THE DEVELOPMENT OF SELF-INJURY AS A MULTI-FUNCTIONAL BEHAVIOUR

ANDREW J. T. BARTON-BRECK

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DECLARATION

"I, Andrew Barton-Breck certify that this work has not been accepted in substance for any degree, and is not concurrently being submitted for any degree other than that of Degree of Doctor of Philosophy being studied at the University of Greenwich. I also declare that this work is the result of my own investigation except where otherwise identified by references and that I have not plagiarised another's work".

Student:
Print Name:
Date:

Supervisor:
Print Name:
Date:

ACKNOWLEDGEMENTS

'BLEED IT OUT'

She takes the razors edge to her flesh
ever so slightly delicately
breaks a line across bare skin
droplets of blood form a line then a bubble
it spills lightly over the edge of her skin
makes river canals ridges
blood instead of water

She scrapes the area near her wound
creating yet another
watching the newly formed river collide with the old one
congealing releasing the pain
the masked over tension
relieving the angst spilling the rage
that feeling of falling apart
is gone from her again
she has released the feeling
of shattered pieces fragments of the past
trying to make their way through

She can't hold it together
the tears are under the surface
she's scared and alone
the cutting will make due

Bleed it out
just a bit deeper
until it all goes away

Emotions held in suspension
unattainable unidentified
stolen objects
body numbness
cells echoing against veins
clashing in her bones
someone's yelling
who?
she can't tell

The inner turmoil
deathly silence
you're just a bad bad girl

got to just bleed it out
cut a bit deeper
let it drip out
feel no more
numbness takes over

Just another way
to keep the pain at bay

Butterfly Warrior April 20, 2009

ABSTRACT

In order to advance our understanding of self-injury this longitudinal study investigated the experiences of 25 adults who had used or were using self-injury. This was achieved by obtaining verbal narrative accounts of their experiences of using self-injury from its onset during childhood or early adolescence, throughout adolescence and into adulthood. These verbatim accounts formed a corpus of data which was analysed using a grounded theory method. This process established seven robust categories associated with the use of self-injury consisting of behavioural, cognitive, emotional, social, occupational, communication and physiological experiences. By thoroughly examining these categories the development of self-injury as a versatile multi-functional behaviour emerged which was governed by the individuals' needs. Evidence for these multiple uses stemmed from the similarities that developed in the individuals' use of self-injury over time. Highlighting these multiple functions it was established that improved social, communication and occupational conditions were crucial aspects in the participants' reduction in using self-injury. The contribution this research has made towards developing our understanding of self-injury was addressed, particularly in relation to its use by the non-clinically defined members of the general public who took part, and in the context of advancing relevant nursing research and practice. Several critical aspects of the methodology were identified, in particular the restrictive generalisation of the findings to others who self-injure, and the use of retrospective accounts were discussed and directives were outlined to improve these aspects in future research. Proposals were made for further research to clarify and investigate the multiple functions of self-injury and to increase our understanding of the continuing use of covert self-injury during adulthood. Additionally, the relevance of the findings to nursing practice, principally in relation to adequately assessing the use of self-injury was discussed.

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1.   INTRODUCTION

1.1. The gap in research

Research and official studies have reported that there has been a notable increase in the occurrence of self-harm amongst adolescents. Brophy (2006), who led the 'National Inquiry into Self-Harm amongst Young People', stated that up to 1 in 10 young people in the United Kingdom self-harm during their adolescent years, 1 million adolescents have thought of self-harm and more than 800,000 adolescents had self-injured. Between 1 in 12 and 1 in 15 adolescents self-injure and around 4% of adolescents in the community cut themselves over a period of 12 months. Consequently there has been a growing need for rigorous qualitative research to explore the experiences of those who self-harm in particular the sub-category of self-injury. This research is required in order to more fully understand the dynamics involved in this alarming and complex human phenomenon which has been highlighted by The British Psychological Society together with The Royal College of Psychiatrists (2004), who formulated national clinical practice guidelines for the care of those who self-harm. A number of researchers such as Walsh (2007), Alder and Alder (2007) and Klonsky (2007, 2009) have examined the practices and functions of self-injury in order to advance our understanding. Also, the continued demand for research has been clearly stated by concerned leading researchers in the field such as Sutton (2007) who has written widely on the subject of self-injury and states that the need for progressive research to develop our understanding of self-injury is *"...enormous..."*. Brophy (2006) concluded that the phenomenon is notably under-researched and the need for more comprehensive research is paramount to explore the dynamics involved in this specific form of self-harm. In addition, Masten

(2004), who reviewed research regarding the development of psychopathology during adolescence, identified that it is vital to conduct research which enhances our understanding of behaviours such as self-injury.

This development in our understanding is crucial, in the context of health and social care, in order to develop effective treatment strategies and interventions that reduce its occurrence. Supporting this, following a thorough review of relevant research into self-injury, Hooley (2008) concluded that self-injury presents researchers and professionals with many challenges due to a lack of understanding and adequate causational theory.

In the context of existing Health and Social Care provision, and in order to develop and improve the services that are available to those who self-injure, further research is necessary to underpin future directives. This requirement has been identified by a number of researchers such as McAllister (2003) who, following a systematic review of research, literature and theory regarding self-injury, indicated that clinicians have to acknowledge the existence of multiple meanings of self-injury in order to provide individualised and effectual treatment. Therefore research that increases clinicians' understanding and awareness of self-injury is essential if this is to be fully achieved. Additionally, Fox and Hawton (2004), who widely researched the causation of self-harm in adolescence, outline the need to focus efforts towards research that not only develops a greater level of understanding of self-injury but also clarifies the essential components necessary to accurately assess, intervene and evaluate self-injury.

1.2. Defining self-injury

In order to distinguish self-injury from other forms of self-harm such as parasuicide Walsh (2006), a prominent researcher who has written extensively on the subject of self-injury, succinctly defines this behaviour as**:**

"*... intentional, self-effected, low-lethality bodily harm of a socially unacceptable nature, performed to reduce psychological stress". (p.4).*

Importantly Woldorf (2005), who describes self-injury in a clinical context, identifies that this intentional damage to one's own body is not legitimate, a norm and not a cultural practice of our society. Self-injury as described by Murray, Warm and Fox (2007), who investigated the use of self-injury by 128 adolescents aged 12 to 19 years, typically involves short or long term physical damage to one's own body by use of a variety of means. Alder and Alder (2007), Sutton (2007), Fogarty (2007) and Ferentz (2008) identified this variety of means to include cutting, burning, branding, scratching, picking, biting, head banging, hair pulling, hitting, bone breaking, repeated bruising, stabbing and reopening wounds.

Walsh (2006) and Sutton (2007) explain how self-injury can take the form of direct or indirect injury. Direct self-injury is when a person causes immediate damage to the tissues of body by means such as cutting. In contrast, indirect self-injury is where damage to the body is not immediate, in other words it has an accumulation or delayed effect in the way it causes injury such as substance abuse. Further division of the phenomenon was made by Kahan and Pattison (1984) when they formulated, through using clinical data, the diagnostic criteria for 'deliberate self-harm'. In doing this they identified that in both direct and indirect self-injury differing levels in the

lethality can occur. In direct self-injury they found high lethality behaviours such as taking small doses of poison, and low lethality behaviours such as superficial cutting. In contrast, with indirect self-injury they found high lethality behaviours such as not taking medication essential in preserving life, and low lethality behaviours such as alcoholism. Additionally, Sutton (2007) explains how self-injurious behaviours can be compulsive where the individual experiences a strong desire to engage in self-injury, or impulsive where the individual without prior planning or thought of consequences engages in unprompted self-injury.

Regarding self-injury in relation to suicidality, McAllister (2003) states how they are indirectly related and that actually committing suicide is 18 times more likely amongst people who self-injure compared to those who don't self-injure. However, as McAllister points out, it is incorrect to presume that self-injury is a subset of suicide. This is clarified by Walsh (2006) who found that what fundamentally distinguishes self-injury from suicidal behaviour is the intent of the person. With suicide the intent is for the person to stop consciousness. In contrast with self-injury, the intent is for the person to remain conscious and change their state of consciousness through injuring themself such as cutting or burning skin tissue. In addition, within this group of people, there are those who self-injure to relieve their emotional state and those who self-injure to relieve a state of detachment from thoughts and feelings. Mazelis (2008), who explored the experiences of women who had suffered childhood trauma and used self-injury, describes this state of detachment as an episode of dissociation when an individual uses self-injury as a way of altering a feeling of profound numbness or deadness in order to feel more in touch with reality, in a cognitive and emotional context, regarding their physical and social environments.

Highlighting the complexity of self-injury even further, Favazza (1996), who studied self-injury from an ethnological perspective, was able to clearly subdivide low lethality self-injury into three subtypes:

- Compulsive self-injury that is repetitive and ritualistic and can occur in various forms and on multiple occasions.

- Episodic self-injury which takes place infrequently. If asked, the person will not identify their behaviour as being self-injury. For this person, self-injury is likely to be a secondary condition associated with a primary condition such as depression.

- Repetitive self-injury that occurs frequently amongst the person's daily repertoire of behaviours. The main difference between episodic and repetitive self-injury is that in episodic the person does not acknowledge their self-injury, whereas in repetitive the person recognises their need to self-injure.

Further distinction of self-injury is made by Favazza and Rosenthal (1993) when they defined the behaviour as a condition in its own right amongst forms of self-destructive behaviours and went on to create a diagnostic category 'Repetitive Self-Injury'. Favazza (1996) provided additional evidence to support this diagnostic category after establishing that an individual's engagement in self-injury could occur on its own as the primary disorder, and could continue to be exhibited after any associated primary disorder - such as depression - had subsided. On this premise Favazza was able to define three central diagnostic criteria for 'Repetitive Self-Injury':

- Repeated failure to resist impulses to destroy or alter one's body.

- Increasing tension leading up to and a sense of relief following self-injury.

- No association between suicidal intent and the act of self-injury.

This diagnosis was advanced by Muehlenkamp (2005) who reviewed the phenomenological and empirical data that supports self-injury as a specific syndrome and established a broader set of eight distinctive criteria for the condition of 'Repetitive Self-Injury' outlined as follows:

- A preoccupation with physical harm to oneself.

- Emotional arousal prior to self-injury.

- No suicidal intent.

- Impulsive self-injury.

- Gratification when actually self-injuring.

- A sense of relief following self-injury.

- Repetitive pattern of self-injury.

- It occurs in the absence of an acute mental health condition or severe learning disability.

However, adding further to the interpretation of self-injury as a specific condition, Fogarty (2007) concludes, following a review of contemporary literature, that repetitive self-injury is best interpreted as an impulse control disorder.

Interestingly Ferentz (2008), who has conducted research and written extensively on the subject of self-injury, explains that due to the act of self-injury not consisting of the intention to inflict life-threatening wounds it is seldom that a person who self-injures will require medical attention and therefore many people who self-injure will not be known to health service professionals and services. This strongly indicates that there are many more people in the community who self-injure than are reported in research findings such as Brophy's (2006), who found that on average there are 142,000 yearly visits to accident and emergency departments (in England and Wales) from young people with self-inflicted injuries. However, Brophy (2006) goes onto support Ferentz's (2008) observation by indicating that those known to self-injure in the national statistics regarding hospital admissions (in the United Kingdom) consist of a small fraction of those who use self-injury.

In conclusion, Sutton (2007) provides a broad and encompassing definition of self-injury by stating that it is:

> *"...a compulsion or impulse to inflict physical wounds on one's own body, motivated by a need to cope with unbearable psychological distress or regain a sense of emotional balance. The act is usually carried out without suicidal, sexual or decorative intent".* (p. 23).

1.3. Variables involved in self-injury

In promoting a better understanding of self-injury it is important to appreciate that a wide range of variables have been found to be associated with this type of behaviour. Alder and Alder (2007) completed an ethnographic study involving in-depth interviews with 80 participants aged between 16 and 55 who used self-injury,

web-site postings, email communications and internet group chat rooms. Their investigation into the practice of self-injury was achieved by incorporating a broad set of variables to explore the social, biological, emotional and behavioural aspects of this behaviour. By using this combination they were able to avoid developing a distorted perspective and successfully clarified a great deal of accurate information regarding the phenomenon such as the individual's rationality, planning and control of their self-injury. Developing this perspective, Turell and Armsworth (2000) carried out an analysis of the variables involved in the self-injury used by 84 women aged between 18 and 67 years who had experienced incest. They found that self-injury served to provide control over distressing thoughts, feelings and memories, punishing the body whilst relieving dissociative states of mind.

Highlighting the wide range of variables that are directly associated with self-injury, Patel and Hodes's (2006) longitudinal study revealed a prevalence of self-injury amongst adolescent refugees which indicates that refugees are susceptible to developing the use of self-injury. Young, Sweeting, and West (2006) conducted a longitudinal study which found a strong association between the use of self-injury and being a member of the 'Goth' sub-culture where self-injury is a common practice. Haw, Hawton and Casey (2006) carried out research using standardised assessments and structured clinical interviews with 150 patients who had used self-injury and found a direct link between self-injury, psychiatric conditions, personality disorders and substance abuse. Elliot's (2005) longitudinal study, which explored the experiences of six men aged from 19 to 58 years who used self-injury, revealed that emotional distress is clearly associated with the use of self-injurious behaviour.

In contrast, with regard to variables that were indirectly associated with self-injury, Anderson and Standen (2006) conducted research using questionnaires, with 179 nurses and doctors to measure their attitudes towards young people who self-harm. An important aspect of their findings was the suggestion that the attitudes of nurses and doctors towards self-injury impacts upon the adolescent's actual experience of using self-injury. This aspect was further investigated by Patterson, Whittington, and Bogg (2007) who devised a questionnaire administered to 153 health professionals to measure attitudes towards people who self-harm. Their findings suggest that a negative attitude of nurses towards self-injury has a negative impact on patients' preparedness to receive treatment. They found that once nurses had received self-injury education and training their attitudes improved, and that this in turn had a positive impact by increasing self-injurious patients' co-operation with intervention services available.

When considering both the direct and indirect variables involved in self-injury, what is clear is that researchers have supported the existence of a variety of interactions between ranges of variables involved in and /or associated with self-injury. This is supported by Turrell and Armsworth (2000) who conducted an analysis of the components involved in self-injury and were subsequently able to clarify a set of characteristics or variables which differentiated incest survivors who self-injured from those who did not self-injure. Developing this point, Evans, Reeves, Platt, Leibenau, Goldman and Jefferson (2000) investigated the associations between self-harm and a range of variables through using interview data, standardised questionnaires and blood sampling procedures (measuring levels of serotonin) administered to individuals who had self-harmed. They found that the social,

psychological and biological variables identified merged with each other and, in combination, provided an overall explanation for actual incidents of self-injury. In addition, by utilising combinations of variables when investigating self-injury, researchers such as Gratz (2001) have been able to design specific inventories in order to define and measure this condition. The construction of Gratz's Inventory was based on a study exploring the psychometric properties of deliberate self-harm exhibited by 150 adults ranging in age from 18 to 64, and incorporated a wide range of variables such as type of self-injury, duration, severity and gender. Lundh, Karim, and Quilisch (2007) modified Gratz's Inventory for use in their study of the frequency rates of the use of self-injury by 128 adolescents, all of whom were 15 years of age. Applying the inventory, they were able to identify several interlocking behavioural, emotional and cognitive components involved in the self-injury exhibited by these adolescents.

1.3.1. The adolescent transition and self-injury

With regard to the adolescent transition, Steinberg, Dahl, Keating, Kupfer, Masten, and Pine (2008), who examined research and literature regarding developmental psychopathology in adolescence, outline how the adolescent transition is a period of time - marked by biological, cognitive, emotional, social and behavioural change and of heightened susceptibility for the development of psychopathological disorders. From this perspective, Masten (2004) describes how self-injury can become a reaction to the dramatic period of change across a range of factors in the adolescent's self and their environment. Developing this point, Ferentz (2008) describes the adolescent as being particularly vulnerable to developing self-injurious behaviours as they confront innate and troublesome developmental changes. The abrupt physiological changes and psychological unrest during this period can lead

to a sense of detachment from their own bodies, turmoil in establishing their social standing amongst their peers which can be compounded by the challenge to increase independence and control of their lives, as well learning to make decisions and manage conflict. Together these factors can become a salient stimulus for development in the use of self-injury.

Fogarty (2008) identified that adolescent self-injury is usually caused by varying combinations of feelings of low self-worth, frustration in managing strong emotions, stress and anxiety. It is a method of coping with these states of mind or feelings experienced during adolescence and associated with the overall experience of growing up. Supporting this, Anderson, Woodward and Armstrong's (2004), who reviewed health services available to young people, identified that adolescence is a critical period when self-injury can become a coping mechanism. This point is broadened by Anderson, et al. (2004), who describe that when a child reaches adolescence they are expected to act in a moral and socially competent manner and be able to distinguish what is appropriate and not appropriate in their behaviour. These expectations for an adolescent experiencing distress may lead to them engaging in self-injury as a means to manage their subsequent distress and cope with the critical transitional period in their life.

Interestingly, Osgood, Foster, Flanagan and Gretchen (2005), who reviewed a wide range of research into adolescents' experiences during the transition to adulthood, report that it is not only a difficult period in the vulnerable adolescent's life, but also it has extended in recent decades to the late twenties for both many men and women. Steinberg, et.al. (2008) indicates that this extension is experienced across the biological, cognitive, emotional, social and behavioural aspects of a person's life.

This is supported by Morrow and Richards (1996) who reviewed research regarding the transition to adulthood. Additionally, they clarify that the key elements of this process involve leaving school, leaving home, becoming sexually adult, parenthood, gaining employment, adult consumerism and a range of economic and social changes. All these changes can present the individual with personal challenges in their lives which they may find difficult and can lead to the use of self-injury as a coping mechanism.

1.3.2. Onset of self-injury and duration

Kahan and Patterson (1984) found that the onset of self-injury is typically during late adolescence and can remain for many years. In contrast, Brophy (2006) and Whitlock, Powers, and Eckenrode (2006), who conducted two studies using observational data obtained from over 400 internet message boards dedicated to those who use self-injury, identified that the onset of self-injury begins in early adolescence around 12 years of age and, in many, rises to a peak in frequency in mid to late adolescence between 16 and 25 years of age. This behaviour, as suggested by Fogarty (2008), follows the same pathway as other difficult behaviours typical of adolescence. Developing this point, Whitlock, et al. (2006) found evidence to show that adolescent self-injury can develop along two differing pathways. One which begins in childhood and continues into adulthood and the second which is unique to the particular time in a person's life, emerging in early adolescence and declining in late adolescence or early adulthood.

Interestingly, research conducted by 'Outside the Box' (2008), examining the experiences of 85 adults who used self-harm, showed that self-injury does not merely

exist within the adolescent population and although it can develop during childhood or adolescence it can remain amongst an individual's repertoire of behaviours into adulthood. They identified that the age range of the adults who took part in their study was from 25 to 55 years and that the majority of these were in employed work. The duration of the self-injuring behaviour was from 5 to over 25 years.

1.4. Self-injury in context of nursing

Webb (2002), who conducted a systematic review of literature exploring the psychological and psychosocial dimensions involved in self-injury, from a nursing perspective indicated that little research had been conducted which examines the interaction and relationship between these two major dimensions. Additionally, Webb supported the existence of emotional, cognitive, social and behavioural factors involved in the use of self-injury. Rayner, Allen and Johnson (2005) integrated theories of self-injury to produce the 'Interpersonal Cycle of Reinforcement of Self-Injury. Importantly, through applying this model, they found that emotional and cognitive factors and the relationship or inter-play between these two dimensions are key components in self-injury. They describe the importance of exploring and developing knowledge of these dimensions in the context of self-injury to enable nurse practitioners to develop a greater level of empathy in their responses to those who self-injure, which in turn will enhance the effectiveness of any assessment and subsequent treatment provided.

Regarding the deficits and needs within nursing development, researchers such as Mc Allister, Creedy, Moyle and Farrugia (2002), who measured the attitude of nurses working with clients who self-harm, have highlighted the need to improve

professional attitudes, knowledge and understanding of self-injury and that this is required in order to improve practice and clinical services offered to this client group. Further highlighting this need is the research of Reece (2005), who examined nurses' understanding of self-injury, and Friedman, Newton, Coggan, Hooley, Patel, Pickard and Mitchell (2006) and Mc Cann, Clark, Mc Connachie and Harvey (2006) who all investigated the attitudes of accident and emergency department staff towards patients who self-injure. The findings of these studies demonstrated that there is a deficit in the level of understanding by nursing staff towards those who self-injure. Developing this point, Smith (2002), who conducted research into the perceptions of clinicians and service users of self-injury, discovered that health professionals generally perceive self-injury as being the client's problem. Smith emphasised the need for health professionals to provide a care approach that views the person who self-injures from a wider holistic perspective. Eisenkraft (2006), who reviewed research and literature in the context of self-injury being a syndrome, acknowledged that developing self-injury as a condition or a separate entity would give healthcare professions a clearer perspective and subsequently a baseline from which to provide individually tailored treatment packages focused on meeting the needs of individuals who self-injure. Therefore in the context of nursing, specific self-injury research is required in order to develop and improve the breadth of resources (including education, training and assessment), clinical knowledge and applied nursing guidelines/protocols.

Leading on from these concerns, Procter's (2005) literature review, which included an examination of the implications of self-harm for nursing practice, succinctly provides the way forward in nursing development. Procter states that

nursing in mental health should involve the range of variables that impact on an individual's life. In self-harm it is essential that nursing services consider and integrate the social, biological, emotional and psychological elements of a person's experiences so that improvements and developments in the nursing services for this client group can be made. Developing this point, McAllister (2003) indicates that clinicians need to acknowledge the existence of multiple meanings of self-injury in order to provide individualized and effectual treatment. Therefore, if this is to be achieved in nursing, research that increases our understanding and knowledge is essential so that theoretical underpinnings can be established leading to the development of more effective nursing practice.

1.5. Theoretical models of self-injury

In pursuit of developing a greater understanding of self-injury, several researchers have increasingly endeavoured to interpret, conceptualise, and operationalise self-injury. This has resulted in the development of multiple ways of understanding self-injury within a range of theoretical frameworks which has contributed towards advancing our understanding and knowledge of self-injury such as:

- The *'Path Analytic Model'* formulated by Low, Jones, MaCleod, Power, and Duggan (2000), who studied the concept of childhood trauma being a precursor to self-injury through the use of a 'Path Analytic Model', which clarified an association between high levels of dissociation and increased self-injury.

- The *'Developmental Psychopathology Framework'* developed by Yates (2004) to provide a model from which to follow the development of self-injurious behaviours as a consequence of childhood trauma or abuse. On close examination of the variables involved in the formation of this model it can be seen that it incorporates social, emotional, biological, behavioural and cognitive dimensions of self-injury.

- The *'Experiential Avoidance Model'* used by Chapman, Gratz and Brown (2006) to study self-injury. Using this framework, they were able to examine the rationale for self-injurious behaviours and clearly establish the underpinning behavioural, cognitive and emotional components of self-injury.

- The *'Multilevel Model'* applied by Bowers, Whittington, Nolan, Parkin, Curtis, Bhui, Kackney, Allan, Simpson, and Flood (2007) to investigate self-harm on acute psychiatric wards. This included consideration of the range of patient conditions, the service context, the physical environment, ward routines, rates of conflict, containment, staff characteristics, staff attitudes and group factors. They looked at the relationship and association between these variables and self-harm and amongst their conclusions found a deficit in the social and occupational nursing care regime which directly impacted on patients by heightening levels of self-injury.

- '*Theoretical model of the social functions of self-injury'* – this model was applied by Nock (2008) on the premise that self-injury symbolises a high intensity social signal which is used as a communication strategy when less intense methods do not have any effect such as speaking or crying. Nock

found that this type of communication of distress can also be a form of reinforced strength by pushing away potential threats in the context of the social environment such as peers who bully. In addition self-injury can serve to reinforce social relationships with other peers.

However, these models as they stand alone merely provide multiple perspectives of self-injury and, as found by McAllister (2007), prove to be restrictive in their application. They tend to provide narrow frameworks from which to understand the meaning of self-injury from a particular perspective and / or moment of self-injury in a person's life such as the sociological aspects. Developing this point, Nock, Teper and Hollander (2007), who reviewed the psychological treatment of self-injury among adolescents, describe how self-injury consists of multiple perspectives, and that its development can only be fully determined through combining a range of perspectives, such as social and cognitive.

In pursuit of discovering more about self-injury and in developing relevant theory, several researchers have combined models into a method used to investigate various aspects of the phenomenon such as:

- '*Multi-Dimensional Perspective*' - Suyemoto (1998), who explored the functions of self-injury, identified an absence of any integration and differentiation between six functional models of self-injury. Subsequently, through the integration of these models of self-injury (environmental model, anti-suicide model, sexual model, affect regulation model, dissociation model and boundaries model) Suyemoto developed the 'Multi-Dimensional Perspective'. Through the use of this comprehensive model, the components

and meaning of self-injury could be more clearly defined. This model was later used by Yip (2005) to investigate the meaning behind adolescents' self-injury, specifically cutting skin tissues.

- The *'Traumagenic Model'* as defined by Yates (2004) and *'Affect Regulation Model'* as defined by Klonsky (2007), were both used by Bocquee (2007) in a cross sectional study involving 592 adolescents which investigated the use of self-injury. By comparing the findings of analysis using the 'Traumagenic Model' and the 'Affect Regulation Model', Bocquee identified that both models indicated that an individual's lack of ability to regulate emotions is strongly associated with exhibiting self-injurious behaviour.

However, from a nursing perspective it can be argued that, despite the fact that these models are valuable in developing our knowledge of self-injury, they are restrictive in their general application to people who self-injure. They lack an overall framework that allows for the examination of the range and combination of variables that can be involved in self-injury whilst encapsulating the meaning, purpose or function of self-injury for the individual. A research framework that examines the whole person is imperative if it is to contribute towards the development of a nursing process designed specifically for people who self-injure.

Leading on from this observation, it is clear that in order to fully rationalise and make sense of self-injury, as suggested by Chapman, et al. (2006), there is a need to develop a unifying, evidence-based theoretical framework in which self-injury can be fully interpreted. This directive lends itself to the development of a holistic/global framework in which a clear and accurate understanding of self-injury can be

established in the context of a person as a whole, covering all aspects of their life. In addition, it is clear from evaluating previous research that in order to adequately conduct research into self-injury, it is vital to recognise that the phenomenon is a multi-factorial event which does not occur in isolation to the spectrum of variables that originate from the person themself and from within the environment they exist.

In support of this research directive, Winchel and Stanley (1991), who reviewed data regarding the biological aspects of self-injury, found that despite the useful formulation of theoretical models which explain self-injury from a variety of patient perspectives, no therapeutic frameworks have emerged from these models which can be applied in general to those who self-injure. Recent research has indicated that this remains the case: for example, in work by Chapman, et al. (2006) and Yates (2004), who show that there is a lack of any sound theory of self-injury which, as previously found by Evans et.al. (2000), encapsulates the range of variables associated with self-injury and can be used to understand self-injury from an applied clinical context. Hooley (2008) concludes that self-injury occurs from the combination of a number of theoretical perspectives and therefore its origins or causation is varied, multiply-determined and complex. Due to this, Hooley indicates that self-injury cannot simply be explained through applying a particular causal theoretical model. Therefore the development of theory is crucial to the advancement of our understanding and treatment of self-injury.

1.5.1. The 'Biopsychosocial Model'

Despite this critique of theoretical models, Walsh (2006) has competently used the 'Biopsychosocial Model', formulated by Engel (1977), to analyse self-injury. The

model described by Engel incorporates social, psychological and behavioural dimensions to explain illness, which is greatly valued in nursing. Due to its broad analytical framework, the researcher is able to generate information from a range of major dimensions across a person's life and daily functioning. With respect to self-injury, using this model Walsh was able to accurately interpret and understand the function and meaning of self-injury from a theoretical perspective and the unique individual's perspective. The model in brief consists of the following main themes or dimensions:

- *Environmental dimensions* – including family historical elements, individual's historical elements and current environmental elements. These external environmental elements have a direct impact on the individual's pattern of self-injurious behaviours.

- *Biological dimensions* – are the factors within a biological framework, which have a direct impact, influence or association with self-injurious behaviours, such as the function of physical pain in self-injury**.**

- *Cognitive dimensions* – involving two fundamental types: cognitive interpretations of environmental events and self-generated cognitions.

- *Affective dimensions* – the emotional factors which act as precursors in an individual's self-injurious behaviours. This includes a wide range of emotions such as anger, sadness and rage.

- *Behavioural dimensions* – this involves the overt actions that come before, during and after self-injury occurs. They are behaviours which can be directly associated with an individual's self-injurious behaviour/s.

The 'Biopsychosocial Model' clearly provides a framework that can be applied to categorise the spectrum of variables or sub-themes associated with self-injury within the five dimensions underpinning the presentation of an individual's self-injurious behaviour/s. From a nursing research and development perspective, Engel (1977) suggests that it is a structure that provides a suitable guide for nursing research. In support of its use in the field of nursing, Nemade, Staats Reiss and Dombeck (2007), who explored models or theories used to explain health and illness, propose that the 'Biopsychosocial Model' provides a framework to thoroughly assess a patient's condition such as self-injury, and that its use promotes clinical effectiveness.

1.6. Making sense of what research has to say about self-injury

Drawing from previous theory cited above and in full consideration of the range of variables identified in previous research, in particular Walsh's (2006) use of the 'Biopsychosocial Model', it can be concluded that there are varying levels, intensities and combinations of behavioural, cognitive, emotional, social, occupational and physiological characteristics or factors in the identification and treatment of self-injury. These can be directly associated with the exhibition and maintenance of self-injurious behaviour/s. When combined, these factors form a global or holistic framework from which to make overall sense of, or to understand, self-injury. Through the application of this framework to the evaluation of previous research and theoretical perspectives, it becomes clear that what this 'body' of available

information shows is that self-injury consists of variations and degrees of these factors as described below:

Behavioural factors

This very important factor involved in the study of self-injury, has been neglected in research and is often absent or vaguely explored in a vast number of studies and within the mass of subsequent literature. The reasons for its importance are that self-injury as the subject of study is open to a wide range of interpretations and perceptions due to self-injury being a general term used to label or encapsulate a wide range and type of behaviours. By merely stating self-injury, or as even more commonly found in research literature - self-harm, the researcher leaves the subject open to the detrimental effects of the wide range of interpretations based on the perception and personal experiences of the reader, researcher, academic, professional, critic and so on. For example self-injury could be interpreted as when a person slashes their wrist, another person could perceive it as when a person attempts to hang themself, or another could perceive it as when a person inflicts superficial lacerations to the forearms using a razor blade.

Therefore including the detail and characteristics of the self-injury in relation to other major factors such as emotional and social aspects is vital. Several researchers have detailed such information in their research such as Carlson, Stacey, DeGeer, Deur and Fenton (2007) who studied 150 teachers' awareness of the cutting skin form of self-injury exhibited by school students. Their research indicated the existence of an array of self-injurious behaviours in addition to cutting, including forms of hitting and skin burning. They provide further detail of this behaviour by describing how

self-injury can be focused on several different areas of the body or specific parts of the body such as the skin, arms and legs. In their findings they observed that those who took part in their study mainly focused on parts of the body that could be easily concealed by clothing such as the upper arm. Further to this, they indicate that another potential factor involved in the type of self-injury and choice of location is what the person is communicating or expressing in the form of self-injury and to whom their expression is focused. In conclusion, they suggest that further research is required to ascertain a) whether methods of self-injury are combined and / or used separately or in conjunction with each other, and b) how choices regarding which areas of the body to self-injure are made.

In support of the importance of clarifying the type and form of self-injurious behaviours, Paivio and McCulloch (2004) conducted research using a series of questionnaires administered to 100 female undergraduates to measure whether alexithymia mediates the relationship between childhood maltreatment and the use of self-injury. They identified six forms or methods of self-injury that are used including hair pulling, head banging, punching, scratching, cutting and burning. In addition, they found that people who self-injure use various combinations of these methods and that cutting was the most frequent form of self-injury used.

In adolescents Ferentz, (2008) noted the symptoms of self-injurious behaviour to be acts of deliberate, repetitive, physical harm to their own bodies, and that the behaviour is typically done in private and kept secret and is usually impulsive. In addition, Ferentz makes the important distinction between self-injury and tattooing or body piercing, in that these are not self-injurious behaviours as they are carried out by

another person in a social context and are associated mainly with beauty, cultural and religious activities. This point is developed by Canver (2008) who reviewed literature regarding the development of our understanding of self-injurious behaviour and accordingly suggests that acceptable self-injurious behaviour such as tattooing is carried out in the presence of others, motivated by symbolic, ritualistic or sacred customs and cultural practices, in contrast to unacceptable self-injurious behaviour that is committed in isolation, lacks symbolism, ritualism, or sacred customs and cultural practice and can co-exist with other self-destructive behaviours such as drug taking.

Cognitive factors

Cognitive factors involved in the presentation of self-injury have received considerable attention and have been firmly supported in research findings as contributing towards the use of this behaviour. Nock and Banaji (2007), who examined the self-injurious thoughts of 89 adolescents using the 'Self-Injury Implicit Association Test' (SIA), supports the link between cognition and self-injury by clearly finding that there were significant differences in the self-injurious thoughts of those who self-injured in comparison to those who didn't. Developing this aspect of self-injury, Harris, Hawton and Zahl's (2005) longitudinal study used clinical and demographic data to explore the suicidal intent of a large sample of patients attending a general hospital over a period of five years. All the patients had self-injured and they concluded that assessment of these cognitive components of self-injury is valuable in understanding the relationship between self-injury and future suicide risk. Further to this point, Adams, Rodham and Gavin (2005) investigated how people using self-injury perceived and made sense of themselves. This was achieved by using

focus groups and interviews with 26 people aged between 16 and 26 years. It was found that there were major areas of conflict within the cognition of those who took part. They deduced from this that being denied self-validation can lead to a worsening of self-injurious behaviours.

Broadening the understanding of cognition related to self-injury Hjelmeland and Groholt (2005) interviewed 98 adolescents and 83 adults following their use of deliberate self-harm. They compared the experiences between these two groups and found that more adults needed to alleviate intolerable thoughts, engaged in more severe forms of self-injury, had a greater number of mental health conditions, and that these differences probably originated from cognitive immaturity. However in contrast, Hawton, Rodham and Evans (2009), who carried out a systematic literature review and school-based study involving more than 6000 adolescents aged between 15 and 16 years at 41 schools, suggest that in fact self-injury is an escalating problem in the adolescent population due to an increase in suicidal and self-destructive thoughts which are not necessarily related to cognitive immaturity.

Emotional factors

It is decisively supported through research that there is a strong link between self-injury and emotional factors. Murray, et al. (2007), Klonsky (2007) and Sutton (2007) investigated the causation of self-injury and found a strong correlation between emotional distress and self-injurious behaviours. Developing this point Lowenstein (2005), who used a review of research to examine the relationship between self-harm and suicide attempts in children and adolescents, proposed that self-injury can act as a resistor by creating a sense of emotional relief for an

individual i.e. from the negative emotions caused from conflicts with others, family difficulties, relationship difficulties and sexual troubles. Without this relief, which Alder and Alder (2007) describe as being temporary, lasting from hours to days, the debilitating individual's emotional state would become overwhelming. Expanding this observation, Hodgson (2004), who conducted research into self-injury using structured interviews via email correspondence involving 22 adults aged from 18 to 35 who self-injured, found that self-injury was used as an adaptive strategy to cope with emotions and relieve stress, keeping the individual safe from engaging in more serious forms of self-destructive behaviour. Supporting this, Schoppmann, Schrock, Schnepp and Buscher's (2007) phenomenological study involving the detailed accounts of the experiences of using self-injury provided by10 women aged between 18 and 35 years, revealed that self-injury is an effective strategy to relieve the person's painful experiences of alienation and therefore it is aptly understood as a type or form of 'self-care'.

Leading on from this Evans, Hawton and Rodham (2005), who conducted a study using anonymous self-report questionnaires administered to 6020 adolescents aged between 15 and 16 years, observed that adolescents who self-injured were likely to be isolated with their feelings and thoughts, unable to communicate verbally with others about their emotional troubles and that this situation gave rise to self-injury as a means of coping. Self-injury was a means of regulating the insufferable emotional states they encountered. Providing greater detail, Klonsky (2007), who reviewed empirical research to identify the functions of self-injury, proposed the following functional features of self-injury that are directly linked to emotional factors:

- Preceding self-injury, individuals experience severe negative emotions and arousal.

- Consequentially, the purpose of self-injury is to alleviate these negative emotions by regulating them.

- During and following the act of self-injury, individuals experience a notable reduction in their state of emotional arousal and the severe negative emotions they had been experiencing.

Exploring the rationale for using self-injury, Deiter, Nicholls and Pearlman (2000) conducted a study using a series of questionnaires answered by 233 adults from hospital and outpatient settings. They used the data obtained to investigate the relationship between self-injury and self-capacities including the individual's ability to tolerate severe emotions, ability to maintain their self-esteem and ability to maintain their relationships with others. They found that those who self-injured had deficits in their self-capacities which were associated with a history of childhood abuse. Related to this, Polk and Liss (2006) examined the psychological characteristics of self-injury by using a comparative study. This involved a series of questionnaires being answered by 194 psychology students aged between 18 and 37 who did not self-injure and 220 individuals aged between 18 and 47 years who self-injured and used self-help websites. Following a comparative analysis between the two groups Polk and Liss suggested that people who self-injured are likely to have not experienced emotional nurturance during their childhood and experience a high level of negative emotions which they need to evade.

Social factors

The social factors associated with self-injury, particularly within the adolescent population, have been studied by a number of researchers and have been clearly linked to this phenomenon. Walsh and Rosen's (1985) longitudinal study of 25 adolescents' use of self-injury showed that adolescents tended to imitate self-injurious behaviours. Also, they found that, over time, the adolescents involved in their study could trigger the act of self-injury in each other. They defined this as the 'contagion effect', consisting of a series of events where a person's use of self-injury is imitated by others in the environment. In support of the contagion of self-injury, Hawton, Rodham, Evans and Weatheralls (2002) conducted a cross sectional survey investigating the dynamics of self-harm using anonymous self-report questionnaires administered to 6020 adolescents aged between 15 and 16 years. Their findings provided conclusive evidence for a modelling effect of self-injury, which indicates that the contagion of self-injury occurs amongst adolescents. Developing this perspective, Taiminen, Kallio-Soukainen, Nokso-Koivisto, Kaljonen and Helenius (2007) studied the use of self-injury exhibited by 12 adolescents, who were residing in a psychiatric unit over a period of one year. They identified that the contagion of self-injury amongst adolescents is a means of bringing about feelings of togetherness – a form of mutual bonding amongst the peer group. Hodgson (2004) suggests that in a social context self-injury in the form of 'cutting' is a learnt behaviour and that this learning can take place through social contact such as between friends and chat websites. Heilbron and Prinstein (2008), who carried out a review of research and theoretical perspectives regarding the influence of peers on the use of self-injury, suggest that the salient influence of peers on the processes involved in an individual's

use of self-injury is linked to the reinforcement and preservation of self-injury during adolescence.

Researchers have provided further evidence that widens the range of social factors involved in self-injury such as Crouch and Wright (2007), who used interviews and participant observations to study the use of self-harm by six adolescents who were residing in a psychiatric treatment unit. They found that the adolescents competed with each other to establish themselves within groups of self-injurers as a person who is a 'genuine self-injurer'. Whitlock, et al. (2006) found that self-injury could emerge in an epidemic pattern amongst young people residing in a range of institutional settings such as hospitals and care centres. In comparison, Sinclair and Green (2005) used in-depth interviews with 20 adults who had used self-injury (in the form of self-poisoning) to discover that self-injury was a means of resolving an individual's lack of control within the context of the social and / or family structure they lived. As indicated by De Leo and Hellier (2004), who conducted a cross sectional study involving 233 adolescents who had deliberately self harmed, there are different types of self-injury contagion stemming from the family, social networks and residential environments.

Enlarging the range of social factors associated with self-injury, Dennis, Wakefield, Molloy, Andrews and Freidman (2005) carried out cross sectional study to examine the social factors involved in the self-injury used by 76 adults aged 65 years or over. Their findings suggest that those who self-injured in the older population were liable to have badly integrated social networks and experience hopelessness. Ayton, Rasool and Cottrell (2003) who conducted a cross sectional study using computer records held by hospitals to examine the details of patients under the age of

18 who had self-harmed, and Skegg (2005) who conducted a systematic review of literature on self-harm research, clearly found a link between social deprivation and the increased risk of people developing self-injurious behaviours. Developing this finding, Alder and Alder (2007) found that self-injury is spread amongst a wide social stratum including those from deprived inner city surroundings, those in foster care, the homeless, prison population, the poor and the privileged. They identified that there was an increasing number of self-injurers amongst youth subcultures such as 'Goths', and indicated that self-injury was a form of bonding ritual or rites within these subcultures. Alarmingly, Alder and Alder indicated that people learnt to self-injure as they formed their self-identity amongst certain social groups e.g. self-injury was exhibited as part of sexual blood play amongst individuals.

Interestingly Nock (2008) suggests that it is probable that people who originally self-injure for social functions, such as communicating distress to others, can eventually over time find self-injury automatically reinforcing. Also that those who originally self-injure in private away from others can find that the behaviour becomes increasingly contingent upon social factors and therefore reinforced in a covert fashion by the behaviour of others.

The effect of social factors in relation to self-injury is illustrated by Hawton, Harriss, Simkin, Juszczak, Appleby, McDonnell, Amos, Kiernan and Parrott (2000), who analysed the cases of self-injury presenting to a general hospital during the first week immediately following the death of Diana, The Princess of Wales. They found that there was a significant increase in reported cases of self-injury especially in

women. This finding very clearly demonstrates the salient influence of social factors on the occurrence of self-injury.

Occupational factors

There has been very little research conducted which investigates the relationship between occupational activity and self-injury. However, research has indicated that it is an important factor, such as Hempstead (2006) who used hospital discharge data to explore the geography of self-injury and found that the occurrence of self-injury is significantly linked to unemployment.

The association of occupational activity and its link to self-injury was recently demonstrated by Bowers, et al. (2007) who examined self-injury and suicide attempts in psychiatric hospitals, and identified that incidents could be reduced through three significant measures: regularly checking on patients; raising the proportion of qualified nurses: and organising more patient occupational activity sessions. Interestingly they found that at weekends, in comparison to weekdays, incidents of self-injury were found to increase in response to a reduction in organised, constructive and meaningful activities.

Interestingly Carlson, et al. (2007) found that an alarmingly high number of students were reported to have self-injured (around 13 to 15%). On closer examination two potentially linking factors emerged from the findings related to occupational activity: a) the students who self-injured tended to be high academic achievers; b) teachers claimed that self-injury was a form of coping for self-injuring

students. However, it is clear there is a lack of research which investigates and clarifies the links between self-injury and occupational activities.

Physiological factors

Researchers have linked physiological factors into the conceptual framework of self-injury such as Bohus, Limberger and Ebner (2000) who used clinical tests of pain with 12 female adult patients diagnosed as having borderline personality disorders. They explored the patients' thresholds to pain, during episodes of intense distress when they wanted to use self-injury. Their findings demonstrated the link between the use of self-injury, physiological factors (the actual experience of physical pain), borderline personality disorders and the perception of pain. Those who experienced a lack of sensibility to pain during self-injury showed an increased threshold for pain perception. Also Green (2007) who reviewed literature regarding physical pain and somatisation, explains how self-injury is described by many people who engage in such behaviours as painless and as a means of relieving cognitive and emotional tension. Therefore Green concludes that self-injurious pain is cognitively modulated by higher brain functions. Theodoulou, Harriss, Hawton and Bass (2005) investigated the association between pain and self-injury by examining the retrospective case notes of all deliberate self-harm patients admitted to a general hospital over a period of two years. From their findings they proposed that the act of causing physical pain was a major causal factor for incidents of self-injury. Supporting this Murray, et al. (2007) conducted research which suggests that central to the experience of self-injury for many was the feeling of physical pain and that this acts as a form of self-punishment. Swales (2007) reviewed literature regarding self-injury and described the experience of physical pain (caused through self-injury) and its relationship with emotional pain.

Swales concludes that internalised emotional pain, e.g. anger, is externalised or relieved through the physical pain created by self-injury.

Illustrating the complexity of self-injury in relation to physiological factors, Sandman and Hetrick (1995) reviewed clinical research which explored the opiate mechanisms involved in self-injury. Amongst their conclusions they demonstrated that the release of endorphins in the body following act of self-injury provides confirmation that endogenous opiates have a direct connection with the use of self-injury. More recently in support of this, Canver (2008) describes how repeated self-injurious behaviour can lead to the individual becoming addicted to endorphins or pain relieving neurotransmitters that are opiate based and released in the body when physical injury occurs.

The relationship between organic mental health conditions and self-injury has been supported by researchers such as Haw, Hawton, Houston and Townsend (2001). They examined the characteristics of mental health disorders and occurrence of self-injury in 150 patients who had attended a general hospital following acts of deliberate self-harm. They found a strong link between organically based disorders, such as depression and self-injury. Focusing on this finding, Parker, Malhi, Mitchell, Kotze, Wilhelm and Parker (2005) investigated the relationship between depressive conditions and deliberate self-injury in three samples of depressed hospital outpatients. They found that self-injury was common amongst those with a depressive disorder and that the use of self-injury was more prevalent in those with bipolar depression. In addition, they found that self-injury correlated with behavioural factors, demonstrating that it was associated with externalizing cognitive response to stress

and weak impulse control. Supporting this Haavisto, Sourander, Multimaki, Parkkola, Santalahti, Helenius, Nikolakaros, Moilanen, Kumpulainen, Piha, Aronen, Puura, Linna and Almqvist (2005), who conducted a longitudinal study to investigate the factors associated with suicidal ideation and acts of deliberate self-harm among 2348 boys from the age of 8 to18 years of age, found an association between depression and ideation. They suggest that this combination of factors for some people can lead to the use of self-injurious behaviours to reduce suicidal ideation.

Strikingly within this area there appears to be no research available which examines the relationship between those who have organically based communication difficulties such as some forms of dyslexia, and sensory impairments such as deafness and self-injury.

Summary

By evaluating combinations of links, interactions and synthesis between the behavioural, cognitive, emotional, social, occupational and physiological factors, it appears that the characteristics of an individual's self-injury can be formulated and will vary depending on the individual's personal circumstances and needs.

1.9. Conclusions drawn from reviewing the literature

This initial review of literature has captured a broad perspective of self-injury through considering the findings of previous studies, theoretical perspectives and from applying an evaluation using a holistic framework. This has clearly shown that in order to meet the shortfall in our understanding of self-injury, research is required which generates the formulation of robust theory from examination of the variables

and factors both clarified and discussed above. Importantly, this originates from my observation that currently there is a major deficit in available research which encapsulates in its entirety the following two dimensions:

- The broad spectrum of variables involved in and associated with the manifestation of self-injury, whilst

- Capturing the development and span of self-injury as a human experience.

This leaves a crucial gap in our understanding of this behaviour with particular regard to the development of self-injury over time (and this consequentially leads to a deficit of information available upon which to devise evidence-based treatment and care for people who self-injure). The design of this present study enabled the two dimensions specified to merge by obtaining adults' retrospective narrative accounts of their personal experiences of using self-injury during their transitions from childhood to adolescence to adulthood. Therefore, this study takes forward the recommendations of researchers, such as Brophy (2006), by expanding our comprehension of self-injury through focusing on exploring this neglected aspect of self-injury. This was achieved from a thorough investigation of the following main research question:

What are the experiences of self-injury during childhood, adolescence and adulthood?

Analysis of the experiences of those who self-injure during these periods clarified the meaning that self-injury holds for the individual over time and their prolonged use. This provided a clearer understanding of the circumstances under which self-injury occurs and is maintained during childhood, adolescence and into adulthood. In

addition, the research allowed for the experiences associated with the reduction and the cessation of self-injury to be clarified.

Investigating the experiences was achieved by conducting informal interviews with adults to obtain reflective, retrospective narrative accounts of their experiences of self-injury during their childhood, adolescence and adulthood. Masten (2004) suggests that this type of retrospective research design enables the researcher to obtain a naturally occurring pathway in the development of self-injury. The interview data formed a corpus which was analysed using a grounded theory method to develop a unique theory regarding the development of self-injury.

2.   METHODOLOGY

2.1. Design

The experiences encountered by the participants of using self-injury were explored using a grounded theory method, described by Glaser and Strauss (1967), Strauss and Corbin (1998) and Holloway (1997) as providing a structured analytical process for examining data and developing an explicit grounded theory. In support of the use of this method, Calloway and Knapp (2001), who made a comparison of qualitative techniques to analyse data obtained from interviews, found that grounded theory was effective in the analysis, understanding and interpretation of such data regardless of the analytical focus, coding method, or the method of data generation. When considering the contents of the corpus of data obtained in this study, which consists of individuals' narrative accounts of their personal experiences, Hilfinger, Messias and De Joseph (2004) found that such narratives present a story of life events in an order and format that makes sense and provides meaning to experiences. Sandelowski (1991) identified that this type of data serves the grounded theory analytical process by providing a form of structured language that acts as a means of communicating detailed information for analysis.

In addition, in the context of nursing, Sheldon (1998) describes how the grounded theory approach enables nursing researchers to rigorously explore rich sources of data, in particular individuals' descriptions of the experiences and provides the process from which an interpretative understanding of what has occurred can be made. From an alternative perspective, Nelson and Sethi (2005) describe how, in order to collect suitable data for a grounded theory analysis, they used an informal

interview format and that approach was appropriate in order to facilitate exploration of their participants' experiences over a period of time. These conclusions run on parallel to my conclusion - that I conducted in-depth informal interviews and obtained narrative accounts of the participants' experiences of self-injury over time, which formed a corpus of raw data (see Appendix A – for sample of transcript) that was analysed using the grounded theory method.

2.1.1 Existing literature and theory

The researcher - I have worked since 1981 in a variety of professional roles (registered nurse and assistant psychologist) alongside people who use self-injury and developed my understanding of this phenomenon and in particular the importance for the clinician to adopt an unbiased and empathetic approach towards them. However, before commencing this research, and in order to orientate myself to the topic of self-injury, a preliminary literature review was carried out which enabled me to: familiarise myself with the subject area; clarify what self-injury consists of – the key concepts; learn about the terminology involved in the field of self-injury; identify 'gaps' in research and information concerning self-injury; and develop a rationale for this study.

Importantly, due to my acquired applied clinical knowledge of self-injury through completing this general literature review, as described by Schreiber and Stern (2001), I was able to identify my thoughts and preconceived ideas regarding self-injury and crucially from this point widen my perception in the role of a researcher investigating this phenomenon. This was essential in reducing the influence of my professional knowledge and the impact of this on applying the grounded theory process of

analysis. This action is supported by Glaser and Holton (2009) who describe the importance of reducing any influence of preconceived ideas or notions, especially those of formed from a professional stance regarding the topic of investigation and that this is essential in order to gain theoretical sensitivity and insight which are fundamental components when applying the grounded theory process of data analysis.

Overall, through carrying out a general review of the literature available I was able to eradicate any clinical bias and ensure that theoretical sensitivity took place. In other words this meant that I (as a clinician) did not corrupt the grounded theory process of analysis and, crucially, the findings of this study. Complementing this healthy position of reflexivity, Schreiber and Stern (2001) explain how through the process of reviewing general literature regarding a phenomenon, the researcher acquires knowledge and background familiarity with the topic of investigation and subsequently this helped to promote, as described by Cutcliffe (2000), theoretical sensitivity, and subsequently ensured that the emergent theory was purely grounded in the data. Therefore, the second review of literature was carried out as an embedded aspect of applying the grounding theory process of analysis, which, as described by Schreiber and Stern (2001), provided additional data in the form of literature supporting the theoretical statements made and supported the process of triangulation of the emergent explicit theory.

Regarding theoretical models of self-injury stated previously (see pages 15-21), such as the 'biopsychosocial model', it was imperative I maintained a position of 'theoretical sensitivity' throughout the grounded theory process of data analysis. Despite being aware of existing theory it was important, as advised by Egan (2002) and Connell and Lowe (1997), that during the initial stages in the process of analysis

such as open coding, I did not focus on a premature inclination towards any single existing theory or literature regarding self-injury. This action, which is described by Glaser and Holton (2009), reduced any bias towards a particular theoretical influence or of any contamination of the data by the existing theory or literature, e.g. shaping it to fit a learning theory of self-injury, and allowed a unique and substantive theory to be generated purely from the data. Cutcliffe (2000) explains how such awareness in all probability serves to enhance the quality of the analysis and subsequent reliability of the findings. In support of this, and with specific reference to the study of self-injury, Nyquist Potter (2003) suggests that by not imposing theory on the process of interpreting what people have said, new knowledge and therefore theory may be allowed to emerge. Nyquist Potter goes onto describe how every act of self-injury requires interpretation and indicates that researchers should not predict in any way (or form) the meaning of the act and suggests that unbiased listening and evaluation leads to more accurate interpretation of the meaning of self-injury.

2.1.2. The informal interviews

Nelson and Sethi (2005) suggest that the use of informal interviews is an adequate way to generate data, and that grounded theory provides a suitable method of analysing this type of data. This informal style of conducting interviews was defined by Nichols (1991) as a form of open-ended or unstructured method of interviewing. Developing this point, Patton (1990) outlines how informal interviews are flexible and enable the interviewer (or researcher) to act responsively to what the interviewee (or participant) is saying. In other words, the informal interviews carried out, in this present study, provided the researcher with a position of maximum flexibility. This enabled the researcher to actively listen to what the participants were

saying and respond by providing opportunities for them to develop their narratives regarding the experiences of using self-injury. Expanding this point, Lofland, Snow, Anderson and Lofland (2005) explain how the informal interview consists of a naturalistic style of interviewing that is conducive to exploring interviewees' experiences and perceptions. Therefore, in this present study, the researcher did not structure the interview by asking a premeditated series of questions, to the contrary, the researcher remained open minded and flexible in responding to what the participant was saying. This informal interview process:

- Allowed the participants to express themselves. It created the conditions for them to give their accounts or to talk freely about their use self-injury, without the restrictions of answering a series of questions.

- Allowed the researcher to interact with and support the participants in describing their experiences of using self-injury. The open-ended questions, used by the researcher, were broad and asked according to how the participant's narrative developed. This provided the researcher with opportunities to explore particular points with the participant or gain more detail regarding what they were saying.

During the interviews, the researcher's flexible verbal responses were based on the researcher's awareness of a holistic framework of inquiry. This framework evolved during the initial general literature review (described on pages 1-35) with the intention of reducing any 'theoretical sensitivity' and 'breaking down' the main research questions into a set of secondary research questions.

Table 1. *Showing the breakdown of the main research question into a set of secondary (or probing) research questions.*

Main research question:
'What are the experiences of using self-injury during childhood, adolescence and adulthood?'

Holistic Framework:	**Secondary research questions:**
Behaviour	What are the behavioural experiences?
Cognition	What are the cognitive experiences?
Emotion	What are the emotional experiences?
Social	What are the social experiences?
Occupational	What are the occupational experiences?
Physiological	What are the physiological experiences?

The secondary research questions detailed in Table 1, above, were not asked by the researcher verbatim during the participants' interviews, but provided the researcher with an implicit framework of inquiry. Supporting the use of a framework, similarly Lofland, et. al. (2005) emphasised the importance of using a guide when conducting unstructured and informal interviews. The use of a guide or framework is particularly useful as it establishes a list of areas, for the researcher, to explore with the participants. Lofland, et. al. summarise this form of conducting interviews as a 'guided conversation', which is constructed by the researcher in a global fashion,

covering all aspects of the subject of inquiry. Therefore, in this present study, by using such a framework of inquiry:

- The researcher awareness and acknowledgment of the various aspects of self-injury was enhanced e.g. the emotional aspects of using self-injury.

- Importantly, the framework enabled the researcher to act responsively and closely follow the participant's narrative and recognise the factors or components involved in the participant's use of self-injury.

- Also, it meant that the researcher did not become focused on any theory or particular findings of previous research, e.g. affect regulation, but in contrast the phenomenon of self-injury in its entirety.

Overall, the framework enhanced the researcher's holistic awareness of the range of aspects that could be associated with the participants' use of self-injury and increased the likelihood of the researcher delivering a consistent form of response, during all the participants' informal interviews. Additionally, the actual questions asked by the researcher were formulated on what the participant actually said, in other words, the researcher's question followed the participant's lead. Therefore the researcher's questions maintained an unbiased or non-leading interview approach, whilst providing a flexible framework of inquiry from which to support and respond to the individuals during their interviews. Lofland, et. al (2005) refers to these types of questions as 'probes', which have the purpose of:

- Reminding the researcher to explore certain areas defined by the framework of inquiry (or guide).

- Probing for aspects of the topic not mentioned by a participant.

Therefore, the researcher only used questions and statements (paraphrasing on occasions what the participant had said) when necessary to prompt the participants to give a full narrative account of self-injury, and importantly with regard to rigour these questions were recorded within the interview transcripts.

Establishing trustworthiness of the researcher's conduct during the informal interview process, the researcher had attained a competent level of practice in conducting interviews and had achieved accredited qualifications endorsing this level of competency, e.g. listening and responding skills, recognition of the boundaries between interviewer and interviewee, an awareness of issues relating to transference and an applied knowledge of issues relating to self-presentation as defined by Lee and Roth (2004), e.g. stake and footing of interviewer and interviewee. Therefore, the researcher was particularly mindful that the process of informal interviewing comprised of the active roles of both the researcher and the participant. This awareness meant that the researcher was not drawn into a particular role, e.g. to become an advisor, by the participant during the process of being interviewed. Also, following each interview the researcher both acknowledged and reflected on the interaction that had taken place between himself and the participant. This reflective task was documented in the form of a reflective statement (see Appendix C – for reflective statements) that was written by the researcher regarding each individual interview. With regard to the participants', following each interview they completed a written form of evaluation (see Appendix Q - for Participant Feedback Forms - Evaluation Summary), which the researcher read and reflected upon with regard to the

participants' interview experience. These combined actions enabled the researcher to monitor and evaluate their own performance, in the role of interviewer, and increased the consistency of the researcher's approach during the 25 informal interviews involved in this study.

Further highlighting the importance of the researcher's reflective thinking, Jasper (2005) argues that reflective writing is a fundamental part of qualitative methodological processes. Relating Jasper's point to this present study, the researcher's post-interview reflective actions described above:

- Increased the trustworthiness of the researcher's observations. This was achieved by the researcher's post-interviews reflective statements (or log) and acknowledgment of the participants' post-interview feedback. Both these integral aspects of completing the informal interview process signalled any wider interpretations and unspoken factors that occurred during the interviews, which may have influenced the interview process and delivery of the narrative accounts.

- Provided the researcher with an opportunity to think critically and evaluate their role as interviewer in relation to the interviewee. Therefore, acknowledging the impact of the interviewer and interviewee on the interview process.

- Contributed towards the transparency of the informal interview process and verifiable audit-trail of the research.

Additionally, the researcher had access to supervision regarding any issues of transference or concerns arising from the participant interviews. This supervision also acted as a strategy to monitor the researchers' performance with regard to conducting the interviews.

Overall, using an informal interview process enabled the participants the opportunity to give their own retrospective narrative accounts of using self-injury and associated events or experiences during childhood, adolescence and into adulthood. They told their own personal 'stories' of using self-injury, which Glaser and Holton (2009) described avoided the filtering or forcing of data. Sandelowski (1991) provides justification for this research approach by explaining that an event in life cannot be fully explained whilst it is occurring but only following its occurrence. In addition, Hardt and Rutter (2004), who investigated the validity of retrospective accounts given by adults, concluded that despite some response bias accounts and under-reporting, the adults' retrospective recollections of earlier adverse experiences in their lives were adequately reliable and valid.

Regarding the narrative accounts, the interview approach used was appropriate in order to facilitate exploration of the participants' experiences over a period of time. Supporting this, Sandelowski (1991) found that narratives serve the grounded theory analytical process by providing a form of language that acts as a means of communicating detailed information. Hilfinger, et al. (2004) explains how narratives provide a story of life events in an order and format that makes sense and provides meaning to experiences. In this present research, the participants' personal experiences or stories of self-injury during childhood, adolescence and into adulthood

were investigated. In context of this, Sandelowski (1991) and Hilfinger, et al. (2004) support the use of interviews in research as a means of creating the right condition for obtaining rich and detailed narratives. Sandelowski (1991) goes onto describe how narratives provide the researcher with information in order to:

- Understand the human being as a subject of inquiry.

- Conceptualize interviews.

- Obtain a source of data that can be analysed and capture the human experience being studied.

With specific relevance to self-injury, Sinclair and Green (2005) clearly demonstrated that by obtaining and analysing narrative accounts of self-injury, they were able to draw several reliable conclusions regarding the use of self-injury by a specific group of patients who had been discharged form hospital. They used these findings to contribute to the development of suitable treatment options for this group of patients.

Complimenting the use of informal interviews, in order to enhance the participants' recollections of their experiences of self-injury, the researcher presented a simple illustrative or visual timeline to illustrate the context of the study and to enhance their recollection of events over time (see Appendix B – Visual Timeline). Several researchers have effectively used a similar technique in their research to support people to recall past events, such as Prince and Davies (2007) and Wilson, Cunningham-Burley, Bancroft and Backett-Milburn (2007). Importantly, Van der

Vaart and Glasner (2007), who investigated the use of visual timelines, found that during interviews the presentation of a visual aid was an effective tool in:

- Facilitating, encouraging and enhancing the participants' memory recall of past events.

- Exploring past events with participants and increasing the accuracy of details they provide.

Further to this, Sandelowski (1991) and Pain and Francis (2003) found that using this technique effectively supported the process of inquiry, evaluation and interpretation of events over a period of time. Deacon (2000) described how timelines are an effective method of enhancing the process of memory recall in a chronological pathway, which was conducive to the transitions being investigated in this study, Also, as indicated by Suddaby and Landua (1998), timelines help the researcher to understand self-injury in context to its development over a transitional pathway and, as found by Pain and Francis (2003), encourage the necessary active involvement of participants.Wilson, et al. (2007) made an important observation that the timeline technique supports participants not to miss important details, which are not necessarily addressed by any interview questions. In addition, on reflection of the informal interview process used, the researcher noted that the presence of a concrete, tangible, visual timeline representation appeared to support the participants and researcher during the interview process to acknowledge and focus on describing, and capturing, the experiences of using self-injury over time.

2.1.3. Rigour and trustworthiness

The design of this study incorporated aspects of Chiovitti and Piran's (2003) schema for establishing rigour in nursing research, including:

- Firstly, the procedure for recruiting the participants and for supporting them in their participation has been stated in written protocols and the demographic details were recorded and described in the findings. Also the researcher ensured that the participants were empowered to lead their involvement in the inquiry process, in particular, during the interview they attended. They were enabled to disclose their own narrative accounts and they were not forcibly led in this process or prompted by answering a series of questions. Therefore, they were able to take the lead in describing the details of their experiences of using self-injury. These actions as supported by Chiovitti and Piran, enhance the credibility of the findings. Developing this point, the corpus of data obtained reflected the language and terminology used by the participants and the quotes used within the analysis process demonstrated how the participants' input remained the leading source of evidence for the emergent theory regarding self-injury. These factors add to the credibility and trustworthiness of the findings.

- Secondly, to improve rigour, the emerging theory was checked by cross-referencing it against what the participants actually said in the audio recordings and written transcripts. This action supported the process of establishing that the interpreted meanings for participants' use of self-injury were accurate. Therefore, what they had described directly contributed to the formation or construction of the emergent theory. Additionally and reflected

throughout the process of analysis, the language used by the participants was maintained and not replaced or distorted, which Chiovitti and Piran specify reinforces the credibility of the findings.

- Thirdly, the written documentation generated through using the systematic grounded theory method of analysis, provided theory triangulation, which, as described by Chiovitti and Piran, means that the construction of the theory is recorded and auditable. Additionally, following each participant interview, the researcher ensured the completion of a reflective statement (or log) of the ethical and procedural issues (see Appendix C – for reflective statement) observed and a summary of the researcher's initial conceptual interpretations of what the participant had described or first memos (see Appendix D for sample of first memos). These actions increased the credibility and trustworthiness of the findings.

- Lastly, to improve rigour, the research findings were discussed in reference to relevant previous research, which Chiovitti and Piran argue increases the transferability of the findings of this study.

2.1.4. Summary

In summary, the design of this present study consisted of conducting informal interviews using a combination of techniques to obtain retrospective narrative accounts' of participants' experiences of self-injury during their transition from childhood to adolescence to adulthood. A simple visual timeline displaying the transitional period under inquiry was both visually (A4 poster) and orally presented at the beginning of the interviews and remained visible throughout the interview. The

recorded interviews were transcribed to form a corpus of data which was then analysed using a grounded theory method of analysis.

2.2. The participants

The participants were adults, all of whom shared a common factor: that sometime during their childhood or early adolescence they started using self-injury. In planning to interview adults about their childhood and adolescent experiences of self-injury there were several crucial considerations to be made, including: the duration of the childhood and adolescence, onset of adulthood and the reliability of adult recollections of their experiences of earlier times. These factors are obviously influenced by the individual differences between each adult who have their own set of unique and personal circumstances. This is supported by Woldorf (2005), who indicated that individuals who self-injure come from a diverse group of individuals. However, for purpose of providing clarity and assisting the participants to recall their experiences, childhood was defined as being their primary school years and adolescence as beginning during the first years of secondary school, which is roughly the age of puberty and extending until they were around the age of 18 and had left school. From this point in their lives adulthood began. This pattern is reflected within the stages of Erikson's (1963) psychosocial model of development. However, as a matter of caution, Osgood, et al. (2005) found that adolescence has extended in recent decades to the late twenties in a social context. Supporting this, Roisman, Masten, Douglas Coatsworth and Tellegen (2004) suggest that the transition to adulthood is typically reached by approximately 30 years of age.

Regarding the issue of the reliability of adult recollections of their adolescence, as stated by Erikson (1963), the age range is appropriate owing to the richness of the experiences and capacity for reflective thinking that is generally associated with people of around 30 years and older. Supporting this, 'Outside the Box' (2008), who investigated 'adults experiences of self-harm' identified that there is value in learning from adult experiences and that adults can provide both detailed and valuable accounts of their experiences of self-injury from its onset and into adulthood.

With these factors considered, I decided to obtain narrative accounts of the experiences of self-injury encountered by a group of 25 adults living in the community, aged between their late 20s and early 50s, who self-injured during their adolescence and either had or hadn't continued to self-injure into their adult lives. In addition, while the vast majority of previous research has involved hospital inpatients or outpatients (Klonsky, 2007), the participants in this study were independent individuals living and working within the community who were not suffering from any debilitating psychiatric condition or illness. The fact that the participants in this study were recruited from the community at large is a unique feature of this study.

2.3. Materials

A draft set of materials required in the participant recruitment process and a protocol for conducting the research were designed and developed (all the final materials used in the main study can be found in the appendixes) including:

- Invitation to participate in research.

- Participant screening and risk assessment.

- Participant information and briefing pack.

- Planned participant informal interview.

- Participant informed consent form.

- Participant debriefing.

- Participant feedback form.

Draft invitation to participate in research

A draft invite was designed that consisted of one page of written text giving a brief outline of my (the researcher) details, the participation inclusion criteria, contact details, a statement regarding confidentiality and the research supervisor's name and contact details.

Draft participant screening and risk assessment

The following preliminary inclusion and exclusion sets of criteria were selected upon based on ethical issues and previous research:

- Inclusion criteria - The be eligible for the study, participants had to be aged between their late 20s and early 50s, generally in good health, living and functioning adequately within the community and had self-injured during their adolescence. This behaviour might have been confined to adolescence or they could have continued self-injuring in their adult lives. Erikson's (1963) argument that adults have the capacity to provide rich accounts of their

experiences due to their reflective way of thinking, in contrast to adolescents or young adults who self-injure - in the midst of an array of changes in their life - was important in selecting the age range of participants for this study.

- Exclusion criteria -Those who did not meet the participation criteria, those with no history of self-injury and those who did not agree to the conditions for participating were excluded from this study. In addition I did not recruit those who could not agree that by taking part they would not knowingly place themselves in a situation whereby they would induce an episode of self-injury. People who were younger than 28 years of age or over 55 years old were excluded from the study. I did not recruit hospital in-patients or people suffering from an acute mental health condition or those who had a notable developmental disorder (moderate/severe learning disability) or those prescribed major anti- psychotic medication. The reason for this is that self-injury is likely for these people to be complicated by more prevalent personal problems or be a secondary condition amongst a possible array of disturbed behaviours.

Those who responded to the invitation contacted me via email or on a research-dedicated phone. At this point, a mutual arrangement was made for me to phone the person to complete a participant screening and risk assessment. This assessment consisted of the identification of any communication difficulties and needs required for any individualised participation support plan, a checklist of the inclusion and exclusion criteria, clarification that the persons understood and agreed with the condition for participation and an opportunity to ask any questions or express any concerns. Completion of the screening enabled me to check and reiterate the

participation inclusion and exclusion criteria and inform them of the condition for participation. Additionally, identification of exclusion criteria indicated a level of risk which this study was not designed to manage. In this case, the potential participants were politely informed why they did not meet with the requirements to participate and thanked for their interest. Those who met the inclusion criteria and wanted to proceed were asked to give an email or postal address and were forwarded a Participation Information Pack and Briefing.

Draft participation information and briefing pack

A draft Participant Information and Briefing Pack was designed which contained full details of the participants' and researcher's roles and responsibilities, including: overview of the research and participation process, issues of confidentiality, participants' and researcher's rights, ethical issues, participation briefing and contact details of organisations supporting people who self-injure in the community. The main reason for providing this detailed information was to ensure that participants were recruited with full knowledge of what the study entailed and the areas to be covered in the interviews. As a result of my forwarding this pack in advance of any further contact, the person had enough time to read and develop their understanding of what their participation involved, allowing them to freely decide whether to take part or not. The pack contained instructions on what do: a) should the interested person want to contact me with any questions or concerns and /or b) proceed in the process of taking part.

Planned participant informal interview

Upon a person deciding to proceed and subsequently contacting me, I agreed in consultation with them on a mutually convenient date, time and venue for their

interview, to take place in an allocated interviewing room. On the day of the interview I took any necessary measures to maintain the participants' anonymity, such as meeting them at the University entrance and escorting them through the security and admittance procedures.

Draft participant informed consent form

Before the participant interview took place, the individual was required to give their signed and oral consent, therefore a draft Participant Informed Consent Form was designed. This form included a series of Yes / No answers regarding their consent, including that they:

- Had read the information provided regarding the study.

- Agreed with condition for participation.

- Had the opportunity to ask questions and discuss the study.

- Had received satisfactory answers to all questions asked.

- Had received enough information concerning the research.

- Had understood that they were free to withdraw from the study.

- Had given permission to have the interview audio-recorded and stored by the researcher.

- Had given permission for the researcher to use quotations from their transcript.

- Had agreed to take part without prejudice as a responsible adult with full liability for his or her own actions.

Additionally, I was required to complete two sections agreeing to protect the person's identity and personal details, to destroy the audiotape recording and keep the interview data in a secure place. Both the participant and I were required to sign and date the form. The form incorporated the research supervisor's name and contact details. In addition the form provided the contact details of a named counsellor with specialist knowledge and skills in counselling people who use self-injury should the participant require specialist assistance or support.

After giving signed consent and before the actual interview commenced (with the audio-recorder switched on and recording) the participant was asked whether or not they agreed to participate. This ensured that, in addition to the participant's signed consent their oral consent was obtained. Once this oral consent had been provided, the interview proceeded.

Draft participant debriefing

Following the interview, I was required to orally debrief the participant by reading the debriefing to them. In order to achieve this, a draft Participant Debriefing was designed. This consisted of inviting the participant to raise any issues or concerns regarding the interview and the experience. The participant was encouraged to voice their thoughts about the participation process and informed that, following their participation, they could contact me with any post interview questions or concerns. The participants were also provided with a written copy of the debriefing.

Draft participation feedback form

To complement the debriefing process, the participant was given a Participant Feedback Form. This provided the participant with the opportunity to reflect on their

thoughts and feelings regarding the interview experience in a written format. Additionally, this valuable feedback enabled me to monitor ethical issues and identify any concerns about the interview process and respond as necessary.

2.4. Pilot Study

2.4.1. Introduction

Between April and May 2008, I conducted a pilot study using the draft materials (described above) with two individuals, one adult man and woman, who met the participation inclusion criteria. The primary purpose of the pilot study was to evaluate, amend, and subsequently develop and refine the materials and informal interview process for use in the main study. In addition, an inter-rater reliability test was conducted to measure objectively the reliability of my interpretations of the corpus of data, obtained from the interviews conducted with the pilot study participants with regard to their experiences of self-injury. The participant and researcher feedback evaluation findings, results of the inter-rater reliability test and critical evaluation of the inter-rater interpretations are described below (pages 64-68).

2.4.2. The participants

In response to an invitation to participate in the pilot study, four potential participants were identified. The people were screened using the draft Participation Screening Criteria/Researcher's Checklist and Risk Assessment. It transpired that two people were excluded from the study because they met with several exclusion criteria (the specific reasons for their exclusion are confidential). Two people (one female and one male) met the inclusion criteria and were subsequently forwarded the Pilot Study

Participation Information Sheet (see Appendix E for details) and the pilot study draft materials described above (pages 51-56). Both participants contacted me to arrange an interview.

2.4.3. Informal interviews

The setting for the individual interviews was a private and quiet room with comfortable seating arrangements and refreshments. The interview environment was free from distraction and any direct influence from others. I ensured that I took adequate measures to keep myself safe in the interview situation by ensuring that I carried a personal audio alarm and made others aware that I was conducting research interviews in the nominated room. In addition, I ensured that the interview room was not isolated and that the interviews were conducted during working hours (9am to 5pm), when other people were nearby. My seating position in the room was near to the exit so I had a clear exit at all times during the interview.

Before the interviews commenced, I orally presented the draft Participant Informed Consent Form to the participants. The written form was then given to the participants to read and answer the consent questions before signing and dating the form. I then read aloud the section of the form that outlined my responsibilities to the participants and also signed and dated the form. This encouraged a mutually binding agreement between the participants and me in the role of researcher. In addition, I brought the participants' attention to the last section which gave the details of a named counsellor should they require any assistance or support following the interview. At this point in the consent procedure, both participants chose to give me different names to use throughout the study in order to protect their identities. The

participants were then presented with the Visual Timeline on an A4 Poster. I described the function of the timeline, in particular its use in prompting them to give a narrative account of their experiences of self-injury during three periods in their life: before adolescence (as a child), during their adolescence and as an adult. The Visual Timeline was displayed within eyesight throughout the duration of the interview.

At the beginning of the audio-recorded interviews, I asked the participants to give their oral consent (providing an oral record - complementing their written consent). I then conducted the interviews according to Berg's (1995) 'Ten Commandments of Interviewing' (see Appendix F for details) and with a consistent awareness of the 'Holistic Framework of Inquiry (see pages 40-43 for details).

2.4.4. Post-interviews

On completion of the interviews I orally debriefed the participants and ensured they were given a written copy of the Draft Participant Debriefing. I provided the participants with the opportunity to ask questions and express any concerns. The participants were orally assured that any reference to what they had said during their participation would be treated by me in strict confidence and that the different name they had given would be used at all times to protect their identity. The participants were orally informed that the recorded interviews would be transferred into written transcripts and that when the research was completed the recorded interviews would be deleted. The written transcripts would be stored in a secure cabinet that only I would have access to. The participants were then given a draft Participant Feedback Form to complete. Following this they were given a Participants – Pilot Study Feedback Form (Appendix G) to complete, which both participants chose to take

home to complete (so they could reflect on the experience in their own time) before forwarding onto me. Also, before leaving the interviews the participants were each given £20 expenses payment and then signed an expenses payment receipt. Additionally, whilst the event was fresh in my mind I then completed a Researcher's - Pilot Study Feedback Form (Appendix H) and completed a reflective statement of my initial interpretations of the ethical and procedural issues.

2.4.5. Evaluation of the pilot study materials and interview procedure

Following a thorough evaluation of the completed feedback forms including the: Participants' and Researcher's Pilot Study Feedback Forms, Draft Participant Feedback Forms, it was concluded that:

The interview experience

One participant was slightly anxious about taking part. However, she mentioned that this anxiety was greatly reduced by my approach and by the informal interview format. The second participant felt glad to have taken part and hoped that their contribution was helpful. Both participants confirmed that there were no aspects of the research that concerned them personally. Both participants were satisfied with my answers to their own questions. Both participants found that my approach was courteous and respectful. Also, both participants found that there were no issues resulting from their experience of taking part which indicated that improvements should be made to the interview process.

Invitation to take part

Both participants found the Invitation to Participate in Research clear and understandable.

Phone and email contact with the participant

Both participants were satisfied with my phone contact with them. One participant said it was simple and informative, the other participant said that I was polite and pleasant.

Participant information and briefing pack

Both participants confirmed that they were able to understand the contents of the Participation Information and Briefing Pack. I supplied the participants with the Participation Information and Briefing Pack in advance of attending the interview, allowing them enough time to read and digest the contents and to contact me with any questions or concerns.

Informed consent form

Both participants confirmed that they were able to understand the contents of the Informed Consent Form.

The interview setting

Both participants found the interview setting comfortable. I was attentive to the interview setting and carefully arranged the furniture with the participants in mind.

Visual timeline

Both participants found the Visual Timeline useful. One participant mentioned that she always found visual prompts helpful. The second participant mentioned that it was useful in supporting him to keep focused on the time periods being explored. During the interview I was able to make use of the Visual Timeline as an aid in

summarising what the participant had said. It also helped me to utilise the holistic

global framework of inquiry. It supported the participants and researcher during the

interview process by focussing on, and capturing the experience of self-injury over

time. I noted, that rather than having the Visual Timeline on a flip chart, it would be

less formal and friendlier to present the timeline in a simple poster format. The poster

was suitably fixed on the wall of the interview room.

Interview questions

Both participants confirmed that the interview questions were clear. One

participant found them to be well formed but not contrived. I noted that the informal

interview approach allowed for a relaxed and unpressured form of questioning. This

certainly alleviated the concerns of being subjected to a series of direct questions that

one of the participants was anxious about. In addition, the informal questioning

supported the participants to be able to 'talk freely' - to tell their own story – describe

their personal and unique experiences self-injury. I concluded that a more formal and

structured interview would have been less conducive to this process.

Researcher's listening / attention

Both participants confirmed that I listened attentively to what they were saying.

One commented how I had absorbed everything she said. I was attentive and showed

interest in what they had to say.

Debriefing

Both participants found that the debriefing was adequate and clear. I felt that the

participants' appreciated a brief / short and concise debriefing as they both appeared

tired following the hour-long intensive interview. Therefore the debriefing was appropriately brief covering all the necessary points required.

The researcher's approach

Both participants found that I was respectful, cordial, and appreciative towards them.

The researcher's appearance

Both participants found my appearance to be acceptable. One said that I was smart and casual and felt that this was very important in order to not give the appearance of superiority (by wearing formal dress).

Participant feedback form

Both participants confirmed that the Participant Feedback Form was understandable and successfully completed it. One participant added that it was also very interesting. Both participants satisfactorily completed the Participant Feedback Forms. The form was simple, requiring quick short answers, which was appropriate and not too demanding on the tired participants.

Strong points of the interview

Both participants noted strong points regarding the interview. One participant stated that there were no leading questions or leading body (non-verbal) language. The second participant found that not being subjected to questioning allowed them to "…just freely talk". I noted that the visual timeline was a particularly strong point of the interview (it was planned and designed with the positive findings of previous

researcher in mind). Also, the informal interview process allowed the participant to describe their narrative account of self-injury and success in doing this was essential in order to capture their experiences over time.

Weak points of the interview

Both participants confirmed that they had found no weak points regarding the materials or interview procedure. I noted no weak points apart from the fact that during one of the interviews the room became cold towards the end of the interview. Therefore I checked that the heating of rooms for the main study was adequate.

Improvements to the interview

One participant made no suggestions for any necessary improvements to the interview. The second suggested that light snacks should accompany the tea and coffee. However, this minor improvement of light snacks was subject to the conditions/regulations for the use of the venue (room), for example, no food or drinks allowed on the premises.

Ethical issues

Neither of the two participants raised any ethical issue or other issues that they wanted to discuss at the end of the interview. I reminded them that they could contact me after the interview by email or phone with any questions or concerns. I found that the informal interview process provided me with the opportunity to consider the participants' needs during the interview process and to adjust my responses accordingly. I certainly believe that by being genuine, attentive and validating towards the person I enhanced the interview process and participants' positive

experience of taking part in the study. Also, the form of inquiry I used, as stated by one of the participants, meant that their anxiety level was reduced as I was not overwhelmingly direct and therefore my interaction with them was comfortable.

2.4.6. Inter-rater reliability test

Conducting an inter-rater reliability test was used to establish the reliability of my interpretations of the qualitative data, using a quantative and objective statistical method. This test, as used by Rausch and Hamilton (2006) and Pope Zieblend and Mays (2000) supports the reliability and accuracy of my (the researcher's) initial interpretations of what the participants had said - the basic themes contained within the transcripts or corpus of the pilot study data. Pope, et al. (2000) suggest that use of the inter-rater reliability test means that critiques cannot simply dispute that the findings are based on subjective interpretations of an individual researcher. In support of this, Armstrong, Gosling, Weinman and Martaeu (1997), who examined the use of the inter-rater reliability test in qualitative research, found that the concordance between several researchers of transcript data showed close agreement of the basic themes. This complemented the procedure used within this pilot study where the raters were required to identify through interpretation the initial basic themes contained within the corpus of pilot study data using a category coding system.

The second rater:

- Holds a BA Honours degree in Humanities and History (with Philosophy).

- Is a proficient researcher, experienced in qualitative research, and in particular in the analysis of discourse and of interpretative written data.

The second rater, being purely an academic (unlike myself) was able interpret the pilot study corpus of data from a non-clinical, unbiased and independent research perspective.

Procedure and results

Firstly, rater 1 devised a category coding system which consisted of the initial basic themes contained within the two transcribed pilot study participant interviews, which formed a corpus data. Using this category coding system and on the premise of strictly independent rating, rater 1 and rater 2 interpreted and labeled the corpus with the initial basic themes they identified. The raters' interpretations were then transferred onto a confusion matrix where the agreed ratings were combined and differences were established (see Appendix O - for details of Category Coding System, Confusion Matrix and Inter-rater Reliability Test).

The result of the inter-rater reliability test provided a Cohen's Kappa *(K)* score of 0.70.

The significance of this *K* score according to Fleiss's (1981) 'rule of thumb' was a score that established my interpretations were 'good'. Therefore, as agreed with the University Research Ethics Committee (see Appendix P for extract from UREC Application form, pertaining to Section 2. 11.) "…if a score of above 0.60 is obtained that confirms my interpretations are good to excellent and therefore reliable, then main study will proceed..." Subsequently, I informed my first supervisors of the *K* score and made plans to progress with the main study.

<u>Critical evaluation of the inter-rater interpretations</u>

From evaluation of the 'confusion matrix' it was established that there was 72% (398) concordance in the interpretations between rater 1 and rater 2. However, in 28% (159) of the interpretations differences were found between the raters. Closer examination of the differences in these interpretations shows that:

- 4.5% (25) were found between the cognitive interpretations of rater 1 and self-injurious behaviour interpretations of rater 2.

- 3.8% (21) of the differences were found between the emotional interpretations of rater 1 and social interpretations of rater 2.

- 3.6% (20) of the differences were found between the self-injurious behaviour interpretations of rater 1 and cognitive interpretations of rater 2.

- 2.7% (15) of the differences were found between the emotional interpretations of rater 1 and self-injurious behaviour interpretations of rater 2.

- 2.2% (12) of the differences were found between the social interpretations of rater 1 and self-injurious behaviour interpretations of rater 2.

Further examination of these differences, when matched with the corresponding transcript content, indicated that the context in which the social, emotional, cognitive and self-injurious behavioural factors described by the participants could be strongly interrelated. This observation, together with full consideration of the raters' interpretations and the fact that this was the initial stage in the grounded theory process of analysis (identifying the initial themes with only two participants)

illustrated the complexity of the phenomenon. It also confirmed that the themes identified were strongly interrelated and existed within a unified and multi-faceted relationship with each other. In the main study these apparent inter-relationships were explored further by applying the grounded theory process of analysis.

However, it was essential that, at this early stage in the research, I maintained a position of 'theoretical sensitivity'. As stated by Egan (2002), Connell and Lowe (1997), during the initial stages in the 'grounded theory' process such as identifying the initial basic themes, the researcher must decline to focus on any premature inclination towards any single existing theory or of forming any premature theory, in this case regarding self-injury. This action on my part acted to reduce any bias towards a particular theoretical influence or of any contamination of the data by existing theory, literature or researcher bias, for example, shaping it to fit a learning theory of self-injury. It was vital that I allowed a unique and substantive theory to be generated purely from the data. In support of this and with specific reference to the study of self-injury, Nyquist Potter (2003) suggests that by not imposing theory on the process of interpreting what people have said, new knowledge, and therefore theory, may be allowed to emerge. Nyquist Potter goes onto describe how every act of self-injury requires interpretation and indicates that researchers should not predict in any way or form the meaning of the act, and suggests that unbiased listening and evaluation leads to more accurate interpretation of the meaning of self-injury.

2.4.7. Conclusions of the pilot study

The evaluation of the participants' and researcher's pilot study feedback raised no issues, concerns or suggestions that indicated the necessity to amend the research

documentation or interview procedure. Therefore the following materials were prepared for use in the main study: Invitation to Participate in Research (see Appendix I, for criteria), Visual Timeline, Participant Screening Criteria – Researcher's Checklist and Risk Assessment Form (see Appendix J for completed forms), Participant Information and Briefing Pack (see Appendix K), Participant Informed Consent Form (see Appendix L for completed forms), Participant Debriefing (see Appendix M) and Participant Feedback Form (see Appendix N).

The findings of the inter-rater reliability test established that my interpretations of the data were reliable. Regarding the differences in interpretations, a critical analysis was carried out as defined above and the outcomes noted. Conducting the pilot study was extremely helpful in creating the opportunity for me to develop my awareness of self-injury as a topic of study. The exercise confirmed to me that there was a need for continuous personal reflection concerning the informal interview process. In addition, due to my previous experiences in effectively conducting qualitative studies, my very careful planning and implementation of the pilot study was a success and I greatly reduced the need for any post-pilot study amendments or action/s

2.5. Main Study

2.5.1. Introduction

Following the evaluation of the pilot study there were no subsequent amendments or refinements to the documents and interview procedure. Therefore, the main study proceeded according to the protocol defined in the Participant Information and Briefing Pack. The inclusion and exclusion criteria remained unchanged.

2.5.2. Networking and research invitation

The first stage in recruiting participants was to approach a wide range of organisations and groups such as Self-Injury and Related Issues (SIARI), that provide support for people who self-injure and to inform them of my research. This contact was both interesting and productive, for example, meeting with various managers and directors of organisations and presenting the research to individuals and groups. Most importantly, I was utilising my networking skills and establishing myself as a researcher in the field of self-injury. In addition, I was orientating myself to what community resources were available to people who self-injure and the present situation for those who self-injure in context with Health and Social Care. This increased my awareness in the role of researcher investigating self-injury. To complement this networking exercise I also:

- Attended a self-injury training day at South London and Maudsley (SLAM) NHS Trust, Crisis Recovery Unit, together with a wide range of professionals working alongside people who self-injure in community and hospital settings.

- Visited and discussed my research with directors/managers, from the Oakview Hospital, Oxleas NHS trust, and Priory Healthcare Ltd, all of whom provide care and interventions for people who self-injure.

- Informally met or communicated with people who self-injure through several anonymous 'Self-Injury Support Groups'.

- Met with and discussed my research with a number of professionals and people with a vested interest in self-injury including: academics, psychiatrists,

social workers, occupational therapist, psychotherapist, cognitive behavioural therapist, nurses, psychologists, carers, parents and charity providers.

I then circulated the 'invitation' to take part in the research amongst the network I had established. This involved either sending the invitation via email and / or posting hard copies to the organisations' facilitator or support website owners. Two organisations specified that according to their own ethical protocols they would reply to any initial enquiries and would, on behalf of the interested persons, communicate their contact details to me. In addition:

- I made contact with the directors of a national support network for people who self-injure, named First Signs, joined their professional forum group and have actively attended their annual self-injury network meeting.

- Arranged to meet up with an unnamed (anonymous) self-injury support group on a monthly basis.

- Had ongoing contact with five self-injury support website owners, including Self-Injury and Related Issues (SIARI), No Secrets, FirstSigns, Sirius Project, and Safe Haven. They have all been very supportive of my research and provide a source of updates on issues regarding self-injury.

- Regarding my contact with SIARI, with the support of the owner Jan Sutton (a prominent figure in the field of self-injury) my research was posted in the number one position on Google search – quote: 'self-injury research UK'.

- Formed a self-injury network, linking my research to the public domain.

Establishing these networking links was vital in order to recruit adults who met with the participation criteria. This had particular reference to the fact that I was recruiting adults who lived in the community, were not in hospital or residing in any form of institutional care. Between April and October 2008 I was involved in conducting participant interviews and meeting a diverse range of interesting people. They were all able to describe, in detail, their personal experiences of using self-injury, during childhood, adolescence and into adulthood.

2.5.3. The participants and evaluation of the participants' feedback

I experienced no major difficulties during the recruitment stage. However, I did have to maintain constant attention to developing my network to attract ongoing interest from potential participants. Also, due to travel difficulties for a number of participants, I made special arrangements for them to take part, including arranging for them to attend interviews at a venues close to their homes, such as University College London, Birkbeck University, Buckingham University, South Thames College, University of Greenwich Medway Campus and community centres in Sittingbourne and Maidstone. One participant who was physically disabled required disabled resources to be mobilised according to her personal needs so she could comfortably take part.

On completion of 25 interviews I consolidated the participants' demographic information and established the diversity of the group who had taken part in the research, as detailed in Table 2, below.

Table 2. *Demographic information of participants who took part in the main study.*

Participant	Gender	Age	Occupation	Qualifications	Self-Injury Currently	No Self-Injury Currently
J	F	30	Human Resources Manager	BSc/MSc	Yes	
S	F	29	Own Business/Charity	BA History		No
L	F	45	Own Business	A levels		No
K	M	37	Chef	Catering Qualifications		No
S	F	38	Advertising / Sales	BA/MA	Yes	
R	M	32	Own Building Business	Plumbing – Carpentry-Bricklaying		No
R	F	28	Unemployed Receptionist	A levels	Yes	
T	F	31	Music Graduate	BA	Yes	
P	M	43	Support Worker	NVQ		No
A	F	38	Social Worker Training	BA	Yes	
R	F	30	Psychology Graduate	BSc	Yes	
L	F	32	Graduate – applying for PGCE	BA	Yes	
L	F	34	Lawyer	BSc/MSc	Yes	
M	M	32	Homeless Unemployed - Solicitors Assistant	NVQ 2 IT/Computing	Yes	
F	F	40	History Graduate Counselling Undergraduate	BSc		No
D	M	47	Homeless Voluntary Work-Care Assistant	NVQ 2 / Care		No
J	F	52	Psychology Student Audio-Visual Technician	Counselling Certificate Foundation Degree	Yes	
T	F	34	Unemployed			No
A	F	43	Own Business Hairdressing	City and Guilds Hairdressing	Yes	
C	F	44	Houseparent	BA English		No
L	F	29	Staff Nurse	BA H Nursing		No
N	M	33	Insurance broker	BA		No
Z	F	38	Personal Assistant	College Secretarial Qualifications		No
G	F	46	Houseparent	BA		No
V	M	30	Theatre actor	BA Performing Arts		No
Total = 25	**Gender** F – 18 M – 7	**Age Range** 28–35 = 13 F = 9 M = 4 36 – 45 = 9 F = 7 M = 2 46 – 52 = 3 F = 2 M = 1	**Occupation** Unemployed = 2 Professionals = 13 Own Business = 4 Student = 3 Houseparent = 2 Voluntary Work = 1	**Qualifications** BA/BSc = 14 (MSc/MA = 2) NVQs = 3 Vocational Qualifications = 5 A levels = 2 No qualification= 1	**Number who currently self-injure** Total = 11 F = 10 M = 1 Age Range 28 - 35 = 7 F = 6 M= 1 36 – 40 = 2 F = 2 M = 0 41 – 52 = 2 F = 2 M = 0	**Number who do not currently self-injure** Total 14 F = 8 M = 6 Age Range 28 - 35 = 7 F = 3 M= 4 36 – 40 = 3 F = 2 M = 1 41 – 52 = 4 F = 3 M = 1

Examination of Table 2 defines the participant age range as 28 to 52 years of age and shows that:

- 52% were aged between 28 and 35 years of age - 69% were females (53% of female group) and 31% were males (50% of male group).

- 32% were aged between 36 and 45 years of age – 78% were females (39% of female group) and 22% were males (29% of the male group).

- 12% were aged between 46 and 52 years of age – 67% were females (11% of the female group) and 33% were males (14% of the male group).

- 92% of the participants described themself as being in meaningful occupation in comparison to 8% who are unemployed.

- 96% of the participants had qualifications (from 'A' levels to MSc/MA) and 4% had no qualifications. 56% of the participants have completed University degree courses.

- 44% of the participants disclosed that they still used self-injury at the time of the interview. Closer examination shows that 91% were female (or 59% of the female group) compared to 9% who were male (or 13% of the male group).

Inspection of those who still self-injure by age range showed that:

- 64% were aged between 28 and 35 years of age - 86% were females (35% of female group) and 14% were males (13% of male group).

- 18% were aged between 36 and 45 years of age – 100% were females (12% of female group).

- 18% were aged between 46 and 52 years of age – 100% were females (12% of the female group).

In comparison, 66% of the participants had stopped using self-injury. Closer examination shows that:

- 57% were female (or 44% of the female group) and 43% were male (or 86% of the male group).

Inspection of those who had stopped self-injuring by age range showed that:

- 50% were aged between 28 and 35 years of age - 43% were females (or 35% of female group) and 57% were males (50% of male group).

- 21% were aged between 36 and 45 years of age – 67% were females (or 11% of female group) and 33% were males (14% of the male group).

- 29% were aged between 46 and 52 years of age – 75% were females (or 17% of the female group) and 25% were males (or 14% of the male group).

In summary, the demographic information confirmed the following key points:

- The participants consisted of approximately a 2 to 1 female to male ratio.

- The majority of participants were aged between 28 and 35 years of age.

- 96% of the participants had gained qualifications and 56% had completed University degree courses.

- The participants came from a wide range of occupations.

- As adults 44% of the participants still used self-injury and the majority of these were aged between 28 and 35 years of age.

It was important for me to note these observations and to carefully consider their relevance during the analysis of the rich and complex data the participants provided.

The participants' feedback

Following each interview, the participant completed a 'Participant Feedback Form', which the researcher then evaluated. This enabled me continuously to monitor ethical issues, including my performance as the interviewee, throughout the data collection stage. A summary of the compiled findings from all the completed forms was made (see Appendix Q - for Participant Feedback Forms - Evaluation Summary) which enabled me to conclude that:

- All of the participants gave positively orientated feedback concerning how they felt about taking part in the research, for example:

  'S'-*"I felt okay about taking part – hope it helps others."*

  'L'- *"Pleased I took part – interesting and helpful."*

'J'- "I found it interesting and insightful. I also very much feel it is important to take part in such research to help the overall understanding of self-injury as a phenomenon."

'R'-"Thanks for the info and for listening. It was really good for me to be able to talk in such a non judgmental setting…"

- Two of the participants raised issues of minor concern that were rectified before their interviews commenced:

'R' was concerned about issues of confidentiality, as it was very important to her that her own identity and the identity of members of her family were protected. I was able to sensitively reassure her and reminded her of my responsibilities concerning issues of confidentiality.

'J' was concerned about the interview and what issues could arise for her from taking part. I sensitively reminded her that she could stop the interview whenever she needed and that she could withdraw at any point. She confirmed with me that she has an excellent support network for any issues that arise concerning her self-injury and is an active member of a national self-injury charity. Following the interview she wrote to me via email saying:

"…I would also like to thank you for your sensitivity and understanding during the research – It was tougher than I thought it was going to be…"

- All the participants were satisfied with the answers to their questions and my approach towards them.

- In addition, following the interviews several participants wrote thanking me for providing them with the opportunity to take part in the research, which for a number of personal reasons had been beneficial or meaningful to them, for example:

'A' said "…*firstly I would like to say thank you for allowing me to speak so freely and honestly about self injury. This was the first time I have really confided in anyone about the issues raised in our conversation. I felt you handled the situation with care, compassion and very supportively. I thank you for your honesty… I had been very nervous about the interview but it was totally painless! Furthermore it has given me the courage to look up the self-injury group in S*******".*

In conclusion, I was able to confirm that at no point during the interview were any questions or concerns raised or feedback given which required me to amend my interview procedure or the documentation utilised following the pilot study.

2.6. Method of Data Analysis

The data was analysed using a grounded theory method, as described by Strauss and Corbin (1998), consisting of firstly reviewing the main research question. This involved examining the corpus of data and writing memos of the initial interpretations made, with a view to answering the main research question. The corpus was then

ordered by using a numbered indexing system for each interview, page and line of discourse. This enabled quick and effective retrieval of relevant material from the corpus.

The next stage was to create memos by carefully reading through the corpus in order to become familiar with the contents and writing notes. A first memo was then developed which reflected my understanding of the major themes or initial categories running through the data. This process of writing memos was continued throughout the analysis to record any patterns that emerged from the data and any other relevant observations. An open coding process then took place whereby I coded the entire corpus with the initial category concepts identified. This enabled me to break down and conceptualise the data by tagging or labelling the indexed corpus with the initial categories identified in the text. This process expressed the data and phenomenon explored in the form of concepts, by the development and labelling of concepts in the corpus that were considered to be relevant to the participants' experiences of self-injury.

An indexing system was then used to record the category concepts identified within the transcripts. This took the form of using cards to record a précis of the data of interest and a reference to the specific transcript, page and line number. As the corpus was examined, complex category concepts emerged, involving links or relationships between the different experiences. References were made linking the relevant sections of data identified on the category concept cards, for example, links between social and emotional experiences (see example Table 3, below).

Table 3. *Example of a category concept card used to record a précis of the data.*

Record Card 1.

Category Concept - Social experiences encountered during adolescence related to

self-injury.

Int 1, Page1, Line: 22   Kiron (pseudonym) says that his best friend started

cutting his name in his arm...

Int 3, Page 6, Lines: 45, 46   Jane (pseudonym) says that she had a difficult time

Linked to emotional   socialising, which made her feel lonely, so she used to

chat to other girls on a self-harm website and started to

feel...

This process led to the identification of sections of corpus that expressed the same or similar concepts. These sections were retrieved and examined for the adjectives and adverbs providing meanings for the properties, dimensions and processes that were expressed in the category, for example, feeling isolated with no emotional support from family or friends (linking social and emotional experiences). This coding process was carried out throughout the entire corpus until this process of defining the abstract and concrete category concepts contained within the corpus was fully explored and exhausted.

A core analysis then took take place involving constant comparison of categories including writing memos, splitting the categories into sub-categories if new concepts were identified, writing definitions and category integration when the concepts were interlinked, and refining categories when more detail was found. As described by Strauss and Corbin (1998) this process, of axial coding, started by assembling together all the category concept cards for the categories that had been generated and examining the data for patterns and relationships that connected the categories. This led to the development of a number of meaningful, grounded, robust categories, for example, communication experiences. Importantly, in answer to the main research question, comparisons were made between the robust categories to identify the similarities in the experiences of self-injury during childhood, adolescence and adulthood and the development in the use of self-injury (see Appendix R, for sample of memos and category concept cards).

The final stage of developing a theory was concerned with placing the established robust categories into an explicit pattern in answer to the main research question. As described by Strauss and Corbin (1998) this process, of selective coding, involved the patterns or connections between the robust categories – their meanings, properties, dimensions, processes and relationships with each other - being stated explicitly in reference to the participants' experiences of using self-injury, over time.

2.7. Ethical issues

2.7.1. Participant information and briefing pack

The Participant Information and Briefing Pack was forwarded to all potential participants. It contained a full breakdown of what taking part in the study would

entail and details of how the ethical aspects of their participation would be met, e.g. maintaining confidentiality, and my role in maintaining the participants' well-being. Regarding issues of confidentiality, as detailed in the Participant Information and Briefing Pack, the participants were informed of my responsibility to treat personal information in strict confidence. However, I had a responsibility to disclose information if the participant indicated they intended to harm others, seriously harm themselves and / or property.

The participants' interview transcripts contained no identifiable material and the participants' anonymity was maintained throughout the study and pseudonyms were used to identify individual participant transcript material or quotations. Assurance was given that, following the completion of the research, the audio recordings would be destroyed and the transcripts, which were anonymous, would be held in a secure place. The participants were also advised to avoid discussing the details of their participation with other participants. This action reduced the potential for participants to influence each others' accounts of using self-injury and subsequently reduced any potential participant bias, for example, participants conforming to a set dialogue and all saying that they had no emotional problems during their adolescence.

The participants were informed that they had the right to withdraw from the study at any time and that they would not be penalised in any way for doing so. The Participant Information and Briefing Pack included a section on the process for withdrawing from the study.

Openness and honesty was encouraged by inviting the participants to ask questions and express concerns about their participation at any point before, during or

after their interviews. I adopted a sensitive and non-judgmental approach and did not deceive the participants. This was essential in treating the participants' well-being as paramount. These aspects of my conduct as the researcher was included as written information in the Participant Information and Briefing Pack (see Appendix K – Participant Information and Briefing Pack for details).

During the individuals' actual participation in the study I was responsible for their well-being, and throughout the participation process maintained a respectful and dignified approach towards the participant. If the participant became distressed I suggested that they stop the interview or take a break so they could choose whether to continue after a break or not. I was prepared to assist the participants to take any appropriate action/s such as seeking counselling. I was sensitive with an awareness of the participants' rights in responding to issues disclosed relating to self-injury, ethnicity, gender and sexuality. This involved my responsibilities regarding confidentiality and conduct as a researcher / interviewee (these are defined in Appendix K – Participant Information and Briefing Pack).

Following the interview, the participants were debriefed using the Participant Debrief document. This provided the participant with the opportunity to ask questions, express any concerns and indicate how they felt after the interview. The participants were then asked to complete a Participant Feedback Form, which provided the opportunity for them to give written feedback regarding their participation experience. The participants were informed that, following the completion of the study, a summary of the findings of the research would be forwarded to them on request. Also, they were informed that I would provide a copy

to the summary of the findings to the organisations that had supported the facilitation of this research.

I conducted the study according to the Universities Research Ethics Committee guidelines and the Nursing and Midwifery Council's code of professional conduct (2004).

2.7.2. The participants' rights

Contained within the Participant Information and Briefing Pack was an important section regarding the participant rights with regard to self-injury (see Appendix K – Participant Information and Briefing Pack). This reinforced the knowledge that taking part in the research was purely voluntary and of the individual's own free will – being entirely his or her own decision. The section contained a website reference to Martinson's (2008) 'Bill of Rights for Those who Self-Harm (self-injure)'. The participants were encouraged to read this comprehensive and specifically tailored Bill of Rights. It provides a clear set of personal rights associated with self-injury and by incorporating these rights into this particular study, the standard and quality of my approach to those who self-injure was greatly improved. The Bill was sensitively tailored towards meeting full consideration of the specific needs of this group of individuals (see Appendix S – Martinson's 'Bill of Rights for Those who Self-Harm).

2.7.3. Participant informed consent form

With specific regard to the participants' consent to participate in this research, the prior study by Jacob, Claire, Holland, Watson, Mairmaris and Gunn (2007) was

consulted. They investigated 71 adult self-harmers' capacity to give formal consent. Their findings demonstrated that, with this specific group, the capacity to give consent was greatly improved when the subjects were presented with both verbal and written details. Therefore, the participants were given a written copy of the Participant Informed Consent Form and it was read out to them. When completing the Participant Informed Consent Form, I checked with each participant that they had fully understood the information contained within the Participant Information and Briefing Pack, including: the purpose of the study, ethical issues, giving informed consent, etc. The participants were informed that the interview would be recorded in order for transcripts to be written for the purpose of analysis and informed of issues relating to confidentiality, their rights as well as the responsibilities of the researcher. The participants were then asked to read and sign the 'Participant Informed Consent Form' if they agreed to take part in the study. In addition, I verbally reminded each potential participant that I agreed to maintain confidentiality, take necessary measures to protect their identity, keep the interview transcripts in a secure place and then signed the document. Therefore, the informed consent acted as a two-way agreement between the participant and myself.

2.7.4. Language

I used appropriate language (not technical or obscure) to enable the participants clearly to understand the purpose of the study and why it was necessary to secure their signed consent prior to the commencement of their interview, for example, to ensure they had an adequate understanding of the purpose of the research.

2.7.5. The participants' welfare

One of the main ethical issue arising from this proposed study was that the participant might become vulnerable or volatile during the interview process, in that their recollection of experiences of self-injury could act as a 'trigger' to induce an episodes/s of actual self-injury. However, it was important to note that, as identified by Hodgson (2004), self-injury may function as an adaptive strategy to cope with emotions and relieve stress, and therefore act as a form of prevention from engaging in more serious forms of self-destructive behaviour. Therefore, the participants were asked whether they had read and agreed with the condition for participation which specified that: "…you must be able to agree that by taking part and describing your experiences of self-injury you will not knowingly place yourself in a situation whereby you will induce an episode of self-injury". This condition was stated in the invitation to take part and the screening process, and reiterated in the Participant Information and Briefing Pack and also when they completed the Informed Consent Procedure.

Furthermore, to enhance aspects of the participants' safety and well-being, I utilised my skills, knowledge and experience in supporting people in crisis through my work as a Nurse Therapist working alongside vulnerable and volatile clients. The Participant Information Pack also included a list of organisations providing support and guidance to people who self-injured. The contact details of these organisations were provided should the participants be inclined to seek specialist support during or following taking part in the study. In addition, the contact detail of a named counsellor who was experienced in providing counselling for people who self-injured was provided. I also made it clear that if required, and with their consent, I was

prepared to support them in making a referral to access professional support and or medical attention, however the need for this did not occur.

After giving their consent at the beginning of the recorded interview, I asked each participant whether they agreed to participate and for their permission to record the interview and use quotations from the written transcript. This ensured that in addition to the participants' signed consent their oral consent was obtained. When each participant had given this oral consent, the interview proceeded.

2.7.6. The researcher

The risk of any adverse effects to me when conducting the study was negligible due to the safeguards built into the procedures for conducting the research. The research supervisor provided adequate and regular supervision sessions during the duration of the study and monitored my wellbeing. Also, the supervision sessions provided me with the opportunity to raise any issues regarding adverse effects, risks, distress or inconveniences. However, I needed to ensure that I took adequate measures to keep myself safe in the interview situation by ensuring that I carried a personal audio alarm with me during the interviews, made others aware that I was conducting research interviews in a designated room, and informed security and secretarial staff of my interview schedule. In addition, I ensured that the interview room was not in an isolated position and that the interviews were conducted during working hours (9am to 5pm), when other people were in the buildings. My seating position in the room was near the door so that I had a clear exit at all times during the interview.

I was constantly aware during the interviews that I had the right (detailed in the Participant Information and Briefing Pack) to terminate the interview at any point or to stop my contact with the participants if necessary for their or my own safety and well-being. My supervisor was provided with a schedule of dates, times and venues of any planned interviews. In addition, I had worked with people who self-injured since commencing my career in health and social care in 1981 and had applied knowledge, skills, experience and understanding of working with people who use self-injury.

2.7.7. Monitoring ethical issues

Pilot Study – monitoring ethical issues during the Pilot Study involved the researcher and the participants' completing a Pilot Study Feedback Form. This included answering questions about any ethical issues that may have arisen. Evaluation of this information demonstrated that no action was necessary to refine the interview process and revise any documents and research procedures related to ethics, for example, the Informed Consent Form. In addition, the inter-rater reliability test confirmed that my interpretations were accurate, reliable and conveyed what the participants were saying.

Main Study –the process of monitoring ethical issues during the main study was continuous and commenced during the initial contact with the participant and on completion of the Participation Screening Criteria – Researcher's Checklist and Risk Assessment. The monitoring was then repeated during the process of completing the Participant Informed Consent Form, Participant Debriefing, and Participant Feedback Form, when the participants were invited to give their specific comments regarding ethical issues. This created the opportunity for the researcher to monitor ethical issues

on an ongoing basis throughout the research data collection process, identify any ethical concerns as they occurred and respond as necessary. This ongoing method of ethical monitoring was set as an agenda item during the researcher's planned monthly supervision sessions.

3.   **RESULTS**

3.1. Overview

From applying a grounded theory method, as described by Strauss and Corbin (1998), to analyse the corpus of data (obtained from the participants' interviews) it was found that the use of self-injury developed, from its onset in childhood or early adolescence, throughout adolescence and into adulthood. It became apparent that the components involved in this development consisted of the participants' behavioural, cognitive, emotional, social, communications, occupational and physiological experiences. Through applying the process of constant comparison, between and within these components, the core category that self-injury develops as a versatile multi-functional behaviour was generated. Fundamental to this overarching theory were the interlinked themes and patterns, which showed similarities in the evolving components of the participants' continued use of self-injury. This evidence confirmed that the use of self-injury progressed to become a behaviour that could be adapted in its use, to serve a number of functions. This involved the generalisation in the use of self-injury according to the individual's intentions for using it and changing personal needs.

Illustrating this, 'F' provides a salient example in her account of using self-injury. The following extract was greatly shortened to highlight the main features (in bold print) in the development of the multiple functions in her use of self-injury:

*"...I was eight...I was raped by my cousin...then I was abused by my eldest brother...I started to self-injure...**the emotional upset...the memory of it**...I'd feel the need to **self-injure...to push that emotion away**...I'd...be **scrapping...***

*using a nail...doing it was **calming me down**...**taking away the upset**...I would ...keep injuring until I felt calm enough **to be in control again**...control of my emotions and **being able to face people**... the family...I learnt to **hide the evidence**...I **kept it secret** – I was very secretive and kept it to myself...they (parents) never made any attempted to talk to me – to help me...**my school work ...was a distraction...it was like another coping mechanism** ...when I was 11... my other brother started abusing me...until I was about 14...my self-injury became a lot worse and **I discovered razor blades**...and **it escalated in terms of how I would cut...I was clear in my mind as to why I was cutting ...I did used to completely dissociate...I started to hate myself and hate my body...I had to... control the emotion** that was inside of me **so I could be this normal person on the outside that everyone wanted... everyone expected...I built up this outside persona and I was a good well behaved young lady...I didn't want anyone to see the hurt and what I was doing** (self-injury) and I just needed **to keep it secret...it (self-injury) was about control – it enabled me to control my emotions** and keep everything in this neat little package ...it (self-injury) was... **balancing the physical pain with the emotional pain**...when I was actually **cutting...the pain...was...calming me**...and it was like in my head was a pair of scales and if the emotion was right up here (pointing above head) I'd keep cutting and cutting until it was level and then I could stop...**keep control and exist in the real world...if I wasn't cutting I'm not sure how I would have coped – it enabled me to be the normal child that was expected – to go to school...to have friends...I was cutting to bring control back into my life and to bring my emotions under control**...yet other times I would cut*

because I felt so numb and so dead that I needed to feel alive again – *so I would cut for the opposite reason sometimes...from about 15/16...the abuse stopped* – so **I was left with the memories and flashbacks...so I would still use self-injury to cope... with the memories**...*I always made sure...I was looking okay and* **I was very careful...I'd have a plan (to self-injure)...I always tried to...be very careful about when I'd cut in terms of thinking about when I had PE and stuff like that...careful about when and where I would cut...so I wasn't found out**...*as I got older...into my 20s...***sometimes I would just cut because I needed to cut because I wanted to (cut)**... *then I went onto university* ...**I still had the nightmares...the flashbacks** *and I was still cutting myself...***I still hadn't told anyone** – *no one knew...***I had no other release** ...*so when I had bad* **memories ...nightmares** – **I didn't have anyone to turn to so I would cut myself**...*I drank quite a lot...I...was...always trying other things to replace... the self-injury...I used to smoke...drink...experimented with drugs...I was anorexic (not clinically diagnosed)...but I gave up on it because* **it...wasn't as effective as cutting...there was nothing that cut out the pain as well as self-injury** ...*it (self-injury) was.. .about different things...***keeping control... control of my emotions** – **control of my memories** ...*allowing me to suppress everything - all the crap and nasty stuff that happened to me over the years from various people* – *it allowed me to carry on with a normal life...***I couldn't face what they'd done to me and I had to get rid of it somehow and cutting did that for me** – **it worked** – **it got rid of it**...*I was more aware...of the horror! of what those people had done to me...I had no idea that that no one else went through this...I felt trapped...there was no one I could talk to about it...***I felt too**

frightened to tell anyone...**it still had that dual purpose ...when the emotion became too much and too overwhelming it calmed me down and when I became too dead it would keep me alive...there were times when...it (self-injury) ...became a habit...like an addiction ...just do it (cutting)...**(*after university) I had a steady boyfriend and we got engaged when I graduated...we moved in together – I got a job...*" and self-injury "*...it carried on... I...married ...then when I was expecting my second child I stepped down out of management...to go part time so...we could manage the children... ended up with three children...but **the self-injury carried on...cutting...it was still there.. .sometimes the smell of a certain aftershave on someone would trigger a flashback.....I couldn't cope with that**...I still hadn't told anyone... **different things would be a trigger for me**...and...I would still need to cut because I had no other outlet...by then **I was using self-injury... as a general coping mechanism...if life got difficult... because I had three children under the age of four – so if I was stressed then I would cut – it was still about the memories and controlling that and still enabling me to be a normal adult in society but it was also about using it...just for a general coping mechanism... stresses...I would use the cutting...if... overtired...with having the family**...sometimes I couldn't wait...if I was really emotionally distress I would...have to go to the bathroom and quickly...**cut myself...to relieve that tension a bit**...but most times I would have to think – **I could feel it building up over the day – the need to cut – I would have to wait till the kids were in bed** and do it then when there was no one around...*" husband at work? "*Yeah...I was still cutting at least once a week ...it was all mine...**when I got to...my early 30s...my self-***

injury started to increase...I began to feel the need to...tell someone what had happened to me but not knowing how to go about that and the frustration of that...I would be left with these memories over and over again and...cutting and at that point I could see the cycle... when my oldest child got to eight...when it (sexual abuse) had started for me...I couldn't cope and it...brought back so many **bad memories...I'd... be frightened and paralysed and I'd panic...I was cutting more and more at that point***...and...****I went into counselling...I actually found it quite traumatic...having to deal with everything that was raked up and how to manage that if I'm not cutting***...so ...I still had to go...I got to the point where I needed to talk to someone...and I was always very aware of the role that self-injury had in my life, that self-injury enabled me to keep all that rubbish buried ...and all that emotional distress and everything buried and if I was going to stop self-injuring then I would have to talk about that and get that out...****it (self-injury) was about control and enabling me to live a normal life... it... enabled me to suppress everything...so I could just carry on being a normal child and in every other aspect of my life...and...it enabled me – it was...a very secretive part of my life and enabled me to function.****..and that's what it did for me and I was fully aware ...of what self-injury was helping me to suppress and, until I was ready to face that, I wasn't going to let go of self-injury...*" (Int 19, page 1, lines 27-38, page 2, lines 39-66, page 3, lines 77-80, page 4, lines 131-132, page 5, lines 166-191, page 6, lines 197-227, page 7, lines 239-267, page 8, lines 268-296, page 9, lines 322-338, page 10, lines 344-373, page 11, lines 392-416, page 12, lines 427-449, page 13, lines 462-488, page 14, lines 498-533, page 15, lines 534-568, page16, lines 573-596)

In summary, the multiple functions of self-injury that developed regarding 'F's' use included the following concepts:

- Relieve and cope with high levels of emotional distress.

- Cope with distressing and disturbing thoughts, memories or 'flashbacks'.

- Develop effective types (covert) and forms of self-injury.

- Induce a state of emotional and cognitive calmness.

- Create a sense of empowerment and self-control.

- Enable and maintain a social persona.

- Cope with, reduce and alter episodes of dissociation.

- Induce physical pain.

- Provide an alternative to communication or verbal expression.

- Support her in completing her period of counselling therapy and deal with the unresolved issues associated with being sexually abused as a child and adolescent.

- Provide a means of suppressing her distressing thoughts and feelings.

- Cope with the general distress / stress of day to day family life.

Reinforcing her use of self-injury 'F' describes:

- Negatively orientated beliefs.

- Negatively orientated perception or interpretations of the social environment.

- Frustration and angry thoughts.

- Developing an understanding and knowledge of the functions of self-injury.

- Difficulties in cognition associated with communication difficulties.

- The acquisition of knowledge and skills in effectively applying self-injury.

- The safe practice of an effective type and form of self-injury.

- The maintenance and use of self-injury as a covert behaviour.

- The generalised use of self-injury as a daily ritual and routine.

- The addictive aspect of self-injury.

- Using self-injury to enable her to function and fulfil her role as a responsible mother.

This example clearly demonstrates the development of multiple functions in 'F's' prolonged use of self-injury over a period of 26 years.

FIGURE 1 – PICTORIAL REPRESENTATION

3.2. Data Analysis

3.2.1. Introduction

An open coding process was applied to the corpus of interview data. This process established a complex and wide ranging number of coded category concepts, which described aspects of the participants' use of self-injury. Overlapping with this open coding was the process of axial coding the data. This procedure involved closely examining the properties and dimensions of the concepts and how they were connected or related to each other. This established that the participants' use of self-injury consisted of seven robust and interconnected concepts or components. The following diagram shows how these components fit into a framework, illustrating that they are related and together impact on the development of self-injury, over time.
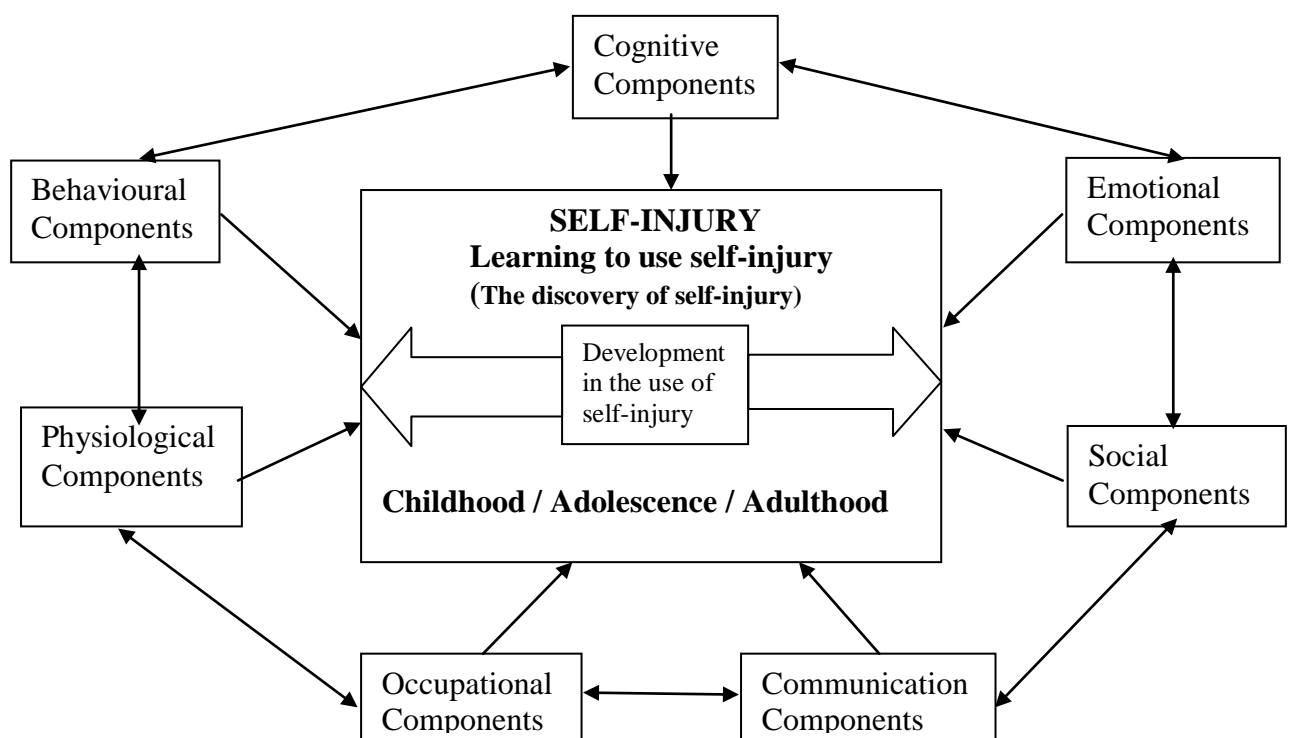
Figure, 2. Diagram showing the interrelated components, of self-injury, which impacted upon the development of the participants use of self-injury, over time.

These interwoven components, there properties and dimensions are detailed below in relation to the development of the participants use of self-injury from childhood or adolescence and into adulthood. Additionally, the aspects of these components linked to the reduction or cessation of using self-injury are described.

3.2.2. Learning to use self-injury

Importantly, to understanding the development of self-injury, the participants describe how they acquired its use as a coping strategy through a process of learning. Starting in childhood or early adolescence, linking cognitive, behavioural and social experiences, the majority of participants describe how the idea to self-injure had originated from their own thoughts. This is consistent with Nixon, Cloutier and Jansson (2008) who conducted a longitudinal study examining the rate of self-harm, involving 568 young people aged between 14 and 24 years. They found that 75% of these people reported that the idea to self-injure had come from their own thoughts and was not prompted by others. On closer examination, the way in which the participants described the acquisition of self-injury followed two central pathways leading to the discovery of self-injury:

- Experiential learning.

- Social learning.

Experiential learning

As similarly found by Alder and Alder (2007) and Hodgson (2004), it was identified that the participants described an incident or experience which prompted

their decision to use self-injury. On closer examination this type of learning was found to involve:

- An impulsive response to overwhelming distress.

- Forming a conscious plan to physically hurt themselves without suicidal intent.

- Having an accident causing physical pain.

An impulsive response to overwhelming distress

The majority of participants describe how they learnt to use self-injury following an outburst of impulsive behaviour, which they exhibited in response to high levels of distress. During this incident they deliberately physically hurt themselves and subsequently discovered the affect that such behaviour had in relieving or reducing the high levels of distress they were experiencing, for example:

"...it just came to mind – nobody told me to do it (cutting) – it was all that pent up frustration...went inwards and I took it out on myself and that...sorted it out..." (Int 9, page 1, lines 32-36)

Forming a conscious plan to physically hurt themselves without suicidal intent

In contrast to an impulsive response (described above) and highlighting cognitive factors, several of the participants describe consciously planning to hurt themselves and that this action was made without suicidal intent. This was their response to the overwhelmingly high levels of distress they were encountering, for example:

"...on my way home I decided I wanted to hurt myself – I was hurting so much inside and felt absolutely rejected...I went home...straight to my bedroom closed

the door and used a compass to carve my arm – it hurt and I felt better...hitting

my head seemed childish – I did that as a child – I know it sounds crazy but

cutting seemed like the only thing to do – nobody told me to do it and I didn't

want to kill myself – so cutting – gouging my arms is what I did..." (Int 4, page

3, lines 99-110)

<u>Having an accident causing physical pain</u>

Several of the participants describe how they had an accident that caused physical

pain and which coincidently relieved the overwhelming distress they were

experiencing, for example:

"...when I first started...what triggered me to self-injure in the first place was

I...fell over and grazed my knee and at the time I was upset about something else

and grazing my knee and hurting my legs took...my mind off the upset and that...

triggered something in my head – that...there's something there that worked for

me..." (Int 19, page 1, lines 7-13)

Social learning

Directly linked to social experiences several of the participants describe how they

learnt to use self-injury from observing and copying the self-injury exhibited by

others. This finding is consistent with Nixon, et.al. (2008) who concluded that self-

injury can be learnt through observing the self-injurious behaviour of others. This

social learning involved:

- Learning from social role models.

- The contagion of self-injury.

Learning from social role models

Interestingly, during childhood several participants, who experienced overwhelming distress when in their home environments, describe having learnt to use self-injury through copying their father's aggressive and self-injurious behaviours. Observing their parent/s use of self-injury acted as a social learning experience influencing their disposition to use self-injury as a means of relieving or coping with high levels of distress they encountered and subsequently acted as an antecedent to their use of self-injury, for example:

> "...I would see my Dad banging his head up against the wall...me seeing him doing that in the atmosphere I was living...those things influenced me to self-injure...I saw my Dad banging his head...what else can you do as a child – what can I possibly do to vent this unrest... I'd...watched my dad and started just doing it (self-injuring)...him passing on all his uselessness...I banged my head against the wall..." (Int 1, page 1, lines 14-19, page 2, lines 68-70)

This is finding is consistent with Hodgson (2004) and Nixon, et al. (2008) who identified that learning to self-injure can occur from copying the self-injurious behaviours of others. Supporting this finding Yip (2005) indicates that learning to self-injure can be prompted by parental influences, such as parent conflict and marital discord, which was seen to not only heighten the participants' levels of distress but also influence their engagement in using self-injury.

The contagion of self-injury

Several of the participants describe how they encountered members of their peer group (at school) using self-injurious behaviours and, due to peer pressure, they

joined in with this activity, for example, 'K' describes how during his adolescence, he experienced the social contagion of an overt type of self-injury. This consisted of others scratching, cutting names / words into their skin, for as he says *"fun"* or to be *"tough"* and the bodily markings were openly displayed amongst the peer group, he says:

> *"...there was actually a group of girls at school that used to do it (cutting) for*
> *fun – there were some blokes as well…actually write names or stuff on our*
> *arms…"* (Int 2, page 3, lines 97-101)

The contagion of self-injury was previously found to be an influence on individuals' use of self-injury by Walsh and Rosen (1985), Taiminen, et al. (1998) and Heilbron and Prinstein (2008). However, expanding this finding and demonstrating the participants' developing understanding of their personal use of self-injury, the participants were able to make a distinction between their covert or private use of self-injury and the contagious type of self-injurious activities carried out within their peer group. Importantly, they acknowledged that the types of self-injury engaged in by their peer group did not have the same function as the type of self-injury they used, for example, leading on from the quote cited above 'K' says:

> *"...it (peer group self-injury) wasn't real self-injury – it was more a thing to do*
> *at school…a bit of stubbing cigarettes on your hand and things like that…to be*
> *tough…but it wasn't a secret – like your own secret thing…I didn't think it*
> *was…as meaningful as when I did it (self-injured - cutting)…"* (Int 2, page 4,
> lines 118-126)

The discovery of self-injury

From the paradigms of learning, described above, all the participants discovered the use of self-injury as primarily a coping strategy. Consistent with the findings of Hodgson (2004), leading on from the learning experiences encountered by the participants, whether intentional or accidental, all the participants described how, following their discovery of self-injury, they began to use a form of self-injury which would serve to induce or gain the effect that they had discovered. This effect was primarily the relief or reduction of high levels of distress they encountered. It gave them the means to cope, albeit temporarily, with the distress they encountered. Through its prolonged use, self-injury generalised to cope with multiple sources of distress, in addition to the original distress they experienced, for example:

> "...I was hurting so much inside and felt absolutely rejected...I...used a compass to carve my arm and I felt better...I couldn't sleep so I did it again...the hurt inside came out...the first time I cut was...the beginning of my affair with cutting...the beginning of my cutting addiction...after that first cut I got on with my life – kept it to myself and the next time the same thing – got upset – then cut – then the next time I got upset – then cut...I fell out with some girlfriends...I can remember the rejection and feeling alone – the way my cutting spread was sudden and it became anything that upset me...it was like overnight I had found something that was missing from my life...I would cut at least once or twice a day...I would at night before bed or in the evening if at home...I would (self-injure) at college depending on how my day was going..." (Int 4, page 4, lines 120 -152, page 5, line 153)

3.2.2. Behavioural Components

Linking all the components (cognitive, emotional, social, communication, occupational and physiological) it was established that the participants' behavioural experiences were a central feature in the participants' use and development of self-injury. The descriptions provided, by the participants', detail how the types and forms of self-injurious behaviours developed through their continued use and practice.

The aspects of these developments in self-injurious behaviours included:

- Using covert types of self-injury.

- Using overt types of self-injury.

- Using both covert and overt types of self-injury.

- The influence of type of self-injury on forms of self-injury used.

- Forms of self-injury.

- Frequency in the use of self-injury.

- Enhancing the effect of self-injury.

- Developing the safe practise of self-injury.

- Post self-injury self-care.

- Using alternative maladaptive behaviours.

CHILDHOOD / ADOLESCENCE / ADULTHOOD

LEARNING TO USE SELF-INJURY

Experiential Learning

a) An impulsive response to overwhelming distress

b) Forming a conscious plan to physically hurt themselves

c) Having an accident causing physical pain

Social Learning

a) Learning from social role models,

b) The contagion of self-injury

Emotional
Cognitive
Distress
Dissociation

THE DISCOVERY OF SELF-INJURY

DEVELOPMENT OF TYPES AND FORMS OF SELF-INJURY FOR MULTIPLE FUNCTIONS

Covert types of self-injury

Overt types of self-injury

Using both covert and overt types of self-injury

a) Combing both covert and overt types during the same episode to relieve overwhelming distress whilst gaining the attention and support of others

b) Separate use of either covert or overt self-injury

The influence of type of self-injury on forms of self-injury used

Forms of self-injury

Frequency in use of self-injury

Enhancing the effect of self-injury

Developing the safe practise of self-injury

Post self-injury self-care

Using alternative maladaptive behaviours

Figure 3. Diagram illustrating the behavioural paradigm described by the participants. This includes learning to use self-injury, the discovery of self-injury and the development in the types and forms of self-injury used for multiple functions.

Types and forms of self-injury

From examination of the participants' descriptions of self-injury during childhood, adolescence and adulthood, it became clear that the types of self-injury (covert or overt) took a range of differing forms, such as cutting and head banging. Supporting this observation, many researchers, such as Paivio and McCulloch (2003), Whitlock, et al. (2006), Sutton (2006) and Alder and Alder (2007) have all identified that self-injury envelopes a wide range of forms of self-injurious behaviours, including: cutting, burning, banging head and other body parts, scratching, punching, biting, re-opening wounds, etc. However, following the participants' descriptions of their actual use of self-injury, over time, it was ascertained that the types and forms of self-injury used developed to support the multiple functions for which it served.

Using covert types of self-injury

The majority of participants described how they used covert types consistently throughout childhood, adolescence and adulthood. This observation is supported by Whitlock, et al. (2006) who identified that those who used self-injury did not inform others of this use and self-injury remained a hidden or covert activity. Hodgson (2004) found that those using self-injury made great efforts to conceal their use of self-injury from others, using, for example, cover stories if others grew suspicious. Close examination of the participants' descriptions of using covert types of self-injury, suggested that their use of covert types of self-injury developed over time.

During childhood, covert types of self-injury included: damaging, cutting, tearing, scratching skin tissues, re-opening wounds, experimenting with tolerance to physical

pain and deliberately having accidents causing physical injuries. These covert forms of self-injurious behaviour were used by the majority of the participants to privately cope with overwhelming emotional and cognitive distress, for example, 'F' describes how when she began to be sexually abused she started using self-injury, she says:

"...grazing my knee and hurting my leg took the pain of that (being sexually abused) – took my mind off the upset…I would get anything I could get hold of – like sharp stones – flints – nails – anything I could scrap my skin with…I'd just keep scrapping and scrapping until I felt better basically…I kept it secret – I was very secretive and kept it to myself…" (Int 19, page 1, lines 13-25, page 3, lines 77-81)

Throughout adolescence, the majority of participants used exclusively covert forms of self-injury that could be hidden or concealed from others and maintained as a secret activity. However, in contrast to childhood the types of covert self-injury used by the participants broadened in variety, to include: cutting, scratching, burning, tearing and stabbing skin tissue, bloodletting, re-opening wounds, experimenting with tolerance to physical pain, tearing off finger nails, pulling hair (in private) and punching own face causing nosebleeds. This indicates that their use of self-injury as an established and covert coping behaviour was developing. Expanding this finding, all the participants confirmed that one or several of these covert types of self-injury were used as a means of effectively coping, in private, with overwhelming emotional and cognitive distress and or dissociative states of mind they encountered, for example:

"...self-injury was a means to an end…I was so angry…and frustrated…it got to the point where I couldn't scream and shout anymore…it (self-injury) diffused it (distress)…and it was like that…through my adolescent period – because I

didn't want anyone to find out I had to…cut my arms…so it wouldn't show." so self-injury was something only you knew about *" Yeah definitely…I didn't want them (family) to know…I thought I was doing something wrong and naughty… so…it was very important to me that they didn't know…I was very conscious that I didn't want my parents to find out about it…"* (Int 5, page 4, Lines 123-158, page 6, lines 223-224)

Also, during adolescence, the participants describe their increasing concerns that others would discover their use of self-injury. This theme was also identified by Yip (2005) who found that those using self-injury may become fearful of being discovered. This factor directly influenced the forms of self-injury they actually used, including the bodily site of the injury and prompted the continuing development in their use of self-injury as a sophisticated, planned and carefully applied coping strategy, with a priority being the preservation of their use of self-injury as a covert or secretive activity, for example:

"…I became quite good at hiding it…it was my own secret…although people got to know – I used to just change where I would cut…they would think I had stopped – but I hadn't…it became more frequent and I became better at hiding it…I became better at self-injury so that I did not cause so much damage it would notice…I started with my arms then…changed to the tops of my legs…I changed the area…it was this invisible type of refuge – then it changed again – people couldn't see the scars – I kept my self-injury to places on my body I (could) hide – making it invisible to others…people could see scars on my arms

but that was old scarring – which had subsided – they couldn't see the areas of

my body which would have been covered by what I wore…I was careful about

my self-injury." (Int 8, page 2, lines 39-50, page 3, lines 101-107)

In comparison to adolescence, during adulthood the range in covert types of self-injury used by the participants narrowed. This was due to the increasing need to maintain self-injury as a carefully applied and valued, covert coping strategy, and therefore the participants used mainly forms of self-injury which they knew they could, with certainty, hide from others, e.g. superficial cutting of the skin. These covert types of self-injury included: cutting, scratching, burning, chemical burns, tearing skin, bloodletting, pulling hair (in private) and taking minor overdoses. Participants described how, due to their prolonged use, these chosen or preferred covert forms of self-injury became practised and refined in their applied use to privately cope with overwhelming emotional and cognitive distress and or dissociative states of mind they continued to encounter.

However, several participants experienced a paradoxical effect: whilst their use of self-injury continued to relieve the distress they experienced, following their use, their concerns regarding being discovered intensified, which further intensified the distress they encountered preceding their use of self-injury, for example:

"...as I got older especially into my late `20s and early 30s...I had to keep it

(self-injury) more secret because it felt more shameful because people see it as

an adolescent thing and if they find out your still cutting and you're in your 30s

– I feel there's shame attached to it..." (Int 19, page 18, lines 655-659)

Supporting these findings, Nock (2008) indicates that in many cases the use of self-injury does not serve a social function and is a privately - used method of coping. Expanding this observation, Lindgren, Wilstrand, Gilje and Olofsson (2004), who used content analysis to examine the experiences of self-harm described by nine women, identified that they used covert forms of self-injury to cope with overwhelming emotional and cognitive distress which they were unable to communicate or verbally express. Also Gollust, Eisenberg and Golberstein (2008), who used an internet-based survey to measure the prevalence of self- injury and potential risk factors of 2843 undergraduate and graduate students, concluded that adults use covert forms of self-injury with no intention of seeking the support of others and therefore cope with high levels of distress alone. Additionally, several of the participants described how during adulthood, as similarly identified by Hodgson (2004), they developed cover stories or excuses for their self-injury if observed by others in order to maintain their 'secret'.

Overt self-injury

Closely linked with social experiences, and demonstrating the multiple functions of self-injury, during childhood, several of the participants describe using overt types of self-injury including: head banging, punching walls, pulling hair, slapping own face, and banging limbs on hard objects. These types of self-injury were exhibited in the presence of others, with the purpose of manipulating or gaining the attention of others, for example:

"...I was not very happy...and started to get really frustrated – I ...started to

pull my hair and slap my face ...there were lots of tantrums with my parents

through my childhood…I used to get cross with…my parents…and feel - often

embarrassed when say a teacher told me off and this would turn to anger which

I would dish out to my parents…if they didn't sort it out –reassure me –then I

used to pull my hair and slap myself…" (Int 10, page 1, lines 14-36)

Deiter and Pearlman (2000), also identified that a secondary function of self-injury is that it can be used to attract recognition and attention from others. Nock (2008) recognised that self-injury can be used to communicate with others non-verbally and provides the individual with a means of social influence. Klonsky and Muehlenkamp (2007), who carried out a review of research regarding self-injury, describe this use of self-injury as an interpersonal influence with a range of effects such as gaining affection and reinforcing responses of others, which is shown in the example given above. Clarifying this finding in the context of developing multiple functions, Klonsky (2009) conducted structured interviews with 39 young adults to assess the functions of their self-injury and found that self-injury was primarily used to alleviate negative affect. Additionally he suggests that using self-injury to influence others was a secondary function.

In contrast to childhood, during adolescence and into adulthood several participants described how, in addition to using self-injury to manipulate the attention of others, they recognised that self-injury was a means of communicating their desperate need for support from others. These participants were unable to cope with very high levels of distress through using self-injury alone, for example:

"…I tried to commit suicide…not to die – to kill myself but to communicate –I

wanted others to know the distress I was feeling…the self-injury the cutting was

severe…it was me…communicating how bad I felt how much I was in turmoil

inside –yes... my – 'cry for help'..." (Int 8, page 5, lines 184-188, page 6, lines

202-214)

Supporting and expanding this finding Nock (2008) shows that individuals can use

self-injury as a means of communicating or signalling the distress they are suffering

to others and that they can intensify the severity of their self-injury if ignored, which,

when acknowledged by others, acts as a form of social reinforcement. Also Mazelis

(1998), who widely researched the use of self-injury amongst women, recognised that

self-injury can be used to communication the internal pain (emotional and cognitive)

that an individual is unable to be express verbally.

Using both covert and overt types of self-injury

Demonstrating the development of multiple functions in the use of self-injury,

during childhood and throughout adolescence several participants describe how they

used different types of self-injury, such as cutting and head banging, with the purpose

of achieving two different outcomes:

- Combing both covert and overt types.

- Separate use of either covert or overt self-injury.

Combining both covert and overt types

During the same episode it was found that several participants used covert self-injury,

to relieve overwhelming distress, whilst using overt self-injury to gain the attention

and support of others, for example:

"...I actually started cutting myself...because...without a doubt...it (self-injury - cutting) released frustration...it (self-injury -cutting) made me feel better...it calmed me down (the)...relief...it released the frustration...and...it felt good...and then I waited for the attention and I got it...it (self-injury) got me attention...or it would get me more attention..." (Int 21, page 7, line 244, page 8, line 275, page 9, lines 307-341, page 10, lines 371-374)

Separate use of either covert or overt self-injury

The participants describe how the type of self-injury used was governed by the individual's intention - whether they were using self-injury to privately cope or to gain the attention and support of others (a form of non-verbal communication), for example, 'J' says:

"...it (self-injury) was...cutting – cutting in secret – cutting parts of my body that no one could see...explaining the cuts as being accident prone – which in my case was easy to do..." (Int 18, page 4, lines 142-153)

On other occasions 'J' engaged in severe head banging when she could not cope, she says:

"...I was up to 10 concussions – most of them ended up in hospital..." she says this was for *"...the...attention..."* (Int 18, page 5, line 160)

Providing support for these findings, Klonsky and Muehlenkamp (2007) report that research has shown individuals who self-injure use multiple methods, which is consistent with the participants' accounts of their developing use of self-injury. Moving into adulthood, in contrast to childhood and adolescence, none of the

participants describe using a combination of both covert and overt types of self-injury during the same episode to relieve overwhelming distress whilst gaining the attention and support of others. This may have been caused by their changing needs, increasing understanding and awareness of the purpose of their self-injury as a self-coping strategy. However, the separate use of either covert or overt self-injury continued and the participants describe developing their separate use. On closer examination it was found that they describe how the type of self-injury was clearly governed by their intention - whether they were using self-injury to privately cope or to gain the attention and support of others, for example:

"...my self-injury was my private thing...I didn't want attention from others for my own self-injury...it was definitely completely about me and how I...dealt with myself...being myself..." however, when she could no longer cope with extremely high levels of distress using self-injury alone, she says *"...I started taking (minor) overdoses...not to try to kill myself...it was...attention seeking ....because I was really struggling...and... things at home were still very difficult and upsetting and I just felt I couldn't cope with any of it..."* (Int 5, page 11, lines 388-402, page 15, lines 553-559)

The influence of type of self-injury on forms of self-injury used

Highlighting the importance of social experiences, central to the participants' decision of which form of self-injury they would use, was the influence of whether the self-injury was to manifest as a covert or overt occurrence in relation to others. Covert self-injury such as cutting the thigh was described by the participants as being hidden or concealed from others under clothing and remained unobservable. Overt

self-injury such as head banging was described by the participants as not being concealed and was therefore observed by others. Several of the participants described how, during childhood, they used exclusively covert types of self-injury compared to the minority who used exclusively overt types of self-injury. In contrast, during adolescence there was a shift towards the use of covert types of self-injury. This was confirmed by the increase in the use of covert types of self-injury and reduction in overt types of self-injury reported by the participants. This shift continued into adulthood where the majority of participants used exclusively covert types of self-injury and none described using exclusively overt types of self-injury.

Therefore, it is clear that the participants' emphasis or importance in their use of self-injury being maintained as a covert coping behaviour increased as they progressed through adolescence into adulthood and subsequently directly influenced the forms of self-injury they used, for example:

> "…I'm more and more careful about where and how visible and…what its (cutting) is going to end up looking like as well…I started off cutting around my ankles…but I don't like things around my ankles…so I made a couple of…cuts on my calf…I didn't like that much either…so then I cut my arm and that…felt right…the outside of my arm is the right place…it doesn't hurt…so its…easier to cut there and get the results I want…but it's too noticeable…it's not sustainable …it's not somewhere where I would cut now – I'm a lot more strategic…" (Int 25, page 16, lines 588-590, page 19, lines 689-713)

Forms of self-injury

During childhood the majority of participants used forms of self-injury which caused damage to skin tissue. This form of self-injury continued throughout adolescence and into adulthood for the majority of participants. Closer examination of this form of self-injury (causing damage to skin tissue) showed that during childhood scratching skin tissue was the most common form of self-injury used by the participants. In contrast, during adolescence this shifted to cutting skin tissue, which was the most common form of self-injury used by the participants and this pattern continued into adulthood. This change to mainly using cutting as opposed to scratching and other forms of damage to the skin was linked to the participants' development in their applied use of the most effective and covert types of self-injury, for example:

> *"...cutting was more carefully done at home...it was more private...I would use...razors...cut deeper than at school and watch the blood drip out...nobody knew...it was never deep enough to end up in hospital – it only took a small cut or tear of the skin to get out of it what I wanted...I got to know how to cut without causing lots of blood...I would cut in places where my skin was easily covered...my thighs...upper legs..."* (Int 7, page 4, lines 146-153, page 6, lines 199-205)

This finding is concurs with Paivio and McCulloch (2004), Murray, et al. (2007), Walsh (2006), and Klonsky (2009) who all identified that cutting was the predominant form of self-injury used in adolescence and early adulthood. The following table was completed to illustrate the types of self-injury in relation to the forms of self-injurious behaviours used by the participants.

Table 4. *The range and combinations of self-injurious behaviours used by the participants.*

Form of self-injury Described	Type of self-injury used: Covert (C) . Overt (O)	Number of participants – childhood	Number of participants – adolescence	Number of participants – adulthood
Scratching skin tissue	C	**5**	4	1
Cutting skin tissue	C	4	**21**	**19**
Cutting skin tissue to gain attention	O	0	1	1
Burning skin tissue	C	0	4	2
Bloodletting (bleeding)	C	0	5	3
Chemical burns	C	0	0	1
Re-opening wounds	C	3	2	0
Tearing skin with hard object	C	1	3	1
Stabbing hands with sharp implement	C	1	1	0
Slamming fingers between hard objects	C	1	0	0
Causing deliberate accidents causing injuries	C	1	0	0
Experimenting with tolerance to physical pain	C	1	2	0
Pulling out hair in private	C	0	2	1
Tearing off finger nails	C	0	1	0
Punching own face to cause nosebleeds	C	0	1	0
Mimicking cutting and ligaturing	C	0	1	0
Head banging (or butt)	O	4	5	1
Punching walls	O	2	2	1
Kicking walls	O	0	2	1
Pulling hair	O	2	0	0
Slapping face	O	1	0	0
Banging self or bodily limbs onto hard objects	O	1	0	0
Minor overdoses	O	0	1	1

From examination of Table 2, it can be seen that the most common types and forms of self-injury used by the participants were: during childhood – covert, scratching skin tissue; during adolescence – covert, cutting skin tissue; during adulthood – covert, cutting skin tissue.

Importantly, the table shows how during adolescence there was an increase in the forms of self-injury used by the participants, to include: scratching skin tissue, cutting skin tissue (covert and overt types), burning skin, bloodletting, re-opening old wounds, tearing skin with hard objects, stabbing hands with sharp implement, experimenting with tolerance to physical pain, pulling hair (in private), tearing off finger nails, causing nosebleeds, mimicking cutting and ligaturing, head banging, punching walls, kicking walls and minor overdoses.

Frequency in use of self-injury

Stressing the developing functions in the use of self-injury, during adolescence the majority of participants described how their use of self-injury increased in frequency. This was due to the generalisation in the use of self-injury as an established and effective strategy to cope with a widening range of sources of high levels distress they encountered in their daily lives. This included the increasing social, communication and occupational demands of being an adolescent, such as difficulties encountered in their social lives and in expressing their distress, for example:

> *"...until I left school...it seemed to escalate more...it was very much about*
>
> *...when I was frustrated...I couldn't get my emotions out and I did it more and*

more often at home especially if I spent a lot of time with my parents ...holidays

and things like that." (Int 16, page 10, lines 344-349)

This finding supports Alder and Alder's (2008) suggestion that the most prominent

period of development in self-injury is during adolescence. Leading on from this, in

contrast to adolescence, during adulthood it was found that the minority of

participants described experiencing an increase in their use of self-injury. Close

examination showed that these increases in frequency were for specific periods of

particularly high levels of distress. This distress was caused by unresolved trauma

from childhood and adolescence and emerging or developing sources of major

distress, such as non-disclosed sexual abuse and an emerging mental health condition,

for example:

> *"...when my oldest child got to 8 that was a huge thing for me because that's*
>
> *when it (sexual abuse) started for me...I couldn't cope and it (child's age)*
>
> *brought back so many bad memories – every time I looked at my child...and*
>
> *I'd...be frightened and paralysed and I'd panic and that was when I realised*
>
> *that I needed to do something because I was...cutting more and more..."* (Int19,
>
> page15, lines 536-545)

For several participants these increases in the use of self-injury were directly linked

with their need to verbally communicate or express the unbearable high levels of

distress they encountered, for example, leading on from the quote above 'F' says:

> *"...and that was the point I went into counselling..."* (Int 19, page 15, lines 544-
>
> 545)

Enhancing the effect of self-injury

Several participants describe how during adolescence as a consequence of their prolonged use of self-injury they learnt or developed a procedure for applying self-injury, which was specifically used to enhance the affect or sensation produced through self-injuring, in particular from the cutting form of self-injury, for example, 'L' describes how she would alter her environment at home to create the right setting to induce a low mood, such as dimming the lighting, to enhance the effects of using self-injury, she says:

> *"...it (self-injury – cutting) got to...being... something I actually quite liked doing...I would turn the music on and sit there and cut...it had to be certain music that continued to make me feel bad...because if I wasn't in the mood for it...then I would try to make myself...it wasn't angry music – it was sort of sad kind of slow...it was about feeling...a bit melancholy and a bit low...then... setting everything out...by this point I'd brought razors...setting out the stuff for cleaning it afterwards...and then...cutting...I just had to do it until I felt satisfied with the amount of blood...seeing enough coming out to wash away the feeling..."* (Int 25, page 11, lines 411-419, page 12, lines 420-437)

Developing the safe practice of self-injury

During adulthood the majority of the participants acknowledged and emphasised the personal value of having the use of self-injury available to them in their lives and subsequently developed their safe practise of self-injury as an effective, reliable and controlled, coping strategy, which they maintained as a covert activity, for example:

> *"...I still occasionally succumb to cutting...to take away my emotions that become so big and...overwhelming...it helps to release them – to...create a*

balance between the overwhelming emotions and controllable emotions – it's like a fuse – some people drink – smoke – take drugs – medication – I cut myself...what I do doesn't poison your body – take away life – for me it gives back life." (Int 4, page 6, lines 225-228, page 7, lines 229-237)

Similarly, Alder and Alder (2007) identified that many individuals who use self-injury acknowledge it is an effective and reliable coping strategy and as a consequence choose to continue with its covert use for coping with overwhelming distress.

Post self-injury self-care

Interestingly, during adolescence and into adulthood as a consequence of their frequent use of self-injury, several of the participants describe the development in their use of post self-injury, self-care. Self-injury became a means of creating or inducing a situation whereby they could engage in this form of self-care, for example:

"...what mattered was...stopping...the overwhelming feelings and thoughts I had...(and) ...cleaning up was very much part of the whole purpose of my self-injury...I can say it certainly became part of it as time went by...cleaning up was like cleaning up my mind and soul...I would feel quite detached from my body... it (cutting) was very controlled and I stayed safe – no stitches required ...and gently clean my damaged skin...it was like someone else was taking care of me cleaning and bandaging my injuries...it was self-care so I didn't need my Mum anymore just did it myself...I really got into the cleaning side of it all – I used to have lotions and creams – plasters and bandages – all in my own first aid box..." (Int 12, page 4, lines 134-135, page 4, lines 141-152, page 5, lines 181-183)

This function of self-injury demonstrates how using self-injury had developed to serve different functions during the same episode. Using self-injury provided relief from overwhelming distress, whilst additionally providing the opportunity to engage in post self-injury and self-care through tending to the injuries.

Using alternative maladaptive behaviour

Several participants described how during adolescence as a consequence of using self-injury they became increasingly concerned with being discovered by others. This prompted them to use alternative maladaptive coping behaviours to relieve or cope with the high levels of distress they experienced, including: taking drugs, drinking alcohol, and eating disorders. However, they returned to using self-injury which they found more effective in meeting their personal needs, for example:

"...when I got to sixth form I started to self-injure again – and it shifted to self-harm – binging and anorexia – I did this because it was difficult to self-injure because of everyone keeping an 'eye' on me – so having an eating disorder was the next best thing...then during the sixth form I started to self-injure – cut again – and the binging stopped..." (Int 8, page 2, lines 66-83, page 3, lines 84-85)

In contrast to adolescence, during adulthood, several participants describe how they used alternative maladaptive behaviours not out of concern or fear of being discovered but in their attempts to cope in a different way than using self-injury. These alternatives included: taking drugs, drinking alcohol and eating disorders, for example:

"...I...was...always trying other things to...replace the self-injury and went through a stage where I used to smoke a lot and drink a lot...I experimented

with drugs…I was anorexic for nearly 2 years (not clinically diagnosed)…but I

gave up on it because it just wasn't as effective as cutting…there was nothing

that cut out the pain as well as self-injury…" (Int 19, page 10, lines 366-373)

However, the majority of participants, as described by the participants in the example above, returned to using self-injury which they found more effective as a coping strategy than the maladaptive alternatives they tried.

3.2.3. Cognitive Components

From exploring the participants' accounts it was ascertained, as similarly found by Walsh (2006) that cognitive experiences were one of the core components of their use of self-injury. Close examination of these experiences during childhood, adolescence and adulthood revealed:

- Negatively orientated perceptions or interpretations of the social environment.

- Beliefs reinforcing the development of self-injury.

- Memories causing high levels distress.

- Developing understanding and knowledge of the functions of self-injury.

- Acquisition of applied knowledge and skills in using self-injury.

- Impact of dissociative states of mind.

- Stabilising the vacillation between overwhelming distress and dissociation.

- Creating a sense of empowerment or control through inducing a level of dissociation.

- Using self-injury to cope with a mental health condition

CHILDHOOD / ADOLESCENCE / ADULTHOOD

| Negatively orientated perceptions or interpretations of the social environment | Beliefs reinforcing the development of self-injury | **Using self-injury as a versatile multi-functional behaviour** |

SELFINJURY

Emotional
Cognitive
Distress
Dissociation

Developing understanding and knowledge of the functions of self-injury

Acquisition of applied knowledge and skills in using self-injury

Relieving cognitive (and emotional distress)

Using self-injury as a generalised coping strategy

Regulating or relieving memories

Altering or reducing dissociative states of mind

Stabilising the vacillation between overwhelming distress and dissociation

Creating a sense of empowerment and control through inducing a level of dissociation

Using self-injury to cope with a mental health condition

Figure 4. Diagram illustrating the cognitive factors contributing to the participants'

developing use of self-injury, as a versatile multi-functional behaviour.

Negatively orientated perceptions or interpretations of the social environment

Directly linked with social experiences, starting in childhood or early adolescence and continuing throughout adolescence and into adulthood, all the participants described forming negative perceptions or interpretations, judgements and concerns regarding their social environment, which intensified the high levels of cognitive and emotional distress they encountered, for example:

"...I was...a difficult person to be with - in a social context...in my relations with others and I did refuse to accept this...so people / friends would be difficult towards me...I would think it over and over in my mind – persecuting myself and thinking I'm the hurt one not them – I couldn't get it that they may be feeling upset too or more than me...it was all about me...cutting helped to relieve all of this - mixed thoughts and feelings..." (Int 10, page 5, lines 158-168)

The participants maintained these perceptions or interpretations of the social environment throughout their use of self-injury, which Klonsky (2007) concludes was a primary reason for using self-injury.

Beliefs reinforcing the development of self-injury

It was established that all those who used self-injury during childhood, adolescence and into adulthood formed beliefs about their circumstances or situation that reinforced their justification for using self-injury and its continued development, for example:

"...it (self-injury) was my thing my private world...only I knew about it (self-injury) – so nobody else was being injured or hurt...it (self-injury) helped me keep on track, keep stable, keep from being even more upset – so in that respect

it worked…all that terrible …social and emotional upheaval – I don't think I could have managed it without the self-injury…it was my secret prop…it gave me…strength…other people had people…to talk to or that supported them…I had self-injury and that was how it worked for me..." (Int 7, page 5, lines 158-185)

The participants maintained these beliefs about their circumstances or situation which clearly reinforced their justification for continuing to use self-injury. Supporting this finding, Sutton (2007) and Chapman, et al. (2006) described how these beliefs reinforce the use of self-injury to relieve or cope with this distress. Expanding this point, Alder and Alder (2007) found that these beliefs about using self-injury actively develop positive attitudes about the use of self-injury, which is reflected in what the participants described.

Memories causing high levels of distress

Directly linked with emotional and social experiences, starting during childhood or early adolescence and continuing throughout adolescence and into adulthood, the majority of participants describe experiencing thoughts, memories (which the participants referred to frequently as 'flashbacks') associated with traumatic and disturbing experiences such as abuse and / or neglect that occurred during their childhood or adolescence. These memories caused them to experience heightened levels of distress preceding their use of self-injury. Supporting this finding, Sutton (2007) outlines how distressing thoughts and memories are factors involved in the 'mental anguish' a person who uses self-injury suffers or encounters preceding the use of self-injury, for example, 'F', who was sexually abused says:

"...the abuse stopped so I was left with the memories and flashbacks...so I would still use self-injury to cope...with the memories...than the actual event...I would still be cutting at home...it was...about keeping it together (emotionally and cognitively)." on starting at university, she says, *"...I naively thought if I left home and went away then all my problems would go away but they followed me and I still had the nightmares and I still had the flashbacks and I was still cutting myself...I still hadn't told anyone... holding onto that was damaging in terms of I had no other release – so when I had the bad memories...nightmares ...I didn't have anyone to turn to so I would cut...there was nothing that cut out the pain (emotional and cognitive) as well as self-injury...it (using self-injury) was mainly about keeping... control of my emotions – control of my memories and ...allowing me to suppress everything – all...the nasty stuff that had happened to me...it (self-injury) allowed me to carry on with a normal life...I couldn't face what they had done to me, I had to get rid of it (distress) somehow and cutting did that for me...at university...I was more aware of it...more aware of...the horror! of what these people had done to me..."* (Int 19, page 9, lines 319-326, page 10, lines 350-359, page 10, line 373, page 11, lines 392-400, page 11, lines 402-416, page 14, lines 498-513)

This finding is consistent with Schoppmann, et al. (2007), who described how memories of past traumatic experiences are relieved through using self-injury. Expanding this finding, Chapman, et.al. (2006) outline how self-injury has a function in supporting an individual to cope with the highly distressing memories of the abuse they encountered. Also, Mazelis (1998) reported that survivors of abuse frequently experience memories or 'flashbacks' to the actual abuse they experienced which is

associated with their use of self-injury. Low, et al. (2000) identified that the victims of abuse use self-injury to control their traumatic and emotionally distressing memories. Additionally, highlighting the direct link with emotional experiences, Sutton (2007) describes how such memories cause unbearable emotional distress and lead to the use of self-injury as an effective means of coping with these memories and relieving the distress they subsequently cause.

Developing understanding and knowledge of the functions of self-injury

The participants described how, through their persistent use of self-injury, they developed their understanding and knowledge of the multiple functions which their self-injury served. This important development in the use of self-injury was also identified by Alder and Alder (2007). On closer examination, it was found that this aspect of the participants' self-injury could be categorised within two different areas of development that were associated with the expanding multi-functional use of self-injury, including:

- Coping with high levels of cognitive and emotional distress.

- Development of self-injury as a planned and carefully implemented generalised coping strategy.

Coping with high levels of cognitive distress

During adolescence, the majority of participants described their use of self-injury as a conscious, covert and effective method of coping with high levels of distress and states of dissociation which involved cognitive processes. This pattern continued during adulthood for the all of participants', for example:

"...just putting this small cut on my arm...I've calmed...and I've been able to relax and...sleep...I needed something that would work...I would calm down and it's (self-injury)...taken my mind off all the things that are bugging the hell out of me...it's almost like I've...switched off and the automatic pilot comes on and I've done whatever a part of me has thought – has needed to do and then switched on again and come back to myself...it's like...acupuncture...its evolved from me...not being able to control myself and lashing out to...more private – more reserved – release of tension (cognitive and emotional), it's more private because I'm not blowing up in a big loud way...I'm... relieving...cutting – relieving tension – giving myself something else to concentrate on which is pain...but it had...the unexpected welcome side affect that it took me away from everything that was going on which I...needed at the time...when I do it (self-injuring) that's what...I'm looking for...I can talk to somebody...and it (distress) wouldn't necessarily stop – take away the reason for needing to do it (self-injure) – there would still be that occasion where...the depression's really bad – I'm really angry and if something happens I can't deal with it – I want to get away from it - so therefore out come a blade and a couple of little cuts just to take me away from all of that...it's a solution at the moment...it works for me...and it's never going to go any further than...a couple of little cuts..." (Int 24, page 21, lines 790-793, page 22, lines 810-830, page 24, lines 905-910, page 25, lines 916-926)

This finding is consistent with Chapman, et al. (2006) and Deiter and Pearlman (2000) who also identified that using self-injury was a solution (cognitively) for the individual and served to relieve and reduce high levels of distress. Likewise, Heath,

Toste, Nedecheva and Charlebois (2008), who examined the characteristics of self-injury and associated risk factors in 23 students aged between 18 to 24 years, and Schoppman, et.al. (2007), concluded that those using self-injury develop its use as an effective coping strategy for distress.

In addition, highlighting the link between cognition and emotions, Najmi, Wegner and Nock (2007), who conducted a cross-sectional study examining 87 adolescents' suppression of unwanted thoughts, identified that self-injury is used to suppress distressing thoughts and to alleviate distressing emotions, which the participants in this present study clearly described.

Development of self-injury as a planned and carefully implemented generalised coping strategy

Starting in adolescence and continuing into adulthood, in addition to being used to cope with high levels of cognitive and emotional distress and dissociative states of mind, all the participants using self-injury describe how it developed as a planned and carefully implemented coping strategy which was influenced or prompted by their knowledge of its generalised application. This aspect of self-injury reflects the development of the participants' use and application of self-injury as a multi-functional behaviour, for example:

> "…it's (self-injury) something I used to cope…a few years back…whereas now
> …getting into my adult life - it's very sporadic and it helps me manage when I
> need…it helps me function to a higher level…its quicker and easier than taking
> a headache tablet for a headache – it fixes the issue…the problem in seconds
> and I'm calmer and more able to do what I was supposed to be doing…I need to

have control over myself…and not let other people to be able to influence

that…so it…doesn't matter what anyone else does to me, I can cope with it or

not as the case maybe and I know how to cope with it…" Also *"…it's (self-*

injuring) an excuse – because I think I definitely need one – I need an excuse to

take care of myself – it's my version of pampering myself…" (Int 25, page 18,

lines 651-686, page 19, lines 720-726)

This finding is supported by Alder and Alder (2007), who highlighted the continuing

development in the use of self-injury. A conclusion from their research into the

practice of self-injury was that it becomes a coping behaviour which is not driven by

impulse but is a deferred, planned and considered behaviour. Additionally, Deiter and

Peralman (2000) identified that using self-injury develops to serve a multitude of

functions, which is consistent with the participants' descriptions of their developing

use of self-injury over time.

Acquisition of applied knowledge and skills in using self-injury

Importantly, from close of the participants' examination experiences of using

self-injury, it was established that, during childhood, adolescence and into adulthood,

a pattern of consequences emerged associated with the acquisition of applied

knowledge and skills. These were gained through actually practicing or applying self-

injury as an effective coping strategy. This pattern involved developing an

understanding of how to effectively use self-injury. In childhood, the majority of

participants who used self-injury describe learning about the fundamental or primary

functions of their use of self-injury and how effectively to apply self-injury, for

example:

"...grazing my knee and hurting my leg...took my mind off the upset and that ...triggered something in my head – that oh there's something...that worked for me...and that's ...what started...I'd graze my knees because...even at that young age I was thinking rationally in terms of a child falls over and grazes their knees – so it's quite common to see grazed knees or scrap the palms of my hands because when you fall over...you put your hands down and you graze your hands...." (Int 19, page 1, lines 9-22)

This pattern increased during adolescence, where it was found that the majority of participants described their continuing development of their applied knowledge of how to effectively use self-injury, which became an established and effective coping strategy, for example:

"...I cut and it was before and after school – I would cut my arms in an alley near the school only small cuts but under my sleeves and dark cardigan they didn't show the small trickles of blood – then mainly at lunchtime, which was, I think, a whole hour on my own – I would lock myself in the toilet and cut my arms again...cutting was more carefully done at home...it was more private...I had my own room...I would use my Mum's razors which I had broken and would cut deeper than at school and watch the blood drip out onto an old 'T' shirt...it wasn't just about the pain...reunited with somewhere where it was calm..." (Int 7, page 4, lines 131-135, page 4, lines 136-153, page 5, lines 154-155)

This is consistent with Hodgson (2004), who identified that those who used self-injury learnt that it was an effective coping strategy for reducing or relieving distress.

This development continued into adulthood and was demonstrated by several participants who described how, in addition to effectively using self-injury to relieve or cope with high levels of distress and or states of dissociation, their applied knowledge had developed to a level whereby they had refined the process of applying self-injury, for example:

"...I definitely...do have control over it (self-injury)...I don't do anything...that I would need to go to the doctor - accident and emergency dep't...I deliberately make sure I do not do stuff (self-injure) like that...I don't do anything like chemical burns anymore because that is difficult to control...I would heat something up and then because say I used a particular piece of metal I would know how many seconds to count – to heat it up...so it would make a certain amount of injury or...damage – but not beyond that – I control it in that way...self-injury has this...double effect...there are moments...when I burn myself and the pain...goes up in an arch – a wave – and at the top there's a moment when...you can't think of anything...feel anything...like being blinded by sunlight...and it...makes everything...everything go away apart from that feeling and...I...find that...really nice...that fsssshh...like a firework..." (Int 5, page 18, lines 656-678, page 18, lines 685-687, page 19, lines 688-694)

Similarly, Klonsky (2007), Klonsky and Muehlenkamp (2007) outline how some people may use self-injury to induce a state of exhilaration. Expanding this finding, Sandman and Hetrick (1995) describe how following the use of self-injury there is a release of opioids and a state of euphoria. This is demonstrated by several participants who describe how their knowledge of the effects of self-injury and their refined skills

led to their use of self-injury being applied with precision, in particular cutting, focused on inducing a euphoric sensation which acted as an escape from reality.

Impact of dissociative states of mind

Linking cognitive with emotional experiences, several of the participants who experienced abuse and neglect during childhood indicate that, in addition to experiencing overwhelming distress, they encountered episodes of dissociative states of mind which, as similarly found by Chapman, et.al. (2006), can negatively impact upon cognitive and emotional functioning. The participants described these states as being very disturbing / distressing and acting as an antecedent to their developing use of self-injury. This finding is consistent with Polk and Liss (2006), who identified that episodes of dissociative states of mind are strongly associated with the use of self-injury. Expanding this point, Santa Mina, Gallop, Links, Heslegrave, Pringle, Wekerle and Grewal (2006) used self-injury questionnaires to examine the psychometric properties of 83 patients aged between 18 and 69 years, who had used self-injury. They found that individuals who experienced abuse and used self-injury disclosed encountering episodes of dissociation. Moving into adolescence, all the participants who had or were encountering physical, emotional and / or sexual abuse and neglect experienced dissociative states of mind and subsequently established their use of self-injury to alter and reduce these disturbing, extremely uncomfortable and debilitating states of mind, for example:

"...I used it (self-injury) cause I needed something to hurt (physically) so I did know I could still feel (emotional and cognitive) things…if you walk around…feeling like you're dead…you're just breathing and staying alive…if

you cut yourself and you still bleed…you can't be dead…" (Int 22, page 13,

lines 488-495, page 14, line 496)

The use of self-injury to alter states of dissociation is supported by Klonsky (2007)

and Klonsky and Meuhlenkamp (2007) who reported that a function of self-injury is

to terminate the highly uncomfortable and distressing experience of dissociation by

stimulating or energising the individual's capacity to generate thoughts and feelings

which is what the participants using self-injury for this purpose described.

However, as similarly identified by Deiter and Perlman (2000) and Klonsky and

Muehlenkamp (2007), developing during adolescence and continuing into adulthood,

several participants described the three ways in which they used self-injury with

regard to reducing or inducing dissociative states of mind:

- To have thoughts and feeling.

- To stop thoughts and feelings.

- Vacillation between overwhelming distress and dissociation.

<u>To have thoughts and feelings</u>

All those who encountered episodes of dissociation or experienced a debilitating

sense of cognitive and emotional detachment described using self-injury to alter and

alleviate these disturbing states of mind, enabling them to have thoughts and feelings

and a sense of reality. This aspect of self-injury was similarly identified by Low, et al.

(2000), for example:

"…I became more aware of the times that I would dissociate and this feeling of being not sure of my reality would be changed by self-injuring which would… make me feel real again…cutting was keeping me alive…" (Int 8, page 4, lines 138-140, page 5, lines 180-183)

This is consistent with Low, et. al. (2000), who found that self-injury was used as a means of coping with the insufferable affect of dissociative states of mind.

To stop thoughts and feelings

In contrast, several participants describe how, when encountering overwhelming distress, they learnt to use self-injury to induce a dissociative state of mind. From inducing this state of dissociation they would feel detached from their distressing thoughts and feelings. Chapman, et.al. (2006) describe this as being an 'escape' from high levels of distress, for example:

"…it (self-injury) was like I was doing an activity focused – cut cut cut and it worked – when the activity was completed I couldn't give a damn about anything – I felt completely numb (emotional and cognitively) like somebody had hit me over the head with a iron bar – concussed – numb and oblivious to it all…what mattered was stopping the overwhelming feelings and thoughts… stopping the…'dead in their tracks'…I would feel quite detached from my body…" (Int 12, page 4, lines 119-135, page 4, line 147)

Vacillation between overwhelming distress and dissociation

Demonstrating the continuing development in the use of self-injury during adulthood, those who used self-injury to alter states of dissociation became more skilful through practice in applying self-injury for this purpose. Leading on from this, several

participants highlighted their use of self-injury, which was used to cope with the vacillation between overwhelming distress and states of dissociation. They used self-injury to facilitate dissociation when encountering high levels of emotional and cognitive distress and to alleviate dissociation when experiencing a sense of emotional and cognitive detachment, for example:

> *"...there were times...I used to...completely dissociate...be somewhere else...I was cutting to bring control back into my life and to bring my emotions under control to calm me and yet, other times, I would cut because I felt so numb and so dead that I needed to feel alive again, so I would cut myself for the opposite reasons...I used to feel... quite numb and dead...I used to use self-injury to make myself feel alive...it still had that dual purpose...when the emotion became too much and too overwhelming, it calmed me down and when I became too dead it would keep me alive."* (Int 19, page 6, line 197, page 8, lines 291-302, page 12, lines 425-430)

This developmental factor is supported by Mazelis (1998) who explains how those who experience dissociation and overwhelming distress learn to apply self-injury to manage the vacillation they experience between these two extreme emotional and cognitive states of mind.

Creating a sense of empowerment or control through inducing a level of dissociation

During adolescence and into adulthood several participants described how from their prolonged use of self-injury, they learnt that, by inducing a level of dissociation, they gained a position of control over their ongoing emotional and cognitive distress.

Subsequently, this gave them a sense of empowerment in their lives. This aspect of using self-injury is linked with social experiences, in particular enabling or empowering the individual to present a persona in a social context. Therefore, they developed the use of self-injury not only to induce a state of dissociation, but also to enable a sense of empowerment in which they were not affected by thoughts and feelings. This was in the context of the challenges they faced in their social environment, for example, 'V', who was bullied by his peers, says:

> *"...the bullying...it (self-injury) helped me overcome these hurdles in my life...the self-injury increased and I was much more able to deal with my life at home and at school ...it (self-injury) became my escape – my own secret world...it made everything okay...those day to day feelings about feeling different and not understanding why... other kids didn't like – or feel okay about being friends with me...this was more confusing in my thoughts because I didn't want to be friends with boisterous and popular boys – but quiet...nice gentle boys like me...it (self-injury) was about getting it right – the right amount of pain...followed by relief and relief in some ways empowerment...it was something that I did nobody else and this actual act in itself – this...secret was mine and I was in complete control of it...the act of self-injury was like the friend who I spent a little time with each day and gave me tranquillity..."* (Int 11, page 3, lines 82-106, page 4, lines 119-124, page 4, lines 125-134)

Supporting this finding, Klonsky and Meuhlenkamp (2007) found that individuals can use self-injury in order to detach themselves from their social environment and consequentially induce a sense of empowerment or control over their thoughts and feelings.

Using self-injury to cope with a mental health condition

Linking cognitive and emotional experiences, several participants described how during adulthood they developed the use of self-injury to cope with the unbearable levels of cognitive and emotional distress from an underlying mental health condition. Gollust, et al. (2008) and Klonsky and Muehlenkamp (2007) have both identified, in simple terms, that self-injury and mental health conditions can co-occur. This relationship between self-injury and mental health, is more fully developed by the participants in this study who provide descriptions of the specific functions their use of self-injury had in relation to the mental health condition they suffered, for example:

"...the...psychiatrist...diagnosed me with...mania and depression...my moods (emotional) can rapidly change up and down – up and down – up and down...those changes started happening with my mood...despite the medication I think that...led me to self-injury as a way to...regulate that (moods)...I get scared...and the self-injury comes back to me...I get very insecure about change and I look for something that... feels safe...that's why I choose self-injury... I used it (self-injury) to...cut myself off and then in other ways to reattach myself...it was a way to...manage - to work with my moods which were very much feeling states between feeling errrr! low and not really there..." dissociation *"Yeah...it kept a lot of what was going on inside away...it (self-injury) was a way to...regulate...my moods...varying between wanting to bring myself back down to ground and wanting to escape myself...it was also about control..."* (Int 23, page 18, lines 668-674, page 19, line 719, page 16, lines 582-609)

Several participants indicated that the mental health condition they suffered had begun to emerge in late adolescence or earlier. However they coped with the negative cognitive and emotional impact of the condition on their own, without any support from others, through using self-injury. The use of self-injury was the only strategy they used in coping with the uncertain and lonely difficulties they encountered, for example, 'M' describes how he was using self-injury to help regulate his fluctuations in mood, which he did not understand during his adolescence. However, when he was attending college he discovered that he was suffering from depression, he says:

"...my dad dragged me along to the doctors – I told the doctor what was going on with me and he said okay you sound like your suffering from clinical depression...and that was a huge relief having gone through all the stress of high school...for somebody to actually say okay there's a reason why you're feeling this down and low – it's a medical condition – that was a huge relief...it (self-injury) stopped for a short period of time..." (Int 24, page 16, lines 605-610, 17, lines 611-613)

This finding is supported by Nixon, et al. (2008) who found that self-injury was primarily used to relieve the distress caused by depressive feelings. Also, the participants' accounts of the relationship between mental health conditions and their use of self-injury support Whitlock, et. al's. (2006) suggestion, that there is a direct link between mental health difficulties and the use of self-injury.

3.2.4. Emotional Components

From exploring the participants' accounts it was ascertained, as similarly found by Walsh (2006) that emotional experiences were one of the core components of their

use of self-injury. Close examination of these experiences during childhood,

adolescence and adulthood revealed:

- Internalised and unresolved emotional distress or disturbance.

- External or environmental factors causing negative emotional arousal.

CHILDHOOD / ADOLESCENCE / ADULTHOOD

INTERNALISED AND UNRESOLVED EMOTIONAL DISTRESS OR DISTURBANCE

SELF-INJURY

EXTERNAL OR ENVIRONMENTAL FACTORS CAUSING NEGATIVE EMOTIONAL AROUSAL

THE CONTINUED USE OF SELF-INJURY

Experiencing episodes of overwhelming distress

Anger and frustration

The impact of a communication deficit on the expression of emotional distress

The impact of being emotionally discounted, neglected and or abused

The generalised use of self-injury to cope with secondary sources of everyday emotional distress e.g. caring for a family

Figure 5. Diagram illustrating the continued influence of emotional factors on the

development and use of self-injury.

Internalised and unresolved emotional distress or disturbance

On close examination of the internalised and unresolved emotional distress or disturbances that the participants described, their associated use of self-injury was found to consist of a number of emotional aspects which reflected the multiple functions in their use of self-injury, including:

- Experiencing episodes of overwhelming emotional distress.

- Anger and frustration.

- The impact of a communication deficit on the expression of emotional distress.

Experiencing episodes of overwhelming emotional distress

Linking emotional and cognitive components or thoughts and feelings, all the participants described how, consistently during childhood and throughout adolescence and into adulthood, their use of self-injury served to bring about a state of relief from the high levels of emotional (and cognitive) distress they experienced. This was similarly found by Klonsky and Meulenkamp (2007), Chapman, et al. (2006) and Rayner, et.al. (2005), who concluded that the primary function of self-injury is to obtain relief from high levels of emotional distress, for example:

> *"...my emotions that become so big and overwhelming...it (using self-injury)*
> *helps to release them to...create a balance between the overwhelming emotions*
> *and controllable emotions...it's a fuse...cutting is about reducing my...*
> *emotional distress...or pain...to a level I can cope with...it's about a*
> *relationship I have with myself and the way I manage me feelings that grow too*
> *big for comfort..."* (Int 4, page 7, lines 229-237, page 8, lines 274-285)

This finding is supported by Whitlock, et al. (2006) and Murray, et al. (2007), who described how a negative emotional stimulus or overwhelming emotional pain (distress) prompts the use of self-injury. The participants described their encounters with high level of emotional (and cognitive) distress as a salient primary antecedent preceding their use of self injury.

Developing this point, Klonsky (2009) identified that individuals' who encountered overwhelming emotional distress use self-injury for the positive emotional impact of reducing this distress, which the participants in this study clearly described. However, further to these findings, the participants described how the use of self-injury associated with high levels of emotional distress developed over time and shifted through the emotional changes they encountered in their lives.

Anger and frustration

During childhood, linking emotional and cognitive experiences, several of the participants who used self-injury describe encountering distressing feelings and thoughts leading to intense anger and frustration, which preceded their use of self-injury. Similarly, Herpertz, Sass and Favazza (1997), who investigated the impulsivity in the self-injury of 165 hospital in-patients using psychometric tests and diagnostic interviews, as well as Chapman, et al. (2006) and Nock, et al. (2007), identified that intense anger and frustration can precede the use of self-injury. This pattern in the use self-injury persisted and increased during adolescence, confirmed by the majority of participants who described their anger and frustration. Moving into adulthood, several of the participants found that this pattern continued as an established use of self-injury, for example:

"...the...anger and frustration...literally not knowing what else to do except cut...I...felt...unsettled and...very insecure inside of me...mainly with relationships that had broken up with women...cutting myself...it was a release ...it was...anger with myself..." Moving into adulthood, he says *"...although I was...a lot more mature, I was still finding it difficult with relationships and that was still the main thing that was upsetting me...I was angry with myself...for not being able to cope with life...it (self-injury)...works as a release for everything ...the feeling before (preceding the use of self-injury) was anger and frustration ...not knowing what else to do but cut...I'd say afterwards...I felt a lot happier ...its (self-injury) relief...calm after a storm, really, it was like that..."* (Int 20, page 8, lines 269-280, page 11, line 405, page 12, lines 455-464)

The participants consistently reported experiencing high levels of anger and frustration, throughout adolescence and into adulthood. Using self-injury provided them with an established and effective means of coping or relieving the intense anger and frustration they experienced. This finding is supported by Mazelis (1998) and Klonsky and Muehlenkamp (2007) who describe self-injury as being used to disperse or alleviate angry thoughts and feelings. Also, Chapman, et.al (2006) found that anger and frustration intensified the already high levels of distress experienced by those who used self-injury. Additionally, Ross and Heath (2002), who investigated the frequency of self-injury in 140 adolescents, using a self-injury assessment and semi-structured interviews, identified that frustration impacts upon the emotional stability of an individual and subsequently prompts their active use of self-injury as a form of release or relief. The participants in this present study clearly described how using

self-injury reduced and or relieved their encounters with high levels of intense anger and frustration.

<u>The impact of a communication deficit on the expression of emotional distress</u>

During childhood, throughout adolescence and into adulthood, all the participants who used self-injury describe how the overwhelming emotional distress they encountered was not communicated or verbalised to others and was subsequently internalised and intensified, for example:

> *"...I would be...on my own – feeling upset – thinking of my ex and would cut just enough to bleed...until I felt entirely calm and then I would stop the bleeding...I was in control but what really controlled...it (self-injury) was my feelings or my emotions...it (self-injury) was...relieving how I felt because I couldn't express or communicate to others how massive my upsetting feeling was...I internalised it (distress) – I didn't express it to others...and it (self-injury) saved me – it (self-injury) allowed me to ...bypass...the bottling up of my emotions – it relieved them through an internal process..."* (Int 14, page 7, lines 230-242, page 7, lines 264-267, page 8, lines 268-271)

Similarly, Paivio and McCulloch (2004) concluded that using self-injury is associated with deficits in emotional expression which the participants described experiencing.

External or environmental factors causing negative emotional arousal

On closer examination of the participants' descriptions of emotional experiences associated with their multiple use of self-injury, it was established that, in addition to

reporting internalised distress during childhood, throughout adolescence and into adulthood, they all describe encountering emotional distress directly caused by factors they were exposed to in their social environments, for example:

> *"...I started getting bullied...and, to add to my problems, my friends from primary school started avoiding me so that they would not get dragged into the bullying...inside I felt very upset, lonely and...scared...I kind of got used to the comments but what really hurt me was that my friends gradually alienated me – stopped talking to me – playing... weekends became lonely and that went on until I was about 12 and was the cause of my self-injury...I began to feel very lonely...I remember seeing some boys from school... and although I didn't want to be with them...I became so angry with myself – why are you on your own...the thought entered my mind to hurt myself...I...gouged my arm...I felt so angry with myself – it didn't hurt but after a short time it did and I stopped...I felt some relief but it was more about punishing myself for being me...the anger was towards myself...it (self-injury) altered the way I felt at the time...it didn't replace the emotions with another emotion but took the emotions away – took my anger away...the sadness...loneliness and self-pity...it (self-injury) added a new dimension to my life and the way I dealt with my emotions."* (Int 11, page 1, lines 24-38, page 2, line 39, page 2, lines 44-71)

This finding is consistent with Hodgson (2004) who also identified that an important objective of using self-injury was to cope with the distressing emotions caused through negative social interactions.

<u>The impact of being emotionally discounted, neglected and or abused</u>

Linking emotional and social experiences during childhood and throughout adolescence, all the participants who used self-injury described being emotionally discounted, neglected or emotionally abused by others and this led to the internalisation of their emotional distress. This pattern continued for several participants into their adulthood, for example:

"...I was 8 or just 9 – I was raped by my cousin...the trauma of that...I went and told my mother – I didn't tell her what happened but I told her I was hurting down below because I didn't have the words for what he had done to me...they (mother and auntie) said – oh don't worry you must have been rubbed sore by your swimming costume...at the time I didn't know any better...at 9 you don't know what sexual intercourse is – you don't know what rape is...so the only words I could have to tell my mother was that I hurt and where I hurt – so I told her and I showed her...then about six months later I...started to be sexually abused by my eldest brother and that is when I started to self-injure...my eldest brother – he stopped abusing me...when I was about 11 – that's when he stopped...but then it was...a switch because my other brother started abusing me... he was ...very different in his approach – in the things he did...from 11...through to 16 ...he would sit me in front of pornographic films and say well that's how you have sex and stuff like that...then he would invite his mates around and let them have sex with me but he never actually made me have sex with him – my eldest brother did....he would allow his mates to come around and use me and tell me that's how I had to behave – like they did on the films – so he was kind of...more twisted than my other brother...I think for me if I

wasn't cutting I'm not sure how I would have coped…" (Int 19, page 1, lines 27-38, page 2, line 39, page 3, lines 84-86, page 5, lines 165-181, page 8, line 284)

This finding is substantiated by previous research, such as Glassman, Weierich, Hooley, Deliberto and Nock (2007) who examined the relationship between child maltreatment and self-injury using a series of questionnaires administered to 94 adolescents aged between 12 and 19 years. They concluded that the trauma of childhood abuse and neglect is strongly linked to the development in use of self-injury. Additionally, Paivio and McCulloch (2004) and Whitlock, et al. (2006) identified that emotional, physical and sexual abuse was a noteworthy precursor to individual's encounters with high levels of emotional distress and subsequent use of self-injury.

3.2.5. Social Components

From exploring the participants' accounts, it was ascertained that social experiences were one of the core components of their use of self-injury. Walsh (2006) supports this finding when describing the environmental dimensions involved in the use of self-injury, such as when it is associated with the family environment and relationship difficulties. Close examination of these experiences during childhood, adolescence and adulthood, revealed:

- Social experiences within the family unit.

- Social experiences outside of the family unit.

Social experiences within the family unit influencing the use of self-injury

Unstable home environment

Abuse and or neglect

Social factors from outside the family unit influencing the use of self-injury

Difficulties in forming and maintain relationships with others

Victim of bullying

Development of the multiple functions of self-injury in a social context

Manipulating and gaining the attention of others

Enabling a persona in a social context

Coping with continued abuse and or neglect

Coping with the memories of abuse and or neglect

Independence from family and parental supervision

Emotional

Cognitive

Distress

Dissociation

SELF-INJURY

Figure 6. Diagram illustrating the social factors described by the participants that influenced the use of self-injury and its development.

Social experiences within the family unit

On close examination of the social experiences and highlighting the developing multiple functions of self-injury emanating from within the family unit the following themes emerged:

- Unstable home environment.

- Abuse and or neglect.

- Independence from family and parental supervision.

Unstable home environment

The majority of participants described how, during childhood, throughout adolescence and into adulthood, they experienced unstable home environments causing them high levels of emotional and cognitive distress, which subsequently led to their use of self-injury as a coping strategy, for example, 'E' describes her unstable home environment during childhood and throughout adolescence, when she says:

"...my family was...dysfunctional...I wasn't beaten or abused...but my parents were unhappy and...my dad...he was an angry man and...the atmosphere...at home...was always – you could 'cut it with a knife' it was – my stomach would be in 'knots'...it wasn't conducive to growing up...it wasn't right...I wished my parents were normal – I wished we had a normal life...and not this strange... fantasy my dad lived...nobody knew how depressing he was...and angry...he was a very cold man...any father should be the head of the family and strong and looking after everybody and he didn't – he didn't look after us in that way...as a child...you need people to look after you in different ways and my dad...let us all down..." 'E' describes this unstable home environment continuing into her adulthood *"...I hadn't seen my dad – hadn't spoken to him for years...and it all started to fall apart again...my older brother...it transpired ... had a little girl and my dad wouldn't even recognise it...complete denial about anything – no responsibility – he wouldn't take responsibility...for his own children let alone his grandchildren and I started to (self-injure)...but this time it was with a scalpel...I still wanted...basic things like a family – like normal...and I would*

...cut...I was desperately, desperately upset with my family – it always is...it

(using self-injury) stems from...my family – my father...if we would have had a

bit more stability or a normal life when we were children – even into adulthood

...a lot of it is to do with my dad...if we had a bit of a foundation as a family

...there wouldn't be the knock on affect..." (Int 1, page 1, lines 11-17, page 1,

lines 25-28, page 1, lines 30-37, page 2, lines 39-41, page 2, lines 53-58, page 6,

lines 217-222, page 7, line 236, page 8, lines 278-280, page10, lines 354-362)

This finding is supported by Heath, et al. (2008) who recognised that a dysfunctional

or chaotic home environment can cause an individual to cope through using

maladaptive behaviours such as self-injury. Also, as found by Lindgren, et al. (2004),

individuals who self-injure are often exposed to unstable and chaotic family or home

environments. Expanding this point, Wagner and Rehfuss's (2008) phenomenological

study explored the experiences of 3 women aged between 18 and 25 years who used

self-injury. They identified that the rigid, inflexible and unhealthy home environments

the women lived within were found to cultivate their use of self-injury as a coping

mechanism.

Abuse and or neglect

On closer examination of the participants' descriptions of their unstable home

environment, it was established that the majority of participants who used self-injury

during childhood and throughout their adolescence provided details of how they

experienced abusive and or neglectful parent/s interactions, and used self-injury to

cope with the ensuing distress they experienced, for example:

"...I got abused from the age of 7 to 14...I used to go and stay with my dad at

weekends and he was the one what sexually abused me...it felt great to me for a

start because I was only a young age so that's what I thought dads done…and

as time went on I knew it wasn't…get the hurt out of me…I self-injured…" (Int

15, page 1, lines 5-6, page 1, lines 23-29)

This is consistent with the research of Deiter and Pearlman (2000) that identified a

history of childhood abuse was associated with individuals who used self-injury as a

maladaptive method of relieving the distress they encountered. Similarly, Low, et al.

(2000) and Glassman, et al. (2007) found a strong association between abuse and

neglect with the use of self-injury. Paivio and McCulloch (2004) identified that

childhood abuse and neglect was a prominent antecedent to the use of self-injury.

Additionally, Yip (2005) reported that abuse, neglect, trauma and parental conflicts,

causing high levels of distress, preceded episodes self-injury and specifically self-

cutting, in adolescents. Expanding the impact of abuse and neglect and linking this

with other factors involved in using self-injury, Nock (2009) describes how by using

an integrated theoretical model of self-injury it can be shown that abuse impacts

detrimentally on an individual's social life and communication with others throughout

childhood and increases the likelihood they will use self-injury.

This salient antecedent remained consistent in the participants' lives until the abusive

and / or neglectful relationships they experienced had ceased. However, at this point it

was found that the distress preceding the use of self-injury divided into forms:

- Distress caused by memories.

- Continued abuse and or neglect.

Distress caused by memories

Linking social, cognitive and emotional experiences for several participants, although the abuse and or neglect they had endured had stopped, the source of distress was replaced by their encounters with disturbing and highly distressing memories or 'flashbacks' to the traumatic abuse and or neglect they had experienced. This persisted into their adulthood, causing them to experience high levels of distress and a shift in their use of self-injury to cope. Importantly, for several participants these memories or 'flashbacks' were triggered through their social interactions, for example:

> *"...sometimes the smell of a certain aftershave on someone would trigger a flash back and...I couldn't cope with that because at that point I still hadn't told anyone apart from my husband and we never talked about it (sexual abuse or self-injury)...and different things would be a trigger for me...and...I would still need to cut because I had no other outlet...smelling that...particular type of aftershave...on someone and...I still saw the people that had abused me...so if I saw them on the street....I would just go into a panic..."* (Int 19, page 13, lines 482-494)

Supporting this finding, Mazellis (1998) describes how the survivors of abuse experience disturbing memories of the trauma they encountered and subsequently use of self-injury to cope with the affect of these memories.

Continued abuse and or neglect

Linking social, cognitive and emotional experiences, several participants describe how the abuse and or neglect continued into their adulthood and consequentially they

continued to use self-injury to cope with the overwhelming distress and states of dissociation they encountered, for example:

"...I was involved in domestic violence...he used to hit me and everything – so it brought it all back again – so I started cutting again...he used to drink a lot... (and)... take it out on me – he's had me by the throat – I've had black eyes – I've had a steel poker rapped across my back...he did used to do it very...careful so no one could see where he used hit me...he used to storm out to the pub – so I used to be left there and... the only way I could get over it was to...cut..." she provides an example *"...he got me by the throat and was swearing at me...he took the money out of my purse and he slapped my face and he chucked me across the room and then he went out...I was an emotional wreck and so I... went upstairs – actually it was like a daze to me...broke the razor and...cut..."*
(Int 15, page 4, lines 151-163, page 6, lines 174-182)

This is consistent with Mazelis (1998) who described how suffering abusive and neglectful relationships subsequently leads the victims into using self-injury as the means to cope with and survive their ongoing ordeal.

<u>Independence from family and parental supervision</u>

Highlighting the development of self-injury, several of the participants who continued to use self-injury into their adulthood, describe how the type and forms of self-injury developed when they left home and were no longer constrained by parental supervision, for example:

"...my self-injury switched from home where I was restricted – had to be careful not to get found out and being watched (by parents and relatives) to complete

freedom at university – so I did cut without the restrictions of home…" (Int 8,

page 4, lines 123-126)

This change in their social environment or conditions led to the development in their

self-injury and its use as a multi-functional behaviour. In both the examples cited the

participants' use of self-injury also increased in frequency.

Outside of the family unit

On examination of the social factors emanating from outside of the family unit

the following themes emerged:

- Social persona.

- Difficulties in forming and maintaining relationships and interacting with
  others.

- Victim of bullying.

- Manipulating and gaining the attention of others.

Social persona

Importantly, during childhood, several of the participants who used self-injury to

relieve and cope with overwhelming distress describe the emergence of a secondary

function of self-injury, which was to enable them to maintain a persona in context of

their social environment. They describe how this function allowed them to hide their

suffering and conceal their use of self-injury from others and, in addition to being

linked to cognitive factors, gave them a sense of control and empowerment over their

thoughts and feelings in a social context. Using self-injury for this purpose became established and increasingly important during adolescence and this pattern continued into adulthood, where the majority of participants described using self-injury for this purpose, for example, 'R' who was sexually abused during childhood says:

"...I...would... self-injure until I felt calm enough to be in control again...so once I'd got control of my deep emotions and being able to face people downstairs or wherever – go back to the family – then that's the point I would stop (self-injuring)..." During adolescence 'R' says: *"...I had to cut more...to control the emotion that was inside of me – so I could be this normal person on the outside that everyone wanted or...everyone expect...I'd built up my defence levels and had built up this outside persona and I was a good, well-behaved young lady and knuckled down and did my schoolwork – because I didn't...want anyone to see the hurt and what I was doing and I...needed to keep it (self-injury) secret...the whole package...I'd laugh and pretend everything was fine and...I...had it down to a fine art...being this person...it was...like I was dying inside – I was becoming less and less of a real person and the real me was slowly dying and the false me that I had built up was the bigger percentage... when I looked in the mirror, I was really aware that that's not me it's the person that everyone else sees...I had built up this outside persona...there was part of me that was driven to keep that up...if I wasn't cutting – I'm not sure how I would have coped – it enabled me to be the normal...that was expected – to go to school – to...have friends – to do whatever...it (self-injury)...was about gaining control and keeping control so that I could be normal."* During adulthood 'R' says: *"...when I was at university. I was growing up – becoming a mature person – I still hadn't told anyone – no one knew that I ever cut...I had no other*

release - so when I had bad memories…bad nightmares…I didn't have anyone

to turn to so…it (self-injury) allowed me to carry on with my normal life…" (Int

19, page 2, lines 60-63, page 6, lines 225-227, page 7, lines 244-254, page 8,

lines 271-272, page 8, line 276, page 8, lines 283-286, page 8, lines 301-302,

page 9, lines 314-315, page 10, lines 360-363, page 11, lines 396-397)

For several participants, this principal consequence of using self-injury shifted during

adolescence to become a conscious function or antecedent to using self-injury, which

clearly demonstrates the importance in the participants' lives of the developing

multiple functions of self-injury.

Difficulties in forming and maintaining relationships and interacting with others

Several participants described how during childhood they experienced difficulties in

their social interactions and relationships with friends and peers, which caused them

high levels of distress and acted as a primary antecedent to their use of self-injury.

Expanding this finding, Yates (2004) suggests that children who are maltreated in

their close relationships develop difficulties in their relationships with others. In a

broader social context, these difficulties created high levels of distress and the use of

self-injury to cope with this distress. Moving into adolescence, these difficulties

encountered in a social context were described by the majority of participants as

increasing. Interestingly, this increase corresponded to the increase in social demands

and expectations they naturally encountered during adolescence, such as a widening

social network and expected 'normative' social behaviours. The participants clearly

described conflict with peers and difficulties in defining their personal identity in

context of their relationship with others, which remained a continuous theme throughout their adolescence. Consistent with this finding, Yip (2005) describes how negatively-orientated difficulties with peers such as conflict, miscommunication and rejection, leads to increasing levels of distress prior to using self-injury. Also, Yates (2004) found that, during adolescence, individuals can experience high levels of distress if they experience difficulty in defining their personal identity, in context of their relationship with others, and that this may lead to using self-injury to cope with the distress they encounter, for example:

"...I did have a difficult time...in a social sense...mainly because I wanted other kids to do what I wanted – so in a social sense it was difficult...I was...hard to get on with...I always wanted my own way and this came first...I did find it hard to see things from my friends' perspective...wanting my own way and getting frustrated within my mind got worse...and my relationships with my friends was like a 'helter skelter'...it (self-injury) did get more complex...I would feel that rejected feeling more often and when I felt this way I...would fall out with my friends...and what made this better was cutting, so, obviously, I did it more often...it (self-injury) went from cutting my arms say twice a week when I felt rejected by my friends to cutting say every other day when I felt angry, frustrated, rejected ...I was becoming a difficult person to be with - in a social context... in my relationships with others and I did refuse to accept this – so it was always the other persons' fault – they were being horrible to me – so I was a difficult...to get on with - so people / friends would be difficult towards me especially if I had been off with them and the knock on affect would be that I would think about it over and over again in my mind – persecuting myself and thinking I'm the hurt one not them – I couldn't get it that they may be feeling

upset too or more than me…it was all about me – me – me it was all about me
and cutting my arms certainly helped to relieve all of this mixed thoughts and
feelings…it…channelled it all away and I felt much better…I had…taken out my
anger…on myself…and, although I might have been difficult to my friends, I'd
done nothing bad to them.'' (Int 10, page 2, lines 66-76, page 3, lines 77-97,
page 4, lines 134-145, page 5, lines 154-168, page 6, lines 197-199)

This finding is consistent with Gratz (2007), who reviewed the treatment available to
self-injurers and was able to show that an absence of social support leads to
difficulties in forming meaningful relationships that subsequently leads to social
isolation, which is linked with the use of self-injury.

In contrast to adolescence, all the participants who used self-injury in adulthood
describe this pattern as persisting and subsequently continued to experience high
levels of distress in their social environments, which led to their use of self-injury as
an established strategy for coping with this distress, for example, 'L' who suffered
physical and emotional abuse as a child says:

"…I didn't – I've never had…lots…of friends…most of the time I'm someone
who tolerates people…it's (using self-injury) not being able to cope with what
going on…not being able to shout at people when they upset you (me) – not
being able to confront people and say – hey look this isn't good – (and) just
walking away and being angry and not knowing what to do with it (distress) – so
you (I) have to beat yourself up…its (using self-injury) coping with what's going
on (in social environment) and not knowing what else to do…to cope…if you've
made me angry – I don't want to sit and discuss it with you – I really can't be

bothered…to discuss with you why I'm angry with you… can't be bothered to discuss with you why I'm scared of this…" (Int 22, page 14, lines 505-509, page 10, lines 360-361, page 14, lines 498-519)

Supporting this finding, Murray, et al. (2007) identified difficult relationships and arguments with friends as acting as antecedents to the use of self-injury. Also, Mazelis (1998) clearly defines how relationship difficulties can act as the antecedent to causing high levels of emotional and cognitive distress and the individuals' subsequent use of self-injury to cope. She defines that these difficulties can start in childhood (and, in the case of the participants who took part in this present study, also during their adolescence) through the experience of trauma and can negatively impact on an individual's relationship with others, which can escalate due to the increase in social demands and expectations the individual is confronted with during adulthood. Supporting this, Yates (2004) identifies that difficulties encountered in relationships by those who use self-injury stem from the trauma of maltreatment in childhood.

<u>Victim of bullying</u>

Highlighting the diversity and developing multiple functions in the use of self-injury, several of the participants describe how, during their childhood and throughout adolescence, they were the victim of bullying from others outside of their immediate family. This bullying caused them to experience high levels of distress and the use of self-injury to cope, for example:

"…I was bullied very badly…at primary school…I…turned…it…on myself rather than get angry with the people that were bullying me and upsetting me – I would get angry at myself for not being more likeable or…not being able to keep these people as friends... that upset me – that made me do… these behaviours

(self-injury – head banging, scratching, picking skin/scabs)…it was the

frustration and the hurt that had built up and made me lash out over some small

minor thing…it was never a specific reaction to the bullying – in the same time

frame… actually one of the bullies was…one of my teachers – who had taken a

dislike to me…(when) I started secondary school – got horribly bullied…I was

actually physically attacked several times…it wasn't the mental bullying – that I

was used to – it was physical attacks…I was physically beaten up a couple of

times…I was literally humiliated…" were you scared? *"I was…"* (Int 25, page

1, lines 15-27, page 2, lines 44-46, page 5, lines 177-191, page 6, lines 192-205)

Manipulating and gaining the attention of others

Linked closely with communication experiences, during childhood and into their

adolescence in addition to using self-injury to relieve or reduce overwhelming distress

or states of dissociation, several participants describe how they developed the

function of using self-injury to deliberately manipulate and gain the attention of

others, for example:

"…I became very, very manipulative…if I felt like the self-injury would get me

something…or it would get me attention…then…it would occur…I can actually

remember thinking that –they're going see me…they're going to feel sorry for

me…that attention…it was always like that all the way through – it was the

attention that I was looking for…it's reinforcement of the behaviour…it was

learnt behaviour…I got what I wanted…and I wanted the attention…" (Int 21,

page 7, lines 242-245, page 10, lines 350-356, page 11, lines 402, page 15, line

547)

This finding was supported by Yip (2005) and Klonsky and Muehlenkamp (2007, who described how individuals used self-injury to gain the attention of others. Also, Klonsky (2007) and Carlson, et al. (2005) clarified that a function and consequence of using self-injury can be to manipulate the behaviour of others. Developing this point, Nock (2008) and Alder and Alder (2007) identified that using self-injury to gain the attention of others was a form of social reinforcement. In this case, the use of self-injury becomes controlled by social factors (which the participant mentions in the example quoted above). Additionally, Klonsky and Meuhlenkamp (2007) describe how the need to influence others through the use of self-injury is an important function for many individuals.

This is supported by Murray and Fox's (2007) research, which explored the positive and negative aspects of membership of self-harm discussion groups by administering a web-based questionnaire to 102 group members aged from 12 to 47 years. Amongst their findings, they identified that the use of self-injury has been misinterpreted by many as simply being an attention-seeking behaviour.

In contrast, during adulthood, several of the participants describe how, in contrast to using self-injury to merely gain the attention of others, they developed the use of overt types of self-injury as a form of non-verbal communication. In this case, their use of self-injury was specifically focused on gaining the attention and support of others at times when they were experiencing very high levels of distress, which they could not cope with alone, for example:

"…I started taking (minor) overdoses (self-injury)…every week…not to try and kill myself but…it was…an attention seeking thing because I was struggling with

going out…and things at home were…very difficult and upsetting…I couldn't

cope with any of it …I thought if nobody was helping me when I'm doing this…

when I'm taking an overdose once a month – then I'll do it every two weeks then

they'll realize things are really bad…" (Int 5, page 15, lines 554-559, page 16,

lines 580-584)

This finding showing the link with communication is supported by Mazelis (1998),

who concluded that self-injury can be mistakenly perceived as attention-seeking

behaviour when in fact it is being used as a form of non-verbal communication of

extreme levels of internalised (non-verbalised) distress. In other words they display

the self-inflicted injuries to others who become concerned and begin to interact and

communicate with them in an attempt to find out why they are self-injuring.

3.2.6. Communication Components

From exploring the participants' accounts, it was ascertained that communication

experiences were one of the core components involved in their use of self-injury. This

aspect has been under-investigated in previous research and consequentially under-

estimated in its importance in the use of self-injury, for example, Deiter and Pearlman

(2000), Murray, et al. (2007) and Nock (2008), reported that self-injury is a means of

communicating high levels of distress and gaining the attention of other people.

However, they do not explore the role of communication in the use of self-injury any

further than this. The participants in this present study demonstrate that

communication in relation to the development and multiple functions of self-injury is

more complex than this narrow focus, involving:

- Communication deficits within the family unit and with others.

- Distress associated with a deficit in verbal communication.

- Self-injury used as a conscious alternative to verbal communication.

- Using self-injury as a form of non-verbal communication.

CHILDHOOD / ADOLESCENCE / ADULTHOOD

Communication deficits within the family unit and with others

Deficits in communication or verbal expression between members of the family

Discounting of verbal communication

Distress associated with a deficit in verbal communication

Personal difficulties in communication

Having a specific condition causing communication difficulties

Emotional

Cognitive

Distress

Dissociation

SELF-INJURY

Development of the multiple functions of self-injury in the context of communication

Self-injury used as a conscious alternative to verbal communication

Using self-injury as a form of non-verbal communication

Figure 7. Diagram illustrating the communication factors described by the

participants that influenced the use of self-injury and its development.

Communication deficits within the family unit and with others

On closer examination, it was found that the communication deficits within the family unit and with others involved:

- Deficits in communication or verbal expression between members of the family.

- Discounting of verbal communication.

- Communication deficit with others outside of the family unit.

Deficits in communication or verbal expression between members of the family

Consistent with the findings of Levenkron (1998), Polk and Liss (2007) and Nock (2008), it was found that during childhood the majority of participants who used self-injury described experiencing a communication deficit. Linked with social experiences, this deficit involved an absence or lack of opportunity to share distressing thoughts and feelings with members of their family, which was compounded by a lack of non-verbal expression or communication, such as reassuring physical contact, for example, 'A' describes how following the sudden death of her father, as she says:

"I was… young and…the way she (mother) was had a big impact on me…as a child I was looking for answers…she became more distant…she couldn't be my dad…what I mean is that she never put things to rest in my mind…she never talked about emotional stuff…she never asked how I felt…at the time…(it was)…confusing...(leaving questions) ...unanswered ...it was at this time I remember my first...self-injury..."(Int 7, page 1, lines 25-35, page 2, lines 48-49)

Throughout adolescence and into adulthood this communication deficit persisted and increased for all the participants, for example, 'C' who used self-injury says that her family:

"...was empty...it was functional as opposed to full of warmth and hugs and cuddles and...there wasn't any physical – touching or anything like that, even my mum didn't cuddle me particularly my dad certainly didn't...there was a...remote...feeling that there was something wrong – I just wasn't happy...I wouldn't have been able to ...say...it was because my father doesn't say he loves me...everything was...too shallow...my frustrations with not being able to communicate properly with them (parents)...I couldn't say to them...what I think my problems were...I couldn't say...why can't you say you love me dad...we wouldn't sit down and talk about how we were feeling – it was – what's for dinner? – where are we going on holiday?...practical level, not emotional levels and...communication between my parents was really top level...I didn't say – mum I don't feel very well – if there was something wrong she was very practical...I wasn't aware I was unhappy...it was just there was something not right...they were very critical...it (self-injury) seemed to escalate more...when I was frustrated...and couldn't get my emotions out and I did it more and more often at home, especially if I spent a lot of time with my parents... holidays and things like that...it was being with them all of the time and...feeling that I wasn't able to communicate with them...we...didn't discuss how we felt...it got worse the older I got because..." (Int 16, page 7, lines 252-265, page 8, lines 283-291, page 9, lines 324-336, page 10, lines 344-359)

This finding is consistent with Yip (2005) who specifies that the communication facilitated by parents is essential in providing the opportunity for children to express their distressing thoughts and feelings, which was found to be lacking in the participants' descriptions of their experiences. Supporting this finding, Pavio and McCulloch (2004) identified that those who self-injured reported severe difficulties in communicating emotions. Additionally, Schoppmann, et al. (2007) reported that individuals who are alone and without anyone to converse with will not receive inner assurance through relationships with others and that this can cause heightened, internalised distress and the use of self-injury to cope.

Discounting of verbal communication

On closer examination of the descriptions of communication deficits within the family, the majority of participants (during childhood and throughout adolescence) describe their parent/s as discounting their attempts to verbally communicate or express their emotional and cognitive distress, troubles and difficulties, which subsequently became internalised - intensifying their distress and their use of self-injury to cope, for example:

"...my parents separated...it was very turbulent – I don't think I knew if I was ever coming or going...and I took a lot of blame for their break up...I felt a lot of responsibility...to look after people and take care of people (members of her divided family)...every time I asked questions I was told- well one day you'll understand...as a child that is not helpful...when you're trying to understand and it mattered then – so...that's always stuck with me...it felt like they were saying- mind your own business – but it was like – where's mum gone? – what's going on?...where am I? – what's going to happen? – what's going to happen

next? – is she going to come back? – is she going to stay away?...mum has

nearly killed dad – how has she done that? – what do they mean?...and that's

the sort of questions I would ask and I would be told – you'll understand one

day...all I needed...was...a rational explanation of something that I could

rationalise..."

'T' goes onto describe how her mother discounting of her verbal communication
was intensified. This happened when her mother became an active member of a
religious sect. During this time her mother discounted 'T's attempts to gain her
attention through using an overt type of self-injury, she says:

"...I had this group of girls trying to flush my head down the toilet...mum...

would say – look that's persecution (not bullying) and well done for standing

firm...you're going to be a very good sister...I took an overdose of paracetamol

and went and told my mum ...she kept telling me I'd lied...then she told me that I

was going to die and sent me to my room...and then I discovered cutting...I just

did...it started from when I used to pull my hair out...if I...felt angry...I wasn't

allowed to be angry...if I cut then...I would fix it all away...my mum noticed at

one point and she said something about it...you need help.. .and it was...ignored

after that – it was...and no help came...no help came...no help came...I was

meant to pray for my soul...and it was...I'm not going to take it anymore...I'm

not going to take this crap anymore...I lost everything...I didn't have a life

outside of the religion...I burnt myself...I was cutting with razor blades...and I

just don't care anymore...and people would say things and...they put me in

counselling and I was told that I was a compulsive liar...it (self-injury) became

a way of coping...no one ever stopped to listen and...see how I was feeling and

why I was doing what I was doing – all anyone ever did was tell me how bad an

rotten I was…I couldn't voice it then - I …couldn't voice what had happened –

what had gone on or anything else – or how I felt or why I harm…" (Int 6, page

8, lines 291-299, page 12, lines 362-376, page 14, lines 356-357, page 14, lines

378-381, page 15, lines 344-368, page 16, lines 351-352, page 24, lines 354-356,

page 24, lines 368-369)

Similarly, Polk and Liss (2007) found that in families where neglect occurs and the

emotional needs of a child are discounted, learning to verbally communicate or

express thoughts and feelings does not develop and the use of self-injury as an

alternative method of coping is reinforced. Wedig and Nock (2007), who explored the

relationship between parental expression and adolescent self-injury with 36

adolescents aged between 12 and 17 years, found that parental criticism is

significantly linked to the use of self-injury amongst adolescents. Additionally, Nock

(2008) and Nock (2009) describes how in the same way critical and invalidating

environments are associated with reinforcing the use of self-injury.

Communication deficit with others outside of the family unit

During childhood, several participants describe experiencing a communication deficit

involving an absence or lack of opportunity to verbally express and share emotional

and cognitive distress with others outside of their immediate family, for example:

"…nobody knew once those doors were shut – what we went on though –

because you… don't (talk) do you – if you don't talk about it – it just doesn't

exist…no one ever talked about it…nobody had a clue what my dad was like..."

"…I had lovely long hair which covered my neck (site of self-injury) and yeah

nobody knew – or noticed – but I knew and…wanted to keep it to myself

...ironically you do these things but you don't tell anybody...no one ever spoke about anything...you wouldn't..." (Int 1, page 2, lines 45-53, page 3, lines 85-89, page 3, lines 88-92, page 3, line 106)

During adolescence and into adulthood, this deficit was described by all the participants who used self-injury. They described how they did not communicate or verbally express and share their distressing thoughts and feelings and or states of dissociation with anybody, which consequently increased their internalised distress and prompted their use of self-injury, for example:

"...at university although I was growing up becoming a mature person – I still hadn't told anyone – no one ever knew that I ever cut and I think holding onto that was also damaging in terms of I had no other release – so even when I had bad memories I had bad nightmares (of being raped) – I didn't have anyone to turn to so I would cut myself." (Int 19, page10, lines 356-359)

Similarly, Nock (2008, 2009) acknowledged that a potential difficulty for individuals who have a deficit in their ability to communicate with others in a social context can lead to the use self-injury. Consistent with the participants' accounts in this study, Lindgren et al. (2004) found that individuals who used self-injury to cope with distress did so as an alternative to communicating to others their distressing feelings that they found too overwhelming to verbally express or share.

Distress associated with a deficit in verbal communication

During childhood, the majority of participants who used self-injury experienced a deficit in verbal communication to and from others. Linked with social experiences,

this deficit or secondary antecedent had a detrimental effect on the participants' capacity to verbally express and share with others the high levels of distress they encountered. Subsequently their distress was not expressed or shared with anyone else and became unhealthily internalised and intensified. Najmi et al. (2007) also concluded that the suppression or internalisation of unwanted thoughts precipitated the use and development of self-injury. This concurs with the participants who describe how their use of self-injury was used as an alternative to relieve the internalised overwhelming cognitive and emotional distress they encountered. Moving into adolescence, the majority of participants described how this pattern or relationship between a deficit in verbal communication and their encounters with high levels of distress continued to reinforce their use of self-injury. Providing support for this finding, Pavio and McCulloch (2004) demonstrated a link between an individual's inability to verbally express their emotional and cognitive distress and the use of self-injury. Expanding on this, Polk and Liss (2007) describe how if the skills to verbally express troubling thoughts and feelings are not acquired, then the individual learns to use self-injury as an alternative means of relieving the emotional and cognitive distress they encounter, for example:

> *"...I couldn't deal with what had happened so I went inside myself emotionally and that is when I...self-injured...I felt I needed to punish myself – I felt upset inside – it was like everything inside of me felt 'crap' – that badness inside of me I needed to release all of this...it was like punishing and cleansing myself for how I felt inside...I used a piece of metal to scratch into my forearm and I did this often sometimes several times a day – I would scratch the surface of my skin then I used a razor blade to cut...I was left with my feelings – nobody in my*

family talked to me about it – I didn't want to talk to anyone about it." (Int 8,

page 1, lines 11-16, page 1, lines 27-31, page 1, lines 23-26, page 1, lines 17-19)

During adulthood this established pattern continued for the majority of participants. However, in comparison to childhood and adolescence, the participants describe how using self-injury to cope with and reduce immense levels of internalised distress became a conscious alternative to verbally communicating their distress to others. This was for some out of choice and for others due to their established pattern of not communicating their distress to anyone else and coping with it on their own, for example:

"...I turned to it (self-injury) when I experienced overwhelming emotional

...grief ...I would say it was...relieving how I felt because I couldn't express or

communicate to others how massive my upsetting feeling was...I internalised it –

I didn't express it to others...it (self-injury) saved me – it allowed me to...bypass

the bottling up of my emotions – it relieved them through an internal process..."

(Int 14, page 7, lines 254-267, page 8, lines 268-271)

As described by the participants, a deficit in their capacity to verbally communicate their thoughts and feelings led to using self-injury as an alternative means of reducing high levels of distress. Supporting this finding, Polk and Liss (2007) established that individuals who experienced a difficulty in verbally communicating their distressing thoughts and feelings were strongly correlated with those who used self-injury.

On closer examination of the individuals' deficits in communication, it was found to consist of the following:

- Personal difficulties in communication.

- Having a specific condition causing communication difficulties.

Personal difficulties in communication

All the participants who used self-injury during their childhood and throughout adolescence described a personal difficulty in verbally expressing and sharing high levels of emotional and cognitive distress which they coped with privately without the support of others. This difficulty persisted into adulthood for the majority of participants using self-injury, for example:

> *"...I'm not a confrontational person...I don't like arguing...so at times...I*
> *...don't know how to verbalise thing – so rather than...I don't want to shout at*
> *people or tell them how I'm feeling because I don't want to upset them or make*
> *them feel upset or disappointed so it seems easier to do that (self-injure -*
> *scratching)...it's something I don't have to tell people about."* (Int 17, page 12,
> lines 448-457, page 13, lines 458-459, page 15, line 538)

This finding is consistent with Levenkron (1998) and Nock (2009), who identified that many of those who self-injure have personal difficulties verbalising their thoughts and feelings with others. Supporting this finding, Pavio and McCulloch (2004) identified that difficulties in an individual's ability to communicate or verbally express their emotions with others was associated with their use of self-injury. Additionally, Hooley (2008) describes how those who use self-injury have difficulties in communicating or appropriately expressing their emotions.

Having a specific condition causing communication difficulties

During childhood and adolescence several of the participants encountered specific forms of difficulty in their communication associated with dyslexia, which impacted detrimentally on their ability or capacity to communicate effectively, particularly in written tasks and auditory and / or visual processing of information, which subsequently increased any distress they encountered, for example:

"...the dyslexia wasn't helping...it got to me emotionally ...because educationally I was beaten up...all the ones (dyslexic people) that have gone through that period...we are all...emotionally disabled..." (Int 18, page 4, lines 124-139)

Linked with cognitive and emotional experiences, these difficulties affecting communication caused increased and additional levels of distress, particularly during adolescence when they experienced an emphasis on their academic performance, which was an important aspect of the participants' lives.

Self-injury used as a conscious alternative to verbal communication

During childhood, several of the participants describe using self-injury as an effective alternative to communicating or verbally expressing and sharing with others the overwhelming emotional and cognitive distress they encountered. Several mention that it was easier to use self-injury than to verbally communicate their distress to others, for example, T who was sexually abused says:

"...I wouldn't...talk about it..."you had great difficulty in verbalising "yeah" out of choice which one was…easiest – talking or cutting? "to cut up" (Int, 15, page 2, lines 69-76)

This pattern in the use of self-injury as an alternative to verbal communication increased for the majority of participants in their adolescence, and to all the participants in adulthood, for example:

> *"...it (self-injury - cutting) worked – it allowed me to express – to get rid of my emotions temporarily and I felt better for a while…it was a safe way of getting rid of all those bad thoughts and feelings without talking about it (the rape) and I did… understand this...so I did it more often…it (self-injuring) helped me deal with my thoughts and feelings..."* (Int 8, page 1, lines 35-38)

However, several participants described that during adulthood despite having the ability and opportunity to verbally communicate their distress, they choose to continue using self-injury, for example:

> *"...it (self-injury – cutting) was something I did in a way that never concerned others – which is very important…it helps me get on with my life…"*does anyone else know?*" a few people who self-injure or did self-injure and apart from these people no – and I find this okay – I don't need to talk to anyone about it – I don't need any help – it is there if and when I need it…it is a strong antidote to life for me and it works and this is why I still use it (self-injury)."* (Int 9, page 6, lines 227-228, page 7, lines 232-246)

Interestingly, this finding is contrary to Hodgson (2004), who identified that individuals learn to use self-injury as a means of coping when they do not have adaptive alternatives available, such as communicating and sharing their distress through the use of verbal expression. However, despite being aware of the alternatives to using self-injury, as pointed out by Wedge (2009) in a comprehensive article

regarding self-injury, the individual may use self-injury due to not having access to a vocabulary in order to communicate or verbally express and share their distress.

Using self-injury as a form of non-verbal communication

Highlighting the multiple functions of self-injury and closely linked with social experiences, during childhood and persisting throughout adolescence, several participants describe how, through using an overt type of self-injury, they were able to communicate and convey their distress to others. Their intention for using self-injury in these cases was to manipulate or gain the attention and emotional support of others, through using actions as opposed to verbal communication, for example:

> *"...it was always the same scenario – someone's done me wrong or I'd thought they'd done me wrong or…things weren't going quite right in my life… someone's picked on me or a girlfriends…finished with me or we've had a big argument…she'll feel sorry for me…I was personally upset…and it (self-injury) was for a specific person's attention… like one of my girlfriends it (self-injury) was, so she'd realise I was serious…I wanted her attention…cut my arms up …she…took me back to look after me…"* (Int 21, page 10, lines 350-381, page 11, lines 382-402)

This supports Nock (2009) and Najmi, et. al's. (2007) proposal that secondary, to self-injury being used to cope with high levels of distress, the participants learnt to use overt types of self-injury as a form of non-verbal communication. This form of communication was used to express the high levels of distress they encountered to others, in particular, frustration and anger. This is supported by Murray and Fox's (2007) research, which explored the positive and negative aspects of membership of self-harm discussion groups by administering a web-based questionnaire to 102 group

members aged from 12 to 47 years. Amongst their findings, they identified that the use of self-injury has been misinterpreted by many as simply being an attention-seeking behaviour.

In contrast, during adulthood, several participants acknowledged and formulated a style of using of self-injury as a means of non-verbally communicating the unbearable levels of distress they encountered. This use of self-injury developed and several participants were able describe how on occasions self-injury became a conscious alternative to normative forms of communication they were aware of, such as verbal or written communication. Self-injury functioned as a form of non-verbal communication to inform others that they were encountering overwhelming levels of distress, which they needed support to cope with, for example:

> *"...I tried to commit suicide...not to die – to kill myself – but to communicate – I wanted others to know the distress I was feeling...the self-injury – the cutting was severe...it was me...communicating how bad I felt – how much I was in turmoil inside – yes – communicating my – 'cry for help' – I needed some help..."* (Int 8, page 5, lines 184-186, page 6, lines 203-205)

Nock (2008) also recognises that self-injury can be a means of communicating an individual's internal distress that is not verbally communicated. Additionally, this finding is supported by Thompson, Powis and Carradice (2008), who conducted a phenomenological study exploring the experiences of self-harm encountered by eight community psychiatric nurses. They identified that self-injury functioned as a way of communication non-verbally to others an individual's encounters with difficult emotional and cognitive episodes in their lives. Also, the participants in this study were able to demonstrate how using self-injury as a form of non-verbal

communication developed over time to be used increasingly more consciously for this purpose or function. This is highlighted by the participants, who described the advantages of using self-injury as an alternative to communicating with others. During childhood, several of the participants describe being motivated to use self-injury as an alternative to verbally communicating their distress to others. This was due to the personal advantages or benefits they recognised in having their own established covert (or secret) coping strategy. This pattern increased during adolescence and into adulthood for the majority of participants who used self-injury, for example:

> *"…I found something that's…my own and nobody needs to know about it*
>
> *(self-injury – cutting)…and there's quite a lot of power in that I think…after*
>
> *…feeling and reaching out to people before and…needing help…I'd found a way*
>
> *to cater which meant I didn't need to ask people for help anymore…"* (Int 23,
>
> page 14, lines 499-501)

Consistent with this finding, Najmi, et. al. (2007) identified that self-injury enabled the user to suppress, relieve and conceal their ongoing distress without involving others.

3.2.7. Occupational Components

Regarding occupational experiences associated with the use of self-injury, this aspect has received very little or no attention from researchers. However, the complex association between the participants' use of self-injury and occupational factors was explored. The participants' accounts of using self-injury during childhood, adolescence and adulthood confirmed that occupational factors were one of the core

components influencing the use of and, importantly, the functions of their use of self-injury. The factors identified included:

- Occupational activities associated with intensifying levels of distress.

- The effect of high levels of distress on occupational activities.

- Self-injury used as an established daily ritual and routine - a planned activity.

CHILDHOOD / ADOLESCENCE / ADULTHOOD

Occupational activities associated with intensifying levels of distress

Educational special needs

Parental / partner / self pressure on occupational performance

Distress caused by difficulties encountered with educational / work / career demands

The effect of high levels of distress on occupational activities

Self-injury used as an established daily ritual and routine – a planned activity

Planning, implementing and maintaining self-injury as a covert activity

Development of the multiple functions of self-injury in the context of communication

Self-injury used as a conscious alternative to verbal communication

Advantages of using self-injury as an alternative to communicating with others

Using self-injury as a form of non-verbal communication

Emotional

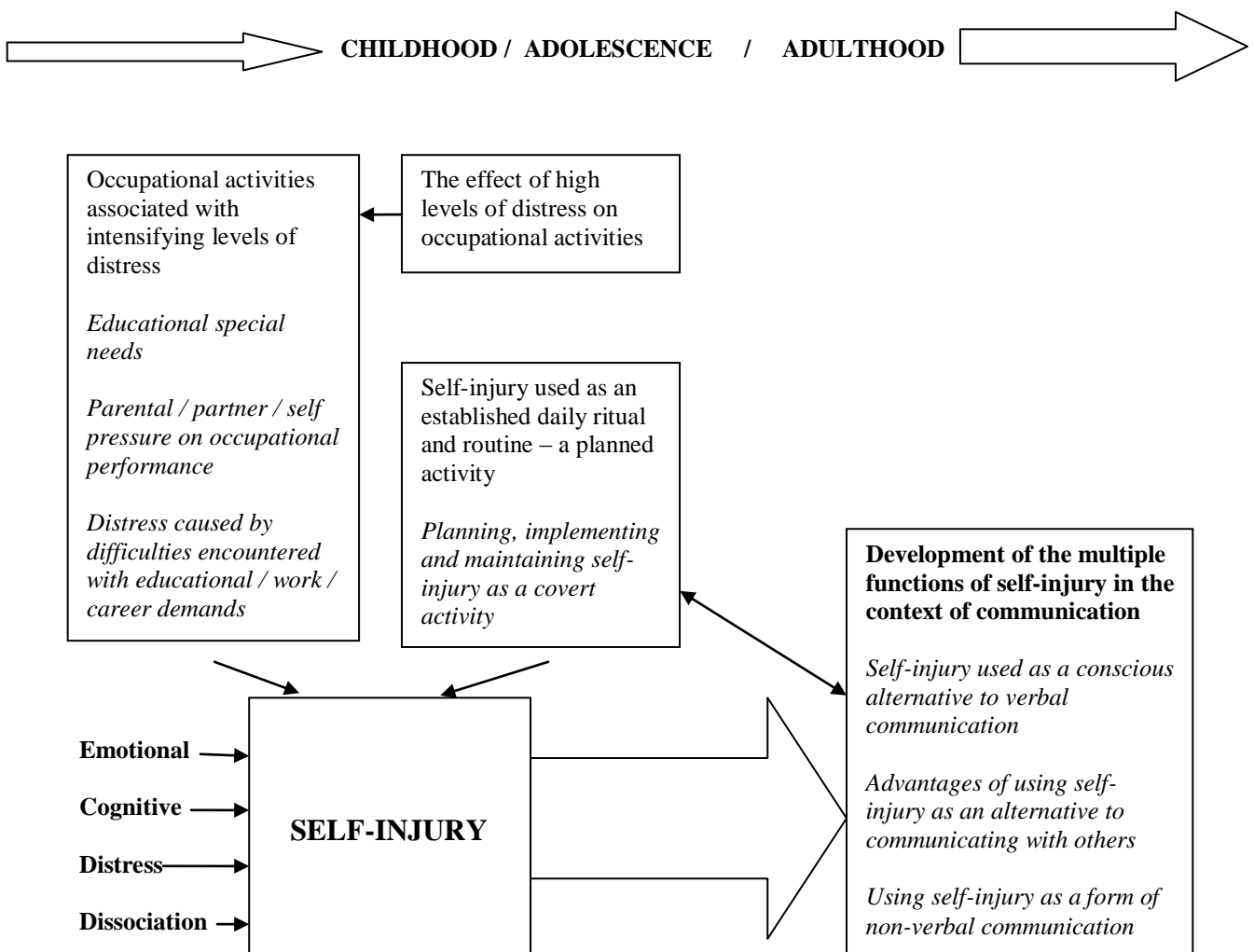**Cognitive**

Distress

Dissociation

SELF-INJURY

Figure 8. Diagram illustrating the occupational factors described by the participants that influenced the use of self-injury and its development.

Occupational activities associated with intensifying levels of distress

On closer examination of the occupational activities associated with intensifying levels of distress during childhood it was established that this factor involved:

- Educational special needs.

- Parental / partner / self pressure on occupational performance.

- Distress caused by difficulties encountered with educational demands.

- Distress caused by difficulties encountered with work demands and expectations.

Educational special needs

Directly linked with cognitive and communication experiences, during childhood and particularly throughout adolescence, several of the participants who used self-injury described either having a specific learning difficulty, such as dyslexia, a general communication difficulty or being gifted intellectually, which had an impact on their performance in educational activities. This added to the distress they encountered and subsequent use of self-injury, for example:

"...I...started to use a compass at school during break time...to stab (self-injury) ...because I...couldn't understand things...I couldn't understand the schoolwork and a lot of the course work...I would get frustrated – I would then play up at school... constantly getting detention and constantly getting the cane...then...on the way home I would stop off...I would scratch (self-injure)..." (Int 2, page 3, lines 89-96, page 3, lines 103-108)

'J' who is intellectually gifted in comparison to her peers says:

"...I didn't understand at the time but I was advanced compared to the rest of my class and friends in...my school work...I just wanted to be like my friends and not different...I felt different...alone ... definitely frustrated...my parents and teacher did know of course...but...I just wanted to be like my friends and not different...so at the time I reacted to it...by starting...self-injury..." (Int 9, page 2, lines 63-71, page 3, lines 80-89)

Parental / partner / self pressure on occupational performance

During childhood and throughout adolescence, several of the participants experienced ongoing pressure from their parents and self with regard to their performance in educational and recreational activities, which added to the distress they experienced and reinforced the subsequent use of self-injury, for example:

*"...I had a really difficult time with my dad...he can be...angry – he's incredibly critical – highly critical – both physically and academically...he was...cruel...it was the criticism...constant criticism of how I looked..."*and academically *"yeah and he had an idea of how I should be and if I didn't fulfil that idea then...I didn't look right or should have done this or that...and that went on for...a long time...it was horrendous – it was horrible...made me feel...not good enough... that I needed to improve – that I needed to be different – that I wasn't acceptable...things deteriorated again...because...of an... intense experience at school...I went out of town to...do my 'A' levels...which I thought was unfair and I was incredibly unhappy and then the same...routine started to happen with self-injury – I started to skip lessons...and my work suffered...it (self-injuring)*

punished myself – but also my dad as well and that ended up with him taking it

out on me and it was basically feelings of worthlessness…I did become very

vulnerable …I was very aware of disappointing people…and that's…how a lot

of my experience felt – like I was constantly letting people down." (Int 23, page

9, line 343, page 10, lines 344-381, page 11, lines 382-418, page 12, lines 419-

420)

Several of the participants experienced this ongoing pressure into adulthood.

However, they describe how this pressure shifted from emanating from their parents

to emanating from their partners and self with regard to their career and or adult

education. Ultimately this pressure added to the distress they experienced and the

need to use self-injury, for example, 'A' says:

> *"…I started to self-injure again…it was the stress of juggling family life…my*
>
> *husband …he's never tried to say don't go to university – he…subconsciously*
>
> *stops…he…puts blocks in the way – like booking a holiday in the middle of the*
>
> *semester and not encouraging me with my work and…things like that…I seem to*
>
> *be on my own - my husband has no interest whatsoever…even when I was trying*
>
> *to read my dissertation to him…he would deliberately turn on the TV up or walk*
>
> *out of the room and he ignored me…when the pressure got so big - I did start*
>
> *self-injure again…."* (Int 17, page 10, lines 364-381, page 11, lines 382-385}

Leading on from this when 'A' commenced her university studies, her husband

said:

*"...oh! you're never going to get there – you know you're not good enough…
you're never going to do that – you're never going to go – I'll give you six
months…"* (Int 17, page 14, lines 516-521)

<u>Distress caused by difficulties encountered with educational demands (examinations)</u>
Highlighting the developing functions of self-injury and generalisation in the use of
self-injury during adolescence, several participants describe encountering difficulties
in the school setting which caused high levels of frustration, in particular. This
intensified or added to the high levels of distress they were already experiencing in
their home lives such as neglect and their subsequent use of self-injury, for example:

*"...it (self-injury) got to the point where…I'd get on with it (self-injure) – punish
myself and then go and get on with my homework…I wanted to study and knew
my GCSEs were coming…but I…hadn't done any English…maths coursework
…I had ten pieces of coursework to do…and teachers were saying I'm going to
fail…I…worked myself into the ground…my head was in a book all the time
…studying…learning…I was tired – I was exhausted – I was up to three in the
morning…I was…aware of having all this work to do and I self-injured to keep
me going…that was all I had – that was mine…it (cutting) …became a way of
coping…I didn't want to feel…anything (thoughts and feelings – distress) from
anybody because if I did I might fall apart and the only way to not get upset
…and to drive myself harder…if I hadn't written enough tonight – it was…I'll
punish myself and then I'll write harder tonight and it became this vicious cycle
…I was telling me I was wrong because I was so driven to get all this stuff done
and so determined that even if I was to get Cs that was fine but there was no way*

I was going to fail those exams…it (self-injury) continued right the way through my exams but after my exams it stopped…it was a way of telling myself I could do better…if I'd slept for more than three hours I'd self-injure because I mustn't sleep for that long…it worked like...it was...to keep me on track to stop me from wondering about anything else (focus mind) – or getting upset about anything else and I didn't want to feel anything… because to me if I failed then that was my world gone…everything I'd ever wanted for me was gone…" (Int 6, page 14, lines 355-361, page 15, lines 373-374, page 16, lines 344-381)

Moving into adulthood, several participants describe how this secondary antecedent or source of distress continued. However when linked to occupational factors it shifted to become:

<u>Distress caused by difficulties encountered with work demands and expectations</u>
As opposed to school and / or college in adolescence, for example:

"…I moved into my third job…and that was very very stressful and the problem with self-injury started again – not immediately but when I started a part time masters… overwhelming pressure…because it was exam times – it was work and university pressure that were making it (self-injury) at its worst…it became very reactionary to work…I'm feeling really s**t – now I need to do something about it so I can actually function again…because it was a huge build up – I was working such long hours for very little thanks…and doing this part time masters …so I was going back to the frustrated…pressure and feeling… overwhelming …it's (self-injury – cutting) been a coping mechanism – it's been something that

regulates how – certainly the last time I got very stressful – doing the masters –
there were a couple of occasions where I could have probably said something to
some people that wouldn't – it wouldn't have been forgiven ...or forgotten and it
would have impacted and damaged my career and...it (self-injury) was a way to
make me not to do that...it (self-injury) helps me function to a higher level...I
need to have control over myself...and not let other people to be able to
influence that...so...it doesn't matter what anyone else does to me – I can cope
with it (by using self-injury)..." (Int 25, page14, lines 497-509, page 14, lines
524-534, page 16, lines 604-612, page 17, lines 613-617, page 18, line 666,
page 18, lines 683-686)

This finding is consistent with the research of Yip (2006), who identified that this
type of additional tension and pressure had the potential negatively to influence or
reinforce the antecedents of self-injury.

The effect of high levels of distress on occupational activities

During childhood and throughout adolescence, the majority of participants who
used self-injury describe how the overwhelming emotional and cognitive distress they
experienced in their personal lives impacted upon their demeanour and performance
when attending school, for example, 'T' who was sexually abused in her home setting
says:

"...I did get bullied...at school...I don't really know why I got bullied...I used to
get picked on quite a bit...so that made it...worse for me..." at...school how did
you feel? *"...subdued - I was not...very good at all. I used to cry all the time and*

I was in a state…I was a really horrible child because of what happened to me

(sexual abuse)…I didn't do very well at school because…I was really stressed

…because…of…all what had happened (was happening at home)…" (Int 15,

page 1, lines 10-17, page 2, lines 65-67)

In contrast, during adulthood, this situation increased for the majority of participants

who continued to use self-injury. They describe how the overwhelming distress they

experienced in their personal life impacted upon their demeanour and performance

when at work, studying in higher education or in the role of parent and or carer. These

participants used self-injury to relieve this high level of distress, enabling them to

function adequately as expected by others in their occupations as responsible adults,

for example:

"…I was using self-injury…as a general coping mechanism…if life got difficult

in terms of – because I had the children quite quickly – I had three children

under the age of four – so if I was stressed then I would cut…using it…just for a

general coping mechanism… I could feel it (tension / distress)…building up

during the day – the need to cut – and I would wait till the kids were in bed and

then do it (self-injure - cutting) when they weren't around…sometimes I couldn't

wait…I would…go to the bathroom and quickly cut…and relieve the tension a

bit…it (self-injury) was about control and enabling me to live a normal life…it

(self-injury) enabled me to function...that's what it did for me…" (Int 19, page

14, lines 498-503, page 14, lines 510-517, page 16, lines 586-588, page 589-

594,)

Self-injury used as an established daily ritual and routine – a planned activity

During adolescence and into adulthood, the majority of participants describe how, linked to the generalisation or widening use of self-injury for multiple functions, using self-injury became an established activity and part of their daily rituals and routines, for example:

"...it (self-injury) was all I had to deal and cope with my troubles – it became a daily routine and ritual that helped me in a way to get on with my life (as a student)..." (Int 8, page 5, lines 163-164)

On closer examination of the participants' descriptions it was identified that, for several participants, their established daily activity or routine of using self-injury compromised their participation in certain activities, such as sport. During such activities their use of self-injury was put at risk of discovery by others. Therefore they would spend time pre-occupied with planning measures to conceal their self-injury from others, carefully implementing or applying self-injury and maintaining the activity as a secret or covert activity, for example:

"...the whole thing (self-injury - cutting) started to become more difficult – I would give all sorts of excuses not to take part in some activities – like sport – because I had started to cut my legs by then and it was every day and I didn't want the questioning... anybody to know – it was becoming a tricky for me...the whole thing about being discovered and really being different was becoming a nightmare...as life got busier ...socially – at school...the self-injury increased – became...an important part...major part of my day to day life...a major burden for me... " (Int 9, page 4, lines 123-129, page 5, lines 158-161)

3.2.8. Physiological Components

The physiological experiences involved in self-injury have not been the focus of the attention of researchers, but, exploring the participants' accounts the researcher ascertained that physiological factors were one of the core components involved in their use of self-injury. Walsh (2006) recognised the biological dimensions, involved in the manifestation of self-injury such as brain imaging studies and endogenous opioid system dysfunction. However, in contrast to Walsh's biological dimensions the participants in this study were able to describe physiological aspects of their self-injury in a behavioural or observable context. On closer examination of these physiological aspects a number of central physiological themes associated with self-injury emerged and, although interrelated with each other, these factors could be defined as:

- Physical pain to reduce high levels of emotional and cognitive distress.

- Physical bodily damage to induce or reduce dissociation and to control vacillation between these two extremes.

- Damaging skin tissue to cause bleeding.

- Using self-injury to induce physical pain.

- Development of the participants' knowledge and understanding of how to apply low lethality bodily damage.

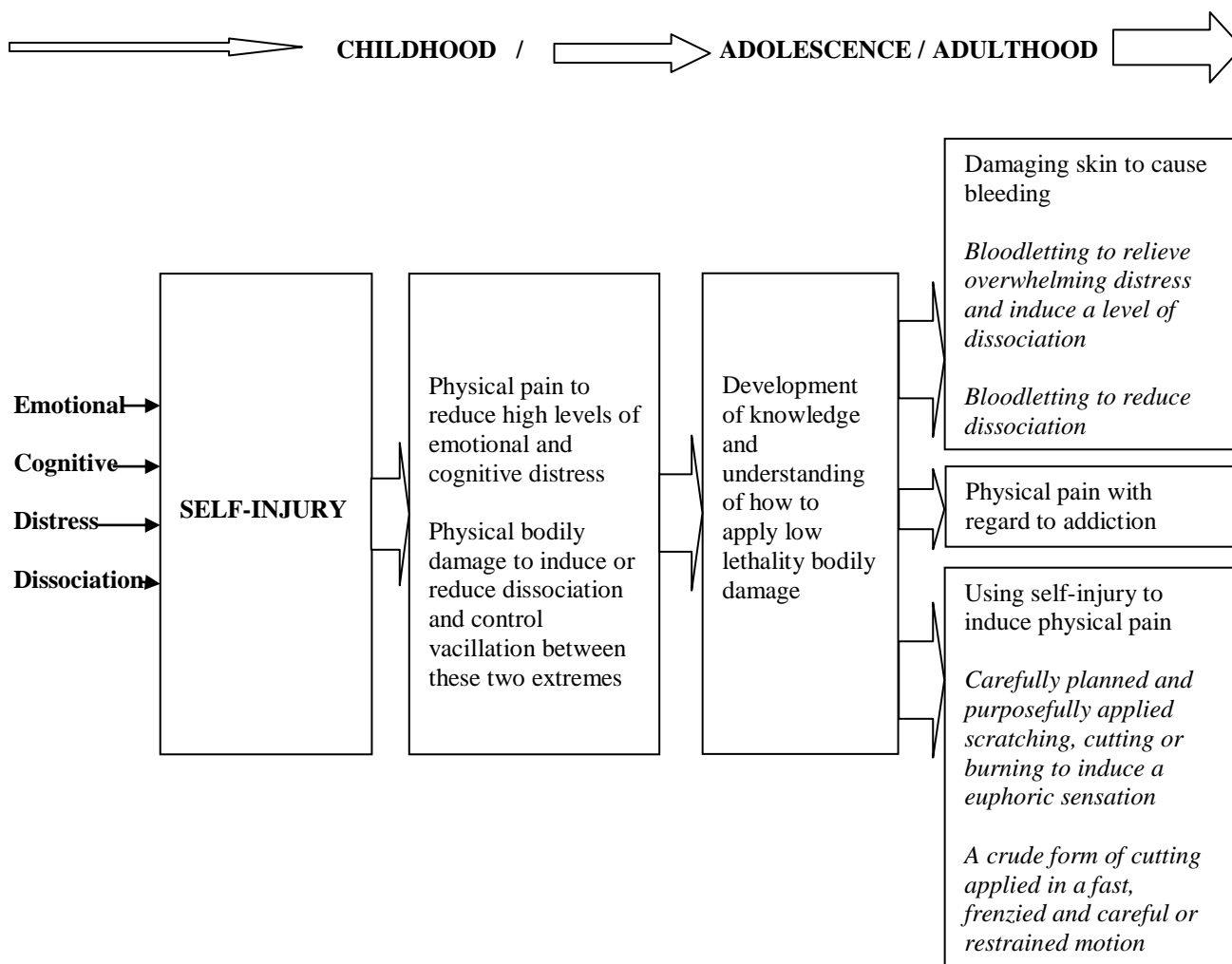- Physical pain with regard to addiction.

Emotional →			Damaging skin to cause bleeding
Cognitive →			*Bloodletting to relieve overwhelming distress and induce a level of dissociation*
Distress → **SELF-INJURY**	Physical pain to reduce high levels of emotional and cognitive distress	Development of knowledge and understanding of how to apply low lethality bodily damage	*Bloodletting to reduce dissociation*
Dissociation →	Physical bodily damage to induce or reduce dissociation and control vacillation between these two extremes		Physical pain with regard to addiction
			Using self-injury to induce physical pain
			Carefully planned and purposefully applied scratching, cutting or burning to induce a euphoric sensation
			A crude form of cutting applied in a fast, frenzied and careful or restrained motion

Figure 9. Diagram illustrating the physiological factors described by the participants that influenced the use of self-injury and its development.

Physical pain to reduce high levels of emotional and cognitive distress

From childhood, throughout adolescence and into adulthood, the vast majority of participants who used self-injury describe how its function was to cause physical pain, through damaging bodily tissues to reduce high levels of emotional and cognitive distress, for example:

"...it was the pain aspect of it (self-injury) that was grounding me...so I actually calm down quicker after I bash my head open...because I was...in pain and by

*concentrating on the pain – the physical pain of the moment – rather than
anything else that caused me to do it (frustration / anger / distress)…it clouded
it out and stopped me worrying about all this stuff that was going on…and I'm
concentrating…on the fact that it hurts (physically)… I'm feeling emotional…
and very angry…and its (sharp implement) cut my arm and its really hurt – it's
not a deep cut but it has hurt and…I calmed down because I've got the pain to
think about rather than what's bothering me…putting this small cut on my arm
…I've calmed…cutting relieving tension – giving myself something else to
concentrate on which is the pain…"* (Int 24, page 8, lines 281-292, page 13,
lines 490-496, page 14, lines 497-512, page 21, lines 776-790, page 22, lines
828-830)

Supporting this finding, Hicks and Hinck (2007), who carried out a comprehensive
review of health, psychology and educational literature regarding the features,
precursors and consequences of self-injury, identified that self-injury had the function
of alleviating high levels of emotional pain for more tolerable physical pain.
Chapman, et al. (2007) identified that self-injury creates physical pain which re-
directs the individual's focus from the overwhelming distress they are encountering.
Developing this point Levenkron (1998), identified that the physical pain created by
self-injury can act as a distraction that redirects the individual away from their focus
on overwhelming emotional and cognitive distress and towards the anaesthetic effect
on the mind of physical pain (which is consistent with the participants' accounts).
Additionally, this finding is similar to Mazelis's (1998) interpretation that self-injury
transfers an individual's encounters with severe emotional pain to the experience of

physical pain, which is less traumatic, or as Paivio and McCulloch (2004) describe, is more manageable than emotional pain.

Physical bodily damage to induce or reduce dissociation and to control vacillation between these two extremes

Linked with cognitive experiences, throughout adolescence and into adulthood, several participants describe developing the use of physical bodily damage/physical pain to relieve emotional and cognitive distress by inducing a state of dissociation from thoughts and feelings and the dual-function it served in altering and reducing distressing states of dissociation. These functions were facilitated through the process of applying physical pain. On closer examination, it was established that what the participants described was the vacillation they experienced between these two states and the use of physical pain (self-injury) to cope and control their fluctuating state of mind, for example:

> *"...the way I was being hurt (physically sexual abuse, emotionally and cognitively) was escalating...I needed to hurt (self-injure – physical pain) myself more to keep control...I had to...control that emotion that was inside me...it was that need to hurt (self-injury – physical pain)...it enabled me to...keep...control ...allowing me...control of my emotions (emotional pain) – control of the memories and...allowing me to suppress everything ...it (using self-injury) was ...like balancing the physical pain with the emotional pain ...when I was actually cutting, I wasn't really aware of feeling the pain but I knew it was there and I knew it was calming me...it was like in my head I had this pair of scales and if my emotion was right up here* (pointing above head)…*overwhelmed... with emotion and the hurt and the pain (sexual abuse – physical, emotional and*

cognitive) ...I'd keep cutting and cutting until it was level then I could stop (emotional and cognitive pain relieved)." "...I was aware at times I was cutting (feeling pain) to bring control back into my life and to bring my emotions under control – to calm me down and yet other times...I...used to completely dissociate – I would be...elsewhere...it was almost like I had left my body ...I would cut because I felt numb and so dead (emotionally and cognitively)...I needed to feel alive again – so I would cut myself for the opposite reason...it still had that dual purpose...when the emotion became too much and too overwhelming it calmed me down and when I became too dead it would keep me alive." "...a lot of the time I didn't feel any pain when I was cutting and I think that might have been when I was so emotionally distressed that I wouldn't have felt anything...but I did feel pain when I cut for the other reason – when I was totally numb and dead – I would cut myself because I wanted to feel pain (physical)..." (Int 19, page 6, lines 197-199, page 6, lines 222-226, page 7, lines 256-767, page 8, lines 268-269, page 8, lines 277-278, page 8, lines 289-296, page 11, line 393, page 12, lines 425-430, page 16, lines 608-609, page 17, lines 610-613)

This finding is consistent with the findings of Chapman, et al. (2006), who reports that physical pain serves to awaken an individual from a state of dissociation by physically stimulating the individual. Additionally, Klonsky and Meuhlenkamp (2007) identified that those individuals who encounter dissociation use self-injury to validate themselves through feeling physical pain. Also, Levenkron (1998) found that the physical pain caused by self-injury can induce a level of dissociation where the individual escapes in their mind from the overwhelming cognitive and emotional distress they encounter.

Damaging skin tissues to cause bleeding

Linked to cognitive experiences, recollecting the practice of self-injury during childhood and early adolescence several participants identified that bleeding from the skin - was the consequence of using self-injury that gave them the most relief from the distress they encountered. Bleeding or 'bloodletting' became the primary purpose or aim of their use of self-injury. It was seeing their own blood that served two functions:

- Bloodletting to relieve overwhelming distress and induce a level of dissociation.

- Bloodletting to reduce dissociation.

For several participants, these established functions of self-injury continued throughout adolescence and into adulthood, for example:

Bloodletting to relieve overwhelming distress and induce a level of dissociation

"...it (self-injury) was like...pulling a splinter out...you have the pain (emotional and cognitive) – pull it out and it goes and that's what it was like – they (neglectful parents) made me feel so bad and the cut to my arm...stopped the painful distress and made me numb which is what I meant when I said I felt nothing...I watched the blood drip drip drip...and felt detached from it all – and that was weird it wasn't the pain of cutting but the dripping of blood which used to calm my mind...so the pain was my distress – the cut was my means of stopping this – stopping the experience (distress) and the blood was the calmness...it worked, it really did...it (cutting) would take away my upset or in

other words the pain I felt – emotionally that is…I…would cut – just enough to

bleed until I wanted the blood to stop…until I felt entirely calm and then I would

stop the bleeding…" (Int 14, page 4, lines 133-150, page 6, lines 224-229, page

7, lines 230-236)

Bloodletting to reduce dissociation

'T' describes how following incidents of domestic violence, she would dissociate

emotionally and cognitively. She says:

"…it (dissociation) used to be like a daze to me…I…cut my legs and sat and

watched the blood run down my legs and I felt better…because …the relief was

coming out of me and I felt all what…he'd done to me was coming out…wash

away because I could see the blood – coming down my leg…" did you feel the

pain? *" no no no…after I cut myself…because before I cut myself I'd feel like I*

weren't here – I'd feel like I was away…and… once I'd cut myself – it felt like

I was coming back…" (Int 15, page 5, lines   181-187, page 6, lines 205-209,

page 7, lines 247-267)

Supporting this finding, Levenkron (1998) concluded that the purpose of self-injury is

either to induce physical pain or to draw blood. Developing this point, the participants

clearly describe, as similarly identified by Chapman, et al. (2007), that when

experiencing dissociation, they used self-injury to see blood and this served to

reattach themselves to reality - that they were alive and could feel. Supporting this,

Mazelis (1998), Sutton (2007) and Schoppmann, et al. (2007) all emphasised the need

for many individuals to use self-injury to cause bleeding and to see their own blood in

order to become in touch with reality. However, in contrast, the participants also

described that seeing blood can induce a dissociative state of mind which is consistent

with Schoppmann, et al. (2007), who identified, that through seeing blood an individual can induce a change in their level or state of consciousness. Using self-injury to draw blood remained more important than physical pain for these participants in achieving relief from the unbearable distress they encountered and / or altering states of dissociation.

Using self-injury to induce physical pain

Interestingly, emerging from the participants' continued practice and developing understanding of how to effectively apply self-injury during childhood and throughout adolescence, several participants describe how they refined their skills and knowledge in using self-injury to obtain the sensation of physical pain, for example:

"...it would be things like when my mum was ironing...touch the iron when it was hot ...so if it was something that was painful (physically) or damaging I would...do it to prove I wasn't afraid of it..." she gives some further examples *"...hand held fans...I had to put my hand in it even though it would hurt...a... jigsaw...you weren't meant to be able to cut yourself on it...so I was getting my hand...trying to cut myself on this blade...it (self-injury) was...being... fascinated with the limits of my kind of body...what it could deal with – what it could take...I wanted to see if I could do X thing – even though I knew it could be painful or cause damage..."* (Int 5, page 1, lines 3-25, page 2, lines 57-61)

This is consistent with the findings of Levenkron (1998) and Klonsky (2009), who identified that individuals can use self-injury to induce physical pain so that they can ascertain whether they find it pleasurable or not. Additionally, Levenkron (1998) describes this pursuit of self-inflicted physical pain as fusing the individual's

attachment with physical pain. This aspect was confirmed by the majority of participants who used self-injury during adulthood. They acknowledge that on occasions they used self-injury to gain the euphoric sensation induced through physical pain. This was similarly identified by Levenkron (1998), who describes how the physical pain caused by self-injury can create pleasurable feelings or, as found by Klonsky (2009), euphoric feelings, which becomes the purpose of using self-injury. Participants provide details of two different ways or forms of self-injury used to attain this euphoric feeling:

- Carefully planned and purposefully applied scratching, cutting or burning to induce a euphoric sensation.

- A crude form of cutting which was applied in a fast, frenzied and careful or restrained motion.

Carefully planned and purposefully applied scratching, cutting or burning to induce a euphoric sensation, for example:

"...I...still self-injure but...I don't feel emotionally connected to it except on a very few occasions...when I burn myself and the pain...as it goes up in an arch – a wave and at the top there is a moment when...you can't think of anything...feel anything...like being blinded by sunlight...it...makes everything go away apart from that feeling...I...find that...really nice..." is it about emotions… thoughts*"...its all of them tied together ...it's a moment of not experiencing anything other than that one specific – fsssshh...my self-injury is no longer associated with my emotions – apart from several occasions when I have been angry."* (Int 15, page 18, lines 659-682, page 19, lines 704-705)

<u>A crude form of cutting which was applied in a fast, frenzied and careful or restrained motion</u>, for example:

"...sometimes I used to really enjoy it (self-injury - cutting) – because I used to do it (cutting) quick – I used to enjoy it..." the releasing feeling " yeah...it (cutting) gets the adrenaline going...the adrenaline is going so much that...do it even more...I felt - doing it fast and doing it loads – is like getting everything ...whatever you've got inside of you (mind) ...it's all coming out...your cutting so fast – everything is flowing out..." endorphins " yeah...quick and quick and quick slices... " (Int 15, page 10, lines 353-376, page 11, line 383)

Development of the participants' knowledge and understanding of how to apply low lethality bodily damage

Demonstrating the development in the participants' use of self-injury during childhood and throughout adolescence, several describe applying the knowledge and understanding that they had gained (through their prolonged use) to more effectively gain control over the high levels of distress they encountered, for example:

"...I was in complete control of it (self-injury - cutting)...the self-injury cuts were only small...the worst...cut was a centimetre or two and they were never deep – only surface skin and I used to move around my body – one arm one week and the next week my leg ...it was about getting it right – the right amount of pain – self-damage – followed by relief...I would have an injury...the physical pain was there – but not as intense or severe as some pain – say twisting your ankle – but it was enough to feel pain – to induce the process of pain relief...it is important to say that I know...some surface skin cutting to specific parts of the body – like under your arm – inner thigh – can hurt more than deeper cutting to

other parts of the body…it is something you learn…when you self-injure –
especially if it needs to be done in such a way as to obtain a real physical pain –
with limited body damage…with as least blood as possible…" (Int 11, page 3,
lines 111-114, page 11, lines 114-124, page 3, lines 125-136, page 3, lines
137-143)

This development continued during adulthood for the majority of participants who
used self-injury. They described having acquired a level of proficiency where they
could apply self-injury to gain the maximum effect whilst causing minimal physical
damage, for example:

"…its (self-injury – cutting) easier than…its quicker and easier than taking a
headache tablet…it fixes the issue…the problem in seconds and I'm calmer and
more able to do what I was supposed to be doing…if I accidently cut myself…my
finger with a knife… that's intense pain and I won't like it – it won't have the
same reaction…I started off cutting round my ankle…I didn't like thing round
my ankles…the natural progression …I made a couple of cuts on my calf…I
didn't like that much either – so then I cut my arm and that…felt right…the
outside of my arm is the right place – but it doesn't hurt – it doesn't hurt at all –
that's the one place that it doesn't hurt – so it's …easier to cut there and get the
results I want…cutting my legs hurts…it doesn't feel right…I don't like the fact
it hurts on my legs – because it hurts it takes more effort to get the results or to
get as much blood…I need…I…burnt myself a couple of times and just couldn't
bear that – that was too much pain – it's got to be the right level of pain as well
…the optimum amount…as long as it didn't hurt too much…" (Int 25, page 14,

lines 524-534, page 18, lines 670-672, page 19, lines 690-715, page 19, lines
717-719)

Physical pain with regard to addiction

During adolescence several participants describe an addictive aspect of low
lethality bodily damage in a physiological context caused through inducing physical
pain. This increased during adulthood for the majority of participants, who described
this addictive effect, for example:

> *"...it (using self-injury) was also (in addition to thoughts and feelings) wanting*
> *to…feel the pain (physical) as well and wanting to…hurt myself and punish*
> *myself…it…worked …it did work…when you do it (cut or and burn)…your body*
> *releases – mechanisms to…help you deal with the pain (physical) and…that…*
> *'rush' afterwards is…addictive …you get the…highs with it and then you crash*
> *back down…I'd…be…wanting to do it (self-injure) again…"* (Int 23, page 15,
> lines 559-564, page 17, lines 621-633)

Clarifying this observation, Klonsky (2009) reports that endorphins are released by
the body in response to physical pain which act as the body's natural analgesic, which
relieves and reduces emotional pain or distress. However, in the context of the
participants' experiences, several described the need that developed to feel physical
pain, which importantly became an antecedent to their use of self-injury. This need to
feel physical pain was focused on inducing the desired level of physical pain in order
to relieve the high levels of distress they experienced. Inducing pain had shifted over
time from being a consequence of using self-injury to becoming a conscious
antecedent or need, for example:

"...I...cut my arm...it's really hurt – it's not a deep cut but it's hurt and...I calmed down because I've got the pain to think about rather than what was bothering me...cutting relieving tension giving myself something else to concentrate on which is pain...it releases...endorphins – which is calming... there's a chemical reaction that the pain causes...its calming...the chemicals that are released in your brain...its calming and it will relax me..." (Int 24, page 21, lines 778-780, page 22, lines 828-830, 24, 857-865)

Supporting this finding, similarly Murray, et al. (2007) found that a large number of users of self-injury reported that the need to feel physical pain was an essential component in the process of applying self-injury.

The majority of participants acknowledged that, during adulthood, they had a need to use physical pain to induce a euphoric sensation, for example:
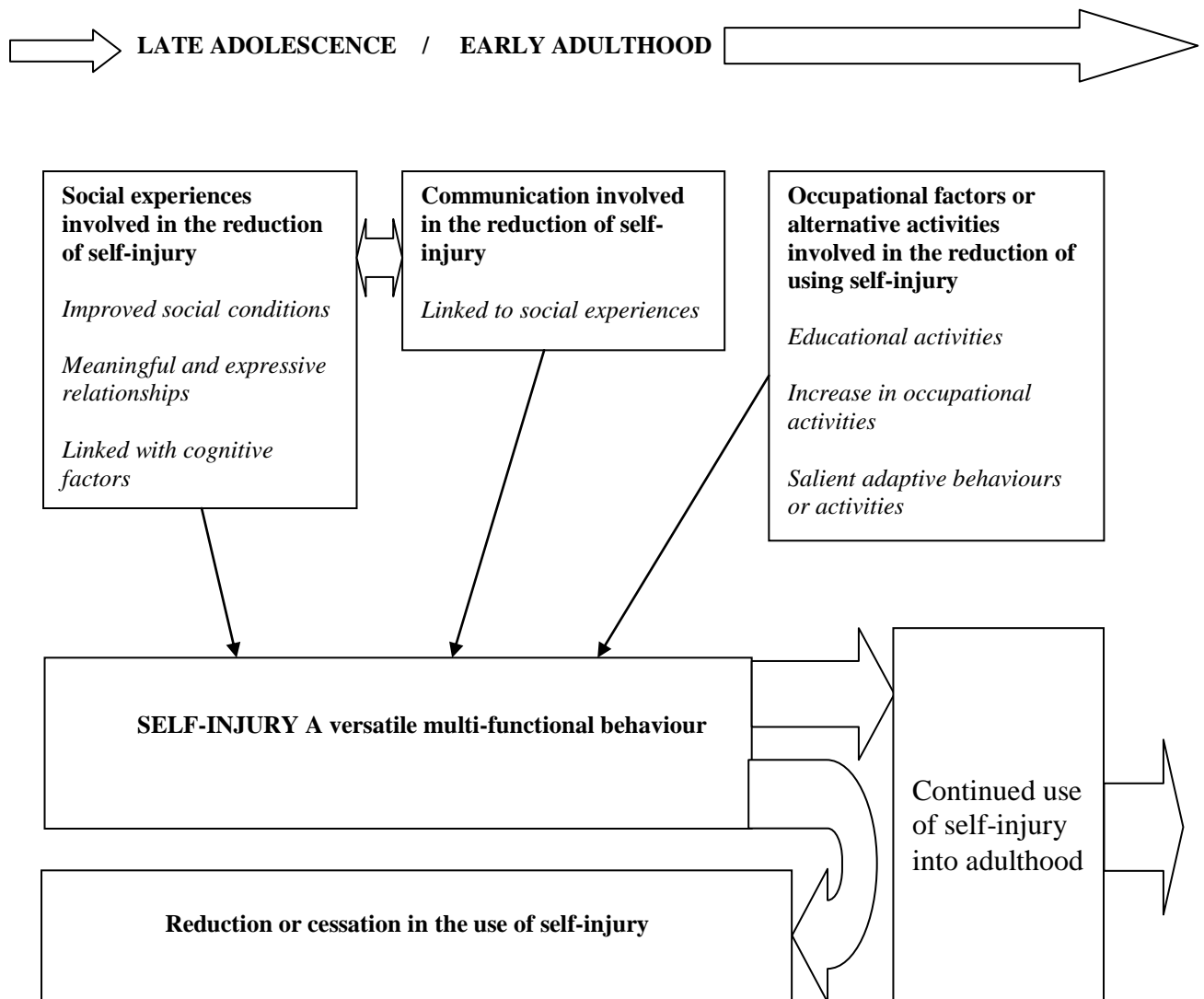
"...I'd got...a carving knife...and ran it down my legs...and...I realised how good it felt...and then...the next time I was stressed out I actually did that...I scratched...my leg with the carving knife...I enjoyed the feel of it...the sensation...I would be feeling stressed, angry, irritated...annoyed...and that (self-injury)...relieved it (distress)...first it (self-injury) feels really...nice and then as I press...harder it becomes...painful and it...feels kind of nice...and after that...a little bit of pleasure but then it becomes too painful to do it....everything is melting away...my problems – my studies...problems at home...they seem to disappear and it (distress) stops...it (self-injury) stops the pain and the anger..." (Int 17, page 11, lines 390-403, page 12, lines 420-435, page 13, line 483)

The self-inflicted physical pain and damage to the body tissues causes the release of opiates which influences how a person feels. Also, Sutton (2007) describes this euphoric sensation as being part of the cycle of self-injury and specifically associated with the individual's need to feel better or different. Importantly, Sandman and Hetrick (1995), who explored the opiate mechanisms involved in using self-injury, found that the release of endorphins in the body following acts of self-injury provide confirmation that endogenous opiates have a direct connection with self-injury. Therefore the selective manner in which a person self-injures and the subsequent increase in the release of endorphins establishes a biological link between the production of opioids and the act of self-injury. As a consequence, the person who self-injures may become addicted to their body's production of opiates and the feeling or analgesic state self-injury produces.

3.2.9. The reduction or cessation of using self-injury

Linking, social, communication, occupational and cognitive components, all the participants described events in their lives, during late adolescence or early adulthood, which led to a reduction or cessation in their use of self-injury. On close examination these changes could be defined as:

- Social experiences involved in the reduction of self-injury.

- Communication involved in the reduction of self-injury.

- Occupational factors or alternative activities involved in the reduction of using self-injury.

Social experiences involved in the reduction of self-injury	Communication involved in the reduction of self-injury	Occupational factors or alternative activities involved in the reduction of using self-injury
Improved social conditions *Meaningful and expressive relationships* *Linked with cognitive factors*	*Linked to social experiences*	*Educational activities* *Increase in occupational activities* *Salient adaptive behaviours or activities*

SELF-INJURY A versatile multi-functional behaviour

Reduction or cessation in the use of self-injury

Continued use of self-injury into adulthood

Figure 10. Diagram showing the influence of social, communication and occupational factors on the reduction or cessation in the participants' use of self-injury, during late adolescence and early adulthood.

Social experiences involved in the reduction of self-injury

Close examination of the participants' experiences of using self-injury showed that, particularly during late adolescence and early adulthood, two main social changes were associated with the reduction and cessation in the use of self-injury:

- Improved social conditions.

- Meaningful and expressive relationships.

Improved social conditions

Importantly, linking behavioural, cognitive, emotional and occupational with social experiences, several participants describe how improvements in their social conditions, such as a decrease in their exposure to domestic violence, was directly involved in the reduction of their use of self-injury, for example:

"...I would definitely cut my arms every time mum and dad argued...mainly at the weekends...it was the three of us at home...but that did change at around 15 when I used to stay around friends' houses at the weekends...it...became less and less frequent ...the more time I was away from home...my social (life) when I went into sixth form took off and I spent all my weekends with friends, so my self-injury stopped...my habit at home...I was more able due to my age to move away from it and them...it was just as much about them(parents) than it was about me...something I did when I was home – alone...the place that oppressed me – home. " (Int 14, page 5, lines 160-191, page 6, lines 192-205)

Meaningful and expressive relationships

Linked with communication factors, several participants describe how they established meaningful and supportive relationships with others outside of the family, which led to their disclosure of encounters with high levels of distress to others. This action subsequently led to the reduction of their use of self-injury. Also, for several of the participants this improvement in their lives was instrumental in their actual cessation of using of self-injury, for example:

"…I went to university…life seemed to change completely – I moved away…I had new friends and a social life…I had a boyfriend…it was very a full life - I loved it – I really enjoyed it – and…I…felt fulfilled – I felt like life was how I thought it should have been – people being open and honest and I didn't really do anymore cutting (self-injury)…it was…much warmer – it felt like what I always felt like my family should have been…" (Int 16, page 11, lines 384-391)

These findings are supported by Yip (2005, 2006) who indicated that improvements to the social environment (or conditions) and communication skills used by an individual to express their distress leads to the reduction in their use of self-injury. This occurs due to the fact that these improvements created the opportunities for the individuals to engage in alternative adaptive behaviours such as discussing and sharing their troubling thoughts and feelings. In addition, Hodgson (2004) identified that the disclosure of self-injury and the reasons for self-injuring are paramount in the process of reducing the use of self-injury.

Advancing this observation, and linked to cognitive experiences, several participants described how due to the influence of their developing social cognition, in particular their intimate relationships and responsibilities towards others, they consciously stopped using self-injury as a maladaptive coping strategy, for example:

"…yeah it was…it(using self-injury) wasn't so much when…I…got my baby and that…because …I was thinking about him more than myself…but…things did used to crop up about it sometimes…I thought about it (self-injury) and I didn't do it (cutting)." (Int 15, page 4, lines 135-142)

Communication involved in the reduction of self-injury

Linked closely with social experiences such as forming meaningful relationships where the verbal expression of distress became mutually facilitated several participants, during late adolescence, actively began to verbally express and share the overwhelming distress they encountered as an alternative to using self-injury, which subsequently reduced in frequency, for example, 'S' explains how her use of self-injury was discovered by her parents and consequently she attended a treatment programme and met a person with whom she shared mutual support and understanding, she says:

> *"...the course worked to some extent – but the most significant thing was I met a lovely bloke – he wasn't a boyfriend or anything like that...he self-injured and he became my support network...we used to meet every couple of weeks...it (self-injury) became a lot less out of control and serious I would occasionally self-injure...but only me and S***** ever knew this – so it was our secret – not just mine – sometimes I would phone S***** and tell him what I was thinking – he would talk and without saying stop – give me the strength not to do it and vice-versa..."* (Int 4, page 6, lines 199-215)

It was found that all those who stopped using self-injury during adulthood became proactive in learning to verbally and non-verbally (such as writing) express and share the overwhelming distress they encountered as an alternative to using self-injury. This action subsequently led to the reduction and cessation in the individuals' use of self-injury, for example:

> *"...what did I do – break a razor and cut myself but I did tell the nurse that I'd done it...I'm glad...I was alright for a few weeks but then I had some bad news*

so I done it (self-injured) again…but I didn't tell anybody…because I couldn't go through all the hassle…so…I done it (self-injured) again…the only way I could deal with it was to cut myself…I went to counselling…and I talked about everything…all what happened with my dad (sexual abuse)– all what had happened with the bloke I was with (severe domestic violence)…then I went on some courses about it…and it helped me a lot…so I never self-injured anymore and I haven't to this day…because…with talking to someone …I got it all out…it made coping better for me at the time…but then once I'd talked to someone about it more it made me cope even better – because I didn't have to think about self-injuring myself…because I knew I could talk…" additionally, she says *"…I wrote a poem about self-injury and said things…about domestic violence…I wrote… because that's how you learn to cope in the end…write them (thoughts and feelings) out on paper…I've done nearly a whole book of poems…"* (Int 15, page 7, lines 254-267, page 8, lines 268-283, page 8, lines 299-305, page 9, line 309, page 11, lines 397-410)

This finding is supported by Yip (2005, 2006) who concluded that the facilitation of the expression of high levels of distress is very important in improving communication and in using adaptive alternative coping strategies to self-injury.

Expanding this finding, during adulthood the vast majority of those who used self-injury described developing their understanding of why they used self-injury and explained the cognitive aspects involved in reducing or stopping the use of self-injury as a coping strategy. This development was directly linked to communication and social factors, in particular learning to communicate or express and share their

overwhelming cognitive and emotional distress and / or dissociative states of mind, for example, 'V' who went to college says:

"...I choose drama...which is most probably the most expressive experience I could have chosen – so part of my life was shrouded by non-expression and secrecy (covert use of self-injury) and the other thrived on being completely overtly expressive...at college I found this world full of not only acceptance of my differences but where they were encouraged to be free...very importantly for me I was able - due to the conducive environment I found myself in - to express a side of my gender and sexuality that had been tormented – being me – being gay and I realised that self-injury had supported me to keep this torment tolerable and subdued – so naturally the need for self-injury disappeared...self-injury was redundant..." (Int 11, page 5, line 156-159, page 5, lines 166-171, page 5, lines 181-189)

Additionally, several participants explain how they continue to think about using self-injury at times when experiencing high levels of distress. However they used the alternative of communicating or verbally expressing and sharing their distress with others, as opposed to using self-injury, for example:

"...I have thought about self-injury a lot...because I have been trying to get a full time job...and keep getting knocked back...and I know it the feeling of rejection that causes this (thinking of self-injury)... self-injury for me is about something that worked – relieved my...distress when I couldn't handle feeling rejected and angry and frustrated with a situation that I couldn't change and later on in my life (40s) this part hasn't changed...so I'm bound to think about doing it...the danger is thinking about it too much in isolation – so that's why I

decided to join a group of people who understand and I can talk to if I want

without being judged or being looked at as though I have a mental problem…I

don't regret self-injury when I was younger – but I would now I am a

responsible adult mother – wife and…relied on to run a family…" (Int 10, page

7, lines 244-262)

Occupational factors or alternative activities involved in the reduction of using self-injury

It was found that, during childhood, several participants described using or

engaging in occupational activities as an alternative to using self-injury in order to

cope with the distress they encountered, including:

- Educational activities.

- Increase in occupational activities.

- Salient adaptive behaviours or activities.

<u>Educational activities</u>

Several participants describe how school activities and being in the school

environment served as a means of escaping from the distress experienced which

emanated from their home environments. Therefore, school activities and the school

environment became an alternative to using self-injury, for example:

"…I remember always enjoying school…after I'd been raped by my cousin and

while being abused by my eldest brother school… became…a refuge because…

home was where I was being hurt and school wasn't – so I continued to enjoy

school and…threw myself into school work and was… passionate about my

school work because that was a distraction for me and it allowed me…it

was…another coping mechanism (in addition to self-injury)…I…enjoyed going

(to school) and if…we were sent home with a bit of colouring or anything like

that I'd be quite meticulous about doing it and spending time on it…I didn't

particularly rebel at school because…for me school was a safe place…so I

didn't want to put that in jeopardy by misbehaving…" (Int 19, page 4, lines 122-
136, page 7, lines 230-232)

Increase in occupational activities

As similarly described by Wedge (2009), several of the participants experienced a
reduction in their use of self-injury during late adolescence as their recreational
activities and school activities increased or they commenced employed work, for
example, 'R' describes how his life became busier and this enabled him to avoid the
antecedents in his life that caused him to use self-injury, he says:

"...I got a job helping a builder…I would never get too close to girls – I couldn't

go through that again – I moved out of home – that was the best thing I ever did

– life became busy – working and making new friends and I stopped self-injury

…" (Int 3, page 5, lines 164-177)

In contrast, during adulthood, this increased for the majority of participants who used
self-injury. They described a reduction in the distress they had experienced and their
use of self-injury when they became fully occupied at work and / or in higher
education, for example:

"…I went to university…life seemed to change completely – I moved away…I

had new friends and a social life…the need to use (self-injury - cutting) wasn't

there…" (Int 16, page 11, lines 384-395)

<u>Salient adaptive behaviours or activities</u>

During adulthood several participants describe replacing their use of self-injury to relieve their distress with alternative salient and adaptive behaviours or activities, for example, linked to physiological factors 'R' says:

"...the most important thing was I took up canoeing – it became the focus of my spare time and still is...I stayed with the building and that has grown from strength to strength – I have bricklaying, carpentry and believe it or not plumbing qualifications and my own business now...my canoeing is very physical – I do white water – that's very physically challenging and sea canoeing that can be scary – I love the adrenaline rush – I suppose that cutting – fighting and canoeing all have something in common - that exhausting feeling afterwards..." (Int 3, page 6, lines 226-231, page 8, lines 289-292)

These findings related to the reduction or cessation of self-injury demonstrates the variety of needs of the individuals which were not being met. The use of self-injury was for a multitude of functions emanating from unstable, deprived social settings, deficits or an absence in communication or expression, and lack of adaptive and alternative activities to using self-injury to cope. When these needs were met the use of self-injury reduced or ceased. This finding concurs with Dallam (1997), who reviewed the management of patients using self-injury in primary care and identified two factors contributing to the reduction or cessation of self-injury:

- Learning or developing communication skills that provide the verbal expression of emotions.

- Reducing the use of self-injury through learning to use adaptive alternative behaviours or activities.

4. **DISCUSSION**

4.1. The Development of self-injury as a versatile multi-functional behaviour

The process of axial coding, described in the results section (pages 98-211), revealed the main concepts or core components involved in the participants' experiences of using of self-injury, over time. To be precise, these components were defined as the:

- Behavioural components

- Cognitive components

- Emotional components

- Social components

- Communication components

- Occupational components

- Physiological components

Intersecting with axial coding, a process of selective coding was utilised to further analyse these components of self-injury. During this process the relationships, patterns, meanings and dynamics involved within and between these interwoven components were further examined, in the context to the participants' prolonged use of self-injury. This deeper level of processing and coding generated a central or core

category concept, which unified all the components of self-injury on a pathway (or storyline) reflecting developments in the participants use of self-injury. Examination of this pathway revealed the explicit and substantial theory that self-injury develops as a versatile multi-functional behaviour. Its versatility could be seen in that it became a strategy that could be adapted to serve a number of primary and secondary functions. These functions were dependent on the individual's specific needs and intentions for its use. Additionally, highlighting the multiple functions that self-injury developed to serve were the factors involved in the participants' reduction or cessation in using self-injury.

The overarching theory that self-injury develops as a versatile multi-functional behaviour was found to involve the following interrelated and essential features:

- Learning to use self-injury.

- Developing covert and overt types of self-injury.

- Developing cognitive reinforcement of using self-injury.

- Developing skills and proficiency in applying self-injury.

- Developing addictive or habitual needs reinforcing the use of self-injury.

- Developing multiple functions in the use of self-injury.

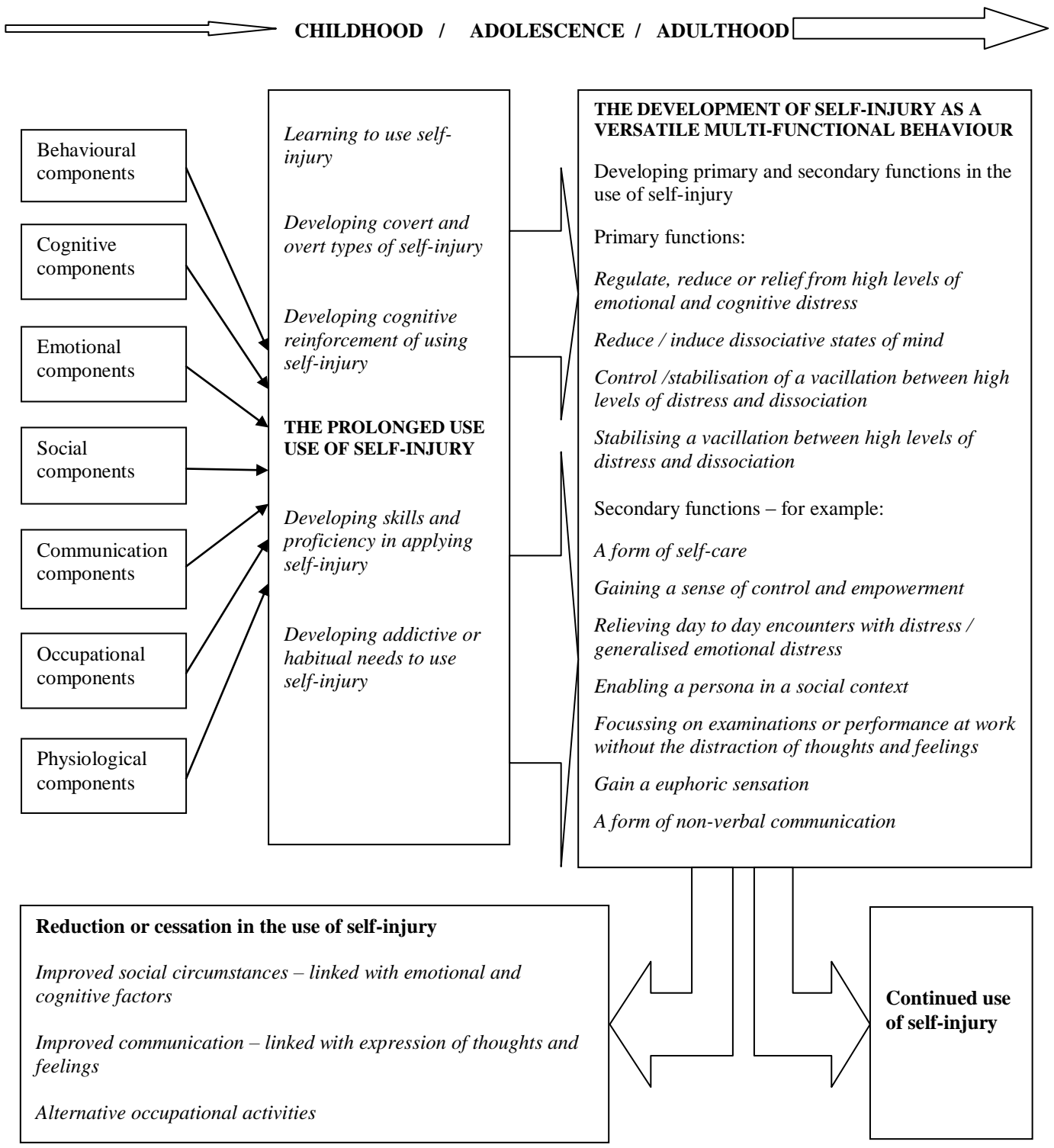- The reduction or cessation in the use of self-injury

CHILDHOOD / ADOLESCENCE / ADULTHOOD

Behavioural components

Cognitive components

Emotional components

Social components

Communication components

Occupational components

Physiological components

Learning to use self-injury

Developing covert and overt types of self-injury

Developing cognitive reinforcement of using self-injury

THE PROLONGED USE USE OF SELF-INJURY

Developing skills and proficiency in applying self-injury

Developing addictive or habitual needs to use self-injury

THE DEVELOPMENT OF SELF-INJURY AS A VERSATILE MULTI-FUNCTIONAL BEHAVIOUR

Developing primary and secondary functions in the use of self-injury

Primary functions:

Regulate, reduce or relief from high levels of emotional and cognitive distress

Reduce / induce dissociative states of mind

Control /stabilisation of a vacillation between high levels of distress and dissociation

Stabilising a vacillation between high levels of distress and dissociation

Secondary functions – for example:

A form of self-care

Gaining a sense of control and empowerment

Relieving day to day encounters with distress / generalised emotional distress

Enabling a persona in a social context

Focussing on examinations or performance at work without the distraction of thoughts and feelings

Gain a euphoric sensation

A form of non-verbal communication

Reduction or cessation in the use of self-injury

Improved social circumstances – linked with emotional and cognitive factors

Improved communication – linked with expression of thoughts and feelings

Alternative occupational activities

Continued use of self-injury

Figure 11. Diagram linking all the components of self-injury and illustrating the features involved in the development of self-injury to serve a range of primary and secondary functions.

Figure 11, above shows the interlinked components of self-injury and illustrates the features involved in the substantial theory that self-injury develops as a versatile multi-functional behaviour, serving a range of primary and secondary functions. This pathway in the use and development of self-injury summarises the participants' storyline regarding their experiences of using self-injury.

Starting during childhood or early adolescence, all the participants learnt to use self-injury through experiential or social learning. With regard to experiential learning the majority of participants discovered self-injury from either: inflicting low lethality bodily damage as an impulsive response to overwhelming distress (they physically hurt themselves) or having an accident causing physical pain which coincidently reduced the high level of distress they encountered at the time. Others learnt from forming a conscious plan to hurt themself without any suicidal intent. In contrast, several participants described acquiring self-injury through social learning. This learning took the form of copying social role models, in particular father figures, from within their family unit.

Importantly, from the point of acquiring the use of self-injury, all the participants described repeating the use of self-injury to gain the effect they had discovered. In other words, they had all learnt that they could use of self-injury as a coping strategy. It was identified that during this onset, of using self-injury, the participants experienced a period of experimentation with using self-injury. They tried out various forms of self-injuring, e.g. scratching, cutting and head banging. Leading on from this, all the participants' practice in using self-injurious behaviours tended to be influenced by their motivation to develop covert style/s of self-injury. These covert

types of self-injury provided them with the means to privately cope with high levels of emotional and cognitive distress, and dissociative states of mind.

Further to this, for all the participants, it was found that the most prominent period of development in the use of self-injury was during adolescence and early adulthood. During this time the participants experienced a dramatic increase in the breadth of their use of self-injury and it was during this period that the multiple functions of self-injury mainly formed. Each individual described their own unique range of functions in the use of self-injury. Notably, these developments occurred in context to the meanings self-injury had for the individual or, in other words, the individual's intentions for using self-injury. This increasing complexity in the participants' use of self-injury for multiple functions developed from the generalised use of self-injury. It shifted from primarily being a coping strategy into a multi-functional behaviour. This strategy was used to cope with and relieve a wide range of generalised everyday distress and stress encountered, e.g. coping with the demands and stresses caused from the day-to-day responsibility of caring for others.

Highlighting, the developing sophistication in the use of self-injury it was found that the participants used both covert and overt types of self-injury and several described using a combination of both during the same episode. These uses of self-injury were governed by the desired function or intention for which self-injury was being used e.g. to cope alone or to gain the support of others. This illustrates how the participants' use of self-injury developed from impulsive types into carefully planned and effective types of self-injury. These types of self-injury were described as being implemented with meaning and with knowledge of the consequences of using such

behaviour, e.g. covertly relieving distress, through using superficial forms of self-injury, whilst at the same time overtly gaining the attention and support of others. Importantly, this confirms that self-injury can develop into a behaviour used for multiple functions and that these functions can occur at the same time or consecutively with each other.

For all the participants, the use of self-injury was reinforced through a range of cognitive factors. These factors maintained the continued use and development of self-injury. Firstly, linked with social experiences, starting in childhood or early adolescence and continuing throughout adolescence and into adulthood, all the participants described forming negative perceptions, judgements and concerns regarding their social environment. These negatively orientated interpretations of the social environment caused or intensified the levels of cognitive and emotional distress the participants encountered, preceding their use of self-injury.

Secondly, during childhood or early adolescence, all the participants formulated beliefs and self-justifications for using self-injury. These were found to both reinforce the use of self-injury and develop alongside their prolonged use of self-injury. Expanding this point, during late adolescence and early adulthood, the majority of participants described rationally assessing the pros and cons for using self-injury, and subsequently developed their beliefs and justifications for continuing to use it as primarily a coping strategy. Their decision to use self-injury was made in preference to alternatives they were aware of, e.g. verbally expressing and sharing with others their encounters with overwhelming distress. Leading on from this, during adulthood, it was found that the majority of participants using self-injury had developed robust

justifications for its use, e.g. that it was the most effective coping strategy available to them.

Thirdly, for all the participants it was found that their understanding and knowledge of using self-injury evolved alongside its prolonged use. Consequentially, they applied this growing understanding and knowledge into maximising the actual use of self-injury as a safe and effective coping strategy, carried out with careful planning as arguably a form of self-care. This led to the subsequent refinement of the participants' techniques and methods of applying and maintaining the use of self-injury as an established covert activity. Self-injury had developed, from an impulsive response to distress, into carefully planned response that was carried out with knowledge of the consequences of using such behaviour. The participants' application of their acquired understanding and knowledge of self-injury continued throughout adolescence and into adulthood. It was found that all the adults using self-injury develop its use as a safe and effective coping strategy, with a number of secondary functions, e.g. relieving distress created by difficulties encountered with work demands and self-expectations of their own performance.

Further to these findings, several participants described how, from the onset of using self-injury, they became increasingly proactive in thought and action in guarding their ongoing use of self-injury, which had become a valuable coping strategy. This was prompted by the increasing fear of losing their use of self-injury if it was discovered by others. They felt that people would misinterpret the meaning that self-injury had for them. These people would regard such behaviour as a sign of serious self-

destruction (suicidal behaviour), when in fact, for the user it materialised as a safe and private form of coping.

Importantly over time, alongside these cognitive developments, the participants' level of skill in applying different types and forms of self-injury expanded. This culminated in the formation of a complex and refined form of self-injury which was self-prescribed and administered to achieve the maximum effect whilst causing minimal bodily damage. They became increasingly aware that self-injury resolved or served a multitude of functions, e.g. using skin burning to induce a state of euphoria, using unconcealed lacerations to the arms as a form of non-verbal communication with others, causing bloodletting in private to alter states of dissociation, causing very small cuts to sensitive areas of the body to override high levels of emotional distress, and enabling a persona which portrayed to others that they were not suffering from distress. Additionally, their use of self-injury matured and became applied with precision and competency so that it could be maintained as valued covert behaviour.

The participants developed new forms of self-injury suited to the function its use served, e.g. cutting the skin tissue, of bodily locations that could be easily concealed, to cause superficial wounds (without any subsequent need for medical attention) that induced the desired level of physical pain to relieve high levels of emotional distress, therefore implementing self-injury as a covert coping strategy. Highlighting this development, it was found that the participants who continued using self-injury during adulthood had developed, or acquired, a high level of proficiency in the application of self-injury. This was through practice and trying out a range of forms of self-injury over the years, e.g. cutting skin, burning skin, head banging, etc, and

learning from their experiences of using self-injury, e.g. cutting skin tissues too deeply and consequentially having to attend the local accident and emergency dep't for sutures and / or being discovered by parents or friends.

Interestingly, the majority of participants who continued using self-injury during late adolescence and into adulthood described developing addictive or habitual needs to use of self-injury. Although merely reported as behavioural and sensory effects by the participants, these findings are consistent with Sandman and Hetrick (1995). They identified that the repeated use of self-injury can cause the user to become addicted to endorphins or pain relieving neurotransmitters, which are opiate-based and released in the body when physical injury occurs. This factor might explain the participants' repeated or habitual use of self-injury and indications that it has addictive features or characteristics. Highlighting, this aspect of using self-injury, during adolescence several of the participants described developing a focus on inducing the desired level of physical pain in order to relieve the high levels of distress they experienced, whilst inducing a state of calmness and tranquillity. In these cases, inducing pain had shifted over time from being a consequence of using self-injury to becoming a conscious antecedent or need.

Further to this development the majority of participants, who used self-injury during adulthood, acknowledged that on occasions they used self-injury to purely gain the pleasurable / euphoric sensation induced through self-inflicted physical pain. This effect of using self-injury was acknowledged by all the adults who used self-injury and importantly, for several, became the objective or function of using self-injury on occasions.

Specifically regarding the development of the multiple functions of self-injury, during childhood or early adolescence, all the participants described the primary functions for which their self-injury was consistently used, namely: to cope with and relieve high levels of emotional and cognitive distress; altering or reducing states of dissociation; and reducing the vacillation between these two extreme states. Leading on from this, influenced or prompted by their established and prolonged use of self-injury for these primary functions, it was shown that the multiple functions of self-injury evolved alongside. In other words, the participants learnt about the additional effects gained through using self-injury and became increasingly aware of the generalised functions self-injury could serve. They recognised that, in fact, the use of self-injury had wider implications for them personally and that its use served a range of secondary or less fundamental, although important functions, e.g. using self-injury to improve the individual's capacity to focus on examination revision by alleviating any distracting thoughts and feelings. These functions were formed according to the individual's experiences and changing needs.

Combinations of the primary and secondary functions of self-injury were presented or used according to the individual's personal needs, circumstances and were ultimately dominated by their intentions for using self-injury. Demonstrating this, several participants increasingly needed to hide their use of self-injury from others, due to its use as a valuable strategy for coping with distress. Accordingly, they describe becoming increasingly proficient at using covert types of self-injury to regulate high levels of emotional distress, reduce states of dissociation, whilst providing them with a sense of control over their thoughts and feelings and enabling them to present a persona to others that they were not suffering. They explained how

this use of self-injury was carried out in private and without others knowing or being aware of their continued use. They took measures to protect their valuable 'secret'.

Overall, it was confirmed by the participants that, over adolescence and into adulthood, the secondary functions that self-injury served shifted according to the individual's changing personal needs. Subsequently, their continued practice led to the cultivation of self-injury as an established, effective and generalised coping strategy that was primarily used to cope with ongoing encounters with emotional and cognitive distress and / or episodes of dissociation. However, its use could be adapted to serve a number of secondary functions, e.g. gaining a sense of empowerment and control. Contingent upon this was not only the development of the participants' skills and proficiency in applying or administering self-injury but also the growth of their understanding and knowledge of the mechanisms involved in applying self-injury, the consequences or impact of its use and what functions self-injury provided for them personally, in addition to relieving distress and / or altering dissociative states of mind, e.g. inducing a euphoric sensation.

Importantly, in understanding the various functions that self-injury developed to serve, the participants describe the salient factors involved in the reduction or cessation in their use of self-injury. Primarily, these reductions were dependent on the participants acquiring adaptive alternatives to relieve the high levels of distress they encountered. During late adolescence and early adulthood, a number of participants experienced improvements in their social circumstances and consequently the emotional and cognitive distress that they had persistently encountered, from childhood or early adolescence, reduced and subsequently their use of self-injury became less frequent and / or stopped. It appeared that as participants formed

meaningful and supportive relationships, which provided them with the emotional and cognitive stability and support that had been lacking or absent in their lives, the need for them to self-injure declined. Very importantly, these relationships provided them with the opportunity to develop their use of alternative and adaptive behaviours to using self-injury, in particular communication - the verbal expression and sharing of encounters with overwhelming emotional and cognitive distress. These meaningful relationships meant that they no longer coped alone through using self-injury. Therefore, verbal expression became an intricate part of their intimate relationships and an alternative to their use of self-injury. This pattern greatly increased during adulthood where all the participants who used self-injury described their knowledge of verbal communication or expression of distress and that this provided an alternative to using self-injury.

Demonstrating the link with this crucial development and cognitive factors, several participants described how their developing social cognition positively influenced the reduction in their use of self-injury. This was an aspect of their intimate relationship with others and involved the increasing awareness of their responsibilities towards others and realisation that using self-injury detrimentally affects those close to them.

Regarding alternative activities to using self-injury, several participants describe how during their childhood they used or engaged in occupational activities as an alternative to using self-injury. These activities mainly involved educational activities, which provided them with a means of distraction or escape from the distress they encountered. This pattern continued for several of the participants throughout their adolescence where, in addition to educational activities, they also describe social

activities as providing an alternative to using self-injury. This was strongly influenced by the participants becoming increasingly involved in social activities away from their home environment, which was the source of the distress they encountered and their subsequent use of self-injury.

Importantly during adulthood, in contrast to adolescence, the majority of participants who used self-injury describe an increase in alternative occupational activities available and also several participants described discovering the use of salient alternative behaviours or activities to replace using self-injury, e.g. adrenaline-inducing sport activities. In addition, linking occupational activities with improved communication, several participants describe using written communication or an expression of distress such as poetry (where they could describe their troubles and concerns) as an alternative activity to using self-injury.

However, during adulthood, despite the majority of participants describing improved social conditions (having utilised opportunities to communicate their distress and having an awareness of alternative activities to using self-injury) their use of self-injury continued, albeit at a reduced frequency. Interestingly, this is consistent with the conclusion made by Wedge (2009) that individuals who use self-injury do so out of choice, to cope as effectively as they can with the emotional and cognitive distress they encounter or suffer. The participants who continued using self-injury into adulthood did so from their own volition. In other words, they decided to cope alone with the episodes of distress they encountered and or states of dissociation. They made their decision to continue using self-injury in preference to the alternatives available to them, e.g. the verbal expression of distress.

4.2. The contribution to current research from studying a non-clinical sample

This study contributes towards to research within the following three areas:

- The value in studying a non-clinical group of individuals.

- The functions of self-injury.

- Nursing research and development.

The value of studying a non-clinical group of individuals

The vast majority of previous research into self-injury has focused on clinical populations, in contrast, this study centred on establishing the experiences of self-injury encountered by a non-clinical, community sample, of individuals. The majority of these participants had never had any contact with health service professionals or specialist agencies in relation to their use of self-injury. This is a very important aspect of self-injury. As pointed out by Alder and Alder (2007), the use of self-injury by a non-clinical population has been neglected and is therefore missing from the available body of research investigating self-injury. Klonsky (2007) argues that we need to study this population if we are to develop a greater and more accurate understanding of self-injury. Through examining the experiences of self-injury, described by the participants, self-injury was clearly shown to exist within the repertoire of behaviours exhibited by a non-clinical sample. This finding asserts that self-injury is not exclusively used by, as suggested in previous research, hospital inpatients (Low, et. al. 2000), the deprived (Ayton, et. al. 2003) and those suffering from a mental health condition (Haw, et. al. 2001). Importantly, the findings confirm that the use of self-injury exists within the general population, and confirms Alder and Alder's (2007) claim that the use of self-injury exists across a wide social spectrum.

In other words this study shows how self-injury is used by 'normal' people in 'normal' settings and is not merely a coping strategy used by the hospital inpatients, or deprived populations. Also, the study verifies that self-injury should not be perceived solely as an adolescent behaviour, but rather as a behaviour that can exist throughout the lifespan, although it remains to be determined whether it is more common in some age groups.

Interestingly, it was found that the non-clinical sample in this present study described similar primary functions in their use of self-injury to the clinical samples, examined in previous studies, such as Santa Mina, et. el. (2006), in particular:

- Using self-injury to reduce or regulate distressing emotional arousal.

- Using self-injury to reduce or alter dissociative states of mind.

Importantly, these similarities in the use of self-injury (between clinical and non-clinical subjects), contribute towards developing our understanding of the fundamental use of self-injury as a coping strategy, regardless of the individuals' health, social and economic status. Similarly, Freeman, Garety, Ebbington, Smith, Rollinson, Fowler, Kuipers, Ray and Dunn (2005), who investigated the structure of paranoia in a non-clinical sample of 1202 adults, found similarities between the non-clinical and clinical samples. They suggest that the study of any condition in non-clinical populations increases our understanding of a phenomenon in its own right.

However, in contrast to the findings of previous research involving clinical samples that has shown the primary functions of self-injury, such as Herpertz, et. al. (1997)

and Low, et. al. (2000), the non-clinical sample in this present study extends the use of self-injury beyond these primary functions to include a range of secondary functions of self-injury, for example:

- The generalised use of self-injury to cope with everyday distress.

- The use of self-injury to focus on examinations and to improve performance whilst at work.

In previous clinical studies these secondary or multiple functions of self-injury have not been clearly identified or established, however this does not necessarily mean that they do not exist. Further research, investigating the multiple functions of self-injury within non-clinical samples, is required to clarify whether this apparent difference with the non-clinical sample, in this study, is valid.

However, in comparison to clinical studies, the participants' who took part in this study, provided accounts of using self-injury which were not confounded by overshadowing clinical factors, e.g. an acute mental health condition or severe learning disability. Expanding this point, Barkus, Stirling, Hopkins, McKie and Lewis (2007), who examined the cognitive and neural processes in auditory hallucinations, experienced by 1206 non-clinical subjects, suggest that when studying specific conditions, such as self-injury, clinical samples can be troublesome due to additional symtomatology, e.g. medication and acute psychiatric conditions. These factors actually have the effect of confounding the process of clearly examining a phenomenon. Also, many clinical studies have been restricted in their application by failing to consider the fact that the manifestation of self-injury is influenced by its

prolonged use, and subsequently they have failed to value the significance of the developmental aspects of self-injury, which was captured and examined for its meanings and importance in this study.

It can be argued, that studying the use of self-injury from a purely clinical perspective:

- Restricts the findings to being relevant to clinical groups.

- Creates a generalised association between psychiatric disorders and the use of self-injury.

Studying self-injury from a clinical perspective, as identified by Bosman and Meijel (2008), has led to self-injury being perceived by many health and social care professionals, such as nurses, as being associated with an acute psychiatric disorder. As Klonsky, Oltmanns and Turkheimer (2003) indicate, focussing research on examining the self-injury used by clinical populations reinforces the general perception that self-injury is a sign or symptom of psychopathology. Importantly, the participants who took part in this study have demonstrated that this is not necessarily the case. Developing this point, as indicated by Brophy (2006) and Alder and Alder (2007), the majority of those who use self-injury never come to the attention of health or social care professionals, and their use of self-injury remains a covert coping strategy. Therefore, it can be concluded the majority of those who use self-injury consist of a non-clinically defined population and that their use of self-injury may differ from that of clinical groups.

Supporting these points, according to several of the participants, in this study, the discovery of their use of self-injury only occurred when they could not cope with the emotional and cognitive distress and or states of dissociation they encountered, through using self-injury alone and without the support of others. In these cases the participants described how their use of self-injury changed in its function, to help them to cope with the subsequent treatment, medical or psychological interventions. For example, in adulthood several participants (who all had unresolved issues originating from being sexually abused during childhood) described how when they entered into counselling their use of self-injury shifted to support them to remain within the counselling process. Self-injury provided them with a means of coping with the disturbing memories or 'flashbacks' raised in therapy (their recollections of the traumatic childhood experiences of being sexually abused) .They continued using self-injury until the counselling until they were able to resolve their deeply troubling thoughts and feelings, which could have caused them to become ill, mentally and or physically. Further to this, it was confirmed by the majority of participants that their use of self-injury remained or remains their own 'secret' and they have no contact with health or social care professionals, or agencies. It can be argued therefore that it is the non-clinical population of self-injurers who:

- Have knowledge and understanding of how self-injury operates, as an effective coping strategy, with or without a clinically defined condition.

- Are able to describe how self-injury exists in their lives, enabling them to cope and continue functioning, independently within the community and with a level of 'normality'.

Leading on from this and illustrating the value of studying a non-clinical population, Kokaliari and Berzoff (2008), who examined the psychological and social functions of self-injury in a non-clinical sample (10 undergraduates aged between 18 and 23 years), point out that, through studying a non-clinical population, they were able to ascertain that the use of self-injury did not with certainty reflect the pathology of the individuals. More notably, the use of self-injury reflected the pathology of the society in which the individuals lived. They concluded that the use of self-injury emanates from the intense social pressures the individuals encountered. Participants in this study provided evidence that supports these observations. They described the range of social factors influencing their use of self-injury, e.g. enabling a persona, and it was established that a large proportion of the distress experienced preceding their use of self-injury was caused by factors within the social environment e.g. unstable home life, being the victim of abuse and / or neglect, etc. Therefore, regarding the interpretation of self-injury, Kokaliari and Berzoff suggest that clinicians must ensure they do not interpret an individual's use of self-injury merely as an indication of the individual's pathology. The findings of this present study certainly develop this point by clearly demonstrating how the individual's use of self-injury was fully interpreted, from recognising the range of non-clinical factors associated with its use. These factors indicate that self-injury is best interpreted within a framework that encompasses the behavioural, cognitive, emotional, social, occupational, communication and physiological factors or components involved in the individual's multiple functions of self-injury.

However, on a matter of caution regarding the study of non-clinical subjects, Thuston, Curley, Fields, Kamboukus, Rojas and Phares (2008), who investigated the

reliability of non-clinical samples, found that the definition of non-clinical can often be misleading or incorrect. They found that a large number of people, who took part in their community study, actually suffered from clinical problems and or were receiving therapy. This is an important consideration when interpreting the findings of this study, despite the stringent participation inclusion and exclusion criteria, which specified that those taking part should:

- Be generally in good health, living and functioning adequately within the community.

- Not be hospital in-patients or people suffering from an acute mental health condition or those who had a notable developmental disorder (moderate/severe learning disability) or those prescribed major anti-psychotic medication.

When considering of Thuston, Curley, Fields, Kamboukus, Rojas and Phares important observation, it can be argued that defining a non-clinical sample relies on the perceptions of members of our society, the researcher and individual. We all make our own interpretations and have our own opinions of what constitutes clinical and non-clinical. Therefore, it is important to note that there exists a level of ambiguity in using such definitions or categorisations.

The functions of self-injury

The development of self-injury as a multi-functional behaviour, established by studying the non-clinical community sample in this study, takes forward the recommendations of previous research e.g. Santa Mina, et al. (2006), Chapman, et al.

(2006) and Nock (2009), which concluded that research investigating the use of self-injury as a multi-functional behaviour is greatly lacking. Yip (2006) also identified that self-injurious behaviour (specifically cutting) is meaningful for individuals and recommends that this behaviour should be interpreted from a multi-dimensional perspective in order adequately to understand why individuals persistently use self-injury. Importantly, the findings of this study wholly support the proposal made by Suyemoto (1998) that self-injury is best interpreted from using a multi-modal perspective. This perspective essentially provides a platform from which to develop greater insight into the multiple functions of using self-injury. Also, the findings substantiate Nock, et. al's. (2007) suggestion that self-injury is a multiply determined behaviour and that the development and maintenance of self-injury can only fully be explained by the combination and examination of a range of relevant psychological, biological and environmental factors. Additionally, the findings extend this range of factors to include the important communication and occupational dimensions.

This study clearly takes forward Polk and Liss's (2007) call for further research to conceptualise the role of dissociation in self-injury and its relationship to communication, trauma (caused from being subjected to emotional and sexual abuse) and negative emotions. The participants' accounts achieved this by providing details of the use of self-injury to reduce states of dissociation (where they experienced the distress of being detached both emotionally and cognitively from their reality) and to induce states of dissociation (in order to detach themselves from their reality of experiencing unbearable emotional and cognitive distress). They also described the vacillation they encountered between these two extreme states and how they used

self-injury to stabilise this vacillation in order to adequately function in a personal and social context.

Importantly, the findings clarify and develop a number of recommendations put forward by Klonsky (2009). Firstly, the participants illustrated that their use of self-injury had / has multiple functions that are interrelated, e.g. relieving high levels of internalised emotional and cognitive distress whilst acting as a form of non-verbal communication to gain the attention of others, which can co-occur during the same episode of self-injury. As suggested by Klonsky, these functions can be interpreted within the same function of self-injury, e.g. to relieve emotional distress. However, when examined, they serve different but interrelated functions, e.g. to relieve emotional distress whilst enabling a persona in a social context.

Secondly, Klonsky suggests that the reinforcement of self-injury leads to repeated episodes of self-injury. The participants provided evidence to support and extend this simple perspective by describing:

- Multifarious antecedents, behaviours and consequences associated with using self-injury.

- The intricate cognitive factors, including the intentions for using self-injury; c) complex social factors.

- A lack of alternative coping strategies.

- An ongoing deficit in communication or expression of distress.

All these factors were found to reinforce the participants' continued or prolonged use of self-injury and its development.

Thirdly, Klonsky recommended further investigation into the physiological aspects of self-injury. This study's findings contribute towards this by demonstrating a clear link between physiological factors and the use of self-injury. This link primarily consists of the participants' use of self-injury to create the sensation of physical pain, which was found to develop in importance for several participants. Ultimately, the participants described how this developing role of physical pain in the process of applying self-injury led to their recognition and conscious use of physical pain to induce a level dissociation and a state of euphoria. This developed during adulthood to become the central focus or purpose for a number of participants in their use of self-injury. This is contrary to Walsh's (2006) claim that the function of self-injury is not centrally about inducing a state of euphoria and that this use of self-injury does not exist without emotional or cognitive distress. It is without doubt that further research is required to explore this aspect in the use of self-injury, which is indicated by a number of participants as a behaviour or condition in its own right. Related to the theory formulated from this study, the findings essentially show that the use of self-injury has multiple functions that can co-exist during the same episode of use.

Interestingly, contrary to Nock, et al's. (2007) claim that the use of self-injury is a dangerous behaviour, the participants who took in this study describe how their actual use of self-injury was or has been for many years low lethality and has supported them to function, and maintain a sense of normality in their lives. Importantly, self-injury developed as a safe form of coping with high levels of distress and states of

dissociation. Also, they were able to describe how the alternatives available to them were more destructive, e.g. drug abuse, and through using self-injury they did not engage in more destructive behaviours, develop a mental health condition or engage in deviant behaviours. It is therefore wrong to make such a sweeping statement without the perspective of those who self-injure being fully appreciated and validated. Also, contrary to the work of Hawton, et al. (2002) who stated that in many cases self-harming represented a transient period of distress, the participants described suffering or enduring distress for very long periods of time and that their established use of self-injury supported their continued functioning and, importantly, avoidance of engaging in more destructive forms of self-harm. Overall, they described self-injury as a form of self-care and not a transient experience.

This study's findings clarify that, as suggested by Nock (2008), communication deficits are notably associated with the participants' developing use of self-injury and extend this simplistic perspective by showing how the dimension of communication consists of a complex and interrelated set of variables, e.g. having a specific communication difficulty and a lack of opportunity to verbally express thoughts and feelings. These variables are unique to the individual and can materialise in a range of deficits in communication that are interlinked with other salient factors associated with the use of self-injury such as abuse and neglect.

Nursing research and development

In the context of nursing services for those who self-injure, the findings both support and advance the findings of previous research, such as those of Webb (2002) and Rayner, et al. (2005), by showing how self-injury develops as a behaviour with

multiple functions in a non-clinical sample. This perspective of self-injury is very important, as it contributes towards enhancing the way in which self-injury is perceived, which is fundamental to adequately understanding the function/s of self-injury in an individual's life despite their clinical status. This reinforces Smith's (2002) valued conclusion that health professionals would improve their approach towards self-injury by adopting a holistic perspective and this is endorsed by the findings of this study.

It is without doubt that the findings regarding the development of the multiple functions of self-injury highlight the need for the nurse practitioner to increase their level of empathy and effectiveness in conducting proficient and accurate assessments of self-injury. Overall in nursing it is vital that the assessment of self-injury incorporates a holistic multi-modal framework. This measure would also improve the identification of appropriate interventions focused on:

- Reducing the causation of self-injury.

- Meeting the needs of the individual that are associated with their use of self-injury.

Additionally, the findings contribute towards meeting the shortfall in the knowledge available to health and social care professionals regarding the functions of self-injury, as recognised by Mc Allister, et al. (2002), Reece (2005), Friedman, et al. (2006), and Mc Cann, et al. (2006). This study provides an account of how self-injury develops from its prolonged use into a behaviour that extends from being a coping strategy to a

versatile multi-functional behaviour, used to support and meet a number of personal needs for the individual.

Essentially, in the context of nursing development, this research builds on Procter's (2005) findings by clearly demonstrating that self-injury consists of a wide range of variables that impact on an individual's life and lead to their response of using self-injury. From this perspective, self-injury can only be captured or understood in its entirety through identifying the behavioural, cognitive, emotional, social, occupational, physiological components and communication components of self-injury in the context of its function for the individual.

4.3. Critique of current research study

The following areas were acknowledged and discussed regarding the critical aspects of this present study:

- Sample size and generalisability of findings.

- The use of retrospective accounts.

- The interpretations of one researcher.

- Conclusions of critique.

Sample size and generalisability of findings
Developing a critique, the findings of this study are potentially limited in generalisation due to the small sample size (25 adults) which was drawn from the

community at large. This conclusion is mainly based on the fact that large numbers of people across a wide range of groups, e.g. psychiatric hospital inpatients, have been found to use self-injury, confirmed in previous research, such as Yates (2004). However, this present research study was not focused on a specific group, e.g. the homeless, but instead attracted a unique group of individuals who wanted to take part out of their own free will or volition. Expanding this point, it was noted that those who decided to take part in this study consisted of a group of individuals who were at a stage in their lives where they could discuss their experiences of using of self-injury. Arguably, this could mean that the findings are relevant only to those people who are willing to discuss their use of self-injury.

When considering the profiles of the women and men who participated (detailed in the method section pages 36-89), they were not representative of those highlighted in the bulk of previous research (discussed in the introduction, pages 1 to 35). Many of those who have taken part in previous studies, unlike the participants in this study, have been recognised as being likely to use self-injury, e.g. psychiatric hospital patients. Also, when considering the process of recruitment of the participants which was achieved through an invite circulated within the public domain, this process of recruitment would have probably restricted access to those who did not use support networks or have access to a computer (in order to view the websites where the research invite was posted). Those who did take part in this study were mainly in their 30s, successful university graduates, functional (cognitively and emotionally), healthy adults, living and working within the community. When considering Brophy's (2006) report that only a small fraction of those who use self-injury is known and adding to the value of this study's findings, those who took part are likely to have represented a

percentage of the unknown, hidden number of people who use self-injury. These people are not represented in health or social care records or national statistics and reflect 'the tip of the iceberg'.

Developing the issue of generalisability, it is apparent that all those who took part could articulate their experiences of self-injury and were in a position both cognitively and emotionally to describe verbally their experiences concerning their prolonged use of self-injury. There are those who use self-injury who cannot easily articulate their experiences e.g. those with sensory conditions or impairments and such people are not represented in this present study. Expanding this point, the adult participants came from a range of backgrounds, ages, gender and lived within the community. However, it is recognised that they did not represent: the elderly, people from diverse ethnic backgrounds or religious sects or people accommodated within institutional settings such as hospitals and prisons. The recruitment process meant that these people were excluded. Also, this study did not extend to recruiting those living within the community with severe learning disabilities and acute mental health conditions, which have been found in previous research to be associated with the use of self-injury.

Crucially, it is accepted that it is unclear whether the development of the multiple functions of self-injury can be generalised to other individuals who use self-injury. Further research designed to be more inclusive of the general population, including a more diverse group of participants, would be required to clarify whether or not these findings are generalisable. Also, on reflection it is questionable whether the development of multiple functions of self-injury is applicable to those who experience

one episode of using self-injury or engage in other forms of self-harm such as an eating disorder. Perhaps it is worthwhile asserting, in defence of this study, that the participants represented a section within our society who use or used self-injury and who have been neglected in previous research. This ignored section of the adult population – the general public who were living within the community, and not segregated due to their status, health, social conditions or circumstances - became the focus of this study.

Interestingly regarding the issue of gender, the ratio of gender mix of those who took part in this study was found to be approximately two females to one male. This mirrors the national statistics (United Kingdom) compiled and reported by Brophy (2006) regarding gender and the use of self-injury. Although similarities in the use of self-injury were identified between the women who took part in this study, no notable gender differences in the experiences of using self-injury emerged. It is important to emphasise that gender differences in the use of self-injury were not specifically investigated in this present study and could be included in any future follow-up study. This would provide a focus on identifying any differences which may emerge from involving a wider sample from the population.

The use of retrospective accounts

Clearly it could be argued that another important weakness in this study was the fact that it relied on data that was recalled by the participants regarding previous events and experiences in their lives. Therefore, their recollections could have been unreliable due to memory problems. Undeniably, the findings did rely on the retrospective self-reports of the participants' memories of using self-injury and it is

acknowledged that they may have been inaccurate or corrupted. Expanding this debate and specifically related to the experiences of using self-injury, Klonsky (2009) points out that relying on retrospective accounts of the experiences of using self-injury is not ideal, as the participants' recollections could be incomplete or inaccurate. Also, Klonsky raises the issue that participants may experience difficulties in describing their experiences when involving mental processes that are directly related to episodes of using self-injury and involve a level of debilitation in the individuals' cognitive functioning. However, it is worthwhile considering that with regard to the experience of physical pain which was a common theme mentioned by the participants, Terry, Niven and Brodie (2007), who investigated pain recall accuracy of 74 participants aged between 26 and 72 years, all of whom had experienced physical pain, identified that the participants gave accurate recollections of their experiences of pain and that this remembering was clear and detailed and therefore they provided reliable retrospective accounts. This indicates that the participants' recollections of episodes of self-injury that caused them physical pain are likely to have been intact and reliable.

On reflection, it could also be debated that the issue of the reliability regarding the retrospective accounts used in this study is in fact partly relevant. In explanation, the majority of adults who took part had continued using self-injury into their adulthood and several participants were able to describe their actual use of self-injury at the time of attending the interview. This arguably reduced their reliance on memory of past events, when describing their experiences of using self-injury. It was also noted that the participants gave detailed descriptions of the events surrounding their use of self-injury, such as their family background and experiences of sexual abuse,

which were essential in validating the theory that self-injury developed multiple functions.

Furthermore, the potential that the participants could experience difficulties in their recollection of past events was considered in the design of this study, which incorporated two directives to aid recall, namely the use of a visual timeline and unstructured interview to obtain narrative accounts. These were implemented in the pilot study and evaluated for their effect. As a consequence, it was recognised that both the researcher and, more importantly, the participants, reported the positive effect on the ease of recall obtained through these two actions. Encouragingly, supporting the use of the visual timeline, it was reported by researchers such as Van der Vaart and Glasner (2007) and Wilson, et.al. (2007) that this visual aid was an effective tool in facilitating, encouraging and enhancing memory recall, exploration of events and the accuracy of details. Regarding the participants' interviews, those who took part in this study were not asked a series of questions but, through unstructured interviews, were empowered to describe their experiences in the form of narrative accounts. This action is supported by researchers such as Hilfinger, et al. (2004), who have clearly shown that unstructured interviews that obtain narrative accounts are effective in generating detailed descriptions of past experiences.

Nevertheless, despite the similarities and consistencies in the patterns described by the participants, it is without question that the greater proportion of findings of this study relied on retrospective accounts, which are exposed to being corrupted by the factor of human error in recall.

The interpretations of one researcher

Another issue of possible concern is that it could be argued that this study relied on the interpretations of one researcher, which is an obvious weakness. However the researcher used a method of interpretation that involved the triangulation of data, initiated through applying the grounded theory process of analysis (validating the themes identified from the written transcripts with the audio recordings of the interviews, summaries of the transcripts, memoing and reflective memos detailing the interpretations made). Also, before commencing the main study, during the pilot study an inter-rater reliability test confirmed that the researcher's interpretations were reliable.

Conclusions of critique

Overall, there is no doubt that these participants provided unique accounts of their experiences of using self-injury and it is not proposed that the findings of this study are generalised to all those who use self-injury. The findings are unique to this group, who described a large number of similarities in their experiences of using self-injury. These similarities were substantiated through the analysis of data and triangulation of the evidence. Additionally, many of the findings are fundamentally consistent with the findings of previous research, such as Klonsky (2007, 2009), Nock (2008.2009) and Walsh (2006, 2009), regardless of the contribution this research makes to the development of this previous research. However, examination of the limitations of this present research and its findings establish that, although this study has been shown to have internal validity, its external validity and generalisability to others who use self-injury could be argued as being questionable or not fully reliable.

Therefore, some caution is required when interpreting the findings of this study, which may only be relevant to those who took part.

4.4. Future research

This study identifies that self-injury develops as a multi-functional behaviour, which provides the way forward for a number of important research incentives that would advance the findings of this present research, including:

- Clarification and investigation of the range of functions that self-injury serves.

- The continued use of self-injury during adulthood.

- The study of the use of self-injury in non-clinical community samples.

- The assessment of self-injury.

Clarification and investigation of the range of functions that self-injury serves

Arising from the affirmation of the development of multiple functions in the use of self-injury, future research could be directed towards the clarification and investigation of the range of functions that self-injury serves. This would involve specific and focused research exploring the various secondary functions of self-injury, for example: the use of self-injury to induce a state of euphoria; the addictive features of self-injury; the use of self-injury to induce a state of dissociation; the association between communication deficits and difficulties and the use of self-injury; the use of self-injury associated with difficulties in the context of social relationships; and the use of self-injury to enable and maintain a social persona.

These examples are merely a few amongst the large range indentified within this present study. However, importantly, there is a need emanating from this study to conduct research which investigates and further tests the concept that self-injury is used for multiple functions and that it is not merely a coping strategy for overwhelming emotional and cognitive distress and states of dissociation. It also raises the question as to whether self-injury is a form of coping or develops as a condition in its own right.

Regarding self-injurious behaviours, the participants described increasing complexity and sophistication in their use of self-injury for multiple functions and how, alongside this development, they ultimately acquired a style of applying self-injury to gain the maximum effect whilst causing minimal damage and that this was governed by the function that using self-injury served. Further research is required to identify the stages or 'milestones' in the pathway of cultivating the use of self-injury as an established, refined behaviour during adulthood.

Interestingly, developing this proposal, the participants clearly demonstrate how, as indicated by Wedge (2009), they used self-injury out of choice and of their own volition. Expanding upon this insightful observation and stemming from this present study is the fact that the majority of adults continued to use self-injury, despite being aware of the alternatives available to them. The reasons for their continued use of self-injury remain unclear. The research established why they began using self-injury during childhood or early adolescence, why their self-injury developed and continued throughout adolescence and into adulthood. However, when the reasons for using

self-injury were resolved or ceased, they describe how they continued using self-injury for multiple functions.

The continued use of self-injury during adulthood

Further investigation is required to clarify the dynamics involved in the continued use of self-injury during adulthood. This could be achieved through conducting research that does not rely on retrospective accounts, but instead, in ways suggested by Klonsky (2007, 2009) Ecological Momentary Assessments (EMA). In applying this method, the participants would maintain a daily log (written or electronic) of their use of self-injury and its functions in relation to their experiences (behavioural, cognitive, emotional, social, communication, occupational and physiological) as they actually occur and over the course of time. This method was demonstrated by several researchers such as Moskowitz and Young (2006), who examined the application of EMA, to be a reliable and valid method of assessment that reduces the dependence on retrospective memory and interpretations of these by the researcher. Therefore EMA, as pointed out by Shiffman and Stone (2008), who examined the methodological and practical issues of using EMA, minimises any participant and researcher bias and maximises validity.

The EMA would provide the information required to ascertain whether the participants are using self-injury to meet multiple needs or whether the need is to use self-injury without any emotional antecedent being present, such as distress. This would go some way towards ascertaining whether self-injury should be regarded or classed as a condition in its own right or not and clarify the implications for an individual of their persistent use of self-injury during adulthood.

The study of the use of self-injury in non-clinical community samples

However, an important consideration, which was established from examining the participants' experiences during adulthood, is that the use of self-injury was mainly a covert activity and, importantly, their suffering remained or remains hidden from others and they cope alone. This poses a difficult task for the implementation of further research focused on a non-clinical, community samples, with particular reference to the fact that they are a difficult group to gain access to and are likely to maintain their self-injury as a covert activity. Alder and Alder (2007) support this when they suggest that most people who use self-injury are not clinical patients, never receive medical attention, and are fully functional individuals whose use of self-injury remains a concealed aspect of their lives in our society. With this in mind, it is suggested that future research would require consultation with, and the support of, those who have or do use covert forms of self-injury such as the numerous mutual support groups available to those who use self-injury. These community based support groups could aid the facilitation of such future research.

Leading on from this, regarding the non-clinical group who took part in this study, as indicated in previous research such as Klonsky, et. al. (2003) and Alder and Alder (2007), any comparison in the use of self-injury between clinical and non-clinical groups is absent within the body of research. This research is required to clarify any differences in the use of self-injury between these two groups. Also, this research would clarify, as indicated by the participants in this study, whether the use of self-injury changes when an individual is clinically defined as suffering from a psychiatric disorder and or admitted to an inpatient facility. This information is vital in the

development of effective assessments, and in the planning and implementation of purposeful interventions to reduce the use of self-injury by hospital inpatients.

The assessment of self-injury

With regard to the development of nursing services in the context of self-injury, as identified by Woldorf (2005), there is a need for nursing professionals to improve their knowledge and understanding of self-injury and their capacity appropriately to respond to the self-injuring person. Expanding this salient point, Santa Mina, et al. (2006) concluded that nurses need to be taught about the multi-dimensional formation of self-harming behaviours and that this gives rise to the importance of developing multifaceted self-harm assessment tools. Providing greater clarification, Kapur (2005), who reviewed the management of self-harm in adults, showed that there is a need for an assessment of the global needs of individuals who use self-injury. This is a crucial and missing resource in the planning, implementation, monitoring and evaluation of nursing interventions for individuals who use self-injury. The findings of this study contribute towards meeting these needs by: firstly, demonstrating that self-injury develops as a multi-functional behaviour used to meet specific needs of the individual and that an improved level of understanding is based on this premise. Secondly, and encouragingly, the findings support the conclusion that in order to assess self-injury fully, it must be interpreted using a multi-modal framework. Therefore, it is proposed that the utilisation of the key components found to be involved in the use and development of self-injury as a multi-functional behaviour provide clinicians with a template for thoroughly understanding an individual's use of self-injury. This template is essential for assessing the functions of their self-injury

and provides a way forward in the design of a suitable framework required for generating a comprehensive global assessment of the use of self-injury.

Providing greater clarification of this proposal, the findings highlight a number of important facts regarding self-injury that could be used in developing a dedicated assessment of self-injury. At present, there is no global assessment available as a resource for nursing, health professionals and therapists that can be applied to ascertain an accurate profile of an individual's use and maintenance of self-injury. Instead, many professionals and therapists working alongside people who self-injure do so from a subjective and impoverished stance. This situation could be improved if nursing clinicians had access to the use of a comprehensive assessment of the individual's use of self-injury and needs associated with this use. Walsh (2007) goes some way to achieving this when providing a guide to the clinical assessment of self-injury. This guide involves a model of assessment incorporating historical factors, details of self-injury used, the antecedents, the consequences and additional factors such as body image difficulties. However, this present study provides evidence that self-injury should be assessed from a broader perspective, which encapsulates or expands the components identified by Walsh, to include the spectrum of variables involved in the manifestation of self-injury. This expansion would incorporate the communication and occupational components and, most importantly, the development of multiple functions in the use of self-injury. These were authenticated in this present study as being important components of self-injury.

Overall, this holistic perspective, including the behavioural, cognitive, emotional, social, occupational, communication and physiological components of self-injury,

provides an improved framework for the development of an assessment. This assessment would fully capture the manifestation of self-injury as a versatile and developing behaviour in the context of its multiple functions.

Reinforcing this applied use of the findings with regard to creating a suitable assessment of self-injury, is the fact that without an adequate and dedicated resource for the assessment of self-injury, nursing staff, health professionals and therapists will continue to place their clients at risk of subjective interpretations and the potential to misinterpret their use of self-injury. Consequentially, their clients' personal and elemental needs associated with their use of self-injury are likely to remain hidden and unmet. This research contributes, together with the pioneering work of Walsh (2006, 2007), to forge the baseline from which the process in the development of a suitable assessment of self-injury can begin.

5.   **CONCLUSIONS**

In conclusion, this unique study discovered the major similarities which existed in the experiences of using self-injury, disclosed by a group of non-clinical, functional and independent adults. These similarities clarified that self-injury develops as a versatile multi-functional behaviour influenced in its use by the intentions and needs of the individual. This finding positively contributes towards the much-needed advancement in our understanding of the development of self-injury from its onset during childhood or early adolescence, throughout adolescence and into adulthood. It was established that over the duration of time, the prolonged use of self-injury had primarily provided the participants with the means to cope with overwhelmingly high levels of emotional and cognitive distress and or states of dissociation. Additionally, the study demonstrated how the participants' persistent use of self-injury led to the development of their understanding of how to apply self-injury effectively in its generalised use for a multitude of secondary functions. This development was complemented by the participants' acquisition of skills and knowledge of how to apply a refined form of self-injury with the aim of achieving the maximum effect whilst causing minimal bodily damage, which was governed by the functions that their covert self-injury served. These findings were discussed with regard to previous relevant research, where it was shown that the findings supported and advanced the suggestions and proposals made by researchers such as Klonsky (2007), that self-injury can be used for a multitude of functions in a person's life and that these functions can occur separately or together during the same episode of using self-injury.

Future research originating from this present study is proposed, with particular reference to the rising need for clarification of the pathways from which self-injury develops as a refined and sophisticated behaviour serving multiple functions. Furthermore, the concept that adults develop the use of a multi-modal form of self-injury, despite being aware of the adaptive alternatives available to them, requires further examination to clarify the dynamics involved and the implications of the prolonged use of self-injury. This could be achieved through using the Ecological Momentary Assessments, recommended by Klonsky (2007). This would be a more reliable method of data collection than the retrospective narrative accounts used in this study. Finally, the applied use of the findings of this present study were discussed in the context of improving nursing approaches to self-injury and, importantly, the development of a dedicated assessment of self-injury, which is presently absent from the resources available to nursing staff and healthcare professionals working alongside clients who use self-injury.

Importantly, in summary, by exploring participants' reflections on the phenomenon of self-injury over its prolonged use, the theory of its development and manifestation as a behaviour with multiple functions emerged. This contributes to the growing body of knowledge available and the development of a greater understanding of the self-injury, whilst prompting the great need for further research to clarify the dynamics involved in the conceptualisation of self-injury.

6. REFLECTIVE STATEMENT

Through conducting this study I became fully immersed in developing my understanding of the process of using self-injury encountered by the adult participants who took part. I believe that the grounded theory method of analysis guided me through the process of discovery and ensured that during the participants' interviews I remained objective in my observations and interpretations of what they had to say regarding their experiences of using self-injury. I am confident that the findings of this study are accurate and, although the participants are not representative of the wide range of people who use self-injury, I believe that, through their genuine involvement and disclosure of their experiences, they have shown that as a non-clinical group of individuals their use of self-injury developed multiple functions. Additionally, this research contributes towards enriching our understanding of the use of self-injury in the context of its functions and development.

7.   **REFERENCES**

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8.   APPENDICES

Appendix A - Sample of corpus

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Appendix P - Extract from University Research Ethics Committee Application form pertaining

to Section 2.11

Appendix Q - Participant Feedback Forms – Evaluation Summary

Appendix R – Sample of memos and category concepts cards (participant 19 only)

Appendix S - Martinson's (2007) 'The Bill of Rights for People Who Self-Harm'

Appendix A

SAMPLE OF CORPUS

Appendix B

VISUAL TIMELINE

The visual timeline grid will loosely prompt the participants to give a narrative account of their experiences of self-injury during three periods of their life: before adolescence (as a child), during their adolescence and as an adult. Regarding the visual timeline to be used in this study, it will simply consist of the participant being verbally and visually presented at the beginning of the informal interview, with a timeline grid presented on a flip chart (refer to *Figure 1,* below). Using the timeline will also heighten the participant's awareness of what is required of them during the interview.

Flip Chart

the
UNIVERSITY
of
GREENWICH

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CHILD ⇒⇒⇒⇒⇒**ADOLESCENCE**⇒⇒ **ADULT**

⇒⇒⇒ ⇒⇒⇒ ⇒⇒⇒ ⇒⇒⇒ ⇒⇒⇒ ⇒⇒⇒⇒⇒
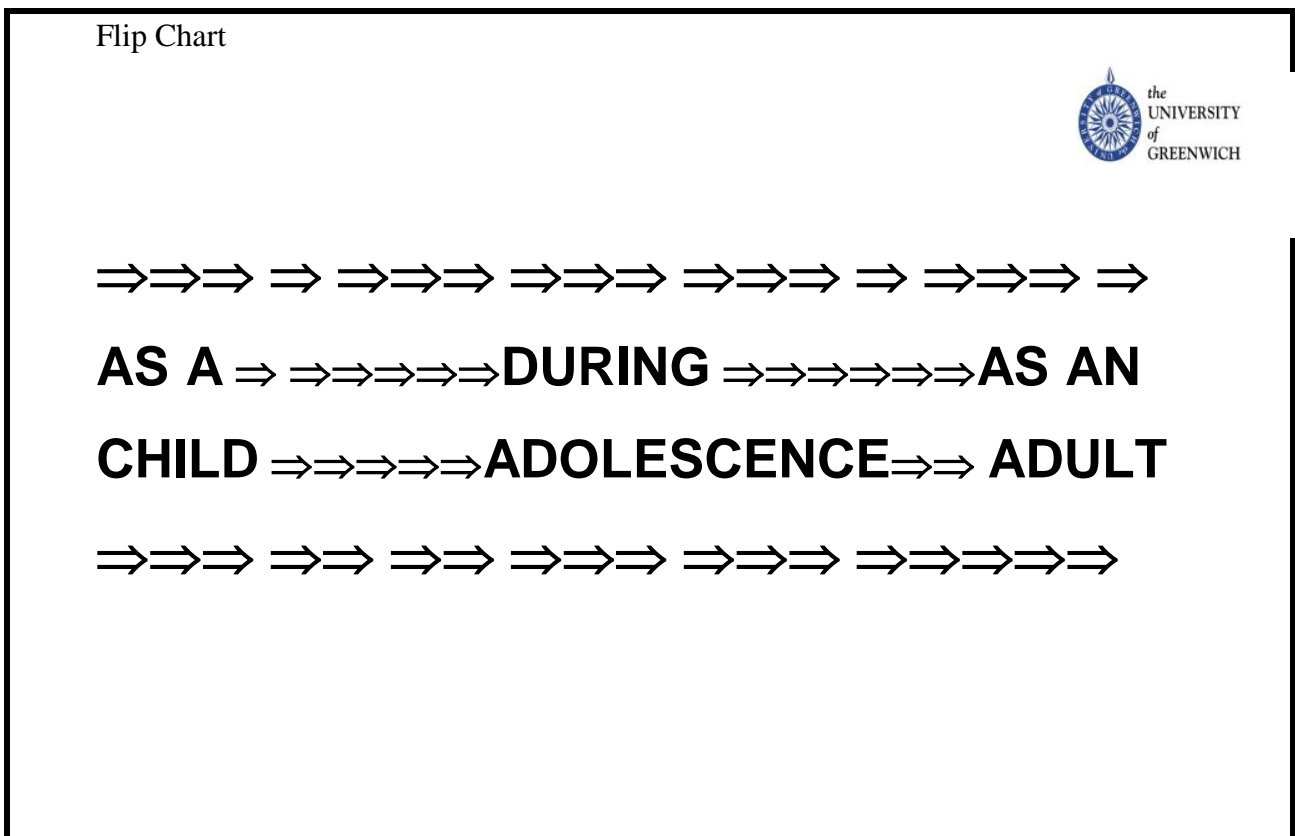
Figure 1. Showing the visual timeline grid to be presented to the participants on flip chart size display

Appendix C

**RELFLECTIVE STATEMENT (LOG) OF ETHICAL AND PROCEDURAL
ISSUES**

Appendix D

SAMPLE OF FIRST MEMOS 8, 17, 27, A1, A2, A3, A4, A5, A6

PILOT STUDY PARTICIPANT INFORMATION SHEET

I have recruited two participants (one woman and one man) for this pilot study who are aged between 30 and 50 years, generally in good health, who are living and functioning adequately within the community and who self-injured during their adolescence and have continued or stopped self-injuring in their adult lives. The participant may be attending an outpatient service or support group for self-injury.

This pilot study will involve using draft materials including: Invitation to Participate in Research, Participant Screening Criteria – Researchers' Checklist and Risk Assessment Form, Participant Information and Briefing Pack, Pilot Study Feedback Forms, Participant Informed Consent Form, Visual Timeline Grid, Debriefing, Participant Feedback Form. The primary purpose will be to evaluate, improve, amend, develop and refine the materials and informal interview process for use in the main study of this research. This will involve both the participant (yourself) and researcher (myself) completing a Pilot Study Feedback Form where it will be required to answer questions about the research process and documentation. This information will be used to refine the interview process and revise any documents and research procedures, such as the informed consent form. The findings of the pilot study will be included in a report, which will be submitted to the University Research Ethics Committee for their appraisal before the main research study commences.

Thank you for your co-operation in agreeing to take part.

Any questions please do not hesitate to contact me on:

Phone: 0208 331 8000 ext: 7768
Email: ba42@gre.ac.uk

Andy Barton-Breck

Appendix F

TEN COMMANDMETS OF INTERVIEWING

1. Never begin an interview 'cold'.

2. Remember your purpose / research question.

3. Present a natural front.

4. Demonstrate aware hearing.

5. Think about appearance.

6. Interview in a confidential and appropriate place.

7. Don't be satisfied with monosyllabic answers.

8. Be respectful.

9. Practice.

10. Be cordial and appreciative.

Adapted from - Berg, B. L. (1995), *Qualitative research methods for the social sciences.* Boston: Allyn and Bacon.

Appendix G

Participant's - Pilot Study Feedback Form   Date:

Was the invitation clear and understandable?

How did you find the initial phone and email contact with the researcher?

Were you able to understand the contents of the Participation Information and Briefing Pack?

Was the Informed Consent Form understandable?

Was the interview setting comfortable?

Did you find the Visual Timeline Grid useful?

Were the interview questions clear?

Did you find the researcher listened?

Was the debriefing adequate and clear?

Was the researcher respectful, cordial and appreciative?

Was the researcher's appearance acceptable?

Was the Participant Feedback Form understandable?

What were the strong points of the interview?

What were the weak points of the interview?

Can you suggest any improvements to the interview?

Were there any ethical issues noted – concerns or issues you would like to raise (please specify)?

Thank you for your co-operation.

Appendix H

Researcher's Pilot Study Feedback Form - Date:

How did you feel about the interview setting?

Did the interviewee understand the briefing?

Did the informal interview process work using the loose Holistic Global Framework of Inquiry?

Did the interviewee understand the questions?

Did they adequately explain / describe their experience of self-injury in line with the research question?

Was more structure required?

Was the Visual Timeline Grid supportive / useful to the participant?

Was the debriefing clear?

Was the Participant Feedback Form completed satisfactorily?

What were the strong points of the interview?

What were the weak points of the interview?

Can you suggest any improvements to the interview?

Were there any ethical issues noted – concerns or issues you would like to raise (please specify)?

Any other comments:

INVITATION TO PARTICIPATE IN RESEARCH

Your Personal Experiences of Self-Injury:

My name is Andy Barton-Breck I am a PhD Student from the University of
Greenwich, School of Health and Social Care.

I am carrying out research that looks into the personal experiences of adults who self-
injured during their adolescence.

If you meet the following criteria I would really like to hear from you:

a) Aged between late 20s and early 50s.

b) Generally in good health.

c) Living within the community.

d) Self-injured during you adolescence.

e) Still self-injure or may have stopped.

f) Are not a hospital in-patient.

g) Are not taking antipsychotic medication.

My contact details:

If you are interested in taking part please phone: 0208 331 8000 Ext 7768 (if I am
not available please leave a phone number and I will return your call) or you can
send an email to: ba42@gre.ac.uk

Confidentiality

You can be assured that I am bound by legislation to ensure your anonymity and treat
what you say in the strictest of confidence.

**Professor Elizabeth West who is supervising this research can be contacted on:
0208 3313000 or email: e.west@gre.ac.uk**

Look forward to hearing from you.
Andy Barton-Breck

Appendix J

PARTICIPATION SCREENING CRITERIA – RESEARCHER'S CHECKLIST AND RISK ASSESSMENT *(To be used by researcher as checklist during initial telephone or email contact with interested person).*

Communication:

Identify with the person any personal communication difficulties that may be

encountered and respond accordingly by creating an Individualised

Participation Support Plan (use page 4).

Researcher's initials

Participation support plan agreed with the individual.

Inclusion criteria.
The person must answer yes to all the following inclusion criteria to be included in the study.

Tick – yes
Cross – no

Ask the person if they are:

a) Aged between 30 and 50 years of age.

b) Generally in good health.

c) Living within the community.

d) Self-injured during you adolescence.

e) Still self-injure or may have stopped.

Exclusion criteria.
If the person answers yes to any of the following exclusion criteria then they will be excluded from the study.

Ask the person if they are:

f) A hospital in-patient?

g) Being prescribed medication for any

   psychiatric condition or being seen by a

   Psychiatrist, Psychotherapist or medical

   Professional?

h) In a state of crisis or receiving intensive

   therapy?

1

Ask the person: Do you understand the condition for taking part stated in the invitation? That by taking part and describing your experiences of self-injury you will not knowingly allow yourself to be placed in a situation whereby you will induce an episode of self-injury. ☐

If the person cannot agree with this condition then they will be excluded from the study.

Ask the person:

Do you have any further questions at this point?

If the person <u>does not meet with the participation</u> inclusion criteria and or if exclusion criteria are identified (indicating a level of risk, which this study is not designed to manage), then the potential participant will be politely informed why they do not meet with the requirements to participate and thanked for their interest.

Explanation given ☐

Ask the person:

Would you like to receive a list of organisations for people who self-injure with contact details? ☐

Note: The person made contact regarding self-injury and may indicate that they are trying to do something about their infliction – I am very experienced in managing these situations and will respond accordingly.

If the person <u>does meet with the participation inclusion criteria</u> and agrees with the condition for taking part then:

Ask the person:

Would you like to receive an information pack that contains the details of your participation in the research? ☐

If yes ask the person:

Could I please have your forwarding address - either email or postal - to send the Participant Information Pack?

Forwarding address:

Final comments:

Once you have received and read the Participant Information Pack then feel free to contact me with any questions or to arrange an interview, date time and venue.

If I am not available to take your phone call please leave a message and I will return your call.

If you send me an email please allow a reasonable time for me to reply as I check my emails at least twice daily.

Thank you for your interest and I look forward to meeting you.

Individualised Participation Support Plan:

PARTICIPANT INFORMATION & BRIEFING PACK

INDEX

AN INVITATION TO TAKE PART:

Following our recent contact I would like to invite you to take part in this research study. Before you make your decision whether to take part it is important that you understand why this research is being carried out, what it will involve for you and your rights. Therefore, please carefully read the following information and feel free to contact me with any questions, concerns or if you require further information.

WHAT DOES THE TITLE OF THE RESEARCH MEAN?

'What are the experiences of self-injury during childhood, adolescence and adulthood?'
In other words: What are your experiences of self-injury as a child leading up to your adolescence, during your adolescence and as an adult.

WHAT IS SELF-INJURY?

Walsh (2006) as: defined self-injury as: "*... intentional, self-effected, low-lethality bodily harm...*" (p.4). This includes skin cutting, burning, hair pulling, head banging, punching, scratching, and other forms of injuring one's own body.

WHAT IS THE PURPOSE OF THIS STUDY?

There has been a notable increase in the occurrence of self-injury amongst adolescents in both research and official reports, for example Brophy's (2006) findings reported in 'The Truth Hurts' following the National Inquiry into Self-Harm Among Young People. Consequently there has been a growing need for research to explore the experiences of people who self-injure. This is needed so that the function of self-injury in a person's life can be more fully and properly understood. In response, this study will examine your experiences of self-injury before, during and following adolescence. In order to do this I will arrange an interview with you where you will be given the opportunity to talk freely and openly and describe your experiences – your own 'story of self-injury' - in a safe environment and without fear of being judged or of any medical intervention, social stigma or implications.

Your account of self-injury is crucial in the process of developing a better understanding of adolescent self-injury and I will support you in doing this by asking you some questions during your interview about your self-injury.

1

WHY HAVE YOU BEEN INVITED TO TAKE PART?

You have been invited to take part because you are:

a) Aged between your late 20s and early 50s.

b) Generally in good health.

c) Living within the community.

d) Self-injured during your adolescence.

e) Still self-injure or may have stopped.

f) Are not a hospital in-patient.

g) Are not taking anti-psychotic medication.

Condition of taking part - You agree that by taking part and describing your experiences of self-injury you will not knowingly place yourself in a situation whereby you will induce an episode of self-injury.

WHAT WILL YOUR PARTICIPATION INVOLVE?

a) Read through this information pack and contact me with any questions or concerns about the research.

b) Contact me to arrange an interview (see page 8 for my contact details) and let me know about any personal arrangements that need to be made to enable you to take part.

c) Attend an interview where:
   - We will discuss the participant information and briefing you have received and complete a Participant Informed Consent Form (required so you can take part).
   - You will be asked to give me a different name, which will be used to identify individual data during my analysis. This precaution is taken so that your identity is protected and you remain anonymous, unless you request that you want your proper name used in the study.
   - Complete an interview in private with me (to describe your experiences of self-injury).
   - Receive a debriefing from me (this will provide you with an opportunity to ask any question or express any concerns following your interview).
   - Complete a Participant Feedback Form.

WILL YOU RECEIVE AN EXPENSES PAYMENT?

Following your attendance of the interview you will receive your fixed amount for expenses of £ 25.00.

WHERE WILL YOUR INTERVIEW TAKE PLACE?

Your participation in this study will last for approximately 2 hours and 10 minutes and will take place at _____ (agreed location of venue).

IS WHAT IS DISCUSSED CONFIDENTIAL?

What you have to say will be treated in the strictest confidence. Your personal details e.g. your name, will not at any time during your participation be used in the study's findings. At all times

I will protect your personal identity and am bound by legislation to ensure this happens. Therefore, transcripts will not contain any identifiable material; your anonymity will be maintained throughout the study. You will be asked to give a different name, which will be used to identify individual data during my analysis unless you specifically request that your proper name be used. I give my assurance that following analysis of the interview data the recording will be destroyed by me and the transcript, which will be anonymous, will be held in a secure place that only I will have access to.

You must not, under any circumstances, discuss the details of your participation with other participants, so as not to influence what they disclose during the interviews.

WHEN WILL I (the researcher) BE BOUND TO BREACH CONFIDENTIALITY?

Although the personal information that you disclose will be strictly confidential - I have a responsibility and duty of care to disclose information if you indicate that you intend to harm others, seriously harm yourself and / or property. In this case I will inform you that I would need to report the disclosure to my research supervisors and make a written account of the details. **Please note that this does not include the low lethality self-injury you tell me about.**

WHO IS RESPONSIBLE FOR YOUR PERSONAL SAFTEY AND WELL-BEING WHEN ATTENDING THE INTERVIEW?

Your personal safety during the interview is of paramount importance and when participating in this study I will be responsible for maintaining this. Therefore, I will ensure that I am familiar with the fire procedure and contact details of relevant persons in the event of an untoward incident.

During your participation in the study I will be responsible for your wellbeing and throughout the participation process I will maintain a respectful and dignified approach. If you become distressed then I will respectfully support you in stopping, or if appropriate, terminating the interview and will be prepared to assist you to take any appropriate action/s, such as seeking medical advice. I will adopt a sensitive approach to any issues disclosed relating to self-injury, ethnicity, gender and sexuality.

WILL YOU BE ABLE TO WITHDRAW FROM THE STUDY?

You are free to withdraw from this study whenever you choose and without any negative consequences. I will respect your choice and be supportive towards you in doing this.

WHAT WILL HAPPEN IF YOU BECOME DISTRESSED DURING THE INTERVIEW?

In order for you to reduce any distress and remain in control of your feelings you can stop the interview, at any point and inform me of how you are feeling. If you are unable to regain control over your feelings you may decide to withdraw from the interview – this is fully acceptable and I will respect your wishes. If I conclude that you need support I will ask your opinion and if appropriate your permission to action this and will assist you accordingly. Also if, as a direct consequence of your participation, you become aware of any raised potential to self-injure you should inform me, and fully consider withdrawing from the study and seeking support if necessary.

WHAT ARE YOUR PERSONAL RIGHTS?

Your participation in this study is voluntary, of your own free will and entirely your own decision. You have the right to withdraw from this study at any time and will not be penalised in any way for doing so. If you decide to withdraw then I can be contacted on the phone numbers or email address given on page 6.

I will adhere to 'The Bill of Rights for Those who Self-Harm (Self-Injure)', formulated by Martinson's (2008). If you are interested you can be read this 'Bill of Rights' on the following website address: **http://www.selfinjury.org.**
If you are unable to access a computer or have any difficulty accessing this website please contact me to obtain a copy.

WHAT ARE THE IMPLICATIONS OF YOUR PARTICIPATION?

Your participation is greatly valued and the findings of the study will provide the data required to conduct the research. Although there are no direct rewards for your contribution hopefully by actually taking part in such a study you should find the experience rewarding in itself. The information will be used to develop a greater understanding of what you and others have experienced and help to develop better services for adolescents' who self-injure.

WILL YOU RECEIVE A DEBRIEFING AFTER THE INTERVIEW?

Following the interview you will be debriefed by me and asked to complete a participant feedback form. This will provide you with the opportunity to ask questions or raise any concerns.

WILL YOU RECEIVE A COPY OF THE RESEARCH FINDINGS?

Yes – you will be asked if you would like to receive a summary of the research findings and will be asked to provide a forwarding email or postal address.

IS THE RESEARCHER PROFESSIONALLY ACCOUNTABLE?

I will conduct the study according to the Universities Research Ethical Guidelines and the Nursing and Midwifery Councils code of professional conduct (2004).

DOES THE RESEARCHER HAVE INDEMNITY INSURANCE COVER?

The researcher is covered by the University of Greenwich indemnity insurance cover for PhD Students whilst conducting this research.

DO YOU HAVE ANY QUESTIONS OR CONCERNS?

I would encourage you to ask questions regarding your personal participation in this study as it is important that you understand what it is all about. If there is anything that you do not fully understand either before taking part, during or following your participation then please contact me and ask for an explanation.

WHAT WILL HAPPEN IF YOU DECIDE TO NOT TAKE PART?

If you decide to not take part then that is completely acceptable. I respect your decision and sincerely thank for showing an interest.

WHAT DO YOU NEED TO DO IF YOU WANT TO TAKE PART?

If you would like to proceed with taking part then simply contact me to arrange an interview date, time and venue.

My contact details: Andy Barton-Breck, PhD Student
Phone: 0208 331 8000 ext: 7768 Email:
ba42@gre.ac.uk

Thank you for your interest and if you would like to take part I look forward to hearing from you.

Andrew Barton-Breck
University of Greenwich – School of Health & Social Care
Mary Seacole Building
Southwood Site
Avery Hill Road
London SE9 2UG

LIST OF ORGANISATIONS PROVIDING SUPPORT AND GUIDANCE FOR PEOPLE WHO SELF-INJURE

Self injury and related issues (SIARI) – website contact - www.siari.co.uk/

Lifesigns – website contact - www.lifesigns.org.uk.uk/

FirstSigns – website contact – www.firstsigns.org.uk.uk/

Recover your life – website contact - http://www.recoveryourlife.com.

Sirius project – self-help for self-harm – website contact - www.siriusproject.org/

Bright – website contact   - www.brightplace.org.uk/

Choose life – website contact - www.chooselife.net/

The Samaritans – 0845 7909090 – website contact - http://www.suicide-helplines.org/uk.htm

Self-injury helpline Bristol crisis service for women – 0117 9251119 website contact – http://www.users.zetnet.co.uk/BCSW/helpline.htm

Women's aid – 808 2000247 – website contact - http://www.womensaid.org.uk/help/national_helpline.htm

Survivors UK (Help for men who have been sexually abused or raped) –0845 1221201 – website contact - http://www.survivorsuk.co.uk/

Men As Survivors Helpline (MASH) – 0117 9077100 – website address - http://www.mash-online.org/

Telephone helplines association – website contact - http://www.helplines.org.uk/

Nightline – 0207 6310101 – website address - www.nightline.org.uk/

Newham Asian women's project - 020 8472 0528 (general), 020 8552 5524 (advice) – website contact - www.nawp.org/

Penumbra – website contact - www.penumbra.org.uk/

Depression alliance - 0845 123 23 20 – website contact - www.depressionalliance.org/

Mental health foundation – website contact - http://www.mentalhealth.org.uk/welcome/

Self-injury a struggle – website resource - www.self-injury.net/

Mental health in the UK – website resource - www.mentalhealthintheuk.co.uk

Metanoia – website resource - www.metanoia.org/suicide/

PARTICIPANT INFORMED CONSENT FORM

Title of Research: *"What are the experiences of self-injury during the transition from adolescence to adulthood?"*	

To be completed by the participant:	**Yes – tick box.** **No – cross box**
1. Have you read the information sheet about this study?	☐
2. Do you agree with the condition for participation specified in the information pack?	☐
3. Have you had an opportunity to ask questions and discuss this study?	☐
4. Have you received satisfactory answers to all your questions?	☐
5. Have you received enough information about this study?	☐

6. Do you understand that you are free to withdraw from this study:
 	
    • **at any time?**
    • **without giving a reason for withdrawing?**
    • **without any negative consequences from the researcher?**
	☐
	☐
	☐

7. Your interview will be audiotape recorded and the recording stored in a locked cabinet. The recording will be transferred into a written transcript and at this point the audiotape will be destroyed. Do you agree with this?	☐
8. I may use quotations from the transcript in writing up the research (which will be made anonymous). Do you agree with this?	☐
9. Do you agree to take part in this study without prejudice as a responsible adult with full liability for your own actions?	☐
Signed	**Date**
Name in block letters	

To be completed by the researcher:

1. At all times I will protect your personal identity and details. I am bound by legislation to do ensure this happens. Therefore, transcripts will not contain any identifiable material, your anonymity will be maintained throughout the study and a different name will be used to identify your transcript (unless you request that I use your real name).

2. I give my assurance that following analysis of the interview data the recording will be destroyed by me and the transcript, which will be anonymous, will be held in a secure place, to which only I will have access.

Signature of researcher   **Date**

Name in block letters

This Project is Supervised by: **Professor Elizabeth West**

Contact Details (including telephone number):

University of Greenwich
Mary Seacole Building
Southwood Site

Telephone: 0208 3318850   **E mail: e.west@gre.ac.uk**

Contact details of named Counsellor:

Appendix M

PARTICIPANT DEBRIEFING

Following the interview the following debriefing is to be presented verbally and in writing to the participant.

Are there any issues that were raised during the interview that concern you or that you would like to talk about?

Have you any questions or concerns that you would like me to answer?

What did you think about the interview?

If at a later time you have any questions regarding the interview or research, I can be contacted on the phone numbers or email address detailed in your copy of the Participant Information and Briefing Pack.

PARTICIPANT FEEDBACK FORM

Please write your answers / comments below the questions

1.   How do you feel about taking part in this research?

2.   Are there any aspects of the research that concern you?

3.   Were you satisfied with the answers to your questions?

4.   Was the researchers approach courteous and respectful?

5.   Is there anything regarding your experience of taking part that
        you feel could be improved?

6.   Would you like a summary of the research findings? (If yes please
         provide a forwarding address or email address)

Any Comments:

Thank very much you for participating in this study.

Appendix O

Pilot Study – Confusion Matrix and Inter-Rater Reliability Test

Confusion Matrix and Inter-Rater Reliability Test

Table 1. *Confusion Matrix detailing the combined inter-rater interpretations.*

			Rater2					Category Coding System
Rater1	B	S	E	O	C	SIB	Total	B = biological experiences
B	2	0	0	0	3	5	10	S = social experiences
S	0	94	2	5	5	12	118	E = emotional experiences
E	0	21	82	0	24	15	142	O = occupational experiences
O	0	2	0	20	0	0	22	C = cognitive experiences
C	4	7	5	1	116	25	158	SIB = self-injurious behaviours
SIB	0	1	0	2	20	84	107	
Total	6	125	89	28	168	141	**398**	= No of agreed interpretations

A coefficient of concordance test was then carried out.

Number of agreed interpretations: 2 + 94 + 82 + 20 + 116 + 84 = 398

Total number of interpretations: 557   = **0.72**

Proportion of occasions agreed interpretations between rater's = 72% (0.72)

Calculate the proportion expected by chance (Pc)

Pc = (0.010 x 0.006 = 0.000006) + (0.118 x 0.125 = 0.01475) + (0.142 x 0.089 = 0.012638) +

(0.022 x 0.028 = 0.000616) + (0.158 x 0.168 = 0.026544) + (0.107 x 0.141 = 0.015087)

= **0.070**   **Calculate Cohen's Kappa (*K*)**

K = 0.72 – 0.070 = 0.65

   1 - 0.070 = 0.93   = **0.70**

From examination of this demographic information it can be seen that 68% of the

participants were females and 32% were males – roughly one third.

Differences between rater 1 and rater 2 interpretations.

4.5% (25) were found between the cognitive interpretations of rater 1 and self-

injurious behaviour interpretations of rater 2.

3.8% (21) of the differences were found between the emotional interpretations of rater

1 and social interpretations of rater 2.

3.6% (20) of the differences were found between the self-injurious behaviour

interpretations of rater 1 and cognitive interpretations of rater 2.

2.7% (15) of the differences were found between the emotional interpretations of rater

1 and self-injurious behaviour interpretations of rater 2.

2.2% (12) of the differences were found between the social interpretations of rater 1

and self-injurious behaviour interpretations of rater 2.

Appendix P

EXTRACT FROM UNIVERSITY RESEARCH ETHICS COMMITTEE

APPLICATION FORM PERTAINING TO SECTION 2.11

Specify whether the following procedures are involved:

Any invasive procedures, e.g. venepuncture.	NO
Any intrusive procedures, e.g. questionnaire(s), interview, diary, focus groups.	YES
Physical contact.	NO
Any procedure that <u>may</u> cause mental distress, in particular if dealing with vulnerable participants, e.g. young, mentally ill, elderly, etc.	NO
Patient records or data with no other direct participant contact.	NO
Prisoners or others in custodial care.	NO
Adults with incapacity (physical and / or mental).	NO
Testing a medicinal product or device.	NO
Children/Young persons.	NO

Outline the procedures involved in your study. *If samples are to be taken, state **type, frequency** and **amount** and whether this is part of their normal treatment. If Radiological Investigations are part of the procedures please indicate the number and frequency of exposures and total calculated dosage – see Appendix V.*

Pilot study

In the first instance, a pilot study will be conducted with two individuals, one male and one female, who meet with the participation criteria stated in the 'Invitation to Participate in Research' (see Appendix H, for details). The draft materials will be used including: Invitation to Participate in Research, Participant Screening Criteria – Researcher's Checklist and Risk Assessment Form, Participant Information and Briefing Pack, Pilot Study Feedback Forms, Participant Informed Consent Form, Visual Timeline Grid, Debriefing, Participant Feedback Form. The primary purpose will be to evaluate, improve, amend, develop and refine the materials and informal interview process for use in the main study.

Inter-rater reliability test **-** In addition, as used by Rauch and Hamilton (2006), an inter-rater test will be conducted to establish the reliability of my interpretations, of what the participants have said (the initial category concepts) contained within the transcripts or corpus of the pilot study data. The second rater will be a proficient researcher (to be identified following UREC approval).

If a Cohen's Kappa (*K*) score of above 0.60 is obtained, which according to Fliess's (1981) 'rule of thumb' shows that my interpretations are good to excellent and therefore reliable, then the main study will proceed. However if a score of below 0.60 is obtained then I shall inform my supervisor and investigate why the inter-rater interpretations are unreliable and respond accordingly, e.g. revise the interview procedure, and then conduct a re-test. It is crucial that I establish reliability in my interpretations of the data before proceeding with the main study.

PARTICIPANT FEEDBACK FORMS – EVALUATION SUMMARY

Evaluation summary of the compiled findings from the participant feedback forms

Question	Positive Responses	Neutral	Negative Responses	Additional Comments
How do you feel about taking part in this research?	25	0	0	0
Are there any aspects of the research that concern you?	24	0	2	2
Were you satisfied with the answers to your questions?	25	0	0	0
Was the researchers approach courteous and respectful?	25	0	0	0
Is there anything regarding your experience of taking part that you feel could be improved?	24	0	0	0
Total	**198**	**0**	**2**	**2**
Positive	**99%**		**99%**	**100%**
Neutral				
Negative	**01%**		**01%**	
Would you like a summary of the research findings?	14	1	10	
Total	**56%**	**4%**	**40%**	

Appendix R

SAMPLE OF MEMOS AND CATEGORY CONCEPT CARDS

(participant 19 only)

<div align="center">

Appendix S

'The Bill of Rights for Those who Self-Harm'

</div>

Martinson, D. (2007, August 14). The Bill of Rights for People Who Self-Harm. [On-line]. *http://www.enotalone.com/authors.php?aid=73*.

1. **The right to caring, humane medical treatment.**

Self-injurers should receive the same level and quality of care that a person presenting with an identical but accidental injury would receive. Procedures should be done as gently as they would be for others. If stitches are required, local anesthesia should be used. Treatment of accidental injury and self-inflicted injury should be identical.

2. **The right to participate fully in decisions about emergency psychiatric treatment (so long as no one's life is in immediate danger).**

When a person presents at the emergency room with a self-inflicted injury, his or her opinion about the need for a psychological assessment should be considered. If the person is not in obvious distress and is not suicidal, he or she should not be subjected to an arduous psych evaluation. Doctors should be trained to assess suicidality / homicidality and should realize that although referral for outpatient follow-up may be advisable, hospitalization for self-injurious behavior alone is rarely warranted.

3. **The right to body privacy.**

Visual examinations to determine the extent and frequency of self-inflicted injury should be performed only when absolutely necessary and done in a way that maintains the patient's dignity. Many who self-injure have been abused; the humiliation of a strip-search is likely to increase the amount and intensity of future self-injury while making the person subject to the searches look for better ways to hide the marks.

4. The right to have the feelings behind the self-injury validated.

Self-injury doesn't occur in a vacuum. The person who self-injures usually does so in response to distressing feelings, and those feelings should be recognized and validated. Although the care provider might not understand why a particular situation is extremely upsetting, she or he can at least understand that it is distressing and respect the self-injurer's right to be upset about it.

5. The right to disclose to whom they choose only what they choose.

No care provider should disclose to others that injuries are self-inflicted without obtaining the permission of the person involved. Exceptions can be made in the case of team-based hospital treatment or other medical care providers when the information that the injuries were self-inflicted is essential knowledge for proper medical care. Patients should be notified when others are told about their self-injury and as always, gossiping about any patient is unprofessional.

6. The right to choose what coping mechanisms they will use.

No person should be forced to choose between self-injury and treatment. Outpatient therapists should never demand that clients sign a no-harm contract; instead, client and provider should develop a plan for dealing with self-injurious impulses and acts during the treatment. No client should feel they must lie about self-injury or be 'kicked' out of outpatient therapy. Exceptions to this may be made in hospital or treatment, when a contract may be required by hospital legal policies.

7. The right to have care providers who do not allow their feelings about self-injury to distort the therapy.

Those who work with clients who self-injure should keep their own fear, revulsion, anger, and anxiety out of the therapeutic setting. This is crucial for basic medical care of self-inflicted wounds but holds for therapists as well. A person who is struggling with self-injury has enough baggage without taking on the prejudices and biases of their care providers.

8. The right to have the role self-injury has played as a coping mechanism validated.

No one should be shammed, admonished, or chastised for having self-injured. Self-injury works as a coping mechanism, sometimes for people who have no other way to cope. They may use self-injury as a last-ditch effort to avoid suicide. The self-injurer should be taught to honor the positive things that self-injury has done for him/her as well as to recognize that the negatives of self-injury far outweigh those positives and that it is possible to learn methods of coping that aren't as destructive and life-interfering.

9. **The right not to be automatically considered a dangerous person simply because of self-inflicted injury.**

No one should be put in restraints or locked in a treatment room in an emergency room solely because his or her injuries are self-inflicted. No one should ever be involuntarily committed simply because of self-injury; physicians should make the decision to commit based on the presence of psychosis, suicidality, or homicidality.

10. **The right to have self-injury regarded as an attempt to communicate, not manipulate.**

Most people who hurt themselves are trying to express things they can say in no other way. Although sometimes these attempts to communicate seem manipulative, treating them as manipulation only makes the situation worse. Providers should respect the communicative function of self-injury and assume it is not manipulative behavior until there is clear evidence to the contrary.