of mind, but it is interpreted by the measure as relief of emotions. Also, 'emotional' antecedents within the measure could be considered to be a combination of emotion and cognition. For example 'feeling like a burden to others' is likely to be experienced as a combination of emotions and thoughts. The interpretation of these items as evidence for emotional relief functions of self-injury may erroneously strengthen the perception that emotion regulation is the primary function of self-injury.

From an ethical perspective, talking about self-injury has not been found to increase the risk of these behaviours in the future (Cukrowicz, Smith & Poindexter, 2010; Zahl & Hawton, 2004). However, research protocols must include ethical consideration of procedures to balance confidentiality and sharing of information for safety. Clear management procedures must be made for instances when participants report current suicidal ideation and/or plans during the research interview. These plans must be made explicit and agreed with potential participants as part of gaining consent.

Retrospective informant report designs

Family members and professional carers of individuals who self-injure are asked to report what they believe to be the reasons for the self-injury, and to recall antecedent events and consequences of the behaviour. This can be in the form of informal open questions about reasons for self-injury or formal structured assessments based on informants' observations across a variety of settings. Formal standardised assessments include: The Motivation

Assessment Scale (MAS; Durand & Crimmins, 1992); Motivation Analysis Rating Scale (Weiseler, Hanzel, Chamberlain & Thompson, 1985); Questions about Behavioural Function (Matson & Vollmer, 1995). This method has predominantly been developed with individuals with intellectual/developmental disabilities (IDD) and severe communication difficulties, who are unable to give self-reports of the functions of self-injury. Theoretical models of self-injury in individuals with severe-profound IDD suggest that repetitive stereotypic behaviours develop into self-injury through internal and external reinforcement of increasingly severe and damaging behaviours as a direct result of individual's limited physical and communication abilities (Furniss & Biswas, 2012). These models emphasise the communication, escape and self-stimulation functions of self-injury. This may have had an impact on the development of informant report measures based on these theoretical models. These designs assume that informants are able to accurately report reasons, antecedents, and consequences, and that the functions of self-injury are stable over time.

In an example of this methodology, Durand and Crimmins (1992) used the MAS to assess functions of self-injury for individuals with a learning disability and/or autism. Individuals' teachers were asked to report antecedents and consequences of self-injury, as well as their perceptions of the reasons for the behaviour. These reports were used to infer functions of self-injury. Teacher's ratings were found to predict individual's self-injurious behaviour in a number of experimental conditions designed to assess functions of self-injury (described in experimental functional analysis section; Herzinger & Campbell, 2007). This suggests the method has good construct validity.

Strengths of a retrospective informant report design include the fact that functions of self-injury are assessed in the individual's natural environment. Reasons, antecedents, and consequences are reported by an independent observer. Therefore individuals are not required to be able to understand and communicate the functions of their behaviour, making the method more inclusive of diverse populations. However, there is still a potential for reporting biases in terms of the informants beliefs and attitudes towards the individual and their self-injury. The reliability of reporting accurately on the frequency, severity and functions of self-injury may be higher with individuals living in 24 hour supported environments, where informants can answer questions based on numerous observations of self-injurious behaviour across different settings. The reliability of informal reports of function, where an informant spends little time with the individual, is questionable. In both formal and informal methods of informant assessment there is likely to be a bias for underreporting of internal functions (Herzinger & Campbell, 2007). From an ethical

perspective, it is important to consider the potential impact of this method on the ongoing relationship between the self-injuring individual and the informant (who is usually a significant caregiver). Consent from both parties should be sought wherever possible, although this may not be possible if individuals do not have the capacity to consent to participation.

Qualitative phenomenological interviews

Qualitative research methods are based on an ontological view of the world as socially constructed, with no single observable truth. Within research, the experimenter is seen as an active participant, with the participant-interviewer interaction a dynamic process. Qualitative methods (e.g. Interpretative Phenomenological Analysis, Grounded Theory) involve interviewing a homogenous sample of individuals who self-injure to explore common themes in the descriptions of their experience of the behaviour.

For example, Rao (2006) interviewed 6 women who reported self-cutting. Open-ended questions were asked in an attempt to encourage discussion of self-injury phenomenology. Interpretative Phenomenological Analysis was conducted to identify recurrent themes in participants' answers about self-injury experiences.

Qualitative methods may be less affected by biases in reporting as they do not directly question the reasons for self-injury, and therefore may be experienced as less challenging for participants. There is the opportunity for reporting of multiple functions relating to actual occurrences of self-injury in the individual's natural environment. This method provides insight into the individual experience of self-injury. However, as with all qualitative methodologies, there is limited scope for generalisability of findings outside the individual experience of the participants involved, due to small homogenous samples. These approaches are open to experimenter bias effects due to the active interpretation by the experimenter. These risks are accepted by the ethos of qualitative research, which holds that there is no objective/observable truth, and reality is subjective (Rao, 2006). Participants are required to be able to understand, and communicate the functions of their behaviour, limiting the inclusivity of this method for use with diverse populations.

Descriptive Assessment

Direct observation designs

These research designs include the use of structured, standardised observational measures (e.g. Functional Assessment Observation Form; O'Neill, Horner, Albin, Storey, Sprague & Newton, 1997) or informal observational reports conducted by experimenters in the individual's natural environment. Observational methods have predominantly been used to investigate the functions of self-injury for individuals with severe intellectual/developmental disabilities (IDD). They are based on a theoretical model of self-injury as a communication, escape, or self-stimulation strategy, resulting directly from individual's physical and cognitive disabilities. The assumption is made that the functions of a behaviour can be reliably and accurately observed, and are stable over time.

Petty, Allen & Oliver (2009) observed individuals with intellectual disabilities in their normal classroom setting for 4-12 hours. Observational recordings were made of all instances of self-injury, and antecedent and consequent events. The functions of self-injury were interpreted using statistical analysis of the relative frequency of self-injurious acts related to particular antecedents and consequences.

Direct observation designs allow independent reporting of the frequency, severity, and method of self-injury, and have good ecological validity. Functions of self-injury can be assessed without the individual needing to understand or communicate them. This limits the effects of social desirability and recall bias, and makes it an inclusive method for use with diverse populations. Behavioural interventions based on observational assessments of function were found to be as effective in reducing self-injury as those based on experimental functional analysis, and more effective than interventions that were not based on a functional assessment (Kahng, Iwata, & Lewin, 2002). This suggests good validity in the assessment of function using this method.

Weaknesses of observational methods include the fact that social functions of self-injury may be overemphasised using this method, due to the lack of information on internal experiences that may not be observable. Observational investigation of function takes a significant amount of time and is only suitable for use with high frequency, low severity self-injury (Petty, et al., 2009). The intent of the behaviour is not assessed by this methodology (i.e. intending to cause harm, intending to die). The act of observing self-injury may lead to changes in the occurrence and/or function of the behaviour. From an ethical perspective, the observation of individuals' self-injury in their natural environment may have an impact on the experimenter, participant, and their wider system. Due to the ethical issues in observing

self-injury these designs are often only employed where individuals are in a supportive environment with professionals intervening when self-injury occurs.

Ecological Momentary Assessment designs

Participants are asked to record instances of self-injury thoughts and behaviours on an electronic device (Personal Digital Assistant; PDA). Individuals use the device to record reasons, antecedents and consequences associated with self-injury as they occur. They complete these assessments in their natural environment over an extended period of time. Studies that have employed this novel design are based on theoretical models that view emotion regulation as the primary function of self-injury. They assume that individuals are able to reliably and accurately report the intentions, antecedents and consequences of self-injury, and that functions are stable over time.

In an example application of this design, Nock, Sterba, and Prinstein (2009) recruited a clinical sample of individuals reporting current self-injury. Participants completed PDA assessments twice daily, and whenever they experienced a self-injurious thought or behaviour, over a two week period. They were asked to report the social context, reason for the behaviour, and the actual consequences of the behaviour, immediately following self-injury. Statistical analyses were used to identify trends within and between participants for reasons, antecedents, and consequences of self-injury. Investigations included identifying predictive factors in the development of self-injury thoughts into self-injury behaviours.

Ecological Momentary Assessment designs provide good ecological validity and do not rely on retrospective report. Multiple possible functions for a range of self-injury behaviours can be assessed. Also, temporally distant antecedents to self-injury can be assessed. However, self-report methods are open to social desirability biases and again, individuals may not be aware of the reasons for their behaviour. The validity and reliability of self-reports of antecedents and consequences have not been established. For example, studies have found a mismatch between subjective self-report of emotional distress and objective physiological measures of negative affect and arousal (Franklin, Hessel, Aaron, Arthur, Heilbron & Prinstein, 2010), suggesting that self-report of internal states may not be reliable. The reliability of individuals' reports of antecedents and consequences of self-injury could be investigated by comparing self-report to physiological measures and/or independent observations.

This method is quite burdensome for participants and large sample sizes are required to deal with issues of low compliance and drop-out (Nock, et al., 2009). It is possible that the act of reporting self-injurious thoughts and behaviours as they occur may influence the occurrence and functions of those behaviours (i.e. reactivity). Careful ethical consideration must be given to procedures for data collection, and appropriate, timely responding to reports of suicidal ideation/acts.

Experimental Assessment

Experimental functional analysis designs

This method involves the "simulation of natural environments with direct systematic manipulation of the social and physical environment designed to alter the frequency of behaviour" (Herzinger & Campbell, 2007). The most widely used method was designed by Iwata and colleagues (Iwata, Dorsey, Slifer, Bauman & Richman,1982) for use with individuals with severe learning disabilities displaying high frequency challenging behaviours, including self-injury. The theoretical model underlying these methods focuses on the following four types of function for challenging behaviour: to get attention, to escape demands, to gain access to tangibles and to self-stimulate. The assumption is that challenging behaviour (including self-injury) serves an identifiable primary function. In order to identify this primary function, antecedents and consequences are systematically manipulated within experimental conditions. Experimental functional analysis assumes that the functions of self-injury assessed in a non-naturalistic environment are generalisable across situations and time.

Iwata, Pace, Dorsey, Zarcone, Vollmer, and Smith (1994) applied this research design with individuals with severe developmental disabilities. The experimental conditions used in this study related directly to the theoretical model of self-injury underlying the design:

- Attention: attention given contingent on self-injury occurring.
- Escape from demand: task demands stopped contingent on self-injury occurring
- Self-stimulation: alone, no activities
- Unstructured play: this condition was included as a control condition in the presence of the experimenter.

The form, frequency, and duration of self-injury in each condition were recorded by a trained observer. The conditions were repeated in counterbalanced orders. The function of self-injury was interpreted by the condition with the highest observed frequency of self-injury.

Strengths of the experimental functional analysis method include the ability to make causal inferences about the situational context of self-injury and the consequences that may reinforce the behaviour, potentially leading to greater validity in the measurement of function. Behavioural interventions based on experimental functional analysis have been found to be as effective in reducing self-injury as those based on direct observation, and more effective than interventions that were not based on a functional assessment (Kahng, Iwata, & Lewin, 2002). Comparisons with observational methods of functional assessment suggest that experimental functional analysis has a tendency to identify fewer functions (Herzinger & Campbell, 2007). Some have suggested that the identification of a single 'primary' function of self-injury allows for more explicit planning in terms of effective intervention techniques. However, this may be over-simplistic when considering the variety of presentations of individuals who engage in self-injury and the finding that many report multiple functions.

This method was developed and used with individuals with severe-profound intellectual/developmental disabilities. The theoretical assumptions behind the methodology are that individual's social and communication difficulties and limitations in accessing opportunities for self-stimulation are the main cause of their self-injury. As a result, the standard four conditions do not explicitly investigate an emotion regulation function of self-injury. An access to tangibles condition has been used by some, where a preferred item is given contingent on self-injury occurring. Development of other experimental conditions to assess other functions of self-injury would be beneficial.

There are serious ethical issues with experimental functional analysis. It involves intentionally increasing potentially life-threatening self-injurious behaviours. There is a risk that self-injury may be further reinforced and that self-injury may develop new functions during the experiment itself (Herzinger & Campbell, 2007). Experimental functional analysis studies have only involved individuals with intellectual and developmental disabilities demonstrating high frequency self-injury. It has been suggested that the benefits of an in depth functional analysis of self-injury in treatment planning outweighs the risks posed (Kahng, et al., 2002). Other limitations of this method include the fact that it is not conducted within individuals' natural environments; and there is no assessment of temporally distant antecedents or internal states that may indicate intrapersonal functions. The assessment is time consuming and demonstrates poor test-retest reliability and generalisability. Experimental functional analysis is not suitable for investigating the functions of low frequency and/or high severity self-injury.

Laboratory based self-injury proxy designs

These studies involve the psychophysiological measurement of affective and/or cognitive processes related to self-injury. Due to the ethical issues relating to the induction of self-injury in a laboratory setting, self-injury proxies are used. These include asking participants to imagine engaging in self-injury, or inducing low levels of pain through non-harmful exposure to extremes of temperature (e.g. Cold Pressor Test). The theoretical model behind this design focuses on the internal functions of self-injury, specifically an emotion regulation function. The design assumes similarities in the experience and consequences of self-injury and the proxy behaviour, and that functions of self-injury are measurable and stable across situations and time.

Franklin et al. (2010) recruited individuals with and without a history of self-injury. Participants were exposed to a stress inducing condition followed by a self-injury proxy, the Cold Pressor Test, which involves participants submerging their hands in extremely cold water. Throughout the conditions participants affective state and cognitive processing abilities were assessed using psychophysiological measures. The effect of the painful stimulus on affective and cognitive processes, for individuals with a history of self-injury compared to those without, was used to make inferences about the functions of self-injury.

The use of physiological and self-report measures of affective and cognitive processes is a significant strength of this methodology, as it allows for comparison between individual's actual and perceived internal experiences. These designs aid the understanding of important processes underlying self-injury and the experience of pain, which cannot be reliably assessed through observational or self-report methods. However, it is not clear to what extent the stress-inducing condition and self-injury proxy can be compared to real-world experiences of self-injury. Fundamental differences include the fact that the painful stimulus is not self-initiated, and involves a method that is rarely reported by self-injurers. The experience of pain (and associated sensations) may be different to those experienced during actual self-injury and may be in a different part of the body. Therefore the validity of this design in investigating functions of self-injury is unknown (Armey, Crowther & Miller, 2011). Lab-based proxy methods are limited in the investigation of social functions of self-injury, and have poor ecological validity due to the unnatural experimental environment. These methods are not suitable for use with individuals who do not have the capacity to consent to participation. Ethical concerns about this methodology centre on the fact that individuals are asked to experience stressful conditions and engage in pain-inducing behaviours.

Insert Table 2 here

Discussion

Summary of findings

Retrospective self-report designs provide greater ecological validity and are less time-consuming than the other methodologies reviewed here. The extent to which individuals can accurately report the functions of self-injury is not yet known and is likely to fluctuate within and between individuals, and social desirability biases may limit reports of certain functions. Retrospective informant report designs provide independent reporting of antecedents and consequences of self-injury. However, informants' responses may be biased by their own attitudes and beliefs towards the individual and the functions of their self-injury. Descriptive and experimental functional assessments are beneficial because they are not affected by the ability of individuals to understand and communicate the functions of self-injury, or by an individual's desire to be positively evaluated by others. However, these methods are time demanding and present considerable ethical issues. The observation of self-injurious behaviour may impact the researcher and the individual. Experimental methods involve deliberately triggering self-injury and are at risk of further reinforcing the behaviour. Observational and experimental methods are not suitable for the assessment of low frequency, high severity self-injury and do not allow for the assessment of intent.

Ecological momentary assessment methods provide real-time indications of antecedents and consequences across a range of real-life situations allowing for the assessment of function of different kinds of self-injury. The intention of self-injury can also be assessed. The introduction of physiological measures alongside self-report of affective states would increase the reliability of this method. Laboratory-based studies employing objective measurements of psychophysiological processes before during and after a self-injury proxy provide important information on possible functions. However, there is insufficient knowledge about the extent to which lab-based stress induction methods and self-injury proxies correspond to real-life experiences of self-injury. Multi-method studies employing real-time assessment in naturalistic environments, where self-report, physiological and independent observation techniques are utilised would provide important direct comparison of these methods. This would allow greater estimates of the reliability and validity of these different methods.

Particular methods were found to be associated with different samples of individuals engaging in self-injury. For example, designs employing retrospective self-report of reasons, antecedents and consequences of self-injury have almost exclusively been conducted with samples of individuals receiving support from mental health services, whilst experimental functional analysis designs have only been used with individuals with severe-profound intellectual and/or developmental disabilities (IDD). This has important implications for the findings of research studies with these populations and in the way that formal assessment methods have been designed. Measures designed on the assumption of social/communication functions of self-injury in individuals with intellectual disabilities do not assess for emotion regulation functions of self-injury. Therefore investigations into self-injury in this population have not found evidence of an emotion regulation function. This may simply be because it has not been assessed, not necessarily because it does not exist. Retrospective self-report measures for self-injury have been developed with clinical populations (predominantly with individuals displaying features of Borderline Personality Disorder) and therefore may not be relevant or suitable for use with other populations.

A recent review of the findings of self-injury research with clinical populations of individuals without IDD concluded that the primary function of self-injury for these individuals is the regulation of negative emotions (Klonsky, 2007). The present methodological review has demonstrated that there are biases within the research designs that have been used with clinical populations that make an emotion regulation function more likely to be identified. This does not mean that emotion regulation is not the primary function of self-injury for these individuals. However, if emotion regulation is the most commonly investigated function using designs that are biased towards identifying this function, then it is highly likely that theoretical assumptions will be strengthened, whether or not this reflects reality. Likewise, attention, escape from demands, and self-stimulation are the most commonly found functions of self-injury in IDD populations (Furniss & Biswas, 2012). These findings support the theoretical perspectives underpinning the research designs employed in these studies. However, if these are the only functions assessed within the research design (e.g. in the restricted conditions of experimental functional analysis), then these are the only functions that can be identified. It is not clear whether the differences between commonly reported functions of self-injury in IDD and non-IDD populations reflects true differences or is an artefact of the use of different research designs developed from contrasting theoretical perspectives. Functional assessment methods must be able to identify all possible functions of self-injury, so that behavioural interventions can be targeted

at the right antecedents and consequences. Otherwise they are likely to be ineffective in reducing self-injury.

Implications and Suggestions for Future Research

Investigations into the validity and reliability of the measurement of self-injury, and its functions, is required. Information about the stability of functions over time, across situations, and across methods of self-injury is needed. Relatively little research has investigated the functions of self-injury in the general population, where individual's difficulties may be less complex. Due to the low frequency and severity of self-injury in these samples, observational and experimental functional analysis methods may not be suitable. However, Ecological Momentary Assessment methods show good validity. Comparisons between the results of real-time reporting of self-injury antecedents and consequences could be compared to retrospective self-report at a later date. Likewise, methods that combine self-report, psychophysiological measures, and formal experimental analysis elements would provide much more detailed, reliable and valid information about the functions of self-injury.

Further investigations of self-injury functions in clinical populations could utilise observational and informant report methods, particularly within inpatient settings. There is also an opportunity for the validity of functional assessment to be assessed by monitoring the effectiveness of behavioural interventions (in inpatient or outpatient settings) aimed at addressing the functions identified for each individual. The adaptation of self-report measures for individuals with mild-moderate learning disabilities, and the use of psychophysiological measures of affective state and cognitive processing would provide greater insight into the possible internal functions of self-injury for individuals with intellectual and developmental disabilities.

In summary, a range of distinct research designs have been used to investigate the functions of self-injury across different populations. Indirect, descriptive, and experimental assessment methods each have strengths and weaknesses. Studies should carefully consider the most suitable research design, and wherever possible this should include a combination of multiple assessment methods.

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Table 1 Description of methodological characteristics to be considered for each research design

Methodological characteristic	**Description**
Philosophical underpinnings and theoretical perspective	Consideration of how the research design conceptualises self-injury and its functions. Underlying theoretical assumptions about the development and/or type of function.
Operationalisation and measurement of self-injury:	Exploration of definitions of self-injury and the reliable and valid measurement of the occurrence, frequency and severity of self-injury.
Operationalisation and measurement of function	Consideration of how multiple possible functions of self-injury are defined and measured. Reliability and validity of measurement.
Potential inclusivity of method	Suitability of the method for use with multiple populations considered in relation to diversity in culture, language, communication, and capacity to consent.
Potential biases	Consideration of susceptibility to demand characteristics, experimenter bias, social desirability, reactivity, and to what extent these be controlled.
Ethical Issues	Is there a risk of increasing the frequency or severity of self-injury through the design? Is there a risk of further reinforcing self-injury or creating new functions for the behaviour? What burden does participation place on participants? Is there a potential impact on the researcher and/or participants of observing self-injury but not intervening to stop the behaviour?

Table 2 Summary of methodological strengths and weaknesses of research designs investigating functions of self-injury

		Operationalisation and Measurement of Self-Injury			Operationalisation and Measurement of Function of Self-Injury						
Research Method and Design	**Philosophical/ Theoretical Assumptions**	**Method of measurement**	**Intent assessed**	**Reliability & validity**	**Method of measurement**	**Reliability (inter-rater, test-retest)**	**Construct validity**	**External validity**	**Potential Inclusivity of Method**	**Potential Biases**	**Ethical Issues**
Indirect Assessment											
Retrospective self-report	Reality is singular, objective and measurable Behavioural approach Theoretical background emphasises emotion regulation as primary function	Self-report Retrospective	✓	Good	Reasons used to infer function (antecedents and consequences may also be included)	Test-retest reliability variable. Higher for social and demand escape functions than for emotion regulation	Not assessed	Good	Poor	Recall accuracy Social desirability Demand characteristics	Management of any immediate indication of risk expressed during interview
Retrospective informant report	Reality is singular, objective and measurable Behavioural approach	Other report Retrospective	×	Good	Observable reasons, antecedents and consequences	Good	Good May bias external versus internal functions	Good	Good	Recall accuracy Demand characteristics Informant bias	Potential impact on ongoing relationship with informant Capacity to consent
Qualitative phenomenological interviews	Reality is multiple and subjective. Social constructionism No observable truth	Yes/no to self-injury question	n/a	Poor	Themes relating to reasons, antecedents and consequences	n/a	Not assessed	Good	Poor	Recall accuracy	Management of immediate indication of risk expressed during interview

Research Method and Design	Philosophical/ Theoretical Assumptions	Operationalisation and Measurement of Self-Injury			Operationalisation and Measurement of Function of Self-Injury						
		Method of measurement	Intent assessed	Reliability & validity	Method of measurement	Reliability (inter-rater, test-retest)	Construct validity	External validity	Potential Inclusivity of Method	Potential Biases	Ethical Issues
Descriptive Assessment											
Direct Observation	Reality is singular, objective and measurable Behavioural approach Theoretical background emphasises communication, escape and self-stimulation functions	Other real-time observational recording Limited to high frequency, low severity self-injury	×	Good	Statistical analysis of observable antecedents and consequences	Good inter-rater and test-retest reliability	Good when compared to other methods May bias external versus internal functions	Good	Good	Experimenter bias Reactivity	Observation of actual self-injury (impact on individual and observer) Time consuming
Ecological Momentary Assessment	Reality is singular, objective and measurable Behavioural approach	Self real-time recording	✓	Good	Statistical analysis of self-reported reasons, antecedents and consequences	Unknown	Unknown	Good.	Poor	Social desirability Demand characteristics Reactivity	Entries into electronic device may indicate immediate risk - management of this must be planned and agreed prior to study
Experimental Assessment											
Experimental Functional Analysis	Reality is singular, objective and measurable Behavioural approach Theoretical background emphasises communication, escape and self-stimulation functions	Other real-time observational recording Limited to high frequency, low severity self-injury	×	Good	Experimental conditions simulate situations related to different functions. Observable rates of self-injury across conditions used to statistically calculate function	Good. External manipulation of situation. Relative frequency of observed self-injury used to statistically calculate function	Good when compared to other methods. May bias external versus internal functions.	Poor	Good	Experimenter bias Reactivity	Intentional increase in self-injury Risk of increasing reinforcement or number of functions of behaviour Time consuming
Lab-based self-injury proxy	Reality is singular, objective and measurable Behavioural approach Theoretical background emphasises emotion regulation as primary function	Self-injury proxy used to compare individuals with/without history of self-injury	n/a	Poor	Psychophysiological measures of affective and cognitive states prior to, during and following self-injury proxy used to infer possible functions	Good	Good. Subjective and objective assessment measures.	Poor	Poor	None	Lab-based induction of stress and pain

Section Two: Empirical Paper

The Reasons, Antecedents, and Consequences Associated with Different Methods of Self-Injury

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Abstract

A clinical sample of twenty one participants (16-65 years) completed the Suicide Attempt and Self-Injury Inventory (Linehan, Comtois, Brown, Heard & Wagner, 2006) to assess the intentions and functions of different methods of self-injury. Within-person analyses found suicidal acts were intended to make others better off, preceded by feelings of burdensomeness, and elicited help, more than nonsuicidal acts. Individuals reported multiple methods of self-injury (mean=4.2) with multiple functions. Self-injury through cutting was less impulsive, preceded by emotional numbness, and reduced feelings of numbness, more than hitting the body. Important similarities and differences exist in the functions of different methods of self-injury within individuals.

Self-injury is defined as: "Any overt, acute, nonfatal self-injurious act where both act and bodily harm or death are clearly intended (i.e., both the behavioral act and the injurious outcomes are not accidental) that results in actual tissue damage, illness, or, if no intervention from others, risk of death or serious injury." (p. 2, Bland & Murray-Gregory, 2006).

Nonsuicidal self-injury, and suicide attempts not resulting in death, have enormous consequences for the individual, their family and society. Prevalence rates of self-injury are estimated at 4-6% of adults, and 14-17% of adolescents, in the general population (Klonsky, 2011; Whitlock, Eckenrode & Silverman, 2006; Hawton, Rodham, Evans & Weatherall, 2002). Higher rates are found in clinical samples of individuals receiving support for a wide range of mental health problems (20-60%; Klonsky, 2011; Klonsky & Muehlenkamp, 2007) and intellectual/developmental disorders (15-25%; Petty, Allen & Oliver, 2009). Approximately 2.7% of the general population report engaging in self-injury with the intent to die (Nock & Kessler, 2006).

Suicidal and nonsuicidal behaviours are considered to lie on a continuum (Tarrier, Taylor & Gooding, 2008). Both involve causing harm to the self, and they regularly co-occur (Klonsky, 2013). Nonsuicidal self-injury is a significant risk factor for suicide (Zahl & Hawton, 2004). Previous nonsuicidal self-injury predicted future suicidal acts more accurately than depression, impulsivity, and other symptoms of Borderline Personality Disorder. Only suicidal ideation was found to be a stronger predictor of later suicide (Klonsky, 2013). However, there are important differences between suicidal and nonsuicidal self-injury, which has led to the proposed introduction of two separate categories within the upcoming Diagnostic and Statistical Manual – 5th edition (DSM-V; Schaffer & Jacobson, 2009). Nonsuicidal acts have higher prevalence rates, occur more frequently, and have less severe physical outcomes (Klonsky, 2013). Suicidal acts demonstrate varying levels of intent to die, with many of these acts occurring with ambivalent intent. However, intent can be difficult to assess accurately, and can fluctuate before and during an act (Miller, Rathus & Linehan, 2006). Traditionally, suicidal acts have been considered to have only one purpose, to cause death, with nonsuicidal acts assumed to be conducted with the intention of relieving negative emotions. Emerging evidence suggests that the functions of both suicidal and nonsuicidal self-injury are multiple and complex (Brown, et al., 2002). Therefore, despite possible differences, suicidal and nonsuicidal self-injury share important similarities and can be best understood through simultaneous investigation.

Within the context of Borderline Personality Disorder (BPD), suicidal and nonsuicidal acts are frequent, and are considered to be learned behaviours that function as an escape from, or avoidance of, intolerable emotions (Linehan, 1993). Currently, there is no unifying evidence-based theoretical model explaining the development and maintenance of suicidal and nonsuicidal self-injury in individuals without a diagnosis of BPD. Theoretical models of nonsuicidal self-injury conceptualise this as a maladaptive coping strategy that develops as a result of underlying vulnerabilities of heightened emotional sensitivity and dysregulation (Chapman, Gratz & Brown, 2006; Nock, 2010). These behaviours are thought to be reinforced by a variety of intrapersonal and interpersonal factors (Nock, 2010).

Investigations into retrospective self-report of reasons for nonsuicidal self-injury have been conducted with a range of different samples. Emotional relief was the most commonly reported reason for self-injury by adults with Borderline Personality Disorder, adult and adolescent psychiatric inpatients and outpatients, and a non-clinical adult sample (Briere & Gil, 1998; Brown, et al., 2002; Laye-Gindhu & Schonert-Reichl, 2005; Nock & Prinstein, 2004). These studies have also found evidence of self-punishment as a commonly reported reason for self-injury, with interpersonal influence, prevention of dissociation, prevention of suicide attempts, and the setting of interpersonal boundaries reported as reasons for self-injury by a smaller percentage of individuals (see Klonsky, 2007 for a review). These findings provide important information about what individuals believe to be the functions of self-injury, however it is not clear to what extent individuals can accurately understand and communicate the functions of their behaviour. Individuals may not be able to describe their internal experiences, or they may be disinclined to report socially undesirable reasons for self-injury (Nock, 2010).

Studies investigating retrospective self-report of the phenomenology of nonsuicidal self-injury have attempted to reduce this social desirability bias by asking individuals to report the antecedents and consequences of self-injury. Individuals consistently reported an increase in the intensity of negative emotions ('anger towards self/others', 'distressed', 'depressed') prior to self-injury and a reduction in this intensity and/or a feeling of relief following self-injury (Laye-Gindhu & Schonert-Reichl, 2005). Some individuals were found to report feelings of depersonalisation, or interpersonal conflict, prior to self-injury, suggesting that in these instances the function of self-injury was to prevent dissociation, and influence others, respectively (Wilkins & Coid, 1991; Jones, Congiu, Stevenson, Strauss, & Frei, 1979). These findings are limited by the lack of information about individuals' ability

to accurately recall antecedents and consequents, and due to the fact that no causal inferences can be made from this kind of methodology.

Laboratory-based studies have employed self-injury proxy behaviour to explore affective and cognitive processes associated with self-injury using both subjective self-report and objective physiological measures. When individuals with a history of self-injury were compared to controls prior to and following a self-injury proxy (self-injury imagery or pain inducing stimulus), they showed significantly higher physiological arousal, and self-reported negative affect, prior to the proxy self-injury, and a significant decrease following the proxy behaviour (Brain, Haines & Williams, 1998; Haines, Williams, Brain, & Wilson, 1995; Russ, Roth, Lerman, Kakuma, Harrison, Shindledecker, et al., 1992). A recent study found that a painful stimulus led to improvements in information processing required for effective problem solving and executive functioning (Franklin, Hessel, Aaron, Arthur, Heilbron & Prinstein, 2010). These results support an affect and cognitive regulation function of self-injury. However, they should be interpreted with some caution due to poor ecological validity of lab-based measurement, and unknown external validity of the self-injury proxies when compared to actual self-injury.

Recent studies have used Ecological Momentary Assessment methods to investigate functions of self-injury in individuals' natural environment and without the limitations of retrospective recall. Armey, Crowther, and Miller (2011) asked individuals to record social context, affective state, and occurrence of self-injury on a palmtop computer whenever self-injury occurred over a seven day period. Individuals engaging in self-injury showed a significant increase in self-reported negative affect, shame, and self-directed anger, with significant decreases in these emotions after self-injury. Participants who did not engage in self-injury during the seven days did not show these increases in negative affect. In a similar study Nock, Prinstein and Sterba (2009) found that thoughts of suicidal and nonsuicidal self-injury occurred most often when participants were socialising, alone, or listening to music, indicating that thoughts of self-injury occurred in a range of contexts. Participants reported that triggers for these thoughts were: worry, bad memories, feeling sad/worthless, overwhelmed, scared/anxious. Suicidal thoughts were also triggered by feeling pressured and having an argument. Interestingly, none of these reported triggers predicted whether self-injury occurred. Feelings that did predict when self-injury occurred were: rejection, anger towards self/others, self-hatred, and numbness/nothingness. These findings are reported to support an emotion-regulation function of self-injury (Nock, et al., 2009). However, a number of the 'feelings' included in the study may be better understood as

emotion-cognition compounds (e.g. self-hatred), and self-injury may regulate the emotional or cognitive elements, or both. In summary, studies have found evidence for emotional relief, interpersonal influence and feeling generation functions of nonsuicidal self-injury. There is also emerging evidence of a cognitive regulation function from self-injury proxy studies.

Studies comparing reasons for suicidal and nonsuicidal self-injury found differences and similarities. Women with a diagnosis of Borderline Personality Disorder reported escaping or regulating negative emotions as reasons for both suicidal and nonsuicidal self-injury. They reported the motivation of "making others better off" more for suicide attempts than nonsuicidal self-injury (Brown, et al., 2002). Nonsuicidal acts were more likely to be conducted as a form of self-punishment, anger expression, and distraction. These differences were found in between- and within- person comparisons. However, it is not clear to what extent participants' reasons for self-injury equate to the actual functions of the behaviour. Therefore, information about differences and similarities in the possible reinforcing consequences of suicidal and nonsuicidal self-injury is needed.

No studies have been identified that investigate the functions of different methods of self-injury (e.g. cutting, overdose, ligaturing). Different methods of self-injury may not be homogenous in topography, severity, intent, and function (De Leo, 2011). This creates a number of issues in the interpretation of studies looking at the reasons, antecedents, and consequences associated with self-injury. If individuals are asked about self-injury in general, then important differences in function may be missed. They may answer questions based on the most common method of self-injury, the most common function, or the most recent function. Research suggests that individuals report an average of 3 different methods of nonsuicidal self-injury (Linehan, Comtois, Brown, Heard & Wagner, 2006). Exploring differences in function across self-injury methods is important from empirical, theoretical and clinical perspectives (De Leo, 2011; Welsh Assembly Government, 2008; NICE, 2004). Self-injurious behaviours are complex and varied between and within individuals. Therefore, within-person comparisons are likely to be the most meaningful way of investigating the functions of different methods (Linehan et al., 2006).

This study will investigate self-reported reasons for self-injury, as well as the antecedents and consequences of the behaviour. A semi-structured interview (Suicide Attempt and Self Injury Inventory, Linehan, et al., 2006) will be used to assess the frequency, severity, duration, reasons, and functions of different methods of self-injury performed with or without an intention to die. A within-person design will be used to reduce

the impact of individual differences on the analysis of these complex behaviours. Similarities and differences in the reasons, antecedents, and consequences reported for suicidal and nonsuicidal self-injury will be explored. Characteristics of different methods of self-injury (e.g. cutting, burning) will be investigated, as well as any similarities and differences in the functions of different methods.

Method

Participants

Participants were 21 individuals, aged between 16-66 years old, currently receiving support from outpatient mental health services in North Wales. They were recruited through mental health professionals, and via their attendance at therapeutic groups facilitated by mental health services. Individuals who had a history of at least one episode of self-injury, and were deemed to have the capacity to consent, were eligible to take part. Mean age was 33.8 years (SD= 16.1). Seventy six percent of the sample was female. Current mental health diagnoses reported were Depression (n=11), Anxiety Disorder (n=7), Borderline Personality Disorder (n=5), Post Traumatic Stress Disorder (n=3), Bipolar Disorder (n=2), Schizophrenia (n=1) and Dissociative Disorders (n=2). Participants reported receiving support from mental health services for an average of 8.9 years (SD= 9.5).

Measures

Suicide Attempt and Self Injury Inventory (SASII; Linehan, Comtois, Brown, Heard & Wagner, 2006): This structured interview was used to collect details regarding topography, intent, medical severity, and contextual factors for suicidal and nonsuicidal acts. Participants answered supplemental questions to report reasons for self-injury, as well as events, thoughts, and feelings that occurred prior to, and immediately following the self-injury. Participants completed the interview questions for each method of self-injury reported during their lifetime. Where an individual had engaged in a particular method of self-injury on numerous occasions (e.g. cutting), they were asked to answer the questions based on a typical or well-remembered occasion of that type of self-injury. They were then asked if their answers were a representation of a typical incident of this behaviour and given the opportunity to alter their responses if this was not the case. For high frequency behaviours over a long time period, individuals were asked to estimate frequency based on the duration of self-injury and average number of episodes per week/month/year. Items on the SASII

included yes/no answers, and participant and interviewer ratings on Likert-type scales (see Ethics Appendix for full interview schedule and instructions).

Participants' scores for their most recent episode of self-injury were used to assess the internal consistency of the SASII subscales. Cronbach's alpha values were sufficient for the following subscales: Suicide Intent (4 items; $\alpha = 0.944$), Suicide Communication (2 items; $\alpha = 0.899$), Emotion Relief Reasons (6 items; $\alpha = 0.709$), Interpersonal Influence Reasons (8 items; $\alpha = 0.827$). The remaining subscales did not show sufficient internal consistency, therefore their items were analysed individually: Medical Risk (3 items; $\alpha = 0.344$), Rescue Likelihood (2 items; $\alpha = 0.155$); Feeling Generation Reasons (2 items; $\alpha = 0.444$), and Avoidance/Escape Reasons (5 items; $\alpha = 0.574$). Antecedent thoughts, feelings, and events were analysed separately. As the supplemental questions on the SASII do not give an indication of intensity of emotional antecedents, participants were also asked to rate the intensity of each emotional antecedent reported on a scale of 0-10.

The list of consequences included in the SASII corresponds almost exactly to the list of reasons (e.g. "to stop bad feelings" becomes "bad feelings stopped"). Therefore, an average score was calculated across Emotion Relief and Interpersonal Influence items, and internal consistency assessed. The Emotion Relief Consequences subscale showed sufficient internal consistency (6 items; $\alpha = 0.81$), but the Interpersonal Influence Consequences subscale did not (7 items; $\alpha = 0.561$). Interpersonal consequences were analysed separately.

In order to assess inter-rater reliability, 20% of the data were independently coded through the use of interview recordings/transcripts. The level of agreement for categorisation of a behaviour as suicidal or nonsuicidal was excellent ($\alpha = 0.941$). The agreement between the other experimenter rated items (Suicide Intent, Risk of Death, Physical Condition, Medical Treatment, and Probability of Intervention items) was also excellent ($\alpha = 0.994$). The SASII has been found to show good validity in relation to reports of the number and severity of acts of self-injury when compared to medical treatment records and weekly self-injury diary cards (Linehan et al., 2006).

Data analysis

Interviews were recorded for coding and transcription purposes. Differences in reported reasons, antecedents, and consequences between suicide attempts and nonsuicidal self-injury were statistically analysed. Comparisons between different methods of self-injury were conducted where at least 10 participants reported engaging in the same methods. Within-person, nonparametric analyses were conducted throughout: Wilcoxon matched-pair tests

for continuous/ordinal data, and Fischer's exact tests for categorical data. Fischer's exact tests were used due to the small sample size, which resulted in low frequencies within contingency table cells. Two-tailed tests with an alpha level of 0.05 were used throughout. Means and standard deviations have been reported in favour of medians within the descriptive tables, to aid the interpretation of the data.

The project was conducted as part of the first author's doctoral training in Clinical Psychology. Ethical and clinical governance approval was given from Bangor University and Betsi Cadwaladr University Health Board.

Results

The mean number of estimated lifetime episodes of self-injury was 1635 (SD=2327; range= 9-8352). Average age for first episode of self-injury was 14.6 years (SD= 7.2; range= 5-32yrs). Time since the most recent episode was: 71% within the previous week; 10% within the last 4 weeks; 10% within the last 12 weeks; and 5% each for one year ago and 2 years ago. Self-injury characteristics, and the most commonly reported reasons, antecedents, and consequences are reported in Table 1.

Comparisons between suicidal and nonsuicidal self-injury

Topographical characteristics of suicidal and nonsuicidal acts

Seventeen participants reported at least one episode of both suicidal and nonsuicidal self-injury. Where participants reported multiple episodes, the most recent was used in the following within-person analyses. Nonsuicidal methods included: Cutting (71%), Scratching (11%), Strangling (6%), Hitting body (6%), and Burning (6%). Suicidal methods included: Drug/medication overdose (71%), Asphyxiation (6%), Cutting (6%), Drowning (6%), Stepping in front of traffic (6%), Strangling (6%), and Deliberately crashing a car (6%). All 17 participants' most recent suicide attempts were classed as ambivalent. Perhaps unsurprisingly, a Wilcoxon matched pairs test found that ratings on the Suicide Intent subscale were higher for suicide attempts (median= 6, M=5.8, SD=1.5) than nonsuicidal acts (median = 1, M=0.9, SD=0.8, $Z = -3.463$, $p<0.001$). Suicide attempts also showed higher ratings compared to nonsuicidal acts for Risk of Death (medians= 3 and 2, Ms= 3.4 and 2.1, SDs = 1.1 and 0.9 respectively, $Z = -2.898$, $p=0.002$) and Medical Treatment (medians= 5

and 0, Ms =4.2 and 1.1, SDs= 3.0 and 2.0, respectively, p=0.004). No differences were found for Suicide Communication, Physical Condition or Probability of Intervention scores.

Reasons for suicidal versus nonsuicidal acts

Individuals' reports of reasons, antecedents, and consequences for their most recent suicidal and nonsuicidal acts are displayed in Table 1. The most common reasons reported for all types of self-injury were: "to stop bad feelings", "to feel something even if it was pain", "to punish myself", "to escape my thoughts feelings and memories", "to express anger", "to obtain relief from a terrible state of mind", "to communicate to others how desperate I am". Participants reported some interpersonal influence reasons for self-injury, but reported higher proportions of emotional relief and feeling generation reasons.

Participants had higher proportion scores on the Emotion Relief Reasons subscale for their nonsuicidal (median= 0.7, M= 0.7, SD=0.2) compared to suicidal self-injury (median= 0.5, M= 0.5, SD=0.5, Z = -2.862, p=0.003). Individuals did report interpersonal influence reasons for their self-injury, but no differences were found in Interpersonal Influence Reasons subscale scores when comparing suicidal and nonsuicidal self-injury (medians= 0.3 and 0.1, Ms= 0.3 and 0.3, SDs= 0.3 and 0.2 respectively, Z = -0.281, p=0.813). Participants were more likely to report the following individual reasons for nonsuicidal than suicidal self-injury: "to punish myself" (82% and 41% respectively, p=0.016), "to stop feeling angry frustrated or enraged" (71% and 29% respectively, p=0.039). Participants reported suicide attempts being "to make others better off" more than nonsuicidal acts (41% and 6% respectively, p=0.031). Descriptive statistics and results of comparison tests for all reasons, antecedents, and consequences are reported in the thesis appendix.

Antecedents of suicidal versus nonsuicidal acts

Common antecedent events reported for both suicidal and nonsuicidal acts included: interpersonal conflict, and/or feeling criticised by others, being (and feeling) alone and isolated, and seeing things that could be used to self-injure. High intensity of multiple emotions was reported across all types of self-injury (on a scale from 0-10). Of particular note were high ratings for feelings of distress, depression, self-hatred/shame, anger at self, and emotionally numb. Thoughts about sexual and/or physical abuse were commonly reported antecedents, as were flashbacks/nightmares. No differences were found between environmental or cognitive antecedents occurring in the 24 hours prior to individuals' most recent nonsuicidal and suicidal self-injury episodes. Participants reported higher intensity of

feeling “like a burden to others” prior to suicide attempts (median= 10, M= 7.4, SD=4.0) than nonsuicidal acts (median= 6, M= 5.4, SD= 4.3, Z = -2.103, p=0.039), but no differences were found for any other emotions.

Consequences of suicidal versus nonsuicidal acts

When comparing feelings, thoughts, and events immediately following self-injury, participants had higher ratings on the Emotion Relief Consequences subscale for nonsuicidal acts (median= 2.5, M= 2.6, SD=0.9) than for suicide attempts (median= 1.7, M= 2.0, SD=1.0, Z = -2.532, p=0.008). When looking at individual Emotion Relief items, a significant difference was found for “feelings of anxiety and terror stopped”, with participants endorsing this consequence to a greater extent following nonsuicidal (median= 2, M= 2.5, SD=1.4) than suicidal acts (median= 1, M=1.7, SD= 1.1, Z = -2.356, p=0.023). The following consequences were more common for nonsuicidal than suicidal acts: “I felt something, even if it was pain” (medians= 5 and 2, Ms = 3.8 and 2.7, SDs = 1.6 and 1.8, respectively, Z = -2.243, p=0.019); ”I stopped feeling numb or dead” (medians= 3 and 1, Ms = 3.2 and 1.8, SDs = 1.7 and 1.4 respectively, Z = -2.481, p=0.016); “I prevented being hurt in a worse way” (medians= 4 and 1, Ms = 3.4 and 1.9, SDs = 1.7 and 1.5 respectively, Z = -2.884, p=0.002). Consequences that were more likely to follow suicide attempts than nonsuicidal self-injury were: “I got help” (medians= 3 and 1, Ms = 2.7 and 1.5, SDs= 1.8 and 1.1 respectively, Z = -2.303, p=0.042) and “I gained admission to a hospital or treatment programme” (medians= 5 and 1, Ms = 3.2 and 1.2, SDs = 2 and 0.6 respectively, Z = -2.873, p=0.002). Fischer’s exact tests indicated that a higher proportion of suicide attempts than nonsuicidal acts resulted in help being received from paramedics (47% and 12% respectively, p=0.031) and Accident & Emergency departments (65% and 18% respectively, p=0.021). For both suicidal and nonsuicidal self-injury participants showed high ratings for “I felt worse about myself, or more self-hatred shame” following self-injury (medians= 4 and 3, Ms= 3.1 and 3.1, SDs= 1.9 and 1.7, respectively, Z = 0, p>0.05).

Insert Table 1 here

Comparisons between different methods of self-injury

Topographical characteristics of different methods of self-injury

Participants reported an average of 4.2 methods of self-injury during their lifetime (SD=1.9; range= 2-9). Methods reported are displayed in Table 2.

Insert Table 2 here

Descriptive differences between methods reported by at least eight participants are presented in Table 1 (Cutting, Overdose, Hitting Body, Burning). The descriptive data suggests that overdoses of drugs/medication were more likely to be suicidal acts. Overdoses and burning appeared to show a later age of onset, greater medical risk and consequent medical intervention, than acts of cutting and hitting body. The only methods reported by more than 10 participants, and therefore suitable for within-person statistical comparisons, were cutting and hitting the body (see appendix for full reporting of comparisons conducted). Twelve individuals reported both methods. All hitting body episodes were categorised as nonsuicidal acts. Two of the cutting episodes were categorised as ambivalent suicide attempts. Instances where the removal of data from these two participants altered the results of analyses are reported below.

Wilcoxon matched pairs tests identified that participants reported a higher total number of lifetime episodes of Cutting (median= 280, M= 1074, SD=1413) compared to Hitting Body (median= 30, M=424, SD=1047, Z = -2.401, p=0.014). Higher ratings were found for Cutting than Hitting Body for Risk of Death (medians= 2 and 1, Ms= 2.2 and 1.2, SDs= 0.4 and 0.4 respectively, Z = -3.464, p<0.001) and Physical Condition (medians= 2 and 1, Ms= 2.1 and 1.2, SDs= 0.3 and 0.4 respectively, Z = -3.317, p=0.001). Hitting Body self-injury received higher ratings of Impulsivity than Cutting (medians= 7 and 5.5, M= 6.8 and 5.6, SDs= 0.6 and 1.5 respectively, Z = -2.013, p=0.044). Significant differences between ratings of suicidal thoughts prior to Cutting and Hitting Body were no longer significant after removing data from the two participants reporting cutting as a method of suicidal self-injury.

Reasons for different methods of self-injury

Individuals' reports of reasons, antecedents, and consequences for the most commonly reported methods of self-injury are displayed in Table 1. Participants reported higher Emotion Relief Reasons subscale scores for Cutting (median= 0.7, M=0.7, SD=0.3) than

Hitting Body (median= 0.3, M= 0.1, SD= 0.2, Z = -2.866, p=0.002). Fischer's exact tests identified significantly more participants reporting the following Emotion Relief subscale items for Cutting than Hitting Body: "to relieve feelings of aloneness, emptiness or isolation" (75% and 17% respectively, p=0.016) and "to obtain relief from a terrible state of mind" (67% and 8% respectively, p=0.031). The latter finding was no longer significant after removing the two suicidal cutting episodes (70% and 20% respectively, p=0.063). Descriptive statistics and results of comparison tests for all reasons, antecedents, and consequences are reported in the thesis appendix.

Antecedents of different methods of self-injury

Cutting episodes were more likely than Hitting Body episodes to be preceded by: "I had an argument or conflict with another person" (67% and 8% respectively, p=0.016). Ratings for feeling "emotionally empty or numb" were higher for Cutting (median= 10, M= 8, SD=3.5) versus Hitting Body episodes (median= 1.5, M= 3.9, SD=4.5, Z = -2.354, p=0.016).

Consequences of different methods of self-injury

The consequence "I stopped feeling numb or dead" was reported to a greater extent for Cutting (median= 3, M= 3.2, SD= 1.6) versus Hitting Body (median= 1, M= 1.8, SD=1.4, Z= -2.401, p=0.02), as was "I got away or escaped" (medians= 2 and 1, Ms= 2.4 and 1.3, SDs = 1.6 and 0.7 respectively, Z = -2.232, p=0.031).

Discussion

Participants reported very high rates of total self-injury episodes during their lifetime (M=1635 (SD=2327; range= 9-8352). Previous estimates of lifetime episodes of self-injury in a sample of adolescents were also high (M=709.3, SD=3911.1; Nock, Holmberg, Photos & Michel, 2007). Given the age range of the present sample, this suggests the estimates of self-injury are plausible, however the accuracy of reporting over this length of time is questionable. Individuals' suicidal and nonsuicidal acts shared similar reasons, antecedents, and consequences, as well as showing important differences. Nonsuicidal acts were more likely to be intended to relieve negative emotions and as a form of self-punishment. Antecedent events, feelings, and thoughts were similar across both types of self-injury. Notably, reported levels of suicidal thoughts did not differ between suicidal and nonsuicidal

acts, and nonsuicidal acts were often reported to be an attempt 'to prevent being hurt in a worse way'. Suicide attempts were more often intended to benefit others and were preceded by more intense feelings of burdensomeness. These findings are consistent with other research into the reasons and antecedents of self-injury in clinical populations of adults and adolescents (Brown et al., 2002; Nock & Prinstein, 2004).

When investigating the consequences of self-injury, suicide attempts were more likely to influence others and result in individuals getting help. Nonsuicidal acts led to reductions in feeling numb or dead and were described as giving individuals something to do that prevented them being hurt in a worse way. Self-reports of actual consequences may be a better approximation of function than reported reasons for the behaviour, suggesting that suicidal self-injury served more of an interpersonal influence and care-seeking function for individuals, whereas nonsuicidal self-injury served more of an emotional relief and feeling generation function. Suicidal and nonsuicidal acts were reported to be effective in expressing anger and to result in feeling punished. The results of this study are consistent with other investigations into the functions of self-injury, and add to the literature by exploring the similarities and differences in the consequences of suicidal and nonsuicidal self-injury within individuals.

It is important to note that all suicidal acts included in these comparisons were categorised as ambivalent. Participants reported a number of previous methods of suicidal self-injury that occurred with unambivalent suicidal intent and greater risk of death (e.g. attempted hanging, drowning). The functions of these suicidal acts may differ significantly from ambivalent acts. Also, higher rates of particular methods of suicidal and nonsuicidal self-injury were represented in these comparisons. Specifically, 71% of most recent nonsuicidal acts involved cutting, and 71% of most recent suicidal acts involved overdoses. These rates are similar to other studies investigating the functions of self-injury; with cutting and overdoses the most frequently reported methods (Brown, et al., 2002; Nock & Prinstein, 2004). The differences between suicidal and nonsuicidal acts, found in the current paper and previous studies, may relate more specifically to differences between nonsuicidal acts of cutting and ambivalent suicidal acts involving overdoses. Therefore, they may not be generalisable to other methods of suicidal and nonsuicidal self-injury.

Multiple methods of self-injury were reported throughout individuals' lifetimes. Different methods of self-injury varied in terms of severity, frequency, duration, and contextual factors, as suggested by the descriptive information reported. Overdoses may present particularly different functional characteristics in that they are less likely to result in

pain or the generation of normal feelings, and are more likely to be suicidal acts than burning, cutting, or hitting the body. Overdoses and burning seemed more likely to be intended to elicit help from others, and had this effect more than cutting and hitting the body. Flashbacks, nightmares and intense negative emotions were reported antecedents for a majority of participants across all four methods. Due to the small sample size statistical analyses between multiple methods of self-injury were not possible, and so no reliable conclusions can be made. However these descriptive findings suggest important areas for future research.

Comparisons between self-injury through cutting and hitting the body found that cutting was more likely to be intended to relieve negative emotions, to occur following an argument, and to result in the generation of normal feelings. Further exploration of the intentions and functions of different methods would be helpful in informing future theory and clinical practice. Individuals reported employing different methods of self-injury in different circumstances, which served different functions. Other factors may also influence the choice of self-injury method (e.g. access to means, ease of hiding action from others, impulsivity etc.). These findings suggest it is meaningful and necessary to consider different methods of self-injury separately.

The current findings are limited by the small sample size and the reliance on recall of information about self-injury. Individuals may not be able to accurately recall the reasons, antecedents, and consequences of their self-injury. Self-reports may be influenced by social desirability biases and demand characteristics. For example, individuals may be less likely to report interpersonal influence functions of self-injury due to the stigma and negativity surrounding so-called "attention-seeking" behaviour. Conclusions about causality relating to particular antecedents and consequences of self-injury cannot be made using this kind of methodology. Asking individuals to answer the same questions repeatedly for each method of self-injury may introduce the suggestion that differences are expected, which may then affect responses. Conducting numerous statistical tests increases the possibility of rejecting a true null hypothesis (Type I error). For the purposes of this exploratory study this risk was tolerated in order to identify potential areas for future research. The major strength of this study is the within-person design, which reduces the effects of individual differences when investigating these complex behaviours.

Exploration of variability in topography and function across different methods of self-injury has highlighted important areas of consideration for theory, research, and clinical practice. These findings highlight the importance of thorough assessment of past and current

self-injurious behaviours. Of particular note is the finding that the medical risk associated with a self-injurious act, and the intensity of suicidal thoughts, did not correctly distinguish between suicidal and nonsuicidal acts. Therefore, suicidal intent should be asked about directly, not assumed (Nock & Kessler, 2006). Detailed questioning is required for accurate and effective formulations and risk assessments. Interventions that directly assess emotional relief, cognitive regulation, self-punishment, interpersonal influence, and feeling generation functions of self-injury, and then tailor interventions based on identified functions, are likely to be most effective in reducing the behaviour. Dialectical Behaviour Therapy (DBT) is recommended as an effective treatment for individuals who self-injure (Binks, Fenton, McCarthy, Lee, Adams & Duggan, 2006; NICE, 2004). DBT includes repeated assessment of the functions of self-injurious acts, while simultaneously teaching individuals more adaptive coping strategies that may serve as functionally equivalent behaviours (Linehan, 1993). DBT skills training includes: emotion regulation, distress tolerance, interpersonal effectiveness and mindfulness elements (Linehan, 1993). For individuals reporting feeling generation functions of self-injury, interventions focused on reducing dissociative experiences are likely to be helpful. Trauma focused interventions may be beneficial for individuals reporting flashbacks and thoughts about past abuse as triggers for self-injury (Linehan, et al., 2006). Understanding the functions of self-injury is a vital part of formulation-based interventions, as well as in guiding case management for individuals presenting to medical and crisis services.

Nonsuicidal self-injury has been proposed for inclusion in DSM-V as a distinct diagnostic entity (Schaffer & Jacobson, 2009). The findings of this exploratory study tentatively suggest that there may be as many topographical and functional differences between different methods of nonsuicidal self-injury as there are between suicidal and nonsuicidal acts. There are also well documented similarities between suicidal and nonsuicidal self-injury, with high rates of co-occurrence (Klonsky, 2013). The aetiology and phenomenology of self-injury remains poorly understood. These facts suggest that caution should be taken before the development of diagnostic categories relating to these complex behaviours.

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Table 1. Topographical characteristics, reasons, antecedents, and consequences associated with most recent suicidal and nonsuicidal act, and a recent episode of the most frequently reported methods of self-injury: burning, cutting, drugs/medication overdose, hitting body

Method	Most recent nonsuicidal act (n=17)	Most recent suicidal act (n=17)	Comparison between suicidal and nonsuicidal act (n=17)	Burning (n=8)	Drugs/ medication (n=13)	Cutting (n=16)	Hitting Body (n=16)	Comparison between Cutting and Hitting Body (n=12)
	Mean (SD) %	*Mean (SD) %*		*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	
Variable: **Estimated lifetime no. of episodes**	n/a	n/a	n/a	29 (62) (range= 1-182)	34 (95) (range= 1-360)	1074 (1370) (range= 30-3230)	381 (942) (range= 3-3640)	✓
Duration (years)	n/a	n/a	n/a	2 (3) (range= 0-8)	8 (11) (range= 0-37)	10 (9) (range= 1-31)	12 (14) (range= 0.04-35)	×
Frequency (no of times per year engaged in)	n/a	n/a	n/a	93 (168) (range= 1-365)	6 (13) (range= 0.2-16)	99 (83) (range= 3-233)	63 (135) (range= 0.2-521)	×
Age at onset (Age at episode for most recent nonsuicidal & suicidal act)	34 (15) (range= 17-59)	30 (15) (range= 16-56)	×	26 (11) (range= 14-42)	23 (12) (range= 14-53)	18 (8) (range= 12-36)	16 (11) (range= 5-43)	×
Risk of Death	2 (1)	3 (1)	✓	3 (1)	3 (1)	2 (0.3)	1 (0.4)	✓
Physical condition	2 (0.3)	4 (1)	×	3 (1)	3 (1)	2 (0.3)	1 (1)	✓
Medical treatment	1 (2)	4 (3)	✓	3 (2)	5 (3)	1 (2)	2 (2)	×
Suicide Intent	1 (1)	6 (2)	✓	2 (2)	6 (2)	1 (2)	1 (1)	×
Probability of intervention	4 (1)	4 (1)	×	4 (1)	4 (1)	4 (1)	4 (1)	×
Communicated risk	1 (2)	1 (2)	×	1 (2)	2 (1)	1 (1)	0.4 (1)	×
Impulsivity	6 (1)	6 (2)	×	7 (1)	6 (2)	6 (1)	7 (1)	✓
% suicidal thoughts	77	100	×	75	93	75	31	×
% Dissociation	53	65	×	75	57	56	25	×
% suicide attempt	0	100	×	25	86	13	0	×

✓ = $p < 0.05$ in statistical comparison. Wilcoxon matched pairs test for continuous data; Fischer's exact test for categorical data
× = n.s.

	Most recent nonsuicidal act (n=17)	Most recent suicidal act (n=17)	Comparison between suicidal and nonsuicidal act (n=17)	Burning (n=8)	Drugs /medication (n=13)	Cutting (n=16)	Hitting Body (n=16)	Comparison between Cutting and Hitting Body (n=12)
	Mean (SD) %	*Mean (SD) %*		*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	
REASONS								
Proportion subscale scores								
Emotion Relief (6 items)	0.7 (0.2)	0.5 (0.2)	✓	0.5 (0.2)	0.5 (0.2)	0.7 (0.3)	0.3 (0.2)	✓
Interpersonal Influence (8 items)	0.3 (0.3)	0.3 (0.2)	×	0.3 (0.3)	0.3 (0.2)	0.2 (0.3)	0.1 (0.2)	×
Individual items (yes/no)								
To die	24	88	×	50	92	31	7	×
To feel something, even if it was pain	88	18	×	75	17	88	60	×
To punish myself	82	41	✓	75	50	75	80	×
To make others better off	6	41	✓	13	42	6	7	×
To escape: my thoughts and memories	65	76	×	75	92	44	33	×
my feelings	65	88	×	50	100	63	60	×
other people	35	59	×	50	58	31	20	×
myself	53	82	×	38	83	50	33	×
To stop feeling numb or dead	47	24	×	50	25	44	40	×
To prevent being hurt in a worse way	47	24	×	75	25	44	33	×
To distract myself from other problems	59	24	✓	63	25	44	33	×
To express anger or frustration	76	47	×	63	58	56	60	×
ANTECEDENTS								
EVENTS (yes/no)								
I had an argument or conflict with another person	76	47	×	63	42	69	13	✓
Someone was disappointed with me	41	24	×	50	17	44	20	×
Someone was angry with me, criticized me, or put me down	71	47	×	50	50	56	40	×
I was isolated or alone more than I wanted to be	53	47	×	38	58	56	13	×
I heard of someone else attempting suicide or harming themselves	24	18	×	13	8	25	0	×
I saw things that I could use to harm myself or attempt suicide with	47	59	×	63	58	56	13	×

✓ = $p < 0.05$ in statistical comparison. Wilcoxon matched pairs test for continuous data; Fischer's exact test for categorical data

× = n.s.

	Most recent nonsuicidal act (n=17)	Most recent suicidal act (n=17)	Comparison between suicidal and nonsuicidal act (n=17)	Burning (n=8)	Drugs /medication (n=13)	Cutting (n=16)	Hitting Body (n=16)	Comparison between Cutting and Hitting Body (n=12)
	Mean (SD) %	*Mean (SD) %*		*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	*Mean (SD) %*	
FEELINGS (intensity ratings 0-10)								
Upset, miserable or distressed	8.2 (3)	9.1 (1)	×	9.5 (1)	8.8 (2)	7.4 (3)	8.1 (2)	×
Angry frustrated or enraged at myself	7.1 (4)	7.1 (4)	×	7.0 (4)	6.5 (4)	6.6 (4)	7.2 (5)	×
Self-hatred or shame, thought I was "bad"	7.8 (3)	7.8 (3)	×	6.1 (5)	7.9 (4)	7.3 (4)	6.5 (5)	×
Like I deserved to be punished or hurt	6.4 (4)	6.4 (4)	×	7.5 (4)	5.9 (4)	5.9 (4)	6.9 (4)	×
Like a burden to others	5.4 (4)	7.4 (4)	✓	6.0 (5)	7.2 (5)	5.5 (4)	4.3 (5)	×
Felt bad about myself	7.9 (3)	8.5 (3)	×	7.6 (4)	8.3 (3)	7.9 (3)	6.9 (4)	×
Depressed	8.9 (2)	9.5 (1)	×	9.6 (1)	9.6 (1)	8.1 (3)	7.4 (3)	×
Emotionally empty or numb	7.2 (4)	7.9 (3)	×	9.6 (1)	8.0 (3)	7.1 (4)	3.8 (5)	✓
THOUGHTS (yes/no)								
About sexual abuse or rape	53	41	×	25	50	44	40	×
About physical abuse or assault	29	24	×	25	33	31	27	×
Had flashbacks or nightmares	65	59	×	50	58	50	47	×
CONSEQUENCES (1= not true at all, 5=very true)								
Emotion Relief (proportion scale)	2.6 (1)	2.0 (1)	✓	2.1 (1)	1.8 (1)	2.6 (1)	1.8 (1)	×
I got help	1.5 (1)	2.6 (2)	✓	2.8 (2)	3.0 (2)	1.4 (1)	1.4 (1)	×
I felt something, even if it was pain	3.8 (2)	2.6 (2)	✓	3.5 (2)	2.2 (2)	3.8 (2)	3.7 (2)	×
I felt punished or succeeded in punishing myself	3.5 (2)	2.6 (2)	×	3.6 (2)	2.6 (2)	3.4 (2)	3.5 (2)	×
Other people were better off than before I harmed myself	1.1 (1)	1.7 (1)	×	1.5 (1)	1.9 (2)	1.1 (1)	1.0 (0)	×
I got away or escaped	2.1 (1)	2.9 (2)	×	2.3 (2)	3.2 (2)	2.2 (2)	1.5 (1)	✓
I stopped feeling numb or dead	3.2 (2)	1.8 (1)	✓	2.8 (2)	1.7 (1)	2.9 (2)	1.9 (2)	✓
I prevented myself from being hurt in a worse way	3.4 (2)	1.9 (2)	✓	4.3 (2)	2.0 (2)	3.3 (2)	2.5 (2)	×
I was distracted from other problems	3.2 (2)	2.5 (2)	×	2.4 (2)	2.1 (2)	3.1 (2)	2.4 (2)	×
My self-injury expressed my anger or frustration	3.7 (2)	3.5 (2)	×	3.4 (2)	3.5 (2)	3.4 (2)	3.3 (2)	×
I felt worse about myself or felt more self-hatred/shame	3.1 (2)	3.1 (2)	×	3.1 (2)	3.4 (2)	2.7 (2)	2.0 (1)	×

✓ = $p < 0.05$ in statistical comparison. Wilcoxon matched pairs test for continuous data; Fischer's exact test for categorical data

× = n.s.

Table 2 Frequency of participants reporting different methods of self-injury throughout their lifetime

Method of self-injury	Alcohol (with known medical risk)	Asphyxiation	Burning	Cutting	Drowning	Drugs/ medication	Hanging	Hitting body	Jumping	Pinching	Poison/toxic substances	Scratching	Stabbing	Stepped into traffic	Stopped required medication	Strangling	Transport related	Other (exposure, not eating, insulin)
Freq.	1	2	8	16	4	13	2	16	1	2	1	4	2	3	1	6	2	3

Section Three: Discussion Paper

Contributions to Theory and Clinical Practice

Reflections on conducting the research

During the planning stage of my research, I was acting on a number of assumptions. I expected difficulties in finding people who would be willing to speak to a stranger about their experiences of self-injury. I imagined individuals could become distressed or dysregulated during the interview. I prepared for challenges in maintaining a non-therapeutic research-focused stance. I envisaged some testing of interpersonal boundaries. I thought I would be faced with numerous cancellations and no-shows. In contrast to my expectations, I encountered very few difficulties in conducting the interviews. As a result, I have gained considerable confidence and composure in discussing difficult experiences with individuals, which has undoubtedly transferred into my clinical practice.

As I near the end of my clinical psychology training, I find myself reflecting on where it all began. At school I had a friend who repeatedly self-injured. I was upset, confused, and scared by their actions. I discovered that I was a good listener, and that I could show patience and containment, despite my inner feelings. I began reading psychiatric text books in an attempt to understand what was happening, to convince my friend that there was help available and they were not alone. It was never my conscious intention to continue the journey that started at school. But, after all this time, it appears that I am still trying to find answers to the same questions: Why do people hurt themselves? And, ultimately, what can we do to help?

These questions are the focus of this discussion paper. The findings of the empirical paper are limited by the small sample size and number of statistical tests conducted. However, these preliminary results, and the conclusions of the methodological review, suggest a number of contributions to theory, research, and practice.

Implications for Future Research and Theory Development

Two main areas of interest can be drawn out of the results of the empirical paper and other findings from the research that will be presented in this paper. These areas are important for future theory and research development to aid understanding of the aetiology and maintenance of self-injury. Firstly, evidence is presented that supports a move away from a categorical distinction between suicidal and nonsuicidal self-injury. Instead it is suggested that a continuum of self-injurious behaviours that includes suicidal and nonsuicidal self-injury, and other self-destructive acts, is the most meaningful conceptualisation of these behaviours. A theoretical basis for understanding these behaviours as a continuum is considered. Secondly, findings relating to the stability of functions of self-injury across different methods, time and contexts are discussed.

A continuum of self-injurious behaviours

Current theoretical and empirical evidence is not sufficient to support a categorical distinction between suicidal and nonsuicidal self-injury (De Leo, 2011). The results of the empirical paper found support for the co-occurrence of these behaviours (81% of the current sample reported both). Emotional relief, escape, help-seeking, and interpersonal influence were reasons for both. Antecedent events, feelings and thoughts were similar. The presence and intensity of suicidal thoughts prior to suicidal and nonsuicidal acts did not differ, despite clear differences in intent. These findings support a conceptualisation of nonsuicidal and suicidal self-injury along a continuum.

Investigations into the functions of self-injury have tended to exclude suicidal acts, focusing only on nonsuicidal self-injury. This has a number of implications. It is clear from the current study, and previous research, that suicidal acts serve multiple functions, even when suicidal intent is high (i.e. ambivalence is low). Understanding the factors that trigger and reinforce suicidal acts is vital. Investigating these acts alongside nonsuicidal self-injury allows for direct comparison between these closely related behaviours. Within-person designs should be employed, to limit the impact of individual differences, given reports of multiple behaviours with multiple functions.

Another consequence of the distinction between suicidal and nonsuicidal self-injury is the impact it has on studies of nonsuicidal self-injury. In their efforts to exclude suicidal self-injury, these studies have focused on low lethality methods of nonsuicidal self-injury (e.g. cutting, scratching). The current study found evidence for a

number of high lethality methods of self-injury used in the absence of suicidal intent (e.g. strangulation, asphyxiation); however these methods are rarely reported in studies of nonsuicidal self-injury. These behaviours may show important differences in topography and function to less severe nonsuicidal methods, and require further investigation. Four participants in our study reported differences in suicidal intent within a particular method i.e. that on some occasions a medication overdose is consumed as an attempted suicide, but on other occasions it is intended to cause harm (but not death), or to induce sleep. This finding emphasises the importance of direct questioning about individual's intentions. Assuming intent from the method, severity or outcome of an action may lead to inaccurate conclusions. If studies focus on nonsuicidal self-injury, then this should be on the basis of direct questions about individuals' intent, not based on assumptions about particular methods or levels of severity.

Currently, there is no evidence-based theoretical framework for understanding both suicidal and nonsuicidal self-injury across a range of populations. Linehan's (1993) biosocial theory suggests that self-injurious behaviours occurring within the context of Borderline Personality Disorder are learned coping strategies of escape from, or avoidance of, extreme emotions that the individual has limited strategies for dealing with. The Experiential Avoidance Model (Chapman, Gratz & Brown, 2006) aims to provide a theoretical framework for understanding nonsuicidal self-injury in the context of a range of psychiatric presentations (e.g. PTSD, personality disorders, depression). This model suggests that nonsuicidal self-injury is predominantly maintained through negative intrapersonal reinforcement. Experiential avoidance strategies, including nonsuicidal self-injury, are considered to be a class of functionally equivalent behaviours that result in the avoidance of, or escape from, emotional experiences that the individual is unable to tolerate. Other experiential avoidance behaviours include: alcohol and substance misuse, thought suppression, and avoidant coping styles (Chapman, et al., 2006). Although the Experiential Avoidance Model of nonsuicidal self-injury emphasises emotional relief/avoidance as the function of these behaviours, it also notes that they may function as methods of avoidance of unwanted thoughts, memories, and sensations (Chapman, et al., 2006). Suicidal self-injury is not included within this model, but some findings from the current study and previous research suggest it may also be considered as experiential avoidance behaviour.

Suicidal and nonsuicidal self-injury may be at the extreme end of a continuum of self-destructive behaviours, that all serve an experiential avoidance function

(Chapman, et al., 2006). The definition of a self-injurious act used in our study excluded a number of behaviours that participants reported as acts of intentional self-injury, including: alcohol overdose; trichotillomania; purging; misuse of laxatives/water pills; stopping required medication; restriction of food and/or fluids. There must be an intention and expectation of injury, as well as actual physiological harm, for acts to be classified as self-injury within the interview used (see Appendix for instructions). We found evidence for other self-destructive behaviours occurring in temporal proximity to self-injury for some individuals. This included alcohol/drug use, bingeing, and illegal acts. Self-injuring individuals display higher rates of alcohol and substance misuse (Gratz, 2003). Although they differ in severity, and the degree to which they are socially sanctioned acts, these self-destructive behaviours may lie on a continuum (Nock, 2010). The Experiential Avoidance Model suggests that these behaviours belong to a functionally equivalent class, which act as an escape from or avoidance of unwanted internal experiences. Investigations are needed into the possible relationship between suicidal and nonsuicidal self-injury and other self-destructive behaviours.

The stability of functions of self-injury across time, contexts and different methods

Future research and theory should attempt to understand factors influencing the stability of the functions of self-injury. The ability to predict changes in behavioural function across situations and methods is vital in informing effective interventions.

Stability of functions across different methods of self-injury

Within the current study, participants reported multiple methods of self-injury. Little is understood about the differences between methods of self-injury. We found topographical and functional differences between different methods of self-injury, with statistically significant differences identified between cutting and hitting the body. Cutting was more frequent and severe, and more likely to be engaged in to relieve negative emotions. Having an argument, and feeling emotionally numb, were more common antecedents to cutting behaviours. Cutting was more likely to result in escape and reductions in feelings of numbness. Both methods tended to be low in severity and high in frequency. These findings highlight the importance of further comparison between methods, which have implications for theory and practice. Research to date has mostly included retrospective self-reports regarding individuals most recent act of self-

injury. Cutting behaviour is the most common and frequent method of self-injury in clinical populations, and as such has been overrepresented in studies of self-injury. Differences highlighted here between cutting and hitting the body, suggest that the primary functions identified in previous studies focusing on cutting behaviours may not be representative of all methods of self-injury. Comparisons between methods that differ in severity and frequency (e.g. cutting versus strangulation/burning) may identify even greater differences between methods. High lethality methods of nonsuicidal self-injury were reported in the current study in the absence of suicidal intent (e.g. strangulation, asphyxiation). Previous studies of nonsuicidal self-injury have excluded these more risky methods, which is likely to have affected results. The functional and topographical variations between different methods of self-injury require further empirical and theoretical attention.

During data collection for the empirical paper, statements made by participants about their choice of self-injury method were recorded[1]. Participants reported the following explanations for engaging in particular methods of self-injury: different methods served different functions (n=4); access to means for normal method was restricted (n=2); some methods resulted in injuries that were easier to hide or to dismiss as an accident (n=3); different methods served the same function but more severe acts were engaged in if lower severity acts had not achieved intended effect (n=2). Further investigation into factors that predict the choice of different methods of self-injury is needed.

Temporal and contextual stability of functions

The assumption within current research is that self-injury serves a primary function for each individual, and that this function is relatively constant over time and across situations. The validity of this assumption requires testing. Results not previously reported in the empirical paper are relevant to this issue. Participants' comments about the stability of the functions of each method of self-injury were recorded[1]. Some participants reported that the functions of particular methods were constant over time and across situations (n=8). Others reported differing reasons for self-injury on different occasions (n=5) and different thoughts/feelings/events acting as triggers (n=5). Some participants reported that different events may occur but the feelings experienced

[1]Participants reports were categorised using content analysis. All data were independently coded. Agreement between coders was excellent (Cohen's kappa = 0.857).

remained constant prior to self-injury (n=6). These findings suggest that for some individuals the intentions and functions of methods of self-injury are not stable. This questions the validity of previous reports of functions, when stability over time has not been assessed. Current empirical evidence may be over-simplified by encouraging the most common or the most recent functions, possibly ignoring important 'occasional' functions for the behaviour. Further investigations into the stability of functions over time and across different situations would benefit from employing multiple functional assessment measures across situations. These should include observation of antecedents and consequences, self-report of reasons for the behaviour, and physiological measures of affective and cognitive state. A longitudinal methodology would provide important information about possible changes in function over time.

In summary, a number of findings are important for consideration in future theory development. The relationship between suicidal and nonsuicidal self-injury suggests that these behaviours should be investigated alongside each other. Theoretical and empirical developments should attempt to understand the relationship between self-injury and other self-destructive behaviours. These behaviours may be best understood as belonging to a functionally equivalent class of a range of experiential avoidance behaviours. The topographical, functional, and experiential differences between methods of self-injury leads to questions about differences in causal and maintaining factors for these behaviours. The stability of functions over time and across situations is unknown.

Implications for Clinical Practice

Prevention and Early Intervention

Self-injury is reported by up to 15% of individuals in the general population, with particularly high rates in adolescents and young adults (Klonsky, 2012). Initial investigations suggest that similar functions exist for individuals in the general population as in clinical samples (Klonsky, 2012). Introducing a policy of routine questioning about self-injury within primary care services may aid early identification (Hilt, Nolen-Hoeskema, & Cha, 2008). Early intervention programmes should be comprised of the following elements: emotion regulation, problem-solving, attention-control, and social communication skills (Hilt et al., 2008). Universal health promotion strategies aimed at improving levels of emotional intelligence, self-esteem and interpersonal effectiveness could have a positive effect on reducing a range of self-destructive behaviours, including self-injury (Mikolajczak, Petrides & Hurry, 2009). Seeing things they could harm with, and hearing about others' self-injury, were common antecedents reported by individuals in the empirical paper. Public policy initiatives aimed at reducing access to means and limiting media coverage of self-injurious acts may be beneficial in reducing self-injury urges and possible contagion effects (Welsh Assembly Government, 2008).

Assessment

Detailed assessment of the frequency, duration, severity, intentions, triggers, and outcomes of all forms of self-injury is an important part of understanding an individual's difficulties and needs. Thorough assessment through clinical interview and/or the use of standardised interviews (e.g. SASII, Linehan et al., 2006) promotes accurate and meaningful formulations to guide effective interventions. The findings of the literature review suggest that retrospective informant reports can be a valid and less time-consuming method of functional assessment, compared to direct observation methods, and therefore may be useful in clinical assessment. Historical and current self-injury is a strong predictor for future self-injury and completed suicide and is vital information when conducting any assessment of risk (Klonsky, May & Glenn, 2013).

Further developments in the understanding of the aetiology of self-injury will inform assessment methods and formulations for individuals engaging in these behaviours.

Intervention

Interventions likely to be effective in the reduction of self-injury should focus on a) developing more adaptive coping strategies; b) addressing underlying deficits/vulnerabilities that drive self-injury; and c) reinforcement of functionally equivalent behaviours (Kimball, 2009). The current findings suggest that individuals who self-injure are likely to benefit from developing skills in the following areas: emotional and cognitive regulation; attention training; problem-solving; inhibitory control and executive functioning; social and communication skills. Formulation-based interventions should specifically target functions identified for each individual (Nock & Prinstein, 2005). The contributions of the current findings to therapeutic interventions for each potential function are discussed below.

Emotional relief

Individuals reported intense emotional antecedents prior to suicidal and nonsuicidal self-injury, including: anger (towards themselves), shame, depression, distress, and hopelessness. They report wanting to relieve, escape, or express these emotions as a reason for both acts. Following self-injury there was evidence of a decrease in intensity and negative valence of emotions. However, an emotional relief function appeared less common for self-injurious acts involving hitting the body. Also, the current findings suggested that the relief of negative emotions was only mild-moderate, and individuals reported an increase in feelings of self-hatred/shame as a result of self-injury, therefore increasing the risk of future acts (Brown et al., 2002).

The regulation of intense negative emotions is accepted as a common function of self-injury. However, clinicians should also be aware of the possibility of positive emotions (and associated thoughts, events) acting as triggers for self-injury. In the current study participants were asked an open question about positive antecedents to self-injury, using the following question: "Have there ever been times where a positive event, feeling or thought occurred prior to self-injury". Responses were grouped into

categories[2] presented in Table 1:

Table 1 Participants' responses to questions about positive antecedents of self-injury

Category of response	**Reason for self-injury**	**Frequency**
No		14
Yes	To regulate positive emotion	2
Yes	To regulate negative emotions triggered by positive events	3
Unsure	Saw something to harm with	2

Two individuals reported using self-injury to regulate positive feelings. This is the explanation given by one participant: "Things were going well, and I thought, why am I happy? And I cut because it's safer not to be too happy". Some individuals appear to find any intense emotions difficult to tolerate, regardless of valence. Three participants reported occasions when positive events/experiences occurred, which then triggered negative feelings (e.g. guilt, hopelessness). These exploratory findings suggest that further research should be conducted into the possible triggering effects of positive events, thoughts and feelings. These appear to be significant for some self-injuring individuals.

The remaining two participants stated that there may have been times when a positive event, feeling, or thought had occurred prior to self-injury, but they did not feel that these would have triggered the self-injury. Both reported impulsive urges to self-injure when seeing something they could use to harm themselves with. One participant's description of this was: "Sometimes everything's ok, but I see something I can hurt with and self-harm anyway". The other participant stated: "..don't know why, just like I'm addicted to harming, so can be when I feel happy or not". This latter finding may be a result of these individuals having poor insight into their internal experiences. However, it is also possible that for some individuals who self-injure, the behaviour is a compulsive act or an addiction (Favazza, 2011). Differences in reports of levels of impulsivity were also found. Some individuals reported a ritual nature to self-injury. Some have suggested different subgroups of individuals who self-injure, with some individuals engaging in

[2]Participants reports were categorised using content analysis. All data were independently coded. Agreement between coders was excellent (Cohen's kappa = 0.907).

impulsive, reactive acts and others showing more planned, ritualistic behaviours (Favazza, 2011). For these individuals interventions targeting an emotional relief function may not be effective. Further investigation into positive antecedents to self-injury, and compulsive urges to self-injure, would help guide effective interventions for all individuals who self-injure.

Interventions targeting an emotional relief function of self-injury should focus on adaptive methods of emotional expression and regulation, as well as strategies for tolerating severe distress when problem-solving abilities are seriously compromised (Chapman, Gratz & Brown, 2006). These strategies should focus on fast, accessible, non-harmful methods of reducing physiological arousal (e.g. cold shower). Individuals who self-injure are known to have decreased emotional intelligence and difficulties regulating emotions in an adaptive way (Mikolajczak, et al., 2009). In the long-term increasing emotional intelligence (within individuals and society) may prove beneficial in reducing self-injury (Mikolajczak, et al., 2009). Particular theoretical and therapeutic models emphasise the importance of the experiential avoidance of difficult emotions in the maintenance of self-injury. The ability to experience and process these emotions within a secure therapeutic relationship is required (Chapman et al., 2006; Kimball, 2009). Enabling clients to tolerate positive events and emotions will be an important element of therapy for some individuals.

Cognitive regulation

There is emerging evidence that self-injury serves multiple cognitive regulation strategies. In the current study, reasons for self-injury included: to escape distressing thoughts and memories. Thoughts of past abuse and distressing memories were reported prior to self-injury, and reduced afterwards. Escape from these cognitive experiences, and relief from auditory and visual hallucinations, was an important additional reason for self-injury. These intrapersonal functions of self-injury have been reported more often by individuals experiencing clinical depression and demonstrating a ruminative cognitive style (Hilt et al., 2008).

From an experiential avoidance perspective, exposure and response prevention techniques should be utilised to reduce the distress associated with unwanted thoughts. Strategies for decreasing rumination and for coping with distressing thoughts in more adaptive ways may be helpful. Mindfulness techniques (a central element in Dialectical Behaviour Therapy) are a good example of this. They develop individuals' ability to

focus their attention on the present moment, instead of ruminating on past events, or worrying about the future (Kabat-Zinn, 1994).

A recent lab-based self-injury proxy study found that the experience of pain resulted in improvements in information processing required for executive functioning abilities, and triggered a shift away from a neurological state primed for emotion-focused reactivity (Franklin, Hessel, Aaron, Arthur, Heilbron, & Prinstein, 2010). Greater understanding of the mechanisms of this shift in neurological state following self-injury may help to identify other ways of addressing this function. Visual correlates of self-injury also require further exploration, with individuals reporting a desire to see themselves bleeding and intrusive images of self-injury as triggers.

Self-punishment

Wanting to punish the self, and succeeding in feeling punished, were reported for suicidal and nonsuicidal acts. Feelings of guilt, shame, and worthlessness were commonly reported emotional antecedents to self-injury. As well as strategies for regulating these emotional components of a self-punishment function, interventions should focus on the difficulties underlying these emotions. Low self-esteem, self-confidence and self-worth are found in individuals with suicidal and nonsuicidal self-injury (Hawton, Rodham, Evans & Weatherall, 2002). Linehan (1993) suggests that individuals self-injure as a learnt behaviour of punishment and self-invalidation, resulting from longstanding invalidation within their developmental environments. Therapeutic relationships should model a validating and compassionate approach towards the individual, and work towards internalisation of this view of the self (Kimball, 2009). Negative beliefs about the self as worthless, defective, or a failure, can be challenged using cognitive restructuring and through more positive interpersonal experiences (Linehan, 1993).

Feeling generation and prevention of dissociation

High levels of dissociation, flashbacks and nightmares were reported prior to self-injury. Acts resulted in the generation of normal feelings, including relieving feelings of numbness, and eliciting pain. The experience of pain may serve to regulate physiological arousal through the release of opiods, or serve to divert the individual's attention away from their emotional distress (Chapman, et al., 2006). However, pain following self-injury was not reported by all individuals, and differed across methods

within individuals. Higher rates of childhood abuse and traumatic experiences are reported by individuals who self-injure (Gratz, 2003). Individuals experiencing dissociation and trauma-related symptoms are more likely to report positive intrapersonal functions of self-injury (i.e. to generate normal feelings; Nock & Prinstein, 2005). Therapeutic approaches should focus on treating Post Traumatic Stress Disorder and dissociation, while developing alternative methods of feeling generation (Brown, et al., 2002).

Three participants reported positive feelings (e.g. euphoria, peacefulness, excitement) following self-injury. Prior experience of these positive consequences of self-injury was reported as a motivation for self-injurious acts. Enquiring about positive emotional and cognitive consequences of self-injury is important in understanding the reasons for these positive emotions, and how these feelings can be generated in a more adaptive way.

Prevention of suicide

Prevention of suicide was a commonly reported reason for nonsuicidal acts. However, there is unequivocal evidence that self-injury increases later risk of suicide, by increasing an individual's desire and capability to attempt suicide (Joiner, 2005; Klonsky, 2013). Psychoeducation about this increased risk is crucial in helping individuals understand how ineffective nonsuicidal self-injury is in reducing suicidal urges and acts in the long term. This may help motivate individuals using nonsuicidal self-injury to prevent acts of suicide to commit to developing more adaptive coping strategies.

Help-seeking and communication of distress to others

Suicidal self-injury was reported to be more effective in eliciting help from professionals, family and friends. Nonsuicidal self-injury appeared less likely to lead to support from others. Individuals reported that their self-injurious behaviours did not help others to understand their difficulties or lead them to treat them differently, despite this being an intention of the behaviour. Self-injurers have been found to be more likely to report social functions of their behaviour if they are experiencing peer victimisation, interpersonal conflict and have poor communication skills (Hilt et al., 2008). Learning more adaptive, effective care-seeking and communication strategies will benefit these individuals. Challenging social perfectionism tendencies may also result in decreases in

self-injury (Nock & Prinstein, 2005). It is difficult for services to operate in a way that stops the reinforcement of suicidal self-injury as a help-seeking behaviour, due to the fact that medical treatment cannot be refused in life-threatening circumstances. Therefore, it is vital that services are able to positively reinforce adaptive care-seeking behaviours.

Making others better off

Suicide attempts were conducted as an attempt to make others better off and were preceded by feelings of burdensomeness. Therapeutic interventions can help individuals develop a more positive view of themselves and their interactions. However, as a result of their complex difficulties, and challenging behaviours, they may be accurate in their perception of being a burden to others (Brown et al., 2002). Interventions should include support for family members and professionals involved in individuals' care, to help them manage the difficulties they face in providing support (e.g. Linehan, 1993). At the same time individuals may benefit from learning interpersonal skills that allow others to support them without becoming burnt out, promoting effective communication and positive interactions (Brown et al., 2002).

In summary, future theoretical and empirical efforts should focus on multiple cognitive, emotional, behavioural and social functions of different methods of suicidal and nonsuicidal self-injury. A comprehensive theoretical model explaining the aetiology and maintenance of suicidal and nonsuicidal self-injury is needed. Therapeutic approaches based on a functional understanding of self-injury should focus on addressing underlying vulnerabilities that cause and maintain self-injury, while simultaneously developing and reinforcing more adaptive coping strategies. To conclude, people harm themselves for a wide variety of reasons. Understanding the functions of self-injury for each individual affords the most promising starting point from which to offer effective help.

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Section Four: Appendices

ETHICS APPENDIX

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Research Protocol

Project Title: The reasons, triggers and consequences associated with different types of self-injury

Research Team

Chief Investigator: Anna Ripley (Trainee Clinical Psychologist), North Wales Clinical Psychology Programme

Supervisors: Dr Michaela Swales (Consultant Clinical Psychologist) and Dr Lisa Train (Clinical Psychologist) -both based at North Wales Adolescent Service, Abergele Hospital Site, Llanfair Road, Abergele, Conwy, LL22 8DP

Purpose and Background

Nonsuicidal self-injury, and suicide attempts not resulting in death, have enormous consequences for the individual, their family and society. Data from the Welsh Assembly Government's "Talk To Me" National Action Plan to Reduce Suicide and Self Harm in Wales 2008-2013 (WAG, 2008) suggests that between 1996 and 2006, around 300 people in Wales died each year as a result of suicide and at least 6,000 people were taken into hospital each year because they had harmed themselves. Many individuals do not seek medical attention following acts of self-injury, so these figures are likely to be a considerable underestimate of the prevalence of the issue (Gratz, 2003). Estimates based on self-reports of self-injury suggest prevalence rates of up to 14% in a sample of college students (e.g. Gratz, 2001), with higher rates found in individuals receiving support for a wide range of mental health problems (Klonsky, 2007).

Although different in severity and consequence, these behaviours are considered to lie on a continuum (Tarrier, Taylor & Gooding, 2008). Acts labelled as self-injurious behaviours are often defined as occurring without the intent to cause death. However, it can be difficult to accurately assess intent, and intent can fluctuate before and during an act (Miller, Rathus & Linehan, 2006). Also, individuals with a history of self-injury have a significantly higher risk of suicide (Zahl & Hawton, 2004). These findings have led some to suggest that investigations into suicidal and non-suicidal self-injurious behaviour should not separate the two concepts, and that "all behaviour that is self-initiated with the intention to cause harm to the body (regardless of intent to die) is included" (p.303, Linehan, Comtois, Brown, Heard & Wagner, 2006)

Research has identified prevalence and risk factors associated with self-injury in different populations, however relatively little work has focused on the functions of self-injury (Gratz, 2003). Better understanding of the motivation and reasons for such behaviours is needed, as well as identification of the consequences of self-injury that make it more likely to be repeated (Klonsky, 2007). Further research is crucial in obtaining a better understanding of the functions

of self-injury, for prevention, early intervention and effective treatment (Talk to Me, 2008; NICE, 2004).

In previous studies investigating individuals' reasons for self-injury a number of potential areas have been identified, including: emotional relief; interpersonal influence; avoidance/escape and feeling generation (Brown, Comtois & Linehan, 2002; Linehan et al., 2006). Even when self-injury is performed with the intention of causing death, individuals can still report other reasons/motives for the behaviour. The reasons for self-injury and the intended consequences of self-injury do not necessarily correspond to the triggers and actual consequences of self-injury. In order to understand the function of self-injury, it is important to investigate patterns of antecedents and consequences of the behaviour, to understand the function the behaviour serves and factors that reinforce the behaviour. Klonsky (2007) conducted a review of eighteen studies investigating the functions of non-suicidal self-injury (NSSI). Studies assessed functions of NSSI through self-report, phenomenological investigations and laboratory based experiments of proxy NSSI behaviour. The studies demonstrated strong evidence for a negative affect regulation function, in that:

- intense negative affect is experienced before self-injury
- decreased negative affect decreases after self-injury
- individuals who engage in self-injury often report doing so with the intention of reducing negative affect
- when engaging in self-injury proxy behaviour (e.g. drawing a red line on wrist), levels of arousal and negative affect are reduced.

The review also found evidence for other reasons for NSSI, including: self-punishment, anti-dissociation/feeling generation, anti-suicide, interpersonal influence, interpersonal boundaries, and sensation seeking. These reasons appeared to be reported to varying degrees, whereas the affect regulation function was reported by the majority. Research supports the idea that NSSI can serve multiple functions at the same time. In summary, affect regulation and self-punishment appear to be the most common reported reasons for NSSI in clinical and community samples, adults and adolescents.

This study will investigate self-reported reasons for self-injury, as well as the antecedents and consequences of the behaviour. A structured interview will be used to assess the frequency, severity, duration and reasons for different types of self-injury performed with or without an intention to die. Although it appears that affect regulation and self-punishment are the most commonly reported reasons for self-injury, it may be that the reasons for self-injury differ between and within individuals. It is also possible that events that trigger self-injury or consequences that reinforce the behaviour do not correspond to an individual's original intentions for engaging in the behaviour. Self-injury of greater severity, frequency and duration may serve different functions and be performed for different reasons than less severe, less frequent acts. In an investigation with a sample of women with Borderline Personality Disorder it was found that different reasons were reported for self-injury that was performed with or without the intention to die. Individuals reported the motivation of "making others' better off" was higher for suicide attempts than nonsuicidal self-injury. This study will explore differences in triggers and consequences of suicidal and nonsuicidal self-injury, and of

different types of self-injury (e.g. cutting, overdosing) to explore whether they serve different functions.

Affect regulation may be the primary function of self-injury, with other functions as secondary. For example, an individual may harm themselves with the intention of reducing negative affect, but the resulting care received from family or medical professionals serves as further reinforcement for the behaviour. It has been suggested that individuals who self-injure are motivated to reduce intense physiological arousal and/or to reduce negative affect. Little investigation has been done into the regulation of discrete emotions such as anger, shame, sadness etc. Self-injury may serve to regulate particular negative emotions but not others. It has also been suggested that individuals who self-injure may have difficulty tolerating intense positive emotions, and although individuals may not report this as a reason for self-injury, closer investigation may highlight positive emotions as a trigger for episodes of self-injury. It may be that self-injury functions as a strategy to regulate any intense emotion, regardless of whether it is positive or negative. This study aims to investigate some of these questions, in order to inform future research and practice.

Research Questions

- Are there different reasons, triggers and consequences associated with suicidal versus nonsuicidal self-injury and with different types of self-injury (e.g. cutting, overdosing)? Reasons, triggers and consequences may be thoughts, feelings and/or events.

Participant recruitment

Participants will include individuals (16 years or above) who have engaged in at least one act of deliberate self-injury. Participants will be recruited through Child and Adolescent Mental Health Services, Community Mental Health Teams, Inpatient units, and Psychology Departments across Betsi Cadwaladr University Health Board. Participants will be recruited through two strategies. Firstly, staff in these teams will be approached through team meetings, to detail the aims of the research, inclusion criteria and procedure. It is hoped that professionals would then contact individuals that may be willing to participate. Staff will be given information packs to give to clients who they feel may be interested and able to take part in the research. Information packs will include a Declaration of Interest form and a prepaid envelope, which they can return to the chief investigator with details of how to contact them. The second recruitment strategy will involve service user groups facilitated by mental health services, including the Taith Therapeutic Community, local SHARDs (Self Harm and Relationship Difficulties). Participants will be recruited through mental health professionals involved in their care. This will ensure that all participants are receiving ongoing support and risk management in relation to self-injury.

Design and Procedures

This study is a cross-sectional design using self-report and interviewer ratings of participant descriptions of self-injury. Participants who return the Declaration of Interest form will be contacted and an appointment will be arranged. At the time of the interview, participants will have had time to look at the information pack and will be given the opportunity to ask the researcher any questions or voice any concerns they may have about taking part in the research. They will also be reminded that they can withdraw from the study at any time should they wish to do so. Consent forms will then be completed.

The Suicide Attempt and Self Injury Interview (SASII) will be completed with participants. Participants will be asked to report reasons, antecedents and consequences for each type of self-injury. Where an individual has engaged in a particular type of self-injury on numerous occasions (e.g. cutting), they will be asked to answer the questions based on a typical or well-remembered occasion of that type of self-injury. They will then be asked if their answers are a representation of a typical incident of this behaviour and be given the opportunity to alter their answers if this is not the case. As the supplemental questions on the SASII do not give an indication of intensity of emotional antecedents, participants will also be asked to rate the intensity of each emotional antecedent they report on a scale of 0-10. Finally participants will be asked if they can recall any occurrences where a positive emotion or positive event seemed to trigger self-injury. Interviews will be tape recorded to allow for coding.

Measures

Demographics: age, gender, ethnicity, mental health diagnoses.

Suicide Attempt and Self Injury Inventory (SASII; Linehan, Comtois, Brown, Heard & Wagner, 2006): This structured interview collects details of topography (i.e. method of self-injury), intent, medical severity, social context, potential triggers, and outcomes of non-suicidal self-injury and suicidal behaviour during a given time period. Ratings are calculated for each type of self-injury as well as for self-injury categorised as suicidal versus nonsuicidal. The interview includes a list of reasons for self-injury, some of which can be combined into scaled scores for Emotion Relief and Interpersonal Influence. The inventory is coded by the interviewer and leads to ratings that can be treated as continuous data. Interrater reliability has been estimated as 0.956, with the measure showing good validity in relation to reports of the number and severity of acts of self-injury when compared to medical treatment records (Linehan et al., 2006). In order to assess inter-rater reliability, 20% of the interviews will be independently coded through the use of interview recordings/transcripts.

Supplemental questions: the supplemental questions on the SASII explore antecedents and consequences of incidents of self-injury. Participants are given prompt cards with example antecedents and consequences and asked to indicate which, if any, apply to themselves. These include events, thoughts and feelings. As well reporting the presence/absence of particular emotions (e.g. anger, sadness), participants will be asked to rate the intensity if the emotion from 1-10.

Participants will also be asked to report any times that a positive feeling, thought or event has served occurred prior to self-injury. This will be an open question.

Qualifications of investigators

The Chief Investigator is undertaking a Clinical Psychology Doctorate and as part of this training, and previous work, is experienced in working with individuals who self-injure. The Chief Investigator and Research Supervisors have all had an enhanced CRB check and attend regular Child Protection and Protection of Vulnerable Adults Training.

Venue for Investigation

Where possible interviews will be conducted on BCUHB premises at Mental Health Team sites. Where access to such sites is an issue, it may be possible to conduct the interview in an individual's home, providing that an up to date risk assessment is available and no risks to the researcher are identified. BCUHB and Bangor University lone worker policies will be adhered to. Where possible interviews will be arranged to coincide with a regular appointment at the Mental Health Team site. If this is not possible then participants will have their travel expenses reimbursed (through the North Wales Clinical Psychology Programme budget allocated for this research) at a rate of 40p per mile.

Data management

Data will be kept according to Bangor University and Betsi Cadwaladr University Health Board policies and procedures. Interviews will be transcribed and coded with data stored on a Bangor University issued encrypted Safestick pen drive. Transcripts and coding sheets will include a participant identification number but no personal identifiable information. The participant identification number key will be stored on the BCUHB server with a paper copy stored separately from the data on BCUHB premises at the North Wales Adolescent Service, Abergele Hospital Site, in a locked filing cabinet. Access to this filing cabinet is limited to Dr Michaela Swales and BCUHB admin staff. In line with BCUHB policy, the encrypted Safestick pen drive will not be inserted into any BCUHB computer. Audio recordings will be kept in a locked filing cabinet until completion of the doctoral programme (September 2013), at which point they will be deleted. Paper copies of transcripts and data files will be stored in a locked filing cabinet on Bangor University premises for 5 years following completion of the doctoral programme (until October 2018), so they are available for audit and scrutiny purposes. These data storage arrangements have been approved by Lisa Parry, Information Governance Manager, BCUHB.

Data Analysis

Due to the small sample size in this study, all analyses will be exploratory in nature and will be reported and interpreted as potential areas for future larger scale research.

- Are there different reasons, triggers and consequences associated with suicidal versus nonsuicidal self-injury? And with different types of self-injury (e.g. cutting, overdosing)?

Descriptive statistics will be presented reporting the proportion of participant's reporting reasons, triggers and consequences for suicidal versus non-suicidal self-injury, as well as for different types of self-injury (e.g. cutting, overdosing). These descriptive statistics will reflect the experiences of this sample alone, but may suggest potential areas for consideration in larger scale research.

In a recent study the SASII was used to investigate differences in the reasons reported for suicidal versus nonsuicidal self-injury (Brown et al., 2002). In order to conduct statistical analysis in the current study, the structure used in the Brown et al. (2002) study will be utilised and replicated.

Items from the list of reasons will be compiled into Emotion Relief (6 reasons); Interpersonal Influence (8 reasons); Feeling Generation (3 reasons); and Avoidance/Escape (5 reasons) scale scores. Two types of scale scores will be calculated: a binary scale score (indicating that at least one reason is endorsed on a particular scale) and a proportion scale score (calculated by the proportion of reasons within a scale). The same process will be conducted on the list of consequences, which can also be grouped into these scaled scores. For the list of triggers, scaled scores will be produced to categorise triggers as thoughts (3 triggers), feelings (20 triggers) or events (21 triggers). Again binary and proportion scaled scores will be computed for each.

In order to compare participants' binary scaled scores for the reasons, triggers and consequences reported for suicidal versus nonsuicidal self-injury, an index episode will be identified. This will be the most recent episode of self-injury reported (in line with Brown et al., 2002). Therefore in the subsequent analyses each participant will only provide one episode of self-injury that is classified as either suicidal or nonsuicidal.

As it is not expected that the data will conform to a normal distribution, non-parametric tests will be conducted. Mann-Whitney tests will be conducted comparing proportion scaled scores for suicidal versus nonsuicidal self-injury for the subscales of the reasons, triggers and consequences reported for an index episode. Binary scaled scores will be compared for suicidal versus nonsuicidal self-injury using 2x2 chi square analyses. In the Brown et al. (2002) study 61% of index episodes were classified as nonsuicidal self-injury. This study involved a sample similar to that in the current study. It is hoped that a sample size of 30 could be expected to provide sufficient numbers in each group to allow for the exploratory analyses proposed here.

- Content analysis of discussions about reasons, triggers and consequences of self-injury: This qualitative analysis will be conducted in order to capture particular common themes brought up in interviews. For example, within the structured interview participants are asked to report

reasons, triggers and consequences for only one episode of each type of self-injury. They may also report that there are different reasons, triggers and consequences on different occasions. Content analysis will allow for identification of these kinds of themes, which would not be captured through the quantitative coding of the structured interview.

Diversity

The recruitment procedure excludes individuals who are not receiving mental health services. It is known that a significant proportion of individuals who self-injure are not receiving support from services. The sample in this study will therefore not be representative of the general population of individuals who self-injure. However, due to time restraints and ethical considerations regarding disclosure of self-injury, it is not considered possible in the context of this research to open the recruitment out to include individuals in the community.

Ethical /Registration Issues

The project will be approved by Bangor University's Ethic Committee and the NHS (N-RES), along with registration from Betsi Cadwaladr University Health Board. Asking people about acts of self-injury and the reasons they do so is a sensitive topic and some individuals may find this distressing. As a result of the proposed recruitment strategy, all individuals will already be engaged in mental health services and will have disclosed to a professional involved in their care the fact that they have self-injured. Confidentiality and potential hazards of conducting the research will be explained to all individuals before taking part in the study and written consent will be obtained. Participants will be informed that at any time during the process they can withdraw from the study, should they wish to do so. Participants will be given the opportunity to discuss any concerns with the researcher or supervision team, and will be encouraged to contact their mental health professional for ongoing support if necessary. According to BPS guidelines 16 and 17 year olds can be considered capable of providing informed consent. This capacity will be assessed in line with the Mental Capacity Act (2005) as with all participants. Previous studies investigating self-injury in adolescents have not been found to increase risk of future self-injury (Zahl & Hawton, 2004).

In acknowledgement of the sensitive nature of the topic and the value of participation, a £5 voucher will be offered to participants as a small gesture of thanks. The importance of research in this area and the positive impact of their participation will also be emphasised in the information sheet. Participants will be given details of relevant sources of information and support (e.g.CALL helpline, Self Harm Network) and will be advised to consult their mental health professional if participating in the research brings up any issues or concerns.

Risk Assessment

Risks to participants: Talking about instances of self-injury may be distressing for some participants. All participants will be fully informed of the purpose, content and procedure of

the research prior to obtaining written consent. Participants will be warned of the sensitive nature of the topic and be offered the opportunity to discuss any issues with a member of the research team if required. There is strong evidence that asking individuals about self-injury (with or without suicidal intent) does not lead to increased risk of that behaviour (Cukrowicz, Smith & Poindexter, 2010) and can in fact be a positive experience (Talk to Me, WAG, 2008). If participants would like the mental health professional involved in their care to be present during the interview, then this will be facilitated, and arranged to coincide with a routine appointment.

If during the interview participants make disclosures indicating an intention to harm themselves or others, or evidence of suboptimal-care, malpractice or abuse, then confidentiality will be breached. BCUHB Protection of Vulnerable Adults and Child Protection Procedures will be followed. Wherever possible participants would first be encouraged to share this information with appropriate parties themselves (e.g. their mental health professional, police, Child Protection Team). Where this is not agreed the researcher will make every effort to inform the participant that confidentiality will be breached prior to doing so. The researcher will have a contact list of local Safeguarding Officers and Mental Health Team Duty Workers and if required will contact staff on duty within the local Mental Health Team to arrange an emergency mental health and risk assessment. The researcher will also contact a member of research supervision team for guidance. In the unlikely event that there are significant immediate concerns about a participant's, or the publics' safety, the researcher will contact the police.

Risks to self: All data collection to be carried out in NHS premises where possible (e.g. CMHTs, inpatient units). If home visits are necessary (for example in order to ensure equality of access to taking part in the research) then potential risks will be discussed with the mental health professional involved in the care of the participant and the new BCUHB lone working policy will be adhered to. Conducting detailed interviews into individuals' self-injurious behaviour may be distressing for the researcher. Support will be sought from the supervision team as necessary.

Feedback

As part of obtaining informed consent, all participants will be asked if, and how, they would like to be informed of the results of the study. A feedback sheet will be sent to those that request it on completion of the Chief Investigator's VIVA.

References

Brown, M. Z., Comtois, A. & Linehan, M. M. (2002). Reasons for suicide attempts and nonsuicidal self-injury in women with Borderline Personality Disorder, *Journal of Abnormal Psychology, 111 (1)*, 198-202.

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Zahl, D. & Hawton, K. (2004). Repetition of deliberate self-harm and subsequent suicide risk: long term follow-up study of 11583 patients. *British Journal of Psychiatry, 185,* 70-75.

Date: Mon, 05 Dec 2011 16:14:57 -0000 [12/05/2011 04:14:57 PM BST]
From: Bangor Research Applications <psse09@bangor.ac.uk>
To: pspcb9@bangor.ac.uk
Subject: Ethics Application Approved

Dear Anna Marie,

2011-5141 The reasons, triggers and consequences associated with different types of self-injury

Your research proposal number 2011-5141 has been reviewed by the School of Psychology Ethics and Research Committee and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of three years from this date.

Ethical approval is granted for the study as it was explicitly described in the application

If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.
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Governance approval is granted for the study as it was explicitly described in the application and we are happy to confirm that this study is now covered by the University's indemnity policy.

If any new researchers join the study, or any changes are made to the way the study is funded, or changes that alter the risks associated with the study, then please submit an amendment form to the committee.

Yours sincerely

Everil McQuarrie

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Rhif Elusen Gofrestredig / Registered Charity No. 1141565

GIG CYMRU NHS WALES

Bwrdd Iechyd Prifysgol
Betsi Cadwaladr
University Health Board

Panel Arolygu Mewnol Y&D - Y Gorllewin
R&D Internal Review Panel - West

Betsi Cadwaladr University Health Board
Ysbyty Gwynedd
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6 March 2012

Subject:	NISCHR PCP - 88815
BCUHB – R&D Ref:	Ripley 11/WA/0382

Dear Miss Ripley

Re: the functions of self-injury (88815) – Research project review

Documents reviewed:	Version	Date
NHS R&D Form: Code: 88815/274593/14/284		12/12/2011
NHS SSI Form: Code: 88815/274602/6/15/123979/230773		12/12/2011
NHS SSI Form: Code: 88815/274605/6/128/129799/230774		12/12/2011
Protocol	2	15/02/2012
Patient Information Sheet	2	15/02/2012
Consent Form	2	15/02/2012
Expression of Interest Form	1	12/12/2011
GP letter	1	15/02/2012
Interview Schedule (SASII)		
Confirmation of Sponsorship		12/12/2011
Evidence of Sponsor Insurance		01/08/2011
Checklist		
CV of CI (Miss A Ripley)		12/12/2011
CV of Academic Supervisor (Dr M Swales)		12/12/2011
CV of Academic Supervisor (Dr L Train)		

The above research project was reviewed at the meeting of the Internal Review Panel held on 19 January 2011. Thank you for responding to the Committee's request for further information.

The Chairman considered the response on behalf of the Committee and is satisfied with the scientific validity of the project, the risk assessment, the review of the NHS cost and resource implications and all other research management issues pertaining to the revised application.

I have pleasure in confirming that the Internal Review Panel is pleased to grant approval to proceed at Betsi Cadwaladr University Health Board sites as described in the application.

The study should not commence until the Ethics Committee reviewing the research has confirmed final ethical approval - favourable opinion.

All research conducted at the Betsi Cadwaladr University Health Board sites must comply with the Research Governance Framework for Health and Social Care in Wales (August 2009).
An electronic link to this document is provided on the BCUHB R&D WebPages.

Alternatively, you may obtain a paper copy of this document via the R&D Office.
Attached you will find a set of approval conditions outlining your responsibilities during the course of this research. Failure to comply with the approval conditions will result in the withdrawal of the approval to conduct this research in the Betsi Cadwaladr University Health Board.

If you would like further information on any other points covered by this letter please do not hesitate to contact me. On behalf of the Committee, may I take this opportunity to wish you every success with your research.

Yours sincerely

pp

Dr Richard Tranter MBChB, MRCPsych, PhD
Consultant Psychiatrist
Chairman Internal Review Panel
Assistant Director of R&D

Part of the research infrastructure for Wales funded by the National Institute for Social Care and Health Research, Welsh Government.
Yn rhan o seilwaith ymchwil Cymru a ariannir gan y Sefydliad Cenedlaethol ar gyfer Ymchwil Gofal Cymdeithasol ac Iechyd, Llywodraeth Cymru

NISCHR
Gwasanaeth Moeseg Ymchwil | RES | Research Ethics Service

Pwyllgor Moeseg Ymchwil Gogledd Cymru - Y Orllewin
North Wales Research Ethics Committee – West

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Miss Anna Ripley
Trainee Clinical Psychologist
North Wales Clinical Psychology Programme
School of Psychology, Bangor University
Bangor
LL57 2DG

05 March 2012

Dear Miss Ripley,

Study title: **The reasons, triggers and consequences associated with different types of self-injury**
REC reference: **11/WA/0382**

Thank you for your letter of 29 February 2012, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chairman.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
REC application (submission 88815/274587/1/601)		13 December 2011
Protocol	2	15 February 2012
Participant Information Sheet	2	15 February 2012
Participant Consent Form	2	15 February 2012
GP/Consultant Information Sheets	1	15 February 2012
Other: Expression of Interest Form	1	12 December 2011
Questionnaire: SASII		
Investigator CV		12 December 2011
Other: CV - Academic Supervisor - Michaela Swales		12 December 2011
Other: CV - Academic Supervisor - Lisa Train		12 December 2011
Letter from Sponsor		12 December 2011
Evidence of insurance or indemnity		01 August 2011
Response to Request for Further Information		29 February 2012

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

11/WA/0382	Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

Rossela Roberts

Mr David Owen
Chairman

Email: rossela.roberts@wales.nhs.uk

Enclosures: "After ethical review – guidance for researchers"

Copy to: *Sponsor: Dr Charles Leek, School of Psychology, Bangor University*
R&D Office: Betsi Cadwaladr University Health Board

Client ID #: _____ Interviewer's ID #: _____

Date: _____

LINEHAN SUICIDE ATTEMPT-SELF-INJURY INTERVIEW (SASII) -STANDARD (SHORT) VERSION -2006

Linehan, M.M., Comtois, K.A., Brown, M.Z., Heard, H.L., Wagner, A. (2006). Suicide Attempt Self-Injury Interview (SASII): Development, Reliability, And Validity of A Scale To Assess Suicide Attempts And Intentional Self-Injury. *Psychological Assessment, 18(3),* 303-312.

S1_____ At any time in the last year [your life, since last assessment, etc.] have you deliberately harmed or injured yourself or attempted suicide? (0 = No, 1 = Yes).

S2_____ How many times have you deliberately harmed or injured yourself or attempted suicide in the last year [your life, since last assessment, etc.]?

S3_____ INTERVIEWER: HOW RELIABLE IS THIS NUMBER? (0 = Unreliable, 1 = Somewhat reliable, 2 = Reliable)

S4_____ HOW MANY EPISODES WERE COUNTED AS THRESHOLD "SUICIDE ATTEMPT/INTENTIONAL SELF-INJURY"? (Answer at end of interview)

Use this horizontal dateline to note suicide attempts or intentional self-injury episodes, in chronological order. Start in the lower right corner, on the first line, and move from right to left. Make a short vertical mark for each suicide attempt/intentional self-harm. Next to the mark, write the date of the episode, the method and if the subject received medical treatment as a result. Circle any events that the subjects describe as suicide attempts. Any further details should be written in the body of the interview.

(Start date)____/____/____

_____ /_____

12 months/ One year ago 11 months ago

_____ /_____

10 months ago 9 months ago

_____ /_____

8 months ago 7 months ago

_____ /_____

6 months ago 5 months ago

_____ /_____

4 months ago 3 months ago

_____ /_____

2 months ago 1 month ago/ Most recent month

(Yesterday's Date)____/____/____

01 _____ SASII SEQUENCE NUMBER (Count most recent SASII as "1") (If no SASII, code 0 and stop interview)

02 _____ BASIS FOR SEQUENCE NUMBER (1 = All episodes, 2 = All medically treated episodes, 3 = Most serious episode, 4 = First episode, 5 = Most recent episode, 6 = most serious last year 7 = Other _____.

03 _____ Think back to the most recent time (time before that) when you harmed yourself. Was this a single event or a series or cluster of events?

INTERVIEWER: RATE EPISODE AS A SINGLE EVENT OR CLUSTER OF EVENTS.
0 = Single event. An act clearly remembered and/or distinguishable from another act by any detail.
1 = Cluster of events. A repetitive or habitual series of low lethality acts in which all circumstances were identical, or a series of acts so poorly recalled by subject such that acts cannot be differentiated from each other in any way other than count.

DESCRIBE BASIS FOR LABELING AS A CLUSTER:
1a _____

_____

04 _____ Was the initiation of your action to (method)/(self-injury/suicide attempt/overdose) deliberate, accidental, or somewhere in between? (1 = Accidental, 2 = Semi-deliberate, 3 = Deliberate) (INTERVIEWER: IF INITIATION OF ACT ITSELF WAS AN ACCIDENT, I.E. CODE=1, BEHAVIOR IS NOT A SASII.)

05 _____ Exact/estimated number of suicide attempts or self-harm events in this cluster (IF SINGLE EVENT, ENTER "1")

5a___ ___/ ___ ___/ ___ ___ First date of cluster (IF SINGLE EVENT ENTER DATE OF EVENT)

5b___ ___/ ___ ___/ ___ ___Last date of cluster (IF SINGLE EVENT ENTER DATE OF EVENT.)

06_____ How accurate is this date (1=Exact, 2=Within two weeks, 3=Within one month, 4=Anytime in last year)

METHOD AND LETHALITY OF METHOD

07_____ Before we try to understand what led up to and followed your self-injury/attempted suicide/overdose, I want to first understand exactly what you did. Tell me again/describe exactly what method(s) you used to injure yourself?

_____

_____

_____

INTERVIEWER: CODE *PRIMARY* METHOD FOR #07

FOR EACH OF THE FOLLOWING METHODS, CODE 0 = Not used, 1 = Used.

7.1_____ = Alcohol (used with direct intent to self-harm):

71a _____ What were you drinking?
(1 = BEER, 2 = WINE, 3 = LIQUOR,
4 = COMBINATION OF 1 & 2,
5 = COMBINATION OF 1 & 3,
6 = COMBINATION OF 2 & 3,
7 = COMBINATION OF 1, 2, & 3,
6 = OTHER, 71ao _____)

71b _____How much did you drink? (CODE SEC's) _____

7.2_____ = Drugs/Medications (used with direct intent to self-harm): _____

72a _____How many different drugs or medications did you take?

72b What drugs or medication did you take? _____
72c DRUG CODE _____
72d How much did you take? 72d1 # tablets: _____ 72d2 # mg:_____
72g What other drugs or medication did you take? _____
72h DRUG CODE _____
72i How much did you take? 72i1 # tablets: _____ 72i2 # mg: _____
72l What other drugs or medication did you take? _____
72m DRUG CODE _____
72n How much did you take? 72n1 # tablets: _____ 72n2 # mg: _____

72q List any other drugs that you took _____

7.3_____ = Poison/caustic substance:
73a What substance did you take? _____
(1=LYSOL, 2=RAT POISON, 3=AMMONIA, 4=POLISH REMOVER,
5=OTHER 73ao_____
73b How much did you take? _____.

7.4_____ = Burning:
74a What did you use? _____
(1=CIGARETTE, 2=LIGHTER/MATCH, 3=OVEN/STOVE,
4=CURLING IRON/FLAT IRON, 5=CLOTHES IRON, 6=HOT METAL, 7=HEATED KNIFE,
8=CANDLE, 9=CHARCOAL, 10=GREASE,
11=BOILING WATER, 12=LIGHT BULB, 13=INCENSE STICK,
14=OTHER 74ao_____)
74b Where did you burn yourself? _____
(1=WRISTS/ARMS, 2= TORSO, 3=LEGS,
4=OTHER/MIXED 74bo_____, 5=RECTUM, 6=VAGINA)
74c VERIFICATION BY SCARS? _____ (0 = No, 1 = Yes)

7.5_____ = Scratch/cut
75a What did you use? _____
(1=RAZOR, 2=KITCHEN KNIFE,
3=EXACTO KNIFE/BOX CUTTER/CARPET KNIFE/UTILITY KNIFE, 4=POCKET
KNIFE/SWISS ARMY KNIFE, 5=SCISSORS/WIRE CUTTER, 6=FINGERNAILS,
7=GLASS/LIGHT BULB/POTTERY, 8=CAN LID/POP CAN, 9=EATING UTENSILS,
10=TWEEZERS, 11=PLASTIC, 12=NAILS,
13=SAFETY PIN/PUSH PIN/TACK, 14=OTHER 75ao_____)
75b Where did you scratch/cut? _____
(1=WRISTS/ARMS, 2=THROAT, 3= TORSO, 4=LEGS,
5=OTHER/MIXED 75bo _____
75c How many stitches did you have? (if none, code 0 _____
75d SEVERITY? _____
(1=SCRATCH, 2=CUTS, NO TENDON, ARTERY, NERVE DAMAGE, 3=TENDON, ARTERY,
NERVE DAMAGE)
75e VERIFICATION BY SCARS? (0 = No, 1 = Yes)

7.6_____ = Stabbing, puncture:
76a What did you use? _____
(1=NEEDLE, 2=KITCHEN KNIFE, 3=POCKET KNIFE, 4=UTILITY KNIFE, 5=PEN/PENCIL,
5=NAILS, 7=SCISSORS, 8=GLASS, 9=KEYS, 10=PINS, 11=OTHER 76ao _____.
76b Where did you stab/puncture? _____
(1=WRISTS/ARMS, 2= TORSO, 3=LEGS, 4=OTHER/MIXED 76bo _____
76c How many stitches did you have? _____
76d VERIFICATION BY SCARS? (0 = No, 1 = Yes)

7.7_____ = Gun:
77a What kind of gun did you use? _____
(1=BB GUN, 2=HAND GUN, 3=RIFFLE, 4=AUTOMATIC, 5=DART GUN, 6=OTHER 77ao_____)
77b Where did you shoot? _____
(1=HEAD, 2= CHEST, 3=LOWER TORSO, 4=LIMBS, 5=OTHER/MIXED 77bo _____
77c VERIFICATION BY SCARS? (0 = No, 1 = Yes)

7.8_____ = Hanging:
78a What did you use? _____
(1= STRING, 2=ROPE, 3=SHEET, 4=OTHER 78ao_____, 5=BELT/STRAP, 6=TOWEL)

7.9_____ = Strangling:
79a What did you use? _____
(1= STRING, 2=ROPE, 3=SHEET, 4=OTHER 79ao_____, 5=BELT/STRAP, 6=TOWEL, 7=HANDS)

7.10_____ = Asphyxiation:
710a What did you use? _____
(1=CARBON MONOXIDE, 2=PLASTIC BAG, 3=OTHER 710ao _____, 4=PILLOW)

7.11_____ = Jumping:
711a On what did you land? _____
(1= SOLID GROUND, 2=WATER, 3=OTHER 711ao_____,
4=DIDN'T FALL BUT WOULD HAVE BEEN LAND,
5=DIDN'T FALL BUT WOULD have LANDED IN WATER
711b From how high did you jump? (IN FEET)_____.

7.12_____ = Drowning:
712a How far from shore or safety did you swim ?(IN FEET) _____.
712b Was the water warm or cold? (1=WARM, 2=COLD) _____
712c Can you swim? (0 = NO, 1 = YES) _____

7.13_____ = Hitting body:
713a What object did you hit? _____
(1=WALL, 2=FLOOR, 3=WALL AND FLOOR, 4=OTHER 713ao _____5=FISTS, 6=SINK, 7=APPLIANCES, 8=HAMMER, 9=FURNITURE, 10=WHIP)
713b How many times did you hit yourself?)_____.
713c What part of your body was hit? _____
(1=HEAD AGAINST OBJECT, 2=FISTS AGAINST OBJECTS,
3=FISTS AGAINST HEAD, 4=OTHER 713co _____.
713d VERIFICATION BY BRUISE/SWELLING? (0 = No, 1 = Yes)

7.14_____ = Stopped required medical treatments or medications (with direct intent to self-harm):
714a What did you stop doing? _____
(1= STOPPED NEEDED MEDICAL TREATMENTS,
2= STOPPED MEDICATIONS, 3=OTHER 714ao_____,
714b For how long was the treatment/medication stopped (hours)? _____
714c What was the treatment for? _____
714d What were expected consequences of stopping treatment: _____-
_____

7.15_____ = Transportation related injury (e.g., drove car off a cliff).
715a describe:_____

7.16_____ = Stepped into traffic.
716a describe:_____

7.17 = Other: _____

08 _____ INTERVIEWER: RATE MEDICAL RISK OF DEATH BASED ON METHOD AND ON OTHER SUBSTANCES PRESENT AT TIME

1 = Very low. Less than/equal to 5 pills (unless medication potentially lethal in low doses); scratching; reopening partially healed wounds; head banging, swallowing small, non-sharp objects; going underdressed into cold for brief time, lying down at night in the middle of a non-busy road but getting up when a car doesn't come or swimming out to middle of lake and returning upon getting tired. Minor heroin overdose 1.5 times usual dependent dose.

2 = Low. Superficial cut on surface or limbs; 6-10 pills (or fewer if medication potentially lethal in low doses); cigarette burn(s), jumping feet first from very low place (less than 10 feet). Heroin overdose 1.5 times usual dependent dose combined with other drugs and/or alcohol.

3 = Moderate. Overdose on 11-50 pills or two or more types of pills or 6-10 pills potentially lethal in low doses and combined with alcohol; deep cuts anywhere but neck, swallowing ≤ 12 oz shampoo or astringent, ≤ 2 oz. lighter fluid, or ≤ 4 tbsp. cleaning compounds; igniting flammable substance on limb. Moderate heroin overdose 2 - < 3 times usual dependent dose.

4 = High. Overdose with over 50 pills or 11-30 pills potentially lethal in low doses or combined with large amount of alcohol, stabbing to body; pulling trigger of a loaded gun aimed at a limb (arm or leg), swallowing > 2 oz lighter fluid, > 12 oz shampoo or astringent or > 4 tbsp. cleaning compounds, igniting flammable substance on multiple limbs and torso, walking into heavy traffic.
Heroin overdose 2 - < 3 times usual dependent dose combined with other drugs and/or alcohol.

5 = Very high. Overdose with over 30 pills lethal in small doses or combined with large amount of alcohol; poison (unless small amount not potentially lethal); attempted drowning; suffocation; deep cuts to the throat or limbs; jumping from low place (less that 20 feet), igniting flammable substance all over body, electrocution, throwing self in front of or from car going less than 30 miles/hr, strangulation. Serious heroin overdose 3 or more times usual dependent dose.

6 = Severe. Pulling trigger of loaded gun aimed at vital area (such as torso or head); Russian roulette, jumping from a high place (more than 20 feet); hanging (feet above the ground); asphyxiation (such as carbon monoxide suffocation); jumping in front of auto going faster than 30 miles/hr or off overpass in rush hour traffic, attempted drowning after ingesting alcohol or other drugs, swallowing nail polish remover, turpentine or similar substances. Serious heroin overdose 3 or more times usual dependent dose combined with other drugs and/or alcohol.

INTENT

09_____ At the time of your self-injury/suicide attempt/overdose, what final outcome did you most intend and expect? (RECORD ANSWER VERBATIM.)

_____

_____

_____

INTERVIEWER: RATE SUBJECT'S CONSCIOUS INTENT TO CAUSE *SELF-INJURY*, I.E., DEGREE THAT BEHAVIOR WAS INITIATED AND PERFORMED IN ORDER TO CAUSE SELF-INJURY *OR* IN ORDER TO RISK SELF-INJURY.

0 = No bodily or physiological harm intended or expected (e.g., expected to fly from window ledge; habitual substance abuser expected to get high as usual; bulimic expected to purge as usual)

1 = Ambivalent intent to cause bodily injury or physiological harm to self and took a chance (e.g., Russian roulette, habitual substance abuser took more than normal amount)

2 = Clear expectations of some bodily injury, physiological harm to self (e.g., expected to sleep for a whole weekend, expected skin to be broken, bulimic expected to disrupt electrolyte balance), or death

10 _____ Just before or at the time of this self-injury/overdose, were you thinking about suicide or wishing you were dead?

0 = Not at all
1 = I was wishing I was dead, but the thought of suicide did not go thru my mind
2 = The thought of suicide passed thru my mind
3 = I briefly considered it, but not seriously
4 = I was thinking about it and was somewhat serious
5 = I was very serious about dying but was also somewhat ambivalent
6 = I was extremely serious, intended to die and was not ambivalent at all

11. Would you say that you injured yourself/attempted suicide/overdosed for any of the reasons on this list and, if so, which ones? (0 = Not mentioned, 1 = Mentioned) **Please Give Card A to client**

_____1 To stop bad feelings
_____2 To communicate to or let others know how desperate you were
_____3 To get help
_____4 To gain admission into a hospital or treatment program
_____5 To die
_____6 To feel something, even if it was pain
_____7 To punish yourself
_____8 To get a vacation from having to try so hard
_____9 To get out of doing something
_____10 To shock or impress others
_____11 To prove to yourself that things really were bad
_____12 To give you something, anything to do
_____13 To get other people to act differently or change
_____14 To get back at or hurt someone
_____15 To make others better off
_____16 To get away or escape
To get away or escape from what? (check all that apply)
_____16a. your thoughts and memories
_____16b. your feelings
_____16c. other people
_____16d. yourself
_____17 To stop feeling numb or dead
_____18 To prevent being hurt in a worse way
_____19 To stop feeling angry or frustrated or enraged
_____20 To demonstrate to others how wrong they are/were
_____21 To relieve anxiety or terror
_____22 To distract yourself from other problems
_____23 To relieve feelings of aloneness, emptiness or isolation
_____24 To stop feeling self-hatred, shame
_____25 To express anger or frustration
_____26 To obtain relief from a terrible state of mind
_____27 To make others understand how desperate you are
_____28 To stop feeling sad
_____29 Other_____

12_____ At the time it occurred, did you consider the episode a suicide attempt, even if you did not really intend to die? (0 = No, 1 = Yes).

13_____ Do you now consider that episode a suicide attempt? (0 = No, 1 = Yes).

If Q. 12 & 13 ARE CODED DIFFERENTLY, ASK THE FOLLOWING AND RECORD ANSWER VERBATIM.
What accounts for this change?
13a_____
_____
_____

14_____ INTERVIEWER: RATE SUBJECT'S CONSCIOUS EXPECTATION OF *FATAL OUTCOME*.
0 = No expectation
1 = Uncertain of outcome
2 = Clear expectations of fatal outcome

COMMUNICATION OF SUICIDE INTENT

15_____ At the time or near the time of this episode, did you tell anyone, directly or indirectly, that you were thinking of suicide or that you wished you were dead? (ASSESS IF SUBJECT COMMUNICATED SUICIDE IDEATION: 0=No, 1=Indirect communication, 2=Direct communication.)

15a DESCRIBE: _____

_____

_____

16 _____ At the time or near the time of this episode, did you threaten suicide to anyone or do anything that could be or was interpreted by someone else as a threat to harm or kill yourself?
(ASSESS IF SUBJECT THREATENED: 0=No, 1=Indirect threat, 2=Direct threat.)

16a DESCRIBE: _____

_____

_____

IMPULSIVITY AND PROBABILITY OF INTERVENTION

17 _____ Did you plan your self-injury/suicide attempt/overdose, or was it an impulsive act? (RECORD ANSWER VERBATIM)
17a _____

_____

INTERVIEWER: RATE IMPULSIVITY OF ACT.
1 = Commitment to act, followed by very careful or elaborate plan carried out over a period of time.
2 = Actively planned and/or got implements. Had impulse, resisted for _____ days, then acted.
3 = Actively planned and/or got implements. Had impulse, resisted for less than 24 hours.
4 = No active planning. Had impulse, resisted for _____ days, then acted.
5 = No active planning. Had impulse, resisted for less than 24 hours, then acted.
6 = No active planning. Occurred impulsively, with no forethought and without very strong emotion.
7 = No active planning. Occurred impulsively, with no forethought and with very strong emotion.

18_____ At the time or near the time of this episode, did you write a suicide note? (0 = No, 1 = Yes)

19 _____ Did you arrange your self-injury/suicide attempt/overdose in such a way that it would be difficult for anyone to find, stop, or save you? (0 = No, 1 = Somewhat, 2 = Yes) Describe the circumstances: (RECORD ANSWER VERBATIM.)

_____

20 _____ INTERVIEWER: RATE PROBABILITY OF INTERVENTION BASED ON ALL INFORMATION

1 = Chance of intervention remote. Act committed by person in a solitary or isolated place without access to telephone (i.e., a wooded area, cemetery, etc.).
2 = Improbable intervention. Act committed by person alone, with intervention by a passerby possible although not expected (i.e., in a motel room, an office late at night, at home alone with no one expected).
3 = Ambiguous chance of intervention. Act committed by person alone, with no certainty of immediate assistance. However, a reasonable chance for intervention existed (i.e., the victim is aware of the impending arrival of others).
4 = Probable intervention. Act committed with another person in the immediate vicinity but not visibly present (such as in the same dwelling/building). Or made phone call but did not directly communicate intention.
5 = Certain intervention. Act committed in the presence of another person/made phone call immediately before or after in order to advise of act or to say good-bye.

LEVEL OF MEDICAL TREATMENT

21. Following your self-injury/suicide attempt/overdose were you taken to any of these places or did you turn to any of these places or people for help? (***Give Card B***); 0 = Not contacted, 1 = Contacted).

_____1 Physician/nurse (Visit)
_____2 Crisis outreach/after hours team/mental health professional (In person visit)
_____3 Police/wellness check (At home or other residence)
_____4 Paramedics/ambulance/aid car (At home or other residence)
_____5 Hospital emergency room
_____5b 0 = Not medically treated, 1 = Treated
_____6 Inpatient, psychiatric unit
_____6b Number of days (CODE = "0" if 6 = 0)
_____6c Voluntary (1 = Yes; 2 = voluntary but threatened with legal commitment if not agreed to; 3 = legally detained on a 24-48 hr. hold; 4 = 72+ hold)
_____ 7 Hospital medical floor
_____7b Number of days (CODE = "0" if 7 = 0)
_____ 8 Intensive care
_____8b Number of days (CODE = "0" if 8 = 0)

22 _____ What was your physical condition afterward? (RECORD VERBATIM ANSWER.)
22a_____

_____

22b RECORD INFORMATION FROM MEDICAL RECORDS _____

_____

INTERVIEWER: RATE PHYSICAL CONDITION FOLLOWING EPISODE
0 = No effect
1 = Very mild effect. *Death impossible.*
(e.g., went to sleep at regular time, woke up ok; slightly queasy or nauseous, but no vomiting; rash type abrasion, bruise; chilled; small non-sharp objects in digestive tract)
2 = Mild effect. *Death is highly improbable; could only occur due to secondary complications or very unusual circumstance.*
(e.g., nauseous; slept significantly more than normal, woke up ok; 1st degree burn; superficial lacerations without tendon, nerve or vessel damage and not requiring sutures; minimal blood loss; larger non-sharp objects in digestive tract)
3 = Moderate effect. *Death is improbable; could only occur due to secondary effects; medical aid is warranted, but not required for survival.*
(e.g., vomiting; slept significantly more than normal, woke up still drowsy; 2nd degree burn; non-septic infection; shallow lacerations on limbs or torso with slight tendon damage requiring sutures; broken digits or limbs; slight to moderate hypothermia or frost bite; slight concussion with no disorientation)
4 = Severe effect. *Death is improbable if first aid or medical attention is administered.*
(e.g., respiratory failure, elevated blood pressure, convulsions or seizures; 3rd degree burn covering 20% or less of body surface; septicemia; deep lacerations on face, limbs or torso with tendon damage or severing and possible nerve, vessel or artery damage; cuts on neck which may require sutures but no major nerves or vessels severed; blood loss less than 100 cc.; bullet in or deep piercing of limbs; severe head injury with decreased orientation; moderate tissue damage; sharp objects in digestive tract; vertebral fracture without cord injury)
5 = Very severe effect. *Death is somewhat probable unless first aid or medical attention is administered.*
(e.g., caustic substance; hypertensive crisis; stroke; 3rd degree burn covering 40% of body surface; severe, deep lacerations on face, limbs or torso with severing of major arteries; blood loss more than 200 cc; loss of eye, ear or digits; bullet or deep piercing in lower torso; severe tissue loss; vertebral fracture with cord injury; mild hypoxia; comatose but still responding to pain)
6 = Extremely severe effect. *Death is highly probable without out immediate and vigorous medical attention, and may occur even with vigorous first aid or medical attention.*
(e.g., 3rd degree burn covering 50% or more of body surface; loss of limb; deep lacerations on neck with major artery damage, i.e., cutting jugular vein; irreparable damage and/or systemic organ failure; gun shot or bullet in chest or head; closed airways, severe hypoxia and/or respiratory arrest; severe hypothermia; cardiac arrest; comatose and not responding to pain)
7 = Lethal effect. *Death occurred.*

23 _____ INTERVIEWER: USE ALL APPROPRIATE INFORMATION REGARDING TREATMENT THAT HAS BEEN GATHERED THROUGHOUT INTERVIEW TO CODE HIGHEST APPLICABLE NUMBER FROM LIST BELOW

0 = No medical treatment sought/required
1 = Went to emergency room or physician, had no medical treatment or assessment and went home (e.g., talked to social worker or resident and left)
2 = Went directly to an in-patient psychiatric unit
3 = Medically treated while on in-patient psychiatric unit, without going to emergency room
4 = Went to emergency room or physician, was medically treated and went home
5 = Went to emergency room, was treated and admitted to psychiatry unit
6 = While on psychiatric unit, went to emergency room for medical treatment and then returned to psychiatric unit
7 = Admitted to medical unit, whether or not via emergency room, for observation (hours to overnight)
8 = Admitted to medical unit, whether or not via emergency room, for required treatment
9 = Admitted to intensive care unit, whether or not via emergency room or medical floor
10 = Mortuary

24 _____ INTERVIEWER: RATE SUBJECT'S INTENT TO DIE, I.E., THE SERIOUSNESS OR INTENSITY OF THE WISH TO TERMINATE HIS OR HER OWN LIFE. RATINGS SHOULD REFLECT YOUR BEST ESTIMATE BASED ON ALL INFORMATION.

1 = Obviously no intent
2 = Only minimal intent
3 = Definite intent but very ambivalent
4 = Serious intent
5 = Extreme intent (careful planning and every expectation of death)

DESCRIBE REASON FOR RATING: 24a _____

_____

25 _____ INTERVIEWER: BASED ON DEFINITION OF SASII ON APPENDIX, CATEGORIZE BEHAVIOR. CODING SHOULD REFLECT YOUR BEST JUDGMENT BASED ON ALL INFORMATION.

1 = Accidental self-harm, without undue risk taking and without unreasonable expectation of safety
2 = Accidental self-harm, with undue risk taking or with unreasonable expectation of safety
3 = Victim-precipitated self-harm, without intent to be harmed by others but with undue risk taking or with unreasonable expectation of safety
4 = "Victim-precipitated" self-harm with intent to be harmed by other
9 = OTHER, including absence of a behavior, which results in harm or illness (e.g., stopped taking important medicines such as insulin)
5 = Intentional self-injury, but not a suicide attempt
6 = Ambivalent suicide attempt
7 = Suicide attempt with no ambivalence
8 = Suicide attempt that is a "failed suicide", with continued life purely accidental and a near miracle

Supplemental and experimental questions for the Suicide Attempt Self-Injury Interview

26. If you had to pick one thing that you think most triggered your self-injury/suicide attempt, what would you say it was? (PROBE FOR MAIN PRECIPITATING EVENT)

_____

_____

_____26a. Did that happen on the day you injured yourself/attempted suicide? (0=no, 1=yes) _____26b. IF NO: did that happen right before you felt the urge to injure yourself or attempt suicide? (0=NO, 1=YES)

IF NO TO BOTH: In thinking about the trigger, ask yourself what was it about that particular day and that particular time that was different. What was the "straw that broke the camel's back" that triggered your action or your final decision to act? What was different about the day you harmed yourself from a day or a week before or after? Why did you injure yourself on that particular day, as opposed to the day before or the week before? What specific events, thoughts, or feelings were most important?

27. Did any of the events or experiences on this list happen to you in the 24 hours before your self injury/suicide attempt? ***Give Card D*** (0 = Not mentioned, 1= Mentioned) ASSESSOR CHECK ALL ITEMS LISTED BY CLIENT.

THINGS THAT HAPPENED IN THE ENVIRONMENT

_____1 You had an argument or conflict with another person
_____2 You tried to spend time with someone but couldn't
_____3 Someone was disappointed with you
_____4 Someone was angry with you, criticized you, or put you down
_____5 Someone let you down or broke a promise
_____6 Someone rejected you
_____7 You lost someone important (even if temporary loss)
_____8 Therapist went out of town or took a break from having sessions
_____9 You were isolated or alone more than you wanted to be
_____10 You had financial problems
_____11 You lost a job
_____12 You had health problems or physical discomfort
_____13 You had a new demand 13a _____.
_____14 You tried to get (or continue) something you wanted but couldn't
_____15 You heard of someone else attempting suicide or harming themselves
_____16 You saw things that you could use to harm yourself or attempt suicide with
_____17 You talked to someone about sexual abuse or rape
_____18 You talked with your therapist about sexual abuse or rape
_____19 You had a therapy session before your self-injury/suicide attempt (on the same day)
_____20 You had a therapy session scheduled for later in the day (after self-injury/suicide attempt)
_____21 Other important negative events happened which could have triggered your suicide attempt/self-injury
21a_____

CLIENT'S FEELINGS

____ 22 Upset, miserable or distressed
_____23 Out of control
_____24 Anxious, afraid, or panicked
_____25 Overwhelmed
_____26 Angry, frustrated or enraged unspecified
_____27 Angry, frustrated or enraged at someone else
_____28 Angry frustrated or enraged at yourself
_____29 Self-hatred or shame, or thought you were "bad"
_____30 Like you deserved to be punished or hurt
_____31 Like a failure or inferior
_____32 Like a burden to others
_____33 Felt bad about yourself
_____34 Guilty
_____35 Sad or disappointed
_____36 Depressed
_____37 Tired or exhausted
_____38 Lonely, isolated, or abandoned
_____39 Trapped or helpless
_____40 Discouraged or hopeless
_____41 Confused
_____42 Emotionally empty or numb

CLIENT'S THOUGHTS

_____43 About sexual abuse or rape
_____44 About physical abuse or assault
_____45 Had flashbacks or nightmares

28. During the 24 hours before your self-injury/suicide attempt/overdose, did you:

_____1 Drink alcohol? (0 = No, 1 = Yes)
- _____1b. How much did you drink? (CODE SEC's)
- _____1c. How many hours were you drinking?
- _____1d. How long before your self-injury did you stop drinking? (CODE HOURS; CODE = "0" IF DRANK IMMEDIATELY PRIOR TO INJURY)

_____2 Take illegal drugs or more than the prescribed amount of medications?
- _____2a. How many different drugs did you use?
- _____2b. What did you use?
- _____2c. How much did you use?
- _____2d. How long before your self-injury did you take the drugs/medications? (CODE HOURS; CODE = "0" IF USED IMMEDIATELY PRIOR TO INJURY
- _____2e. What did you use?
- _____2f. How much did you use?
- _____2g. How long before your self-injury did you take the drugs/medications? (CODE HOURS; CODE = "0" IF USED IMMEDIATELY PRIOR TO INJURY
- _____2h. What did you use?
- _____2i. How much did you use?
- _____2j. How long before your self-injury did you take the drugs/medications? (CODE HOURS; CODE = "0" IF USED IMMEDIATELY PRIOR TO INJURY
- 2k. List any additional ones used._____

_____3 Sleep worse than you usually do?

_____4 Ask someone for help?
- _____4b Did you get the help you asked for?

_____5 Eat a lot more food that you usually do (i.e., binge eating)?

_____6 Engage in illegal behavior (other than using drugs)?

29_____ Were you feeling disconnected from your feelings or as if you were unreal during or prior to your self-injury/suicide attempt/overdose? (0 = No, 1 = Yes).

30_____ Did this state of being disconnected or unreal begin after you decided to self-injury/suicide attempt/overdose? (0 = No, began before, 1 = Maybe, 2 = Yes, began after, -8 = No dissociation).

31_____ Were you hearing voices that were telling you to harm yourself during or prior to your self-injury/suicide attempt/overdose? (0 = No, 1 = Yes).

32_____ Did you feel physical pain during your self-injury/suicide attempt/overdose? IF YES: How much pain did you feel on a scale of 1 to 5 with 1=little pain but mostly none and 5=extreme pain. (Score 0=none or number 1-5).

33. Following your self-injury/suicide attempt/overdose were you taken to any of these places or did you turn to any of these places or people for help? (***Give Card C and code in the order that Subject contacted each***) 0 = Not contacted, 1 = Contacted first, 2 = Contacted 2nd, etc.).

_____1 Relative
_____2 Friend
_____3 Supervisor/teacher
_____4 Co-worker/other student
_____5 Stranger, neighbor
_____6 Crisis service/after hours team. (By phone)
_____7 Psychotherapist (By phone)
_____8 Physician/nurse (By phone)
_____9 Psychotherapist (Extra visit)
_____10 Other 10a_____

34. How helpful were each of the people/agencies with whom you had contact? Please rate on a scale of 1 to 5 with 1 = they made things worse to 5 = they made things much better.

_____1 Relative
_____2 Friend
_____3 Supervisor/teacher
_____4 Co-worker/other student
_____5 Stranger, neighbor
_____6 Crisis service/ after hours team. (By phone)
_____7 Psychotherapist (By phone)
_____8 Physician/nurse (By phone)
_____9 Psychotherapist (Extra visit)
_____10 Other 10a _____

(For those items answered with a number in question #21, ask the above question. Code = "-8" if person/agency was coded "0" in #21)

_____1 Physician/nurse (Visit)
_____2 Crisis outreach/after hours team/mental health professional (In person visit)
_____3 Police/wellness check (At home or other residence)
_____4 Paramedics/ambulance/aid car (At home or other residence)
_____5 Hospital emergency room
_____6 Inpatient, psychiatric unit
_____7 Hospital medical floor
_____8 Intensive care

35 _____ Did your self-injury/suicide attempt/overdose have any of the following consequences on your job? (CODE "-8" IF SUBJECT UNEMPLOYED)
1 = Strongly improved my job performance by causing me to work more, be more focused, etc.
2 = Slightly improved my job performance
3 = No effect or overall neutral effect
4 = Impaired my job performance
5 = Reprimanded/demoted
6 = Lost job

36 _____ How many work days did you miss because of your self-injury? (CODE = "-8" IF SUBJECT UNEMPLOYED)

37 _____ Did your self-injury/suicide attempt/overdose have any of the following consequences on your school work? (CODE = "-8" IF SUBJECT NOT ENROLLED)
1 = Strongly improved my school performance by causing me to study more, be more focused, etc.
2 = Slightly improved my school performance
3 = No effect or overall neutral effect
4 = Impaired my school performance
5 = Dropped a class(es) / Failed a class(es)
6 = Expelled

38 _____ How many days did you miss because of your self-injury? (CODE = "-8" IF SUBJECT NOT ENROLLED)

39 _____ Did your self-injury/suicide attempt/overdose have any of the following consequences on your housing situation?
1 = Strongly improved living situation by making roommates/family with whom you live more understanding, reducing housework, etc.
2 = Slightly improved living situation
3 = No effect or overall neutral effect
4 = Housemates/neighbors upset / Restrictions placed on me
6 = Neighbors called the authorities to complain / Threatened with an eviction
7 = Evicted

40 _____ Did your self-injury/suicide attempt/overdose have any of the following consequences on your financial situation?
1 = Significantly improved my financial situation by causing others to give me money, reduce my debt, etc.
2 = Slightly improved my financial situation
3 = No effect or overall neutral effect
4 = Costs paid for by insurance or other third party or paid less than $100 out of pocket
5 = Paid costs out of pocket of more than $100
6 = Bankrupt

41 _____ Did your self-injury/suicide attempt/overdose have any of the following consequences on your relationships with people that you care about?
1 = Much closer, much more contact
2 = Somewhat closer or somewhat more contact
3 = No effect or overall neutral effect
4 = Somewhat more distant or strained or somewhat less contact
5 = More distant or strained or less contact
6 = Relationship(s) ended

42_____ Did any of the events or experiences on this list happen immediately following your self-harming/suicidal incident? ***Give Card E.*** If so please give a rating for each question on the following 1-5 scale: 1 = "Not true at all/ did not happen at all," to 5 = "Very true/ happened a lot".

_____1. Bad feelings stopped
_____2. Others understood how desperate you are/were
_____3. You got help
_____4. You gained admission into a hospital or treatment program
_____5. You felt something, even if it was pain
_____6. You felt punished or succeeded in punishing yourself
_____7. You got a vacation from having to try so hard
_____8. You got out of doing something
_____9. You shocked or impressed others
_____10. You proved to yourself that things really were bad
_____11. It gave you something, anything to do
_____12. Other people treated you better
_____13. You got back at or hurt someone
_____14. Other people were better off than before you harmed yourself
_____15. You got away or escaped
_____16. You stopped feeling numb or dead
_____17. You prevented yourself from being hurt in a worse way
_____18. Feelings of anger, frustration, or rage stopped
_____19. Others realized how wrong they are/were
_____20. Feelings of anxiety or terror stopped
_____21. You were distracted from other problems
_____22. Feelings of aloneness, emptiness, or isolation stopped
_____23. Feelings of self-hatred/shame stopped
_____24. Your (self-injury/suicide attempt/overdose) expressed your anger or frustration
_____25. You experienced relief from a terrible state of mind
_____26. Feelings of sadness stopped
_____27. You stopped feeling empty inside, as if you were unreal, or disconnected from your feelings
_____28. Feelings of depression stopped
_____29. You felt worse about yourself or felt more self-hatred/shame
_____30. Other _____

Appendices

SASII Card A
(Question #11)

Would you say that you injured yourself/attempted suicide for any of the reasons on this list and, if so, which ones?

1. To stop bad feelings
2. To communicate to or let others know how desperate I was
3. To get help
4. To gain admission into a hospital or treatment program
5. To die
6. To feel something, even if it was pain
7. To punish myself
8. To get a vacation from having to try so hard
9. To get out of doing something
10. To shock or impress others
11. To prove to myself that things really were bad
12. To give me something, anything to do
13. To get other people to act differently or change
14. To get back at or hurt someone
15. To make others better off
16. To get away or escape
    To get away or escape from what? (tell assessor all that apply)
    16a. my thoughts and memories
    16b. my feelings
    16c. other people
    16d. myself
17. To stop feeling numb or dead
18. To prevent being hurt in a worse way
19. To stop feeling angry or frustrated or enraged
20. To demonstrate to others how wrong they are/were
21. To relieve anxiety or terror
22. To distract myself from other problems
23. To relieve feelings of aloneness, emptiness or isolation
24. To stop feeling self-hatred, shame
25. To express anger or frustration
26. To obtain relief from a terrible state of mind
27. To make others understand how desperate I am
28. To stop feeling sad
29. Other_____

SASII CARD B
(Question #21)

Following your self-injury/suicide attempt/overdose were you taken to any of these places or did you turn to any of these places or people for help?

1. Physician/nurse (Visit)
2. Crisis outreach/after hours team/mental health professional (In person visit)
3. Police/wellness check (At home or other residence)
4. Paramedics/ambulance/aid car (At home or other residence)
5. Hospital emergency room
6. Inpatient, psychiatric unit
7. Hospital medical floor
8. Intensive care

SASII CARD C
(Question # 33)

Following your self-injury/suicide attempt/overdose were you taken to any of these places or did you turn to any of these places or people for help?

1. Relative
2. Friend
3. Supervisor/teacher
4. Co-worker/other student
5. Stranger, neighbor
6. Crisis service/after hours team (by phone).
7. Psychotherapist (by phone)
8. Physician/nurse (by phone)
9. Psychotherapist (extra visit)
10. Other _____

SASII
CARD D
(Question #27)

Did any of the events or experiences on this list happen to you in the 24 hours before your self injury/suicide attempt?

THINGS THAT HAPPENED IN THE ENVIRONMENT

1. I had an argument or conflict with another person
2. I tried to spend time with someone but couldn't
3. Someone was disappointed with me
4. Someone was angry with me, criticized me, or put me down
5. Someone let me down or broke a promise
6. Someone rejected me
7. I lost someone important (even if temporary loss)
8. Therapist went out of town or took a break from having sessions
9. I was isolated or alone more than I wanted to be
10. I had financial problems
11. I lost a job
12. I had health problems or physical discomfort
13. I had a new demand
14. I tried to get (or continue) something I wanted but couldn't
15. I heard of someone else attempting suicide or harming themselves
16. I saw things that I could use to harm myself or attempt suicide with
17. I talked to someone about sexual abuse or rape
18. I talked with my therapist about sexual abuse or rape
19. I had a therapy session before my self-injury/suicide attempt (on the same day)
20. I had a therapy session scheduled for later in the day (after self-injury/suicide attempt)
21. Other important negative events happened which could have triggered my self injury/ suicide attempt

FEELINGS

22. Upset, miserable or distressed
23. Out of control
24. Anxious, afraid, or panicked
25. Overwhelmed
26. Angry, frustrated or enraged unspecified
27. Angry, frustrated or enraged at someone else
28. Angry frustrated or enraged at myself
29. Self-hatred or shame, or thought I was "bad"
30. Like I deserved to be punished or hurt
31. Like a failure or inferior
32. Like a burden to others
33. Felt bad about myself
34. Guilty
35. Sad or disappointed
36. Depressed
37. Tired or exhausted
38. Lonely, isolated, or abandoned
39. Trapped or helpless
40. Discouraged or hopeless41. Confused
42. Emotionally empty or numb

THOUGHTS

43. About sexual abuse or rape
44. About physical abuse or assault
45. Had flashbacks or nightmares

SASII CARD E

(Question #42)

Did any of the events or experiences on this list happen immediately following your self-harming/suicidal incident? If so please give a rating for each question on the following 1-5 scale:
1 = "Not true at all/ did not happen at all," to 5 = "Very true/ happened a lot".

1. Bad feelings stopped
2. Others understood how desperate I am/was
3. I got help
4. I gained admission into a hospital or treatment program
5. I felt something, even if it was pain
6. I felt punished or succeeded in punishing myself
7. I got a vacation from having to try so hard
8. I got out of doing something (PH2909)
9. I shocked or impressed others (PH2910)
10. I proved to myself that things really were bad
11. It gave me something, anything to do (PH2912)
12. Other people treated me better
13. I got back at or hurt someone
14. Other people were better off than before I harmed myself
15. I got away or escaped
16. I stopped feeling numb or dead
17. I prevented myself from being hurt in a worse way
18. Feelings of anger, frustration, or rage stopped 19. Others realized how wrong they are/were
20. Feelings of anxiety or terror stopped
21. I was distracted from other problems
22. Feelings of aloneness, emptiness, or isolation stopped
23. Feelings of self-hatred/shame stopped
24. My (self-injury/suicide attempt/overdose) expressed my anger or frustration
25. I experienced relief from a terrible state of mind
26. Feelings of sadness stopped
27. I stopped feeling empty inside, as if I was unreal, or disconnected from my feelings 28. Feelings of depression stopped
29. I felt worse about myself or felt more self-hatred/shame
30. Other _____

INSTRUCTIONS FOR USE OF SUICIDE ATTEMPT SELF INJURY INTERVIEW (SASII-1 9/28/06)

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Introduction

The Suicide Attempt Self Injury Interview (SASII) is used to collect details regarding the time, circumstances, motivations and treatment of each Intentional Self Injury (ISI) that a subject can recollect. Intentional Self Injury (ISI), as measured here, is defined in question S1 of the SASII. The SASII's structure consists of a Dateline, Appendices, Cards and an interview for each ISI episode.

The SASII can either be answered in numerical order (preferred for research) or the interviewer can move freely around within the interview, following subject cues (preferred for clinical us). The phraseology is designed to provide flexibility and aid communication. Data is collected for either a "lifetime" history (as far back as a subject can recall up to the present) or an "interval" history (covering the intervening time between scheduled assessments or some other arbitrary time span determined by the interviewer). Many subjects refer to specific ISI events as "overdose' or "suicide attempt" so terminology reflects their vocabulary.

When a question requests that the interviewer record the subject's response "verbatim", it does not imply that the interviewer should not probe the subject for a more detailed answer or clarify the answer. Instead, the interviewer is encouraged to probe, to clarify and to obtain as detailed of an answer as is necessary for making clinical ratings. For each question that requires an interviewer's rating, the interviewer should base the rating on clinical judgment based on the entire interview, not simply on the subject's verbatim response.

Generally speaking, text that is to be read to the subject is in upper and lower case letters, while instructions to the interviewer or coder are in capital letters. Directions to use "-8" often appear in the interview instructions. "-8" is a code for "Not Applicable."

Vocabulary: An "episode" is the word used to describe a "single event or act" or to describe a "cluster." A "cluster" is a group of "single events/acts." Please see question 3 of the SASII for a complete definition of "clusters." "Cards" refer to attached lists that should be given to the subject according to instructions in the interview.

Question S1.

The interviewer should be thoroughly familiar with the definition of Intentional Self Injury (ISI). Answers should be probed in order to be certain the subject understands what types of behavior the interviewer is inquiring about. The following definitions should be used:

Intentional Self Injury: Any overt, acute, nonfatal self-injurious act where both act and bodily harm or death are clearly intended (i.e., both the behavioral act and the injurious outcomes are not accidental) that results in actual tissue damage, illness, or, if no intervention from others, risk of death or serious injury.

Drugs: Any amount above the prescribed dose plus intent to harm one's self counts as an ISI. This means even taking two pills counts if two is above the prescribed dose and the subject was intending to hurt him/herself (e.g., kill, make sick, cause physiological damage). Drugs or medications must be INGESTED to count as an ISI. Therefore, if someone grabs the pills even as the subject was about to put them into his/her mouth, this does NOT count. Once the pills are swallowed or if put in mouth but forcibly taken out by someone else, count as an ISI. If drugs are taken simply to obtain a good night's sleep, do not count. Intentional sleep as a consequence counts only if it involves an excessive amount of sleeping (e.g., an entire week-end or much more than the individual's "normal" sleep pattern). Do not count if drugs are taken to get high, feel better or as part of a normal drug abuse pattern (exception for drug abuse would be taking more than one's regular "dose" with the expectation of harm).

Alcohol: Ingested alone, in absence of any other substance, does NOT count unless there is clear and incontrovertible evidence, such as a physicians warning, that ingesting that particular amount of alcohol would cause acute harm/death and subject did it knowingly with the intent to hurt him/herself in an acute manner (i.e., drinking with hope of getting cirrhosis of the liver and dying from that would NOT count).

Poisoning: Substance must have been INGESTED. As with drugs, if someone grabs the poison even as the subject was about to ingest it, this does NOT count. Once the poison is swallowed or if put in mouth but forcibly taken out by someone else, count as an ISI. Includes any food/substance subject knows or has been told would cause harm (e.g., a diabetic eating enough sugar to produce a noticeable, negative, immediate physiological response) and which the subject ingests with an intent to cause such harm.

Gunshot: Must have pulled trigger AND caused tissue damage, or Russian roulette if certain at least one bullet was present, aimed at body, with clear intent to risk harm.

Cutting: Skin must be broken, not just pushed or rubbed.

Burning Must be some damage to skin other than redness and/or pain. For example, burning arm hair with a lighter that leaves a red mark and causes sunburn like pain for an hour would NOT be counted.

Stabbing: To puncture, thrust or drive with a pointed weapon, as opposed to incise, gash or cleave as in cutting

Strangling: Tight enough to cause a physiological reaction such as dizziness, or the act of strangling presents a clear risk of known harm (i.e., if subject has epilepsy).

Hanging: Engaging in the act with intent to harm. Erotic hanging is not counted as an ISI. Putting noose around neck does NOT count unless it meets the criteria for strangling above.

Jumping: Must be belief or intent to harm. Dangling feet over a bridge or hanging on with hands but not jumping does NOT count.

Asphyxiation: Engaged in the act even if it did not cause damage. If subject had set up all necessary equipment, i.e., attached hose to exhaust pipe and turned on motor with nozzle end to mouth but something went wrong (such as the hose melting) this still COUNTS as an ISI.

Drowning: Counts if subject engages in act he/she has reason to believe will result in his/her demise whether or not it does. For example, swimming out to the middle of a large lake to drown but being picked up by the Coast Guard would count as would swimming out, turning back when exhausted and having extreme difficulty making it back to shore e.g. continuously sinking beneath water, taking water into lungs and/or attempt results in some physiological damage. Just turning back with no difficulty getting back to shore would NOT be counted.

Hitting Body Both intent to harm and noticeable tissue damage (bruise, lump) must be present. Banging fist (hitting/kicking something with a hand) in anger or frustration without any intent to cause harm does NOT count.

Bulimia Ordinarily does NOT count, unless there is a clear and convincing reason to believe damage has been done to the body (e.g., throwing electrolytes out of balance) was both the intent and the consequence.

Stop Eating Same as above. For example if a subject does not eat for 7 days with intent to cause harm but has no physiological effect such as dizziness, faintness or nausea, then act is NOT counted.

Stopped needed medical treatments or medications Ordinarily does NOT count, unless there is clear and convincing reason to believe acute damage to the body was the intent and the consequence. Count as a suicide attempt if there was clear intent to commit suicide and tissue damage or a negative, immediate physiological response was a result. If death is simply being allowed, i.e., the person was stopping medications for reasons other than to die even knowing that death would or could result, then it does NOT count.

Motor vehicle collision Vehicle collision must have had a reasonable chance of causing bodily harm.

Stepping into traffic Subject must have been hit by a car or situation must be similar to russian roulette if harm was intended but subject was not hit; subject must not have voluntarily left the road before being hit, and cars must have been going fast enough on the road that there would be little chance of avoiding being hit.

Driving off bridge or cliff If the car is headed off the road and then subject stops the car for any reason prior to the tires leaving the pavement, the act is NOT counted. However if the car is stopped physically by someone other than the subject (such as the police) it is counted.

Harming a wound Must be more than just "playing" with wound, picking at it, making it itch, etc. Must have opened wound and caused further bleeding.

Other Only count what would qualify as an ISI by itself. Do not count repetitive behaviors that cause harm but are better accounted for as OCD or other disorders like trichotillomania or skin picking disorders.

Also do NOT count intentionally self harming behavior that is done primarily to procure pain medications, recreational self mutilation (done for fun not in response to emotional pain), sadomasochistic behaviors (done for sexual pleasure not in response to

emotional pain) or self inflicted tattoos & brands (done for fashion/cultural/statement reasons not in response to emotional pain).

Question S2.

This total should include all single events and all events within a cluster. (See Question 3 for definition of clusters.)

Question S3.

S3 is answered by the interviewer at the end of the interview. The response is based on the interviewer's' evaluation of the subject' general memory acuity, effects of any medications on subject's memory, inconsistencies noted by interviewer, and the subject's professed difficulties remembering times or details. For example, a subject who brings a calendar documenting all episodes and has a clear memory of each episode would have a higher reliability rating than a subject who was heavily medicated, had no calendar, and could only recall that he/she "overdosed many times."

Question S4.

S4 will equal S2 if all events were single but will be less than S2 when at least some events are clustered. (See Question 3 for definition of clusters.)

Dateline.

The dateline is an extremely brief outline of ISI activity. Only the date, method, whether or not it was a suicide attempt and whether or not any medical treatment was received are recorded on all ISI's done during the time span under inquiry. Details of each ISI are recorded on individual SASII forms. If subject is having difficulty recalling ISI's during the time period, ask the subject to think about the most recent month and then work backwards month by month.

The dateline helps structure what can be a confusing mass of information, especially if a subject's memory is poor or inclined to change. Also, since subjects have difficulty talking about their ISI's, the dateline provides a basis for initiating conversation. Finally, it is useful for checking radical changes, e.g., a subject who had multiple ISI's in a previous time span now states he/she has none to report. By being aware of the previous number of ISI's, the interviewer can probe for the reasons for the abrupt change.

Question 1.

Start with the most recent ISI and work backward in time. This procedure is based on the literature in memory research which suggests that such a procedure will obtain the most detailed and accurate information.

Question 2.

Self-explanatory

Question 3.

#3 is the beginning of detailing each episode. If the subject can remember the specific act, it is considered a single event. If either interviewer or client can distinguish one act from another, whether by time or circumstance, or any other detail, each act is to be rated as a single event. Occasionally a subject cannot clearly recall details of a series of events. If a sequential series of ISI's, suicide attempts, or overdoses are too repetitive or too close together in time to discriminate as separate acts, they should be identified as a cluster. All questions in the SASII must be answered identically about each act in the series in order to be considered a cluster. Thus, clustering is rarely used because subjects can almost always recall some details of an event. It is rare that a series of events are identical. There is usually a difference in location, motivation, severity/frequency, type of medical treatment received, etc.

Isolate and record as separate events any instances wherein:

a) Subject receives medical treatment
b) There is a change in severity/frequency of self-harm
c) There is a change in level of impulsivity or probability of intervention
d) There is any change in reason(s) for engaging in the act
e) Subject moves in or out of an inpatient psychiatric unit

f) Basically, whenever there is any difference in the way any of the questions are answered

When a single event can be distinguished within a long cluster, end the first cluster, record the single event, and begin a second cluster.

If information on a cluster is taken and then the subject remembers details of one act within the cluster, that one act is recorded in detail on a separate SASII form and the previous cluster is broken into two clusters: one cluster prior and one cluster following the single event. Thus, what initially appears to be a cluster often breaks down into separate events as the subject's memory is prodded by the SASII questions. Or a large cluster breaks down into several short clusters interspersed with single events.

The most effective approach to #3 is to talk about single acts unless this becomes impossible, at which point one considers clustering. Probing for medical treatment is often an effective way of identifying single acts which may be separated from what initially appears to be a cluster. To begin with a cluster usually results in some waste of time and backtracking as the interviewer discovers many differences within an assumed "cluster."

When counting up the total number of SASII's in a time period, count each cluster as a single episode. EXAMPLE: 3 single events + 1 cluster of 5 overdoses = 4 SASII's total.

Additional Examples for Determining number of episodes/clusters

If a subject cuts twice in one day because of different triggers, it would be considered two episodes and separate SASII's would be completed for each episode.

If a subject cuts at 11:00 pm due to an argument and then cuts again at 4:00 am due to the same argument, both done with no intent, it would be considered one episode even though it occurred on two different days.

If, in the same scenario above, the 4:00 am act was an overdose with no intent, it would still be considered one episode even though the lethality was more severe than the cutting. In this instance the assessor would code for the highest level of lethality based on all ISI's within the episode.

If a subject tries to hang him/herself with intent but the rope breaks and he/she then cuts with no intent, it would be considered two episodes. If, though, the cutting was also with intent, it would be considered one event with two methods and coded for the highest lethality reached within that episode.

If a subject does not eat for two weeks and has physiological consequences, the episode is considered a single episode and NOT a cluster.

Question 4.

The focus here is on the initiation of the act itself. Falling off a ledge is accidental. Jumping off a ledge is deliberate. Balancing on a ledge on one foot and leaning over the edge hoping to fall is semi-deliberate. Do not infer unconscious motivation; stick to conscious motivation.

Question 5.

Frequencies of ISI acts within a cluster can be determined most easily by averages if the subject does not clearly recall the total number of acts. Did the acts occur on a daily basis? If so, how many times per day? If not daily, how often each week, on the average? The interviewer can then tally the total.

Questions 5a &5b.

If subject only remembers that the act was at the beginning of the month, enter "1" for the day, if at the middle of the month, enter "15" and if at the end enter "30". For example 01/01/2006 would be an example of a date for the beginning of a month. If the subject doesn't remember the date, but does remember the month, enter "15" for the day. Use the best estimate if the subject is not certain of the month. Asking if it was fall, winter, spring, or summer works as a good time reference.

Question 6.

Work with the client to estimate how accurate the date for that specific event is and record the estimate as a date that is "exact", "within two weeks", "within two months", or a date that could be "anytime in the last year".

METHOD AND MEDICAL RISK OF METHOD

Following question 7 is an **open-ended question** that asks the subject to tell the interviewer about the ISI. This question is designed to provide the interviewer with a general sense about the episode. Since the interviewer will not be coding any variables directly from this question, it is left to the interviewer to determine how much he/she wishes to probe the client for details at this point. If the interviewer already knows something about the ISI (e.g., the interview is being conducted in the emergency room following an overdose), he/she does not even need to ask the question.

Question 7.

Code the PRIMARY method here from the numeric list of methods listed under #7. For example if the primary method was the ingestion of drugs then the code would be 7.2. If subject has used more than one method, code the more severe method, e.g., if the subject has used drugs and alcohol, generally code for the drugs since drugs are more likely to cause death than alcohol. Similarly if a subject attempts to hang themselves but the rope breaks and they cut afterwards, code hanging as the primary.

Questions 7.1 – 7.17

The codes for recording each method used are the numbers 7.1 – 7.17 in front of each method listed in #7. Specificity is the key to answering these questions.

The questions asking for verification by scars requires the interviewer to note whether or not they can observe scars from the ISI on the subject during the interview.

If two implements from the same category are used to cause harm within the same event or act code the implement that causes the most damage. For example a razor would generally cause more damage than a paper clip or butter knife.

When drugs or alcohol are consumed at the time of an ISI, the details of the amount and type should be noted in the verbatim section of #7, but recorded as an additional method on 7.1 or 7.2 only if they were intentionally part of the means of the ISI.

For SEC's on 7.1 code units of alcohol consumed. One unit of alcohol would be = a 12 oz. beer, 4 oz. wine or wine cooler, 1 oz. hard liquor or 1 standard cocktail.

Question 8.

The interviewer should use strictly the examples written (or methods similar in risk) and not use any personal interpretation of the descriptors "low," "very low", etc. Rate strictly on method alone; do not include information on location of act, other's presence, medical effects, or other aspects of the ISI. Superficial cuts on surface or limbs are cuts that ordinarily would not require sutures. Deep cuts are those that usually would require sutures. If unsure, use lower category.

If a subject drives after an overdose do not code at a higher level, but rate as noted above according to the method alone.

Question 9.

Write in the subject's answer to the open ended question verbatim, then code level of conscious intent to cause self injury based on subjects answer.

Question 10.

The question with options 0-6 should be read to the client verbatim and coded exactly as client answers without any interpretation by the coder.

Question 11.

Give card A to the subject, ask the question and code his/her answers.

Question 12.

To be read verbatim. Some, not all, subjects relate to the idea of attempting suicide without intending to die. For those who do not and resist this question in its entirety, they should be instructed to answer the question as if the phrase "even if you did not really intend to die" were not there.

Question 13

Use the same subject's definition of suicide attempt here as used in question #12. If subject's answer on #13 is different from that on #12, write in what accounts for that change on #13a.

Question 14.

Using all information gathered during the interview (or up to this point if questions asked in sequence) rate the subject's conscious expectation to die.

COMMUNICATION OF SUICIDE INTENT

Question 15.

This question should always be read completely verbatim. The temptations to paraphrase should be avoided strictly as it is easy to leave out key words. A communication of suicide ideation may or may not also be a threat. Code here both non-threatening and threatening communications. Examples of non-threatening direct communications include telling a therapist or relative that one is thinking of suicide when asked directly or saying "I can't stop thinking of killing myself." Examples of non-threatening indirect communications would be saying "I wish I were dead" or saying "I just feel like I can't go on any more.

Question 16.

As in #15, this question should always be read completely verbatim. The temptations to paraphrase should be avoided strictly. A threat is any direct or implied promise of self-injury or suicide or it is any act or statement that gives an appearance of or actually is calculated to instill fear in others that one might self-harm or suicide. It is often accompanied by a hostile tone. An indirect threat would be a statement to a therapist "I just wanted to call to say good-bye" or saying "I can't tell you" when asked why he/she might not come to the next session.

IMPULSIVITY AND PROBABILITY OF INTERVENTION

Question 17.

In addition to asking the question as written, the interviewer must also probe for resistance. Did the subject resist the impulse and, if so, for how long? The difference between an ISI done impulsively with and without overwhelming emotion is the difference between cutting with intense feelings of anger toward the therapist, sadness about ending a relationship, etc. vs. walking past a knife and suddenly having the urge.

Question 18.

The note should be written before or during the ISI and should indicate the subject's wish or intent to die. This item does not include notes which only describe the subject's unhappiness.

Question 19.

Record yes/ no/ somewhat answer verbatim, then record circumstances verbatim. For non-suicidal behavior, "save you" means "stop you".

Question 20.

The interviewer should code strictly according to the examples cited. Avoid interpreting the descriptors "certain intervention," "probable intervention," etc. Probing may be necessary if the interviewer is unfamiliar with the geography or setting referred to by the subject. Asking for more detail, rather than interpreting or assuming, is the correct approach.

If a subject has roommates or family in the same house, says goodnight to them and would not be expected to see them until morning and initiates self harming behavior afterwards, the chance of intervention would be "3" or ambiguous.

LEVEL OF MEDICAL TREATMENT

Question 21.

Give subject card B and probe for a "blow-by-blow" account of events immediately following the ISI. This should include where he/she went, what he/she did, to whom he/she spoke following his/her episode. Number of hours prior to treatment refers to the number of hours between the time the subject intentionally injured him/herself and the time treatment was received. These can also be coded in sequence by time of intervention or assistance.

Question 22.

Record answer verbatim and then code according to subject's answer. The interviewer should code according to the italicized definitions and the examples cited. Avoid interpreting the descriptors "hardly any effect," "moderate effect," etc. Focus instead on the specifics and severity of any physiological effect or damage. If the subject is uncertain about his/her condition, probe more and then code lower category. Medical records can also be used to determine the rating.

Question 23.

Using all information gathered throughout the interview, the interviewer should code for the type of medical treatment received. The interviewer should code the highest level of treatment.

Treatment must occur within 24 hours of an ISI in order to be counted on #23.

Question 24.

Probe the subject's self-report, using answers to previous questions if appropriate, to assess the subject's conscious suicide intent at the time of the ISI. Code from list and describe the reason for rating in 24a.

In order to code a "5", subject must have carefully planned act (at least one day of planning) AND have every expectation of death. If it is an impulsive act with every expectation of death, code a "4".

Question 25.

Code #1 is not ordinarily used because the accidental nature of the behavior would have stopped the interview earlier. However, the code is included if the interview is used with an accidental injury control condition.

Code #2 is also not used for the same reason as above. If used, code here if the injury is due to highly risky behavior, such as subway surfing, drunk driving, jumping off of high bridges for a thrill, etc.

Code #3 is rarely used.

Code #4 is rarely used. An example of when it is appropriate to use this code would be when a subject plans to go out get drunk and black out with the intent of being raped and killed and then does get drunk, blacks out and gets raped, but survives.

Code #9: Self Explanatory

Code #5 - #6: Self Explanatory

Code #7: Use if a subject had no ambivalence

Code #8 is rarely used and should only be coded in instances of near miracle survival following a suicide attempt. For example, when a subject survives after jumping in front of a train, speeding car on the freeway or jumping from a VERY high place or when a subject would not have survived without medical intervention and only got the intervention by a random chance. A good example of this is when a subject is found by a hiker in a remote spot and must be put on a ventilator following an overdose.

Supplemental and Experimental Questions for the SASII

TRIGGERS

Questions 26a & 26b

These questions focus on what precipitated the ISI. Some subjects will not be able to identify anything for # 26. If, after some probing, this is the case write in "no response" and code this item as -8 (non applicable).

Question 27.

This question focuses on what happened in the 24 hours before the ISI. The assessor will hand the subject the list (card D) of antecedents and will ask him/her to say the number of all items that apply. The antecedents don't necessarily have to be previously identified as "triggers" to the ISI. For question 13a write out the demand on the subject and for question 21a write out the negative event.

Question 28.

The intent here is to connect certain behaviors (alcohol, drugs, difficulty sleeping, not getting requested help, overeating & illegal behaviors) to ISI. Thus the effects of alcohol, etc., should be occurring in the 24 hours prior to the ISI. For drugs and alcohol code how much was used, over how many hours it was used and how many hours prior to the self injury the subject stopped using the substance. If alcohol and/or drugs were used as a method of ISI, code "-8" for the respective question(s).

If a subject has used drugs and/or alcohol as a method of ISI in the last 24 hours (an ISI counted on a previous SASII) it would be counted on #28 for the current SASII.

Question 29-30.

The intent of these questions is to assess dissociative experiences surrounding ISI behavior.

Question 31.

Be sure to probe for exactly what the voices were saying.

Question 32.

First determine if pain was experienced. Then, if yes, ask them to rate on the 5 point scale. Code appropriate rating or zero for no pain.

NON-MEDICAL CONSEQUENCES OF SASI

Questions 33.

This question is the same as #21 above with additional people/places listed that the subject may have had contact with. Give subject card C and follow the instructions in #21.

Question 34 (Part A).

For those people/places subject had contact with in #33, rate how helpful each was on the scale given.

Question 34 (Part B).

For those people/places subject had contact with in #21, rate how helpful each was on the scale given.

Questions 35 – 41

Read the question and then read each of the possible responses from 1 to 6, temporarily skipping 3 "No effect or overall neutral effect" and reading that last if subject has not chosen any of the others.

Question 40.

If money is lost from days missed from work then code according to the total cost to the subject.

Subject has no financial effect if parents or charity pay hospital bills. When a parent takes his/her own bankcard away from a subject, it is not considered a financial impairment unless the bankcard is in the subject's name.

Question 42.

This question focuses on what happened to the subject immediately following the ISI. The assessor will hand the subject the list (card E) of events and experiences and will ask him/her to say the number of all items that apply. For those that apply the subject should then be asked to rate to what degree each item occurred on the scale given.

If the subject loses consciousness immediately following their ISI, for example in an auto accident, then he/she should indicate the consequences immediately upon waking up. If, though, the subject recalls a time period after the ISI but prior to losing consciousness, for example after swallowing pills but before blacking out, then the subject should indicate the consequences immediately after the ISI.

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NORTH WALES CLINICAL PSYCHOLOGY PROGRAMME

PRIFYSGOL BANGOR UNIVERSITY

Information about the research

Title of Project: **The reasons, triggers and consequences associated with different types of self-injury.**

Research Team: Anna Ripley, Trainee Clinical Psychologist
Dr Michaela Swales, Consultant Clinical Psychologist
Dr Lisa Train, Clinical Psychologist

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. If you are interested in taking part please complete the 'Expression of Interest form' included in this pack.

One of the research team will go through this information sheet with you and answer any questions you have before starting the research. Take some time to think about the information and talk to others about the study if you wish. Please ask us if there is anything that is not clear.

What is the purpose of the study?

This study is about self-injury, which is any action that is intended to cause harm to your own body e.g. cutting, burning, overdosing. This study is interested in all kinds of self-injury, whether or not the intention is to cause death. We are interested in exploring the reasons, triggers and consequences associated with different kinds of self-injury. We hope this may lead to greater understanding of why people injure themselves. The study is being conducted as part of a Clinical Psychology Doctorate being undertaken by one of the research team.

Why have I been invited?

We are inviting individuals with a history of self-injury who are receiving support from mental health services in North Wales to take part in the research. Your healthcare professional has identified you as someone who may be interested in taking part. Approximately 30 people will be taking part in the study.

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Do I have to take part?

It is up to you to decide to join the study. If you decide you are interested in taking part after reading this information, then please complete the 'Expression of Interest form' included in this pack with details of how we can contact you to arrange a meeting. We will describe the study to you and go through this information sheet. If you agree to take part, we will then ask you to sign a consent form to confirm that you understand what the study involves and are happy to take part. You are free to decide not to take part, or to withdraw at any time, without giving a reason. This would not affect the standard of care you receive.

What will I have to do?

If you agree to take part then a meeting will be arranged for an interview about your experiences of self-injury. The interview will be conducted by one of the research team. You will be asked questions about different types of self-injury and the reasons, triggers and consequences associated with them. The interview will take approximately one hour. The interview will be tape recorded, to allow us to record and analyse your answers. We will also record some information including your age, gender, ethnicity and mental health diagnoses. No personal identifiable information will be included in the write-up of the study and audio recordings will be deleted once the study is complete. A mental health professional involved in your care can be present at the interview if you wish.

Expenses and Payments

As a 'thank you' for agreeing to take part in the research, you will be offered a £5 voucher.

What are the possible disadvantages and risks of taking part?

Taking part in the study will require approximately one and a half hours of your time. Previous research has found that talking about self-injury does not make it more likely that you will harm yourself. However, talking about your experiences of self-injury may be upsetting or uncomfortable for you. We suggest you think carefully about this before deciding to take part in this research, especially if talking about your experiences is particularly distressing for you.

What are the possible benefits of taking part?

Some people find it helpful to discuss their experiences of self-injury. Many people find contributing to valuable research a positive experience. We cannot promise that the study will help you, but the information we get from this study will help improve our understanding of self-injury and may lead to improvements in treatment for individuals who self-injure in the future.

What will happen if I decide to withdraw from the study?

We will destroy all data gathered from you, including audio-tape, interview transcript and contact information. This will have no effect the standard of care you receive

What if there is a problem?

If you have a concern about any aspect of the study, you should ask to speak to the researchers who will do their best to answer your questions (Dr Michaela Swales, Tel no: 01745 448700). You could also speak to your mental health professional. If you remain unhappy and wish to complain formally you can do this by contacting: Hefin Francis, School Manager, School of Psychology, Adeilad Brigantia, Penrallt Road, Gwynedd LL57 2AS. Tel: 01248 388339.

In the event that you are harmed as a result of taking part in the research due to someone's negligence, then you may have grounds for legal action for compensation against Bangor University, but you may have to pay legal costs. The normal complaints mechanisms will still be available to you.

Will my taking part in the study be kept confidential?

Yes. We will follow ethical and legal practice and all information about you will be handled in confidence. All information which is collected about you during the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised. The anonymous data collected may be seen by authorised persons from the research sponsor (Bangor University) in order to check that the study is being carried out correctly. However, if during the interview you disclose an intention to harm yourself or others, the researcher may have to breach confidentiality and report these disclosures to others.

What will happen to the results of the research study?

The final write-up of the research study will be available to the public and may be published in a peer-reviewed journal. No personal identifiable information about you will be included in this write-up. If you would like to receive feedback on the results of the study after taking part then this can be arranged.

Who is organising and funding the research?

This research is being funded and supervised by Bangor University.

Who has reviewed the study?

This study has been reviewed and approved by the Bangor University Research Ethics Committee. All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has also been reviewed and given a favourable opinion by the North Wales Research Ethics Committee.

Further information and contact details

For general information about taking part in research please see the NHS website:
For specific information about this research project please contact Anna Ripley, Trainee Clinical Psychologist, NWCPP, School of Psychology, Bangor University, College Road, Bangor, LL57 2DG.

If you would like advice on participating in the research please feel free to discuss it with someone else, including your healthcare professional.

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NORTH WALES CLINICAL PSYCHOLOGY PROGRAMME

PRIFYSGOL BANGOR UNIVERSITY

Gwybodaeth am yr astudiaeth

Teitl y Project: **The reasons, triggers and consequences associated with different types of self-injury.**

Tîm Ymchwil: Anna Ripley, Seicolegydd Clinigol dan Hyfforddiant
Dr Michaela Swales, Seicolegydd Clinigol Ymgynghorol
Dr Lisa Train, Seicolegydd Clinigol

Hoffem eich gwahodd i gymryd rhan yn ein hastudiaeth ymchwil. Cyn i chi benderfynu, mae'n bwysig eich bod yn deall pam mae'r ymchwil yn cael ei gwneud a'r hyn fydd yn digwydd. Os oes gennych ddiddordeb cymryd rhan, a fyddech cystal â llenwi'r 'Ffurflen Dangos Diddordeb' sydd yn y pecyn hwn.

Bydd un o'r tîm ymchwil yn mynd drwy'r daflen wybodaeth hon gyda chi ac ateb unrhyw gwestiynau sydd gennych cyn dechrau'r ymchwil. Cymerwch dipyn o amser i feddwl am y wybodaeth a siaradwch ag eraill am yr astudiaeth os ydych yn dymuno. Holwch ni os nad oes rhywbeth yn glir.

Beth yw pwrpas yr astudiaeth?

Astudiaeth am hunan-niweidio yw hon, sef unrhyw weithred a fwriedir i achosi niwed i'ch corff eich hun, e.e. torri, llosgi, cymryd gorddos. Mae gan yr astudiaeth ddiddordeb ym mhob math o hunan-niweidio, p'un ai'r bwriad yw achosi marwolaeth ai peidio. Mae gennym ddiddordeb mewn edrych ar y rhesymau, yr amgylchiadau a'r canlyniadau sy'n gysylltiedig â gwahanol fathau o hunan-niweidio. Rydym yn gobeithio y gall hyn arwain at fwy o ddealltwriaeth pam mae pobl yn eu niweidio eu hunain. Mae'r astudiaeth yn cael ei chynnal fel rhan o Ddoethuriaeth Seicoleg Glinigol y mae un o'r tîm ymchwil yn ei gwneud.

Pam ydw i wedi cael fy ngwahodd?

Rydym yn gwahodd unigolion gyda hanes o hunan-niweidio, sy'n derbyn cefnogaeth gan y gwasanaethau iechyd meddwl yng Ngogledd Cymru, i gymryd rhan yn yr ymchwil. Mae eich gweithiwr gofal iechyd proffesiynol wedi nodi y gallech chi fod yn

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rhywun a all fod â diddordeb mewn cymryd rhan. Bydd tua 30 o bobl yn cymryd rhan yn yr astudiaeth.

Oes rhaid i mi gymryd rhan?

Chi sydd i benderfynu a ydych am ymuno â'r astudiaeth. Os penderfynwch ar ôl darllen y wybodaeth hon bod gennych ddiddordeb cymryd rhan, yna llenwch y 'Ffurflen Mynegi Diddordeb' sydd yn y pecyn hwn gan roi manylion sut gallwn gysylltu â chi i drefnu cyfarfod. Byddwn yn disgrifio'r astudiaeth a mynd drwy'r daflen wybodaeth yma gyda chi. Os cytunwch i gymryd rhan, byddwn wedyn yn gofyn i chi lofnodi ffurflen gydsynio i gadarnhau eich bod yn deall beth mae'r astudiaeth yn ei olygu a'ch bod yn barod i gymryd rhan. Gellwch wrthod â chymryd rhan neu dynnu'n ôl ar unrhyw adeg heb roi rheswm. Ni fydd hyn yn cael dim effaith ar y gofal rydych yn ei gael.

Beth fydd yn rhaid i mi ei wneud?

Os cytunwch i gymryd rhan, yna trefnir i gynnal cyfweliad i'ch holi am eich profiadau o hunan-niweidio. Un o'r tîm ymchwil fydd yn cynnal y cyfweliad. Gofynnir cwestiynau i chi am wahanol fathau o hunan-niweidio a'r rhesymau, amgylchiadau a chanlyniadau sy'n gysylltiedig â hwy. Bydd y cyfweliad yn para tuag awr. Caiff y cyfweliad ei recordio ar dâp er mwyn i ni gofnodi eich atebion a'u dadansoddi. Byddwn hefyd yn cofnodi peth gwybodaeth, yn cynnwys eich oed, rhyw, ethnigrwydd a diagnoses iechyd meddwl. Ni chaiff unrhyw wybodaeth bersonol a allai ddatgelu pwy yw rhywun ei chynnwys yn yr adroddiad ar yr astudiaeth a chaiff recordiadau sain eu chwalu unwaith y gorffennir yr astudiaeth. Gall gweithiwr iechyd meddwl proffesiynol sy'n ymwneud â'ch gofal fod yn bresennol yn y cyfweliad os dymunwch.

Treuliau a Thaliadau

Cynigir taleb o £5 i chi fel ffordd o ddiolch am gymryd rhan yn yr ymchwil.

Beth yw'r anfanteision posibl a'r risgiau wrth gymryd rhan?

Byddwch angen rhoi tuag awr a hanner o'ch amser i gymryd rhan yn yr astudiaeth. Mae ymchwil flaenorol wedi dangos nad yw siarad am hunan-niweidio yn ei gwneud yn fwy tebygol y byddwch yn eich niweidio eich hun wedyn. Fodd bynnag, gall siarad am eich profiadau o hunan-niweidio fod yn anodd a phoenus i chi. Rydym yn awgrymu i chi feddwl yn ofalus am hyn cyn penderfynu cymryd rhan yn yr ymchwil, yn arbennig os yw siarad am eich profiadau'n achosi llawer iawn o drallod i chi.

Beth yw manteision posibl cymryd rhan?

Mae rhai pobl yn gweld ei bod o gymorth iddynt drafod eu profiadau o hunan-niweidio. Mae llawer o bobl yn gweld bod cyfrannu at ymchwil werthfawr yn brofiad cadarnhaol. Ni allwn addo y bydd yr astudiaeth yn eich helpu chi'n bersonol, ond bydd y wybodaeth a gawn yn gwella ein dealltwriaeth o hunan-niweidio a gall arwain at welliannau yn y driniaeth i unigolion sy'n niweidio eu hunain yn y dyfodol.

Beth fydd yn digwydd os penderfynaf dynnu'n ôl o'r astudiaeth?

Byddwn yn dinistrio'r holl ddata amdanoch, yn cynnwys y tâp sain, trawsgrifiad o'r cyfweliad a gwybodaeth gyswllt. Ni fydd hyn yn cael dim effaith ar y gofal rydych yn ei gael.

Beth os bydd problem?
Os ydych yn bryderus ynghylch unrhyw agwedd ar yr astudiaeth hon, dylech ofyn am gael siarad gyda'r ymchwilwyr a fydd yn gwneud eu gorau i ateb eich cwestiynau (Dr Michaela Swales, Ffôn: 01745 448700). Gallech siarad hefyd â'ch gweithiwr iechyd meddwl proffesiynol. Os ydych yn dal yn anhapus ac eisiau cwyno'n ffurfiol, gellwch wneud hynny drwy gysylltu â: Hefin Francis, Rheolwr Ysgol, Ysgol Seicoleg, Adeilad Brigantia, Ffordd Penrallt, Gwynedd, LL57 2AS. Ffôn: 01248 388339.

Pe baech yn cael eich niweidio yn ystod yr ymchwil o ganlyniad i esgeulustod rhywun, yna efallai y bydd gennych sail dros gamau cyfreithiol am iawndal yn erbyn Prifysgol Bangor, ond efallai y bydd rhaid i chi dalu eich costau cyfreithiol eich hun. Bydd y trefniadau cwyno arferol yn dal ar gael i chi.

Fydd y ffaith fy mod yn cymryd rhan yn yr astudiaeth yn cael ei chadw'n gyfrinachol?
Bydd. Byddwn yn dilyn dulliau gweithredu moesegol a chyfreithiol ac ymdrinnir yn gyfrinachol â phob gwybodaeth amdanoch. Bydd yr holl wybodaeth a gesglir amdanoch yn ystod yr ymchwil yn cael ei chadw'n hollol gyfrinachol. Ni chaiff eich enw a'ch cyfeiriad eu cynnwys gydag unrhyw wybodaeth amdanoch ac felly ni fydd yn bosibl eich adnabod. Gall y data dienw a gesglir gael eu gweld gan bobl wedi'u hawdurdodi gan noddwr yr ymchwil (Prifysgol Bangor) er mwyn gwirio bod yr astudiaeth yn cael ei chynnal yn gywir. Fodd bynnag, os byddwch yn datgelu gwybodaeth yn y cyfweliad sy'n dangos bwriad i niweidio eich hun neu eraill, yna fe all yr ymchwilydd orfod torri cyfrinachedd a rhoi gwybod i eraill am y datgeliadau hyn.

Beth fydd yn digwydd i ganlyniadau'r astudiaeth ymchwil?
Bydd yr adroddiad terfynol ar yr astudiaeth ymchwil ar gael i'r cyhoedd a gall gael ei gyhoeddi mewn cyfnodolyn a adolygir gan gydweithwyr. Ni fydd unrhyw wybodaeth bersonol amdanoch yn cael ei chynnwys yn yr adroddiad hwn. Os hoffech gael gwybodaeth am ganlyniadau'r astudiaeth ar ôl i chi gymryd rhan ynddi, gellir trefnu hynny.

Pwy sy'n trefnu ac yn ariannu'r ymchwil?
Caiff yr ymchwil ei hariannu a'i goruchwylio gan Brifysgol Bangor.

Pwy sydd wedi adolygu'r astudiaeth?
Mae'r astudiaeth hon wedi'i hadolygu a'i chymeradwyo gan Bwyllgor Moeseg ac Ymchwil Prifysgol Bangor. Edrychir ar bob ymchwil yn y GIG gan grŵp annibynnol o bobl, sef y Pwyllgor Moeseg Ymchwil, i warchod eich buddiannau. Mae'r astudiaeth hon wedi'i hadolygu a'i chymeradwyo hefyd gan Bwyllgor Moeseg Ymchwil Gogledd Cymru.

Gwybodaeth bellach a manylion cyswllt
Ewch i wefan y GIG i gael gwybodaeth gyffredinol am gymryd rhan mewn ymchwil:
I gael gwybodaeth benodol am y project ymchwil hwn, cysylltwch ag Anna Ripley, Seicolegydd Clinigol dan Hyfforddiant, NWCPP, Ysgol Seicoleg, Prifysgol Bangor, Ffordd y Coleg, Bangor, LL57 2DG.

Os hoffech gael cyngor ynghylch cymryd rhan yn yr ymchwil, mae croeso i chi ei drafod â rhywun arall, yn cynnwys eich gweithiwr gofal iechyd proffesiynol.

COLEG IECHYD A GWYDDORAU YMDDYGIAD
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PRIFYSGOL BANGOR UNIVERSITY

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NORTH WALES CLINICAL PSYCHOLOGY PROGRAMME

Consent Form

Title of Project: The reasons, triggers and consequences associated with different types of self-injury.

Research Team: Anna Ripley, Trainee Clinical Psychologist
Dr Michaela Swales, Consultant Clinical Psychologist
Dr Lisa Train, Clinical Psychologist

Please read the following information carefully, circle the appropriate response and sign if you wish to participate in the study.

I have read and understood the information sheet explaining what the study will involve.	YES / NO
I have had the opportunity to think about the information, to ask questions and to consider the answers before making a decision about taking part.	YES / NO
I agree to the audio recording of my interview for the purposes of transcription and analysis (these tapes will be kept securely and will be erased following transcription).	YES / NO
I understand that my participation is **completely voluntary** and that I am **free to withdraw at any time** without giving any reason, without my medical care or legal rights being affected.	**YES / NO**

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I understand that what is discussed during the interview will be kept confidential and that no personal identifiable information about myself will be included in the write up of the project. YES / NO

However, I understand that if, during the interview, I disclose information that indicates an **intention to harm myself or others**, the **researcher may have to breach confidentiality** and report these disclosures to others.

I agree to the inclusion of direct quotes from my interview being included in the final written version of the study (any direct quotes used would remain anonymous). YES / NO

Upon completion of the study I would like a written summary of the findings. YES / NO

I agree to take part in this study. YES / NO

…… …….. ……

Name of participant Signature Date

…… …… ……

Name of researcher Signature Date

If you are unhappy about any aspect of the research and would make to make a complaint you can do this by contacting Hefin Francis, School Manager, School of Psychology, Adeilad Brigantia, Penrallt Road, Gwynedd LL57 2AS.

COLEG IECHYD A GWYDDORAU YMDDYGIAD
COLLEGE OF HEALTH & BEHAVIOURAL SCIENCES

YSGOL SEICOLEG
SCHOOL OF PSYCHOLOGY

RHAGLEN SEICOLEG CLINIGOL GOGLEDD CYMRU
NORTH WALES CLINICAL PSYCHOLOGY PROGRAMME

PRIFYSGOL BANGOR UNIVERSITY

FFURFLEN GYDSYNIO

Teitl y Project: **The reasons, triggers and consequences associated with different types of self-injury.**

Tîm Ymchwil: Anna Ripley, Seicolegydd Clinigol dan Hyfforddiant
Dr Michaela Swales, Seicolegydd Clinigol Ymgynghorol
Dr Lisa Train, Seicolegydd Clinigol

Darllenwch y wybodaeth ganlynol yn ofalus os gwelwch yn dda, rhowch gylch o amgylch yr ymateb priodol a llofnodwch y ffurflen os hoffech gymryd rhan yn yr astudiaeth.

Rwyf wedi darllen a deall y daflen wybodaeth ar gyfer yr astudiaeth uchod. DO / NADDO

Rwyf wedi cael cyfle i feddwl am y wybodaeth, i ofyn cwestiynau ac i ystyried yr atebion cyn penderfynu cymryd rhan. DO / NADDO

Rwy'n cytuno i'm cyfweliad gael ei recordio ar dâp i ddibenion trawsgrifio a dadansoddi (cedwir y tapiau hyn yn ddiogel a byddant yn cael eu chwalu ar ôl eu trawsgrifio). YDWYF / NAC YDWYF

Rwy'n deall fy mod yn cymryd rhan yn **hollol wirfoddol** ac y gallaf **dynnu'n ôl unrhyw bryd,** heb roi rheswm a heb i hynny effeithio ar fy ngofal meddygol neu hawliau cyfreithiol. YDWYF / NAC YDWYF

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Rwy'n deall y caiff yr hyn a drafodir yn y cyfweliad ei gadw'n gyfrinachol ac na fydd unrhyw wybodaeth bersonol a allai ddatgelu pwy ydwyf yn cael ei chynnwys wrth ysgrifennu adroddiad am y project. Fodd bynnag, rwy'n deall os byddaf yn datgelu gwybodaeth yn y cyfweliad sy'n dangos **bwriad i niweidio fy hun neu eraill, yna fe all yr ymchwilydd orfod torri cyfrinachedd** a rhoi gwybod i eraill am y datgeliadau hyn.	YDWYF / NAC YDWYF
Rwy'n cytuno i ddyfyniadau uniongyrchol o'm cyfweliad gael eu cynnwys yn adroddiad ysgrifenedig terfynol yr astudiaeth (bydd unrhyw ddyfyniadau uniongyrchol yn ddienw).	YDWYF / NAC YDWYF
Ar ôl i'r astudiaeth gael ei gorffen hoffwn gael crynodeb ysgrifenedig o'r darganfyddiadau.	BYDDWN / NA FYDDWN
Rwy'n cytuno i gymryd rhan yn yr astudiaeth hon.	YDWYF / NAC YDWYF

…….	……..	……
Enw'r sawl sy'n cymryd rhan	Llofnod	Dyddiad
……	……	……
Enw'r Ymchwilydd:	Llofnod	Dyddiad

Os ydych yn anhapus ynghylch unrhyw agwedd ar yr ymchwil ac yr hoffech gwyno, gellwch wneud hynny drwy gysylltu â Hefin Francis, Rheolwr yr Ysgol, Ysgol Seicoleg, Adeilad Brigantia, Ffordd Penrallt, Bangor, Gwynedd LL57 2AS.

THESIS APPENDIX

Contents:

- Additional results table

- Thesis word count

Appendix Table: Means, standard deviations and percentages for reasons, antecedents, and consequences reported for different methods of self-injury and most recent suicidal and nonsuicidal acts

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
REASONS	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
Emotion Relief	0.7		0.2	0.5		0.2	✓	0.5		0.2	0.5		0.2	0.7		0.3	0.3		0.2	✓
Interpersonal Influence	0.3		0.3	0.3		0.2	×	0.3		0.3	0.3		0.2	0.2		0.3	0.1		0.2	×
To stop bad feelings		100			71		×		75			83			88			60		×
2. To communicate to or let others know how desperate I was		53			41		×		50			42			50			7		×
3. To get help		47			41		×		50			50			44			7		×
4. To gain admission into a hospital or treatment program		12			41		×		13			42			13			7		×
5. To die		24			88		✓		50			92			31			7		×
6. To feel something, even if it was pain		88			18		×		75			17			88			60		×
7. To punish myself		82			41		✓		75			50			75			80		×
8. To get a break from having to try so hard		41			53		×		50			42			44			20		×
9. To get out of doing something		6			6		×		0			8			6			0		×
10. To shock or impress others		18			6		×		13			8			13			13		×
11. To prove to myself that things really were bad		18			29		×		50			42			13			13		×
12. To give me something, anything to do		24			0		×		0			0			13			13		×
13. To get other people to act differently or change		24			12		×		25			17			19			27		×
14. To get back at or hurt someone		29			6		×		13			8			19			7		×
15. To make others better off		6			41		✓		13			42			6			7		×
16a. To get away or escape: my thoughts and memories		65			76		×		75			92			44			33		×
16b. my feelings		65			88		×		50			100			63			60		×
16c. other people		35			59		×		50			58			31			20		×
16d. myself		53			82		×		38			83			50			33		×

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
17. To stop feeling numb or dead		47			24		×		50			25			44			40		×
18. To prevent being hurt in a worse way		47			24		×		75			25			44			33		×
19. To stop feeling angry or frustrated or enraged		71			29		✓		38			42			75			47		×
20. To demonstrate to others how wrong they are/were		12			12		×		25			8			6			13		×
21. To relieve anxiety or terror		53			29		×		50			33			44			13		×
22. To distract myself from other problems		59			24		×		63			25			44			33		×
23. To relieve feelings of aloneness, emptiness or isolation		65			47		×		50			58			75			13		✓
24. To stop feeling self-hatred, shame		47			53		×		50			58			56			20		×
25. To express anger or frustration		76			47		×		63			58			56			60		×
26. To obtain relief from a terrible state of mind		76			59		×		50			67			63			27		✓
27. To make others understand how desperate I am		35			47		×		75			58			31			13		×
28. To stop feeling sad		41			59		×		63			75			44			13		×
EVENTS																				
1. I had an argument or conflict with another person		76			47		×		63			42			69			13		✓
2 I tried to spend time with someone but couldn't		24			24		×		13			25			25			0		×
3. Someone was disappointed with me		41			24		×		50			17			44			20		×
4. Someone was angry with me, criticized me, or put me down		71			47		×		50			50			56			40		×
5. Someone let me down or broke a promise		29			29		×		25			33			31			20		×
6. Someone rejected me		29			24		×		13			33			25			33		×
7. I lost someone important (even if temporary loss)		18			18		×		13			17			19			7		×

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
8. Therapist went out of town or took a break from having sessions		18			18		×		13			25			13			7		×
9. I was isolated or alone more than I wanted to be		53			47		×		38			58			56			13		×
10. I had financial problems		24			0		×		0			0			13			13		×
11. I lost a job		0			6		×		0			8			6			0		×
12. I had health problems or physical discomfort		24			18		×		38			17			13			13		×
13. I had a new demand		12			18		×		25			25			13			0		×
14. I tried to get (or continue) something I wanted but couldn't		6			18		×		13			25			0			7		×
15. I heard of someone else attempting suicide or harming themselves		24			18		×		13			8			25			0		×
16. I saw things that I could use to harm myself or attempt suicide with		47			59		×		63			58			56			13		×
17. I talked to someone about sexual abuse or rape		6			18		×		0			25			6			7		×
18. I talked with my therapist about sexual abuse or rape		0			12		×		0			8			0			0		×
19. I had a therapy session before my self-injury/suicide attempt (on the same day)		24			6		×		0			8			19			13		×
20. I had a therapy session scheduled for later in the day (after self-injury/suicide attempt)		6			0		×		0			0			6			0		×
FEELINGS																				
22. Upset, miserable or distressed	8		3	9		1	×	10		1	9		2	7		3	8		2		×
23. Out of control	6		4	7		4	×	6		4	7		4	7		3	6		4		×

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
24. Anxious, afraid, or panicked	7		4	7		4	×	5		5	6		5	6		4	4		4	×
25. Overwhelmed	8		3	7		4	×	8		3	7		4	7		4	6		4	×
26. Angry, frustrated or enraged unspecified	5		5	5		5	×	5		4	5		5	5		5	3		4	×
27. Angry, frustrated or enraged at someone else	5		4	6		5	×	5		5	6		5	5		4	4		4	×
28. Angry frustrated or enraged at myself	7		4	7		4	×	7		4	7		4	7		4	7		5	×
29. Self-hatred or shame, or thought I was “bad”	8		3	8		3	×	6		5	8		4	7		4	7		5	×
30. Like I deserved to be punished or hurt	6		4	6		4	×	8		4	6		4	6		4	7		4	×
31. Like a failure or inferior	6		4	8		3	×	5		5	8		4	6		4	6		5	×
32. Like a burden to others	5		4	7		4	✓	6		5	7		5	6		4	4		5	×
33. Felt bad about myself	8		3	9		3	×	8		4	8		3	8		3	7		4	×
34. Guilty	7		4	6		4	×	5		5	6		4	6		4	5		5	×
35. Sad or disappointed	7		4	7		4	×	7		4	7		4	7		3	6		4	×
36. Depressed	9		2	9		1	×	10		1	10		1	8		3	7		3	×
37. Tired or exhausted	7		4	6		4	×	8		3	7		4	6		4	6		4	×
38. Lonely, isolated, or abandoned	7		4	7		4	×	9		3	6		4	7		4	5		4	×
39. Trapped or helpless	6		4	7		4	×	8		3	7		4	6		4	3		4	×
40. Discouraged or hopeless	6		4	8		3	×	6		4	7		4	6		4	4		4	×
41. Confused	5		4	6		4	×	8		3	6		4	5		5	6		4	×
42. Emotionally empty or numb	7		4	8		3	×	10		1	8		3	7		4	4		5	✓
THOUGHTS																				
44. About sexual abuse or rape		53			41		×		25			50			44			40		×
45. About physical abuse or assault		29			24		×		25			33			31			27		×
46. Had flashbacks or nightmares		65			59		×		50			58			50			47		×

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
CONSEQUENCES																				
Emotion Relief	2.6		1.0	2.0		1.0	✓	2.1		1.0	1.8		1.0	2.6		1.0	1.8		1.2	×
1. Bad feelings stopped	2.8		1.3	2.2		1.6	×	2.8		1.4	2.2		1.7	2.7		1.4	2.1		1.2	×
2. Others understood how desperate I am/was	1.4		1.0	2.1		1.7	×	1.9		1.6	2.5		1.9	1.1		0.3	1.5		1.2	×
3. I got help	1.5		1.1	2.6		1.8	✓	2.8		1.9	3.0		1.8	1.4		1.1	1.4		1.1	×
4. I gained admission into a hospital or treatment program	1.2		0.6	3.2		2.0	✓	2.0		1.6	3.7		1.7	1.2		0.5	1.1		0.3	×
5. I felt something, even if it was pain	3.8		1.6	2.6		1.8	✓	3.5		1.7	2.2		1.7	3.8		1.5	3.7		1.5	×
6. I felt punished or succeeded in punishing myself	3.5		1.7	2.6		1.8	×	3.6		1.8	2.6		2.0	3.4		1.7	3.5		1.9	×
7. I got a break from having to try so hard	2.4		1.6	2.2		1.7	×	2.6		1.8	2.4		1.7	2.4		1.6	1.7		1.4	×
8. I got out of doing something	1.0		0.0	1.1		0.5	×	1.0		0.0	1.2		0.6	1.0		0.0	1.0		0.0	×
9. I shocked or impressed others	1.5		1.3	1.8		1.6	×	2.0		1.9	2.0		1.7	1.3		1.0	1.5		1.1	×
10. I proved to myself that things really were bad	2.7		1.8	2.9		1.8	×	3.4		2.0	2.8		1.9	2.6		1.7	1.9		1.7	×
11. It gave me something, anything to do	1.6		1.2	1.1		0.3	✓	1.0		0.0	1.1		0.3	1.4		1.0	1.5		1.0	×
12. Other people treated me better	1.1		0.2	1.2		0.6	×	1.0		0.0	1.3		0.6	1.1		0.3	1.4		1.1	×
13. I got back at or hurt someone	1.8		1.6	1.6		1.4	×	1.0		0.0	1.8		1.5	1.6		1.4	1.3		1.0	×
14. Other people were better off than before I harmed myself	1.1		0.5	1.7		1.2	×	1.5		1.4	1.9		1.6	1.1		0.5	1.0		0.0	×
15. I got away or escaped	2.1		1.4	2.9		1.7	×	2.3		1.8	3.2		1.7	2.2		1.5	1.5		0.9	✓
16. I stopped feeling numb or dead	3.2		1.7	1.8		1.4	✓	2.8		1.7	1.7		1.3	2.9		1.7	1.9		1.5	✓
17. I prevented myself from being hurt in a worse way	3.4		1.7	1.9		1.5	✓	4.3		1.5	2.0		1.5	3.3		1.6	2.5		2.0	×
18. Feelings of anger, frustration, or rage stopped	2.9		1.6	2.2		1.4	×	2.0		1.6	2.2		1.5	2.8		1.6	2.3		1.4	×
19. Others realized how wrong they are/were	1.1		0.2	1.1		0.2	×	1.0		0.0	1.1		0.3	1.1		0.3	1.3		1.0	×

	Most recent nonsuicidal act (n=17)			Most recent suicidal act (n=17)			Comparison between most recent suicidal and nonsuicidal act (n=17)	Burning (n=8)			Overdose (n=13)			Cutting (n=16)			Hitting Body (n=16)			Comparison between cutting and hitting body (n=12)
	M	%	SD	M	%	SD		M	%	SD	M	%	SD	M	%	SD	M	%	SD	
20. Feelings of anxiety or terror stopped	2.5		1.4	1.6		1.1	✓	1.5		0.8	1.3		0.8	2.6		1.5	1.7		1.2	×
21. I was distracted from other problems	3.2		1.7	2.5		1.7	×	2.4		1.6	2.1		1.6	3.1		1.7	2.4		1.6	×
22. Feelings of aloneness, emptiness, or isolation stopped	2.1		1.3	1.5		1.2	×	1.8		1.2	1.5		1.2	2.4		1.3	1.5		1.1	×
23. Feelings of self-hatred/shame stopped	2.2		1.2	1.7		1.6	×	1.8		1.4	1.7		1.5	2.1		1.3	1.9		1.2	×
24. My (self-injury/suicide attempt/overdose) expressed my anger or frustration	3.7		1.5	3.5		1.7	×	3.4		1.8	3.5		1.8	3.4		1.6	3.3		1.8	×
25. I experienced relief from a terrible state of mind	2.9		1.5	2.6		1.6	×	2.6		1.8	2.5		1.4	2.8		1.5	2.3		1.4	×
26. Feelings of sadness stopped	2.2		1.3	1.9		1.4	×	1.8		1.2	1.9		1.5	2.3		1.3	1.8		1.2	×
27. Stopped feeling empty inside, as if I was unreal, or disconnected from my feelings	2.4		1.3	2.1		1.5	×	1.9		1.5	1.8		1.3	2.0		1.2	1.8		1.3	×
28. Feelings of depression stopped	1.6		1.1	1.6		1.1	×	1.8		1.4	1.5		1.2	1.7		1.1	1.7		1.2	×
29. I felt worse about myself or felt more self-hatred/shame	3.1		1.7	3.1		1.9	×	3.1		1.9	3.4		1.8	2.7		1.7	2.0		1.4	×

✓ = $p < 0.05$ in statistical comparison. Wilcoxon matched pairs test for continuous data; Fischer's exact test for categorical data
× = n.s.

Thesis Word Count

Thesis Abstract: 300

Literature Review: 5,535

Empirical Paper: 5,411

Discussion Paper: 4,237

Appendices (inc. tables, figures and references; excluding ethics appendix): 6,553

TOTAL (excluding ethics appendix): 22,036