A Feasibility Study to Evaluate a Self-Harm Group in Psychiatric Inpatient Settings

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A thesis submitted for the degree of Doctorate in Clinical Psychology

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April 2018

Acknowledgements

Firstly, I would like to thank all of the people on the wards, who took time out of their day to speak to me and take part in the study. I would like to acknowledge, not only the people who experienced the group, but all of the people that gave me time to explain the study to them.

I would especially like to thank my supervisors Dr Frances Blumenfeld and Dr Lisa Wood for their guidance, support and patience. This thesis was only possible thanks to Lisa trusting me to conduct research in her workplace and believing in the viability of the project. A special thankyou also goes to Dr Margot Brink for sharing her knowledge with me and taking the time to convey this in a way that helped me develop the group protocol. I would like to thank the assistant psychologists on the wards for helping me recruit participants and for running the groups, and Dr Claire Williams for her enthusiasm for the project, allowing me access to the wards and for helping to get the groups up and running.

I would like to dedicate this thesis to a friend, who had a difficult journey through psychiatric inpatient care and in doing so steered the course of this thesis.

To my parents, Cate and Jim, my sister, Helen and brother, Rob who always listen even when they have more important things to think about. To my nephew, Orson, for being a ray of sunshine and a timely reminder of what is most important in life.

Lastly, to my partner Lee, who has been present at every stage of my journey in the last 11 years and for all this time has held an unwavering belief that I *can* do it!

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Abstract

Despite being the most common reason for admission to psychiatric inpatient services in the UK (Bowers, 2005), no evidence-based treatment currently exists for self-harm in this setting (Turner, Austin & Chapman, 2014; Winter et al., 2007). Dialectical Behavioural Therapy (DBT) has found promising results in treating self-harm in outpatient settings (Linehan, 1993a). More recently, there have been favourable results from a DBT-informed group in an inpatient setting (Gibson, Booth, Davenport, Keogh & Owens, 2014), however the intervention was longer than the average stay on an inpatient ward (23 days; Health and Social Care Information Centre, 2014). The aim of the current study was to assess the feasibility of a novel DBT-informed group for people who self-harm within the average length of an inpatient stay. The 'Coping with Crisis' (CwC) group protocol was compiled using DBT skills (Linehan, 1993a), with particular focus on crisis management strategies. In line with the Consolidated Standards of Reporting Trials (CONSORT) guidelines for feasibility studies (Eldridge et al., 2016), the aim was to collect data on the rates of recruitment, retention, outcome measure completion and participant feedback, in order to inform the design of a main study. Twenty-four participants were recruited from an inpatient ward in a National Health Service (NHS) Trust. Results suggest that the clinicians and participants found the CwC group acceptable and it was found to be feasible to run the group and research study on an inpatient ward. However, the study experienced several challenges in terms of recruiting to target (80% achieved), retaining participants in the treatment groups and completed post-intervention outcome measures (n = 9; 38%). This information, in addition to feedback from the participants can be used to inform adaptions to the study design and make recommendations to improve outcomes for future research.

Chapter 1.

Introduction

Overview

Graff and Mallin (1967) were among the first to recognise self-harm as a mental health condition. Since then, self-harm has become increasingly common (Perry et al., 2012). It has been associated with long-term difficulties (relationship break-downs, housing or financial problems; Hawton, Zahl & Weatherall, 2003), mental health conditions (Haw, Hawton, Houston & Townsend, 2001; Meltzer et al., 2002) and a higher risk of completed suicide (Hawton, Saunders & O'Connor, 2012). The National Suicide Prevention Strategy for England (Her Majesty's Government Department of Health, 2012) suggests people who self-harm are at high-risk and subsequently in serious need of attention. The National Institute of Clinical Excellence (NICE, 2011) recommend self-harm is treated as a priority. However, service user-led evidence has raised concerns regarding the lack of treatment provision focused on improving the way people manage their self-harm (Hume & Platt, 2007). The evidence has been particularly critical of inpatient services (Faulkner & Thomas, 2002; Hume & Platt, 2007). Indeed, despite being the most common reason for admission to psychiatric wards in the UK (Bowers, 2005; Clements et al., 2016), no evidence-based treatment currently exists for self-harm for adults in an inpatient environment (Turner, Austin & Chapman, 2014; Winter et al., 2007). Therefore, the current thesis is primarily concerned with furthering research into developing a psychological treatment that can be administered in an inpatient setting for adults who self-harm, with a focus on obtaining feedback from the people undergoing the treatment.

This chapter will define self-harm, provide an overview of the incidence rates, theories, treatment interventions, and outline the factors relevant to treatment in inpatient settings. The current literature on psychological treatments for self-harm will be presented and the gaps in

this current evidence highlighted, in order to justify this feasibility study for a novel treatment for self-harm in an inpatient setting.

1.1 Self-Harm

1.1.1 Definition

The National Institute of Health and Clinical Excellence (NICE; 2011) in the UK defines self-harm as "self-poisoning or self-injury, irrespective of the apparent purpose of the act". The definition used for this condition by the American Psychiatric Association (APA) differs to that used by the UK, highlighting an area of contention in the self-harm literature. In 2013, the fifth version of the Statistical and Diagnostic Manual of Mental Disorders (DSM-5) from the APA included 'nonsuicidal self-injury disorder' (NSSID) in Section III as a discrete condition. The DSM-5 (APA, 2013) defines self-harm as "deliberate, self-inflicted harm that *isn't intended to be suicidal*".

Despite the definitional debate, there seems to be a universal understanding in the literature that self-harm and suicidal behaviours are complex (Klonsky, May & Glenn, 2013) and over-lap significantly (Klonsky & Muehlenkamp, 2007; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006). In the UK, the definition of suicide is "the fatal act of self-harm initiated with the intention of ending one's own life" (Morriss, Kapur & Byng, 2013). A suicide attempt is more difficult to define and dependent on the intent of the person who is carrying out the act (Hawton, Saunders & O'Connor, 2012). Ougrin and Zundel (2009) claim that motivation towards suicide can be seen to be on a continuum and that even when completing the act of self-harm, individuals have reported feeling ambivalent about whether they live or die (Hawton, Saunders & O'Connor, 2012). Evidence like this indicates that suicidal intent can be multifaceted and changeable, rendering the argument for separation academic rather than driven by subjective evidence.

Alternatively, some believe that differentiating between self-harm and a suicide attempt allows for better understanding and therefore improves the assessment of risk and choice of treatment (Glenn & Klonsky, 2013). Differentiating self-harm from suicidal intent continues to be contested in the literature (Muehlenkamp, 2005; Ougrin & Zundel, 2009; Turner, Austin, & Chapman, 2014; Washburn et al., 2012) and has been a significant barrier to the progression of research in this field (NICE, 2011). Importantly, reports from people who self-harm present their view of self-harm behaviours differently from researchers and clinicians in the literature; they view self-harm as "a way of releasing pressure" and "a way of coping" (Hume & Platt, 2007). While it is not suggested that readers simply accept one concrete definition of self-harm, for operational purposes this paper will be based on the definition expressed in the NICE guidelines (2013); suicidal intent is not simply present or absent but is more complex and changeable. This paper also accepts that this complexity extends to the person's relationship to the act of self-harm, which in many cases is not entirely a negative one as it is often widely assumed (Hume & Platt, 2007).

Due in part to these definitional issues, the way in which the literature refers to the act of self-harm is also inconsistent. Self-harm is interchangeably referred to as 'deliberate self-harm' (Pattison & Kahan, 1983), 'parasuicide' (Ogundipe, 1999), 'self-wounding' (Tantam & Whittaker, 1992), 'pathological self-mutilation' (Suyemoyo, 1998), 'moderate self-mutilation' or 'self-injurious behaviours' (SIBs) (Favazza & Rosenthal, 1993). In the UK, NICE (2011) reached an agreement to omit the words 'deliberate' or 'intentional' to prefix 'self-harm', contending that the addition of these words inadvertently suggest there are 'non-intentional' or 'accidental' ways to self-harm. Therefore, this paper will seek to avoid these inconsistencies by referring to the act described as 'self-harm'.

1.1.2 Incidence

The most common form of self-harm is reported to be cutting the skin using a sharp object, occurring in around 70-97% of people who self-harm (Skegg, 2005). Other ways people harm themselves include; banging/hitting body parts, burning, scratching, picking at wounds, hair pulling, ingestion of substances and ingesting or imbedding objects (Klonsky, 2007, Skegg, 2005). With several studies outlining the incidence of self-harm being inversely correlated with participants' age, it has been suggested that these behaviours are becoming increasingly common (Zlotnick, Mattia, & Zimmerman, 1999).

The literature on the incidence of self-harm not involving hospital treatment varies in the literature (Bowen & John, 2001; Fox & Hawton, 2004). However, there have been estimates that in the general population around 4% of adults' self-harm in the United States (Briere & Gil, 1998), and 2% in England (Meltzer et al., 2002). Among the risk factors for self-harm are perceived negative life events (Fliege et al., 2008), a lack of social support (Heath et al., 2009) and interpersonal problems (Stepp et al., 2008), as well as depression and anxiety (Hawton, Saunders & O'Connor, 2012; Holmes, 2000). Therefore, it is not surprising that the number of people who self-harm is believed to be considerably higher in those with diagnosed mental health difficulties (Kerr, Muehlenkamp & Turner, 2010; 20%). Mental health difficulties are defined as problems that affect the way someone thinks and behaves (MIND, 2016). The literature demonstrates the proportion of people who self-harm who are also experiencing common mental health difficulties such as depression (Nock et al., 2006; 41%), obsessive-compulsive disorders (Neziroglu & Kaplan, 1995), substance abuse, post-traumatic stress disorder (Najavits, 2002), anxiety (Busch et al., 1993), eating disorders (Claes, Vandereycken & Vertommen, 2003; Levitt, Sansone & Leigh Cohn, 2005; 26-55%), dissociative conditions (Biere & Gil, 1998; 69%) and borderline personality disorder (BPD) (Oldham, 2006; 75%). The literature has been unable to fully explain the connection between

self-harm and mental health difficulties, although links have been made between self-harm and childhood trauma (van der Kolk, Perry & Herman, 1991), traumatic incidents and difficulty in regulating emotions (Nock, 2009), which are also risk factors for mental health conditions. This connection is explored further in the explanatory theories section of this thesis.

Borderline personality disorder is characterised by pervasive behavioural, emotional and cognitive instability, a lack of impulse control and repeated self-injury (APA, 2013; Lieb, Zanarini, Schmahl, Linehan & Bohus, 2004). There is general consensus in the literature regarding the high association between self-harm and BPD (Andover et al., 2005; Glenn & Klonsky, 2009; Jacobson, Muehlenkamp, Miller, & Turner, 2008; Klonsky, Oltmanns & Turkheimer, 2003). Self-harm in itself is recognised as a symptom of borderline personality disorder (BPD; Linehan, 1993a; Walsh & Rosen, 1988) and is one of the criteria for this diagnosis described in the DSM-5 (APA, 2013) and NICE (2011). In fact, previous literature has noted that an individual can often receive a diagnosis of BPD if they are presenting with self-harm "even if the person lacks any other signs and symptoms of BPD" (Crowe & Bunclark, 2000; McAllister, 2003). However, self-harm has been found to occur across many conditions as depicted above, and also affects people with no known mental health condition (Klonsky, 2007). Glenn and Klonsky (2013) suggest that classifying self-harm as a *symptom* of BPD means it has not been given the significance it requires in a clinical context. Furthermore, the suggestion that self-harm is a symptom of one disorder limits the explanatory power (Nock, 2009) and has negative implications for the quality of research and treatment of self-harm as a result (Shaffer & Jacobson, 2009).

1.1.3 Gender differences

Research has historically indicated that rates of self-harm are up to four times higher in

females than males (Fox & Hawton, 2004; Zlotnick, Mattia, & Zimmerman, 1999). However, more recently Kerr, Muehlenkamp, and Turner (2010) found no significant difference in the prevalence of self-harm between men and women. This has been verified by case-control studies (Bowers, Simpson & Alexander, 2003). Kerr, Muehlenkamp and Turner (2010) reported that males seem to engage in different forms of self-harm such as hitting themselves, which could explain the different rates found in previous research. Further research found females in New Zealand were more likely than males to harm themselves acutely enough to require hospital treatment and therefore female acts of self-harm are more likely to be recorded (New Zealand Information Service, 2003). In terms of suicidality, however, a gender difference seems to occur, with research demonstrating significantly higher rates of females *attempting* suicide (Lee, Villar, Juthani, & Bluestone, 1989; Pirkis, Burgess & Jolley, 1999) and males being at significantly greater risk of *completing* suicide (Hawton, Zahl & Weatherall, 2003). Therefore, further exploration seems to be required into the connection between self-harm and gender differences, in particular taking into account the context of this behaviour (Bowen & John, 2001).

1.2 Psychiatric inpatient wards

Over the last five decades, the psychiatric inpatient services in the UK have been 'deinstitutionalised', initiating a shift in the treatment of mental health problems from hospital to community settings. Whilst, overall this process has been a positive one (Lakeman, McGowan & Walsh, 2007), it has also meant there has been a shift in focus and funding. This has left inpatient services with little research, development or direction (Bowers, 2005), despite hospitalisation still accounting for 75% of the NHS mental health spending (Thompson, Shaw, Harrison, Ho, Gunnell, & Verne, 2004).

There are many different types of inpatient mental health wards in the UK, including

forensic, medium secure, low secure and intensive care wards, high dependency beds, maternity, specialist assessment units, adolescent or older adult wards and substance misuse or eating disorder units. The current paper will focus on the most common of these facilities; wards that provide overnight care for adults of working age (18-65) within acute mental health hospitals within the NHS.

The reasons for admission to acute mental health wards are varied and outlined in the literature. The most common cause for admission is when a person is "*at risk of harming themselves or others*" (Bowers, 2005). This is followed by the need for intensive observation that a ward environment can provide for the purpose of *diagnosis* of a mental health condition (Abas et al., 2003). Thirdly, if *treatment* is required a person will be admitted often restarting a client on medication or supervising consumption of medication (Abas et al., 2003). This is usually considered in the context of other factors, which have meant the person cannot be treated safely in the community. The *presence of a severe mental health problem* is a further reason for admission to inpatient services. Again, the severity must be such that it is not possible to manage in the community (Bowers, 2005). Next, *deficits in self-care* is an important criterion for admission, which includes refusal to eat, an 'inability to function' (Sederer & Summergrad, 1993), and 'self-neglect' (Flannigan et al., 1994). Lastly, if the client's support network is no longer able to care for them or is contributing to their mental health problem they will be admitted until alternative provision is found (Bowers, 2005).

The Department of Health's hospital episode statistics (HES) data was used to investigate patterns of psychiatric hospital admissions in England within a 1-year period. This study found depression and anxiety were the most common factors in people who were admitted to hospital, accounting for 29.6% of all admissions (Thompson et al., 2004). Schizophrenia and other related psychoses accounted for 26.0% of admissions, with substance misuse in 19.1% of people admitted, 'mania' accounting for 10.8%, organic disorders were found to be 1.5%

of admissions and other diagnoses accounted for the remaining 13.0% (Thompson et al., 2004).

The acute (inpatient) care pathway takes a staged approach, starting with diagnosis, developing an action plan, implementation and monitoring on-going improvement (Appleton, 2012). The NHS Confederation defines an acute inpatient bed to "provide care with intensive medical and nursing support for patients in periods of acute psychiatric illness", for inpatients who are either "informal or detained under the Mental Health Act" (Bluglass & Beedie, 1983). It is also expected by the NHS Confederation that "patients will usually spend fewer than 90 days on an acute inpatient ward" (Appleton, 2012). Although estimates show that some may be admitted for over a year, the average stay on an inpatient ward is 23 days (Health and Social Care Information Centre, 2014).

1.2.1 Self-harm and psychiatric inpatient wards

One of the main functions of psychiatric inpatient care is to provide a safe environment for people at risk of self-harm and suicidality (Bowers et al., 2005). As such, self-harm is one of the most common reasons for admission to inpatient services (Bowers, 2005; Way & Banks, 2001; Sansone, Songer & Miller, 2005). Reported rates of self-harm on these wards vary substantially in the literature between 4% (Bowers, Simpson & Alexander, 2003) and 68% (James, Stewart & Bowers, 2012).

A review of the literature revealed that in an inpatient environment the method most commonly used by people to self-harm was cutting, followed by head banging, punching/kicking objects, strangulation, inserting objects into the body, re-opening old wounds, burning and self-poisoning (James, Stewart & Bowers, 2012). These incidents of self-harm on wards tend to be of relatively low lethality (Bowers et al., 2008), but up to 20% were reported to be 'severe' including deep cuts, fractures or internal injuries (Ehmann et al.,

2001).

Individuals who are acutely suicidal and self-harming are often hospitalised so they can be in a safe environment (Drew, 2001), which provides 24-hour nursing care, close observation and therapeutic input (Cutcliffe & Stevenson, 2007). The interventions available for self-harm on inpatient wards tend to be divided into two groups in the literature; 'containment strategies' and 'psychological/psychosocial' treatments (James, Stewart & Bowers, 2012). Of all the mental health disciplines, nurses are in the most direct contact with the patients during hospitalisation and therefore employ most of the 'containment' strategies, which include increased observations, control of access to objects, mobilising internal strengths and social support networks (Drew, 2001). Less often, they also include manual restraints and Pro Re Nata (PRN) medication (Foster, Bowers, & Nijman, 2007). Containment methods have been contentious in the literature (Langan & McDonald, 2008) and have been stated to be detrimental to the individual's emotional well-being (Bowers, 2014).

The management of self-harm is difficult in these environments (Gournay & Bowers, 2000) and at times has been widely criticised (O'Donovan, 2007; Hume & Platt, 2007). However, with lack of guidance in terms of evidence-based interventions (Hawton et al., 1999; 2016), staff can often feel helpless and take a negative view of people who self-harm (McHale & Felton, 2010). Nurses report finding it most challenging to support someone who does not communicate their feelings, and they felt powerless to change suicidal behaviour, with most nurses believing it was inevitable that a number of these people would come to take their own life (Carlén & Bengtsson, 2007). Nurses have reportedly felt that their interaction with the patients who self-harmed was more giving 'support' as opposed to providing 'in-depth therapeutic work', which was seen as the role of a qualified specialist (O'Donovan, 2007).

The importance of psychosocial interventions for self-harm is clear. The next sections will

outline the current explanatory psychological theories and evidence base for these treatments for adults. A review of the literature will follow, which focuses on the treatments for self-harm, particularly those which have been found to be effective in inpatient environments.

1.3 Explanatory theories and interventions for self-harm

National Institute for Health and Care Excellence (NICE, 2011) states; "self-harm does not often result from a wish to die, those who self-harm may do so to communicate, to secure help and care, or to obtain relief from an overwhelming situation". Motivations to self-harm are complex (Skegg, 2005; Swales, 2008), are likely to hold a number of different meanings for one person and often serve multiple functions simultaneously (Klonsky, 2007; Suyemoto, 1998). The service-user led evidence base reflects this complexity, reporting diverse experiences of self-harm and attitudes towards it (Hume & Platt, 2007). To establish effective treatment options, it is important to consider the possible drives for people to harm themselves (Himber, 1994). These are summarised below with accompanying suggested interventions from the most recent literature.

1.3.1 Systemic theories

Systemic theories support the idea of self-harm as a social disorder, in stating that systems of people have interrelated and interdependent parts, so each action, including self-harm has consequences on the other members of the system (Crossno, 2011). They posit that a system, such as a family is defined by boundaries and has a tendency to resist change in order to maintain homeostasis (Bowen, 1966). Therefore, it is proposed that self-harm can be a way to maintain homeostasis within a system, and possibly to deflect attention from other areas within that system (Podvoll, 1969). However, given the recent increase in prevalence of self-harm behaviours, a limitation of these theories is the lack of interest in the impact of cultural

issues on the person who self-harms.

1.3.2 Cultural theories

Cultural theories take account of issues related to power, marginalisation, injustice and resistance (McAllister, 2003). Curry (1993) argues that the body may represent the experience of not belonging; by harming the self the individual could be struggling to find their identity and is looking to integrate with the dominant group. By self-harming, the body becomes a "battleground" where the person is playing out a conflict with the self, moulded and constrained by beliefs and practices, which are embedded in society (Crowe, 1996). These theories go some way to explain the impact of external factors on the person who self-harms and could indicate reasons behind the recent rise in self-harm behaviours. However, to some extent they also lack full acknowledgement of the existence of personal agency or experiences that shape the way a person responds to their experiences.

1.3.3 Psychodynamic theories

Alternatively, psychodynamic theorists attempt to explain self-harm using the 'drive models', with an emphasis on personality development and unconscious motivations (Aself-harmead, 1997; Freud, 1917; Motz, 2010). The *anti-suicide theory* suggests that self-harm occurs in the drive between life and death, with self-harm acting as a moderator for self-destructive death urges (Firestone & Seiden, 1990; Suyemoto, 1998). The *object relations theory* suggests that people develop a sense of self from objects in their environment, such as other people, things and fantasies (Mahler, 1968; Townsend, 2000). Within this theory, ideally a child learns that others are consistent, lovable, dependable, and they can trust the other, so in turn they view themselves this way too. In abusive situations, Van der Kolk, McFarlane and Weisaeth (1996) postulate that without the stability of a consistent object-

relationship, a child will be less able to cope with good and bad parts of themselves, thus driven to self-harm as a form of punishment.

Psychodynamic interpersonal therapy was developed by R. F. Hobson in 1985. Following this a brief manual and outcome measure was published by Shapiro and Startup (1991), which can be applied to people who self-harm. Psychodynamic principles, humanistic and interpersonal concepts guide the therapy model where the therapist aims to develop a "mutual feeling language" with the patient (Hobson, 1985). Hobson (1985) developed this model to consist of seven different components including; rationale for treatment, shared understanding, staying with feelings, focus on difficult feelings, gaining insight, sequencing interventions, and making changes. The main aim for this treatment is to "identify the interpersonal difficulties in the service user's life which are responsible for either precipitating or maintaining their symptoms" (Guthrie et al., 2001). However, this therapy has not been robustly tested and is based on principles that do not have a history of many controlled trials in the literature. Further research has been completed on the impact of abuse in childhood, which is presented below.

1.3.4 Childhood trauma

While there is currently no evidence for a direct link in support of the previous ideas suggested by psychodynamic theories, many believe that traumatic incidents, including abuse in childhood can lead to an adult harming themselves (Babiker & Arnold, 1997; Everett & Gallop, 2000; van der Kolk, McFarlane, & Weisaeth, 1996). Interactions between different positions can be found in commentaries about child abuse and self-harm simultaneously feeling love and hate, overwhelmed and empty (Calof, 1995); each of these causes a tension and they are not understood or accepted in society (McAllister, 2003). Through repeated experiences of being neglected and ignored, the idea is reinforced that one must not

communicate feelings. Therefore, the patterns of keeping secrets and silence emerge (Calof, 1995). It is these patterns of keeping secrets that mean the abuse can continue and with nowhere else to turn, the abused may instead resort to actions of self-destruction (Calof, 1995). Van der Kolk (1989) suggests that the act of self-harm can be a way that earlier abuse is repeated. Ross (1997) posits a cycle of self-abuse, which involves guilt and shame felt from abuse and an unmet need for support. Unfortunately, the only people who are often there to offer this support are the abusers, so the person is caught in a cycle of being re-abused, yet not being able to leave due to the partial comfort provided by the 'supportive' other (Ross, 1997).

Although these theories are building support, they have been criticised for the lack of explanation as to why people *without* traumatic experiences may find themselves self-harming or why some people who have abusive experiences do not self-harm. Attachment, cognitive and biosocial theories attempt to answer this, presented below.

1.3.5 Attachment theories

The mentalisation-based approach (Bateman & Fonagy, 2013) identifies the impact of problematic attachments and the implications this has for self-destructive behaviours. Mentalising is described as the "process by which we make sense of each other and ourselves" (Fonagy & Bateman, 2013). This approach contests that "the mental process by which an individual implicitly and explicitly interprets the actions of the self and others as meaningful on the basis of intentional mental states such as personal desires, needs, feelings, beliefs and reasons" (Bateman & Fonagy, 2004). Bateman and Fonagy (2013) suggest that as human beings we are able to lose awareness that other people have minds and in stressful situations people may have "temporary lapses in mentalising".

Given a secure attachment in childhood, Bateman and Fonagy (2013) suggest that recovery from these lapses is relatively quick, demonstrating "robust mentalisation". If someone has the ability to mentalise and recover quickly when mentalisation is lost, this creates cycles of attachment that reinforce the secure attachment (Fredrickson, 2001) and leads to the development of "adaptive environments" (Mikulincer & Shaver, 2007). The opposite is true of people who have problematic attachments as a result of childhood maltreatment, Bateman and Fonagy (2013) contest that this leads to vulnerability to frequent loss of mentalising. Frequent loss of mentalising with an inability to regain it quickly, means people find it difficult to self-regulate in relationships and are susceptible to emotional turmoil and impulsivity, which underlies the symptoms of BPD (Bateman & Fonagy, 2013).

The mentalisation-based approach makes links between childhood maltreatment and the self-destructive symptoms of BPD, such as self-harm, which informs the treatment model. Mentalisation-based treatment is aimed at people diagnosed with borderline personality disorder (BPD) and consists of individual and group therapy, which not only focuses on behaviours, but also affective states, intentionality and motivation (Bateman & Fonagy, 2013).

1.3.6 Cognitive behavioural theories

Historically, behaviourists have assumed that all behaviour is learned from the environment and is a result of stimulus-response. Early research studies outlined several 'secondary gains', which reinforce the function of self-harm, including attention (Offer & Barglow, 1960), control over others, mobilising others, and competition (Podvoll, 1969). The Social Learning Theory (SLT) emphasises the importance of reinforcement, modelling, imitation and identification in self-harm (Bandura, 1964; 1973). This theory suggests that self-harm is reinforced internally through the relief felt when one self-harms (Gratz, 2007)

and environmentally through the care received from family, friends or peers (Bandura, 1973; Iwata et al., 1994). Within this theory, the concept of contagion suggests that individuals may also observe self-harm being rewarded in others and may then choose to imitate this behaviour (Ghaziuddin et al, 1991; Simpson, 1975). Although this approach may explain the recent increase in the prevalence of self-harm, many suggest that this is a simplistic explanation to a complex behaviour.

In cognitive behavioural theories, cognitions are considered the central pathway to self-harm behaviours, namely thoughts of hopelessness (Beck, 1979; Rudd, Joiner & Rajab, 2001). Findings in support of this idea have suggested people who self-harm are more likely to react to stressful life events with feelings of defeat than control participants (O'Connor, 2003). Cognitive Behavioural Therapy (CBT) aims to increase a person's sense of hope by directly addressing their negative views of the self and the future (Rudd, Joiner & Rajab, 2001). CBT is focused on the solving of problems and changing unhelpful patterns in cognition, behaviours and emotional regulation through the development of skills and coping strategies (Beck, 2011). CBT is based on the idea that distorted thinking and subsequent behaviours contribute to the maintenance of difficulties faced in people with mental health problems (Beck, 2011). Cognitive behavioural therapies aim to help clients become aware of the way they interpret and evaluate experiences, while testing out new coping strategies (Westbrook, Kennerley & Kirk, 2011).

Cognitive behavioural therapies have gained the most research attention for treating self-harm (Hofmann et al., 2012; Muehlenkamp, 2006). The treatments offered vary in terms of length, intensity, frequency, mode of delivery and mechanisms of action. As well as standard cognitive behavioural therapy (CBT), there are less intensive therapeutic interventions within this, such as crisis cards, used to remind people of the support they can access. There are also treatments that select parts of cognitive therapies, such as problem-solving therapy (PST).

PST is often used with people who self-harm and has the advantage of being easily understood (Hawton & James 2005). PST involves learning techniques and practicing strategies that can help a person when confronted by a crisis.

Other forms of cognitive behavioural therapies include Manual Assisted Cognitive Therapy (MACT; Schmidt & Davidson, 2003), which was developed by Schmit and Davidson (2003) with the aim of reducing depressive symptoms and increasing positive thinking in people who self-harm. The six-session therapy incorporates elements of CBT (Beck, Freeman & Davis, 2015), Dialectical Behavioural Therapy (DBT; Linehan, 1993a) delivered through the use of a manual. This approach emphasises self-harm as a social disorder and is an attempt to explain the increased prevalence in these behaviours in recent years. However, it can be criticised for failing to take account of emotions and higher-level motivations, overlooking the presence of factors such as personal agency and systemic influences.

1.3.7 Dialectical Behavioural Therapy (DBT; Linehan, 1993)

Dialectical Behavioural Therapy (DBT) is a type of cognitive-behavioural therapy developed by Marsha Linehan in the late 1980s to help people with borderline personality disorder (BPD). DBT is based on the biosocial theory of personality, which assumes that there is a contribution from underlying biologically determined traits and acknowledges the presence of environmental stimuli (such as childhood abuse) (Cloninger, 1986; Linehan, 1993a). The biosocial theory was primarily developed for people experiencing suicidal ideation and then evolved to treat people with borderline personality disorder (BPD; Linehan, 1987, 1993a). The research base now includes core skills training for a variety of disorders, and has been found to be successful in reducing self-harm (Linehan, 1993a).

The biosocial theory (Linehan, 1993a) regards BPD as a disorder of emotional

dysregulation occurring in individuals with biological vulnerabilities and an "invalidating environment". As a result, this theory suggests people with BPD have sensitivity to heightened emotions, an inability to regulate these emotions and a slow return to their emotional baseline. This emotional vulnerability is combined with an environment that is invalidating and disregarding of emotional reactions and experiences, oversimplifying the solving of emotional problems, and highly regards positive thinking (Linehan, 1993a).

The dialectical philosophical position says that invalidating environments (which could be physically and sexually abusive families) work to develop impairment in emotional regulation for a child, failing to learn how to recognise emotions and tolerate their own distress (Linehan, 1993a). Later, Crowell, Beauchaine and Linehan (2009) proposed an additional element to the biosocial theory following research indicating that early vulnerability is initially expressed as *impulsivity*, which was found to influence the action component of emotion. They assert that trait impulsivity is predisposing for a subset of people who meet the criteria for BPD, which manifests in people exhibiting impulsive behaviours, such as self-harm (Crowell, Beauchaine & Linehan, 2009). This theory explains how the reciprocal transactions between these factors from an early age leads to a trajectory of difficulties later in life (Crowell, Beauchaine & Linehan, 2009). Therefore, the treatment goals in Dialectical Behavioural Therapy (DBT) are addressing problematic behaviours in a problem-solving manner using behavioural analysis and the acquisition of skills to improve motivation, enhance the person's capabilities, ensure they can generalise, enhance their environment and maintain the skills they have learnt when they leave treatment (Linehan, 1993a).

To accomplish these functions, typical treatment is spread over a year using various modes (individual treatment, group skills, between session coaching and therapist consultation) (Linehan, 2014). This treatment programme is conceptualised by a number of stages, the

sequence of which is determined by the level of need and includes skills reflecting the key dialectic; acceptance of who you are, and the ability to change (Linehan, 2014). The modules included in the treatment manual include mindfulness skills, interpersonal effectiveness skills, emotional regulation skills, and distress tolerance skills (Linehan, 2014). Unfortunately, the manualised DBT (Linehan, 1993) is a year in length and is intensive in nature (one group, one individual session and 24-hour crisis line). Therefore, this cannot be replicated in an inpatient environment where the average stay is 23 days (Health and Social Care Information Centre, 2014).

In line with the DBT model (Linehan, 1993), the affect-regulation model of self-injury suggests that people harm themselves in order to relieve themselves of emotional distress (Favazza, 1992; Gratz, 2003), as the only way they know how to self-sooth (Klonsky & Muehlenkamp, 2007). Some believe the physical pain acts as a way to distract them from the emotional distress (Babiker & Arnold, 1997). After interviewing 39 adults with a history of self-harm, Klonsky and Glenn (2009) established that for his participants self-harm was associated with an improvement in emotional valence, a decrease in emotional arousal (sadness, overwhelming and frustrated feelings) and an increase in calmness and relief. Primarily, the findings supported an affect-regulation model of self-injury (Klonsky, 2007) and other research in finding that affect improvements followed self-injury (Briere & Gil, 1998). However, criticism has been made of such studies, which have been found to have poor ecological validity and a limited selection of methods of self-harm (McAllister, 2003).

These theories demonstrate that the reported antecedents of self-harm are variable and complex (Klonsky & Glenn, 2009). Additional complexity is indicated with an unclear and debatable definition of self-harm, which means that theories may be explaining completely different phenomenon. This is a particularly pertinent issue when considering DBT was developed in the USA, where the definition of self-harm does not include suicidal

behaviours. However, with regard to DBT, Linehan (1993) includes both self-harm and suicidal behaviours in the treatment protocol, therefore targeting the behaviours within the definition or self-harm in the UK. Despite these issues, there seems to be a consensus about the presence of difficult early experiences, combined with a predisposition of high emotional reactivity and an environment conducive to this way of dealing with problems could lead someone to self-harm. The complex nature of the problems related to self-harm and the diverse presentation of these might explain why research into finding a suitable treatment has proved to be a challenge (Muehlenkamp, 2005). The attempts to research and find a suitable psychological treatment thus far are outlined below.

1.4 Psychological treatments for self-harm; Literature review and meta-analysis

Overview

The National Institute for Health and Care Excellence (NICE, 2011) guidance for psychological treatment for self-harm states that "consideration may be given to offering an intensive therapeutic intervention combined with outreach" to "people who self-harm". It is recommended that self-harm is treated as a priority (NICE, 2011), which is particularly relevant in psychiatric inpatient settings, given that one of the main functions of these environments is to provide a safe setting for people at risk of self-harm and suicidality (Bowers et al., 2005). However, there is currently very little empirically supported evidence to be guided by for a psychosocial treatment for adults, especially in inpatient settings (Turner, Austin & Chapman, 2014), despite these behaviours becoming increasing prevalent (Griffin, Arensman, Wall, Corcoran, & Perry, 2013; O'Loughlin & Sherwood, 2005).

Systematic reviews collect and critically analyse research studies that meet the review question in order to provide an exhaustive summary of the findings. These reviews are required in order to understand what is presented in the current literature and how findings

can be combined to better understand the subject under scrutiny. The main reviews of the treatments for self-harm in the literature currently are reported by Hawton and colleagues (Hawton et al., 1999; 2016). These reviews as well as others conducted prior to this thesis examine studies that evaluate psychosocial *and* pharmacological treatments for self-harm as well as including interventions designed for *children or adolescents* (under 18 years) who self-harm (Arensman et al., 2001; Crawford et al., 2007; Hawton et al., 1999; 2016; Turner, Austin & Chapman, 2014). Among the current systematic reviews for psychological treatments, there are no reviews that pay particular attention to psychiatric inpatient settings when evaluating the research specifically designed to address self-harm in adults. The current systematic review and meta-analysis attempted to fill this gap in the current literature and is presented in the following section.

1.4.1 Review questions

Due to the gap existing in the current systematic review literature, a systematic narrative review and a meta-analysis will be conducted in line with evidence-based practice, addressing PICO components (Population, Intervention, Comparison, Outcome; Thompson et al., 2012). The review examines outcomes in order to evaluate what psychological interventions are found to be effective. The main outcome used by the studies in this review was 'repetition of self-harm', so this was used to combine results for the meta-analysis and chosen as the primary outcome. Depression score data also featured as an outcome in more than one study, therefore it was possible to combine them for the purpose of the meta-analysis. This review will assess the quality of the included studies by scrutinising the characteristics, the outcome measures used and the risk of bias in each study. In particular, this review is interested in whether there are interventions that have been found to reduce repetition of self-harm in inpatient settings.

This review protocol was registered online on the PROSPERO website on 24th May 2016 (https://www.crd.york.ac.uk/prospero/#searchadvanced).

1.4.2 Search strategy

This search employed the NHS Centre for Research and Dissemination guidelines for the conduct of the systematic reviews (Khan et al., 2001) and was conducted in accordance with the 'Preferred Reporting Items for Systematic Reviews and Meta-Analysis' (PRISMA) guidelines (Liberati et al., 2009). The interface 'EBSCOhost Research Databases' was used to search the literature from 1950 to August 2017 and accessed the following databases; 'CINAHL Complete', 'MEDLINE with full text', 'PsycARTICLES', 'PsycINFO'. Following this, a search was also conducted using the 'Web of Science'.

The search terms used for this review were based on those in previous reviews (Arensman et al., 2001; Crawford et al., 2007; Hawton et al., 1999; 2016; Turner, Austin & Chapman, 2014) and designed to capture the most relevant studies. The search terms included; "self-harm" or "self harm" or "self-injur*" or "self injur*" or "self-mutilation" or "self-inflicted wounds" *and* one of the following; "psycho* intervention" or "intervention" or "psycho* treatment" or "cognitive therapy" or "behavioural therapy" or "dialectical behavioural therapy" or "CBT" or "DBT". This search limited results to studies involving adult participants (over 18 years). To locate any outstanding papers an additional search using the same strategy was completed on the 'Web of Science Core Collection' (see PRISMA flowchart in figure 1; Liberati et al., 2009). A manual search using reference lists of relevant papers and search engines was also completed. All corresponding authors of the final studies were contacted for the details required for the meta-analysis and any additional unpublished studies.

1.4.3 Inclusion criteria

This review based the inclusion and exclusion criteria on the PICO components (Population, Intervention, Comparison and Outcome). The review included studies published in the English language, including human participants, who had experienced at least one episode of self-harm and were accessing psychiatric inpatient, outpatient or Accident and Emergency (A&E) services. This review was inclusive of studies that were controlled (i.e. participants randomised into experimental and control conditions) and uncontrolled (i.e. case studies, feasibility studies). The studies were only included if they focused on psychosocial interventions, defined as any form of therapy with a verbal component ('talking therapies'). To maximise comprehensiveness, this review stipulated that the studies would only be included if the primary or secondary outcome was recorded to be 'repetition of self-harm'.

1.4.4 Exclusion criteria

A number of studies were excluded from this analysis, despite having the reduction of self-harm as an outcome (full list of excluded studies in Appendix A). The studies were excluded if the inclusion age of participants spanned through adolescence (i.e. participants included from 15, 16 or 17 years and older), if they included pharmacological treatment, unless used as a comparator or if their purpose was outlining incident rates or referencing possible causes of self-harm without analysis of a psychosocial intervention. Studies were also excluded if the treatment of self-harm was not the primary reason for the intervention. For example, some therapies have been found to be effective in reducing self-harm when treating BPD, for example Mentalisation-Based Treatment (Bateman & Fonagy, 2004; 2009), and DBT (Barley et al., 1993; Bohus et al., 2000; Kröger et al., 2006), but these are not specifically designed to target self-harm and so were not included in this review.

1.4.5 Data extraction

Once a preliminary set of articles had been identified they were categorised into randomised controlled trials (RCTs) and uncontrolled studies, then into the types of psychological intervention that were being evaluated. The data was extracted by the author of the review (SF) presented in the tables (1 and 2), including location of study, setting (outpatient/inpatient), participant's baseline characteristics (age, gender, diagnosis), intervention type, modality, number of sessions, number of participants, dropout rate, duration of treatment, primary outcome measure and follow-up points. The mean and standard deviation for the primary outcome measure (repetition of self-harm) and secondary outcome measure (depression) was recorded. Where these statistics were not made clear in the publication, authors were contacted.

1.4.6 Risk of bias and quality assessment

A detailed examination of the quality of the randomised controlled trials (RCTs) was completed, including an assessment of bias using the Downs and Black 26-item methodological quality checklist (Downs & Black, 1998). Each RCT scored points if they demonstrated a method the researchers used to eliminate or reduce the bias (i.e. blinding researchers and participants). The studies scored no point if it was unclear what measures had been taken or they explicitly explained that they had not taken any measures to avoid bias (see break down of scores in table 1, Appendix B). Each study was given a score out of 27 in an assessment of reliability and validity (see table 1). All of the papers were also monitored using a relevant critical appraisal tool (Critical Appraisal Skills Programme UK; CASP, 2013), which is presented in the narrative review of each study below.

1.4.7 Data analysis

Due to the inclusion of uncontrolled studies, the analysis will include a narrative synthesis, which draws together findings from multiple studies and uses text to summarise the findings (Popay et al., 2006). This will attempt to ascertain how the interventions have worked and will explore relationships in the data. It will be used to develop a theory for evaluating the psychological treatments presented in the studies. A meta-analysis will also be used to integrate effects of interventions in the RCTs included in this review where the data were available. A meta-analysis was conducted where there were at least two studies' data that could be used to examine the outcome and were only aggregated if treatments were adequately similar. All the RCT data that was available was continuous, so it could be combined using standardised mean difference using Review Manager (Revman) (2014) software for Mac version 5.3 with the Mantel-Haenszel method. Hetregeneity in the meta-analysis was measured using the I^2 statistic, which describes the percentage variation across studies not due to chance (Higgins, Thompson, Deeks, & Altman, 2003), as per Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2005). Heterogeneity between studies was found to be low, but a random effects model was used to allow for outcomes to vary in a normal distributon between studies (Ades & Higgins, 2005). Cohen's d criteria were used to measure for small, medium and large effect sizes (Cohen, 1977).

1.4.8 Results

A PRISMA flow chart (Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009) demonstrating the systematic process used in this review is presented in Figure 1. The inclusion criteria outlined above were applied in this search, which produced 26 studies evaluating a psychosocial intervention for self-harm in adults. Considering the increasing prevalence in self-harm (Griffin et al., 2013; O'Loughlin & Sherwood, 2005) and evidenced link between self-harm and suicide (Nordentoft et al., 1993), the number found is surprisingly

low. Out of the studies selected, nine were controlled and 15 were uncontrolled, results are shown in tables 1 and 2 respectively.

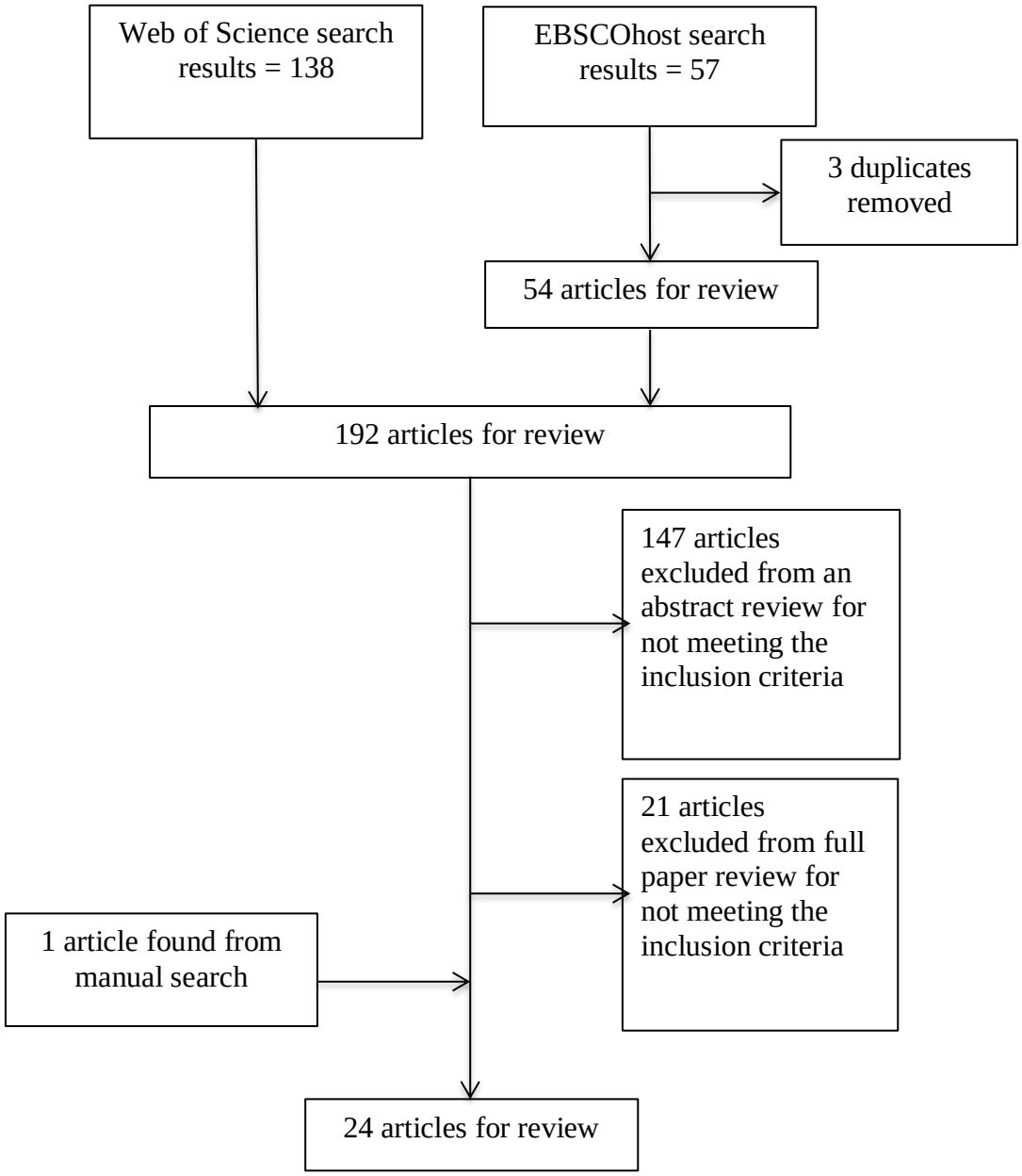


Figure 1. 'Preferred Reporting Items for Systematic Reviews and Meta-Analysis' (PRISMA) Flowchart (Moher et al., 2009) of study selection strategy.

Table 1

Randomised controlled trials (RCTs) for psychological treatments for self-harm

Author	Location	Design	Setting	Sample demographics: Age	Female %	Diagnosis	Intervention	N	Drop-outs	Mode	Sessions (weeks)	Primary measure of SH	Follow-up data	Quality score
Evans et al. (1999b)	London, UK	RCT	Outpatient	18-65	42%	SH only	Crisis card vs. TAU	417 410	0 2	Indiv.	As required.	Rep of SH (hosp. att)	12 months	20
Gratz, Tull & Levy (2014)	USA	RCT	Outpatient	18-60	100%	BPD	ERGT vs. TAU	31 30	5 7	Groups	14 (14)	DSHI DASS-D	3, 9 months	24
Guthrie et al. (2001)	UK	RCT	Outpatient	18-65	56%	Self--poisoning	IPT vs. TAU	58 61	30	Indiv	4 (4)	BDI	6 months	20
Linehan et al. (1991)	USA	RCT	Outpatient	18-45	100%	BPD	DBT vs. TAU	32 31	24	Indiv & groups	104 (52)	Rep of SH PHI	12 months	23
Linehan et al. (2006)	USA	RCT	Outpatient	18-45	100%	BPD	DBT vs. TAU	52 49	0 0	Indiv & groups	104 (52)	HAM-D PHI	12 months	25
McAuliffe et al. (2014)	Ireland, UK	RCT	Outpatient	18-64	64%	SH only	PST vs. TAU	222 211	44 53	Indiv	12 (6)	Rep of SH BDI	6 months	22
Morgan et al. (1993)	Bristol, UK	RCT	Outpatient	18-65	Unknown	SH only	Crisis card vs. TAU	101 111	0 0	Indiv	As required.	No. of repeaters	12 months	17
Tapolaa et al., (2010)	Finland	RCT	Outpatient	18-65	100%	SH only	ACT+SFBT vs. TAU	7 6	2 1	Indiv	4 (4)	Rep of SH BDI	6 months	15
Weinberg et al. (2006)	Boston, USA	RCT	Outpatient	18-40	100%	BPD	MACT vs. TAU	15 15	0 0	Indiv.	6 (12)	Rep of SH	8 months	19

Notes. RCT = Randomised Control Trial, SH = Self-Harm, TAU = treatment as usual, Indiv = individual sessions, hosp. att. = hospital attendance, BPD = Borderline Personality Disorder, ERGT = Emotional Regulation Group Therapy, IPT = Interpersonal Therapy, DBT = Dialectical Behaviour Therapy, PST = Problem Solving Therapy, ACT = Acceptance and Commitment Therapy, SFBT = Solution Focused Behavioural Therapy, MACT = manual assisted cognitive therapy, Rep of SH = repetition of self-harm (i.e. number of incidents), DSHI = Deliberate Self-Harm Inventory, PHI = Parasuicide History Interview, DASS = Depression Anxiety Stress Scales, BDI = Beck Depression Inventory, HAM-D = Hamilton Rating Scale for depression, Quality score = Down and Blacks (1998) checklist score.

Table 2

Uncontrolled studies for psychological treatments for self-harm

Author	Location	Design	Setting	Sample demographics: Age	Female %	Diagnosis	Intervention	N	Drop-outs	Mode	Sessions (weeks)	Primary measure of SH	Follow-up data
Booth et al. (2014)	Ireland	Uncontrolled	Inpatient	18-65	81%	SH only	DBT-based	114	38	Groups	24 (6)	Rep of SH	3 months
Davidson et al. (2014)	Glasgow	Feasibility	Outpatient	18-65	Unknown	BPD, sub. abuse	MACT TAU	14 6	3 2	Indiv.	6 (2)	DSHI	3 months
Erlangsen et al. (2015)	Denmark	Matched cohort	Outpatient	18-65	57%	SH only	Psychosocial	7,367 92,384	1,689 34,103	Indiv.	8-10 (8-10)	Rep of SH	10 years
Gibson et al. (2014)	Ireland	Non-rand. control trial	Inpatient	18-60	65%	BPD	DBT-based Waitlist control	82 21	24 4	Groups	24 (6)	DSHI	3 months
Gratz & Gunderson (2006)	USA	Uncontrolled	Outpatient	18-60	100%	SH only	ERTG	12 10		Groups	14 (14)	DSHI	No follow-up
Harned et al. (2012)	USA	Feasibility	Outpatient	18-60	100%	BPD, PTSD	DBT PE	13	3	Indiv.& groups	52 (52)	SASII	3 months
Kapur et al. (2013)	Manchester, UK	Pilot RCT	Outpatient	18-65	Unknown	SH only	Leaflet/calls No intervention	33 33	1 1	Indiv.	8	Rep of SH (hosp. att)	12 months
Kern et al. (1997)	USA	Case study	Outpatient	18-65	100%	BPD	CBT	2	0	Indiv.	Variable	Rep of SH	No follow-up
Lamprecht et al. (2007)	UK	Uncontrolled	Outpatient	18-65	53%	SH only	SFBT	40		Indiv	1 (1)	Rep of SH	No follow-up
Low et al. (2001)	UK	Uncontrolled	Inpatient	18-65	100%	BPD	DBT-based	10	0	Indiv.	52 (52)	Rep of SH	3, 6 months
Riaz & Agha (2012)	Pakistan	Uncontrolled	Prison	18-65	100%	SH only	CBT	9		Indiv.	12 (12)	DSHI	No follow-up
Stanley et al. (2007)	USA	Uncontrolled	Outpatient	18-49	85%	BPD	DBT-based	20	1	Indiv.& groups	26 (26)	Rep of SH	No follow-up
van Goethem et al. (2012)	Netherlands	Uncontrolled	Outpatient	18-65	84%	BPD	DBT-based	19	14	Indiv.& groups	52 (52)	Rep of SH	No follow-up
Wilhelm et al. (2007)	Australia / New Zealand	Feasibility	Outpatient	18-65	57%	SH only	Green card	456		Indiv.	3 (3)	Rep of SH (hosp. att)	3-15 months
Winter et al. (2007)	UK	Controlled trial	Outpatient	18-65	53%	SH only	Psychotherapy	64		Indiv	As required	Rep of SH	6 months

Notes. TAU = treatment as usual, BPD = Borderline Personality Disorder, SH = Self-Harm, Indiv = individual sessions, MACT = manual assisted cognitive therapy, DBT = Dialectical Behaviour Therapy, PE = Prolonged Exposure, ERGT = Emotional Regulation Group Therapy, Rep of SH = repetition of self-harm (i.e. number of incidents), SFBT = Solution Focused Behavioural Therapy, DSHI = Deliberate Self-Harm Inventory, SASII = Suicide Attempt Self-Injury Interview, Quality score = Down and Blacks (1998) checklist.

1.4.8.1 Study selection

The selection of studies followed 'Preferred Reporting Items for Systematic Reviews and Meta-Analysis' (PRISMA) guidance (Moher et al., 2009). The initial search, after duplicates were removed produced 192 articles for review. Most of the studies were excluded from review of abstracts, due to not being relevant for the current review (see full list of excluded studies in Appendix A). For example, a number of studies were excluded if the inclusion age spanned through adolescence or only focused on older adults. After this, studies were removed for not meeting the inclusion criteria outlined above. One paper was found through a manual search and added to the appropriate studies, which made a final 24 studies in this review (see tables 1 and 2 for details).

Attempts were made to contact the authors if results were not clearly presented in order to conduct a meta-analysis. Two RCTs (Guthrie et al., 2001; Linehan et al., 2006) were unable to provide data on repetition of self-harm and four RCTs (Evans et al., 1999b; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Morgan, Jones & Owen, 1993; Weinberg, Gunderson, Hennen, & Cutter Jr., 2006) were unable to provide data on levels of depression usable for the meta-analysis. However, these studies still contributed to the narrative synthesis of this review alongside the data from the uncontrolled studies.

1.4.8.2 Study characteristics

Study characteristics and baseline demographics are outlined in tables 1 and 2. A total of nine studies used an RCT design (Evans, Evans, Morgan, Hayward, & Gunnell, 1999b; Gratz, Tull & Levy, 2014; Guthrie et al., 2001; Linehan et al., 1991; Linehan et al., 2006; McAuliffe et al., 2014; Morgan et al., 1993; Tapolaa et al., 2010;

Weinberg et al., 2006) and 15 were uncontrolled studies (Booth, Keogh, Doyle, & Owens, 2014; Davidson et al., 2014; Erlangsen et al., 2015; Gibson et al., 2014; Gratz & Gunderson, 2006; Harned, Korslund, Foa, & Linehan, 2012; Kapur et al., 2013; Kern, Kuehnel, Teuber, & Hayden, 1997; Lamprecht et al., 2007; Low, Jones, Duggan, Power, & MacLeod, 2001; Riaz & Agha, 2012; Stanley, Brodsky, Nelson, & Dulit, 2007; van Goethem, Mulders, Muris, Arntz, & Egger, 2012; Wilhelm et al., 2007; Winter et al., 2007). The studies were published between the years 1991 and 2015, with participant numbers ranging from two to 99,751 people.

All of the studies included treatment for people who had experienced at least one episode of self-harm, 11 studies (46%) included people with a diagnosis of BPD and 13 studies (54%) were inclusive for all people who self-harm irrespective of diagnosis. In terms of the gender of participants, 10 studies (42%) included only female participants; the other studies where gender was known all included over 50% female participants with the exception of one study (Evans et al., 1999a) that used 42% female participants. The majority of studies (63%) used participants aged between 18-65 years; the remaining used groups between 18-45 or 18-60 years. The majority of studies (83%) included in this review were set in an outpatient setting; the 4 studies (17%) that were set in psychiatric inpatient or prison settings were all uncontrolled (see tables 1 and 2).

1.4.8.3 Risk of bias and quality assessment

All of the studies were examined using a critical appraisal tool (Critical Appraisal Skills Programme UK; CASP, 2013) and the Downs and Black 26-item methodological quality checklist (Downs and Black, 1998). The checklist (Downs and Black, 1998) reviews the possible bias in; i) reporting, ii) external validity, iii) study

bias and iv) confounding bias (see break down of scores in table 1, Appendix B). Scores in this assessment are listed for the RCTs in table 1.

Firstly, reporting bias occurs when the publication of a report is affected by the significance of the results (Egger, Smith, Schneider, & Minder, 1997). The assessment of reporting bias involved examining whether the studies report all findings irrespective whether the results are significant or not (Hopewell et al., 2009). The studies included in the present review did not appear to be biased in how their results were reported, which were assessed by evaluating whether studies reported *all* results, regardless of positive significance.

Secondly, external validity is the extent to which study findings can be generalised to different measures, persons, settings, and times (Steckler & McLeroy, 2008). An example of this in the current reviewed studies is the use of homogeneous groups of participants. Ten of the studies in this review (42%) included female participants only, which has meant the results of these studies cannot be generalised to males in the population. Eleven of the studies in this review (46%) included only participants with a diagnosis of BPD. It is possible that positive results in these studies, such as those reported by Weinberg et al. (2006), could be due to the treatment being suitable for people with BPD who also self-harm rather than helping people manage the self-harm specifically. Therefore, the results in these studies cannot be generalised to *all* people who self-harm without a diagnosis of BPD.

Small sample sizes also have an implication on how far the findings can be generalised. Participant numbers in the studies under review range from two people (case studies) to 99,751 people in a matched cohort study (Erlangsen et al., 2015). Among the RCTs included, Tapolaa, Lappalainen and Wahlström (2010) has the smallest sample size (n = 13), the authors admit the size of their sample limits the

conclusions that can be drawn from the results of this study, due to the lack of representation of the population under study. The authors advise that further research is required to confirm findings with a larger sample size.

Thirdly, study bias occurs when there are problems in the methods of measurement. For example, three of the studies in this review used hospital attendance to measure repetition of self-harm (Evans et al., 1999b; Kapur et al., 2013; Wilhelm et al., 2007), which could be viewed as more reliable than self-report measures due to the objective nature of the data, however the method also potentially misses a number of self-harm incidents not requiring hospital intervention, therefore may not have been sensitive enough measure change in self-harm. Evans et al. (1999b) suggested that this could be the reason that the crisis card produced no significant impact on reducing repetition of self-harm. Some studies, such as Guthrie et al. (2001) propose that their self-report method of self-harm data collection was more accurate because it included all incidents of self-harm, rather than just hospital presentations. However, self-report measures of self-harm used in most of the studies included in this review are methods found to be open to bias (particularly in BPD population; Ebner-Priemer et al., 2006) due to the retrospective and subjective nature of questions relying on participants' accurate reporting and recall.

Nine of the studies used an RCT design, which is deemed to be the 'gold standard' of research (Rorty, 2009). A RCT is described as a robust design that requires randomisation of participants and ensures that all possible mediating factors are controlled for as much as possible. However, 15 studies in this review were uncontrolled, which means that other possible confounding variables are not controlled to the same extent as in RCTs. For example, Kern et al. (1997) recruited two case studies. It is possible that the findings presented lack external validity and

therefore it may not be possible for them to be generalised to the population under study. Three of the uncontrolled studies were conducted on inpatient wards (Booth et al., 2014; Gibson et al., 2014; Low et al., 2001). This setting means the possibility for controlling confounding variables is high. However, the three studies included in this review are uncontrolled in nature and therefore the results should still be viewed with caution (Critical Appraisal Skills Programme UK; CASP, 2013). It is also true that the nature of inpatient settings means participants are likely to be in crisis on entering the ward. Unlike outpatient settings this means that regardless of therapeutic input, patients' symptoms may improve due to the change in their environment. It could also be true that in the first weeks of their stay they will have received a multi-disciplinary approach to their care, which is difficult to differentiate from each other when measuring intervention efficacy. The only way to account for these is to include a control group within the same environment and recruit enough people to power a RCT, which has not yet been done for the purpose of evaluating the efficacy of a treatment for self-harm in an inpatient environment.

1.4.8.4 Characteristics of interventions for self-harm used

The average number of sessions offered by the RCTs was 52 sessions (range 4-104) and 18.6 sessions (range 1-52) in the uncontrolled studies. The majority of the studies in this review used individual interventions (63%); five studies made use of both individual *and* group interventions (21%) and four studies offered a group intervention only (16%).

Brief psychological interventions

There is variation in the type of psychosocial interventions used to address self-harm for the adult population in the literature. This review has included studies that use the term 'psychosocial' to describe their intervention. This criterion included interventions with less intensive strategies, such as those that simply maintained contact with participants. Five of the included studies (21%) used 'brief psychosocial interventions'. The two RCTs using 'crisis card' interventions allowed participants access to professional support should they need it (Evans et al., 1999b; Morgan, Jones & Owen, 1993). Evans et al. (1999b) offered people who attended hospital following an incident of self-harm a 24-hour crisis telephone consultation with an on-call psychiatrist for a 6-month period after the episode. Morgan, Jones and Owen (1993) offered patients who presented in a similar way, a doctor who was available at all times and encouraging the patient to seek help. One pilot study offered leaflets signposting local support; they also made two phone calls within the first two weeks, and sent a series of letters over a one-year period (Kapur et al., 2013). The final two studies offered more therapeutic interventions, Wilhelm et al. (2007) evaluated feasibility of 'The Green Card Clinic', which allowed participants to identify difficulties from a list of problem areas, that was combined with tailored psychological strategies. Erlangsen et al. (2015) conducted a matched cohort study assessing the impact of 'brief psychosocial interventions'. However, they did not provide further details about these.

The findings from the two RCTs using 'crisis card' interventions differed; one found no significant difference in hospital attendance between groups (Evans et al., 1999b) and the other found a 54% reduction in repetition of self-harm (Morgan, Jones & Owen, 1993). The authors, Morgan, Jones and Owen (1993) advise of the importance of offering a lifeline, even if it is not used. However, the main limitation

of both of these studies is the use of hospital attendance to measure repetition of self-harm, which may miss significant, albeit less severe episodes of self-harm that remain unreported.

Both Kapur et al. (2013) and Wilhelm et al. (2007) were testing feasibility of the interventions under study. Kapur et al. (2013) found the intervention was possible, but experienced difficulties in recruiting participants, with only 26% of eligible people agreeing to consent. Wilhelm et al. (2007) also reported that the three-session, person-centred approach called 'The Green Card Clinic' was feasible. They also found that the participants reported less depressive symptoms and had made positive lifestyle changes at follow-up. Wilhelm et al. (2007) concluded that there were significant differences between people when comparisons were made between repeat and first-time self-harm patients, the authors concluding that treatment should take account of this.

Lastly, using a matched-cohort study in suicide prevention clinics in Denmark between 1992 and 2010, Erlangsen et al. (2015) found the clients who received a non-specific psychosocial therapy intervention were linked to lower risks of self-harm and death by any cause compared to no psychosocial intervention within the first year after treatment.

Psychotherapy

In this review, the term 'psychotherapy' refers to the use of the psychodynamic model to provide help for someone to overcome problems in a therapeutic space. Two studies in this review (8%) used 'psychotherapy' interventions for the treatment of self-harm (Guthrie et al., 2001; Winter et al., 2007). Guthrie et al. (2001) conducted an RCT to investigate the impact of four sessions of psychodynamic interpersonal

therapy (IPT) based on a manual developed by Hobson (1985) for people who had presented to hospital following self-poisoning. Winter et al. (2007) evaluated an intervention called ‘personal construct psychotherapy’, which was trialled against treatment as usual (TAU) for particpants who had attended hospital following an episode of self-harm.

Guthrie et al. (2001) found a clear treatment effect, in contrast to similar research that had been conducted previously, which the authors suggest might be due to the focus of the treatment on interpersonal problems. After monitoring repetition of self-harm over three years, Winter et al. (2007) also found positive effects from the intervention (significantly less suicidal ideation and depression), however not a significant reduction in repetition of self-harm.

Cognitive behavioural therapies

For this review, cognitive behavioural therapies refer to the second wave interventions based on the development of coping strategies, which targets problems and changing unhelpful patterns in cognitions and behaviours (Beck, 2011). Most of the studies in this review (79%) used cognitive therapy based or psychoeducational interventions, although the treatments vary in terms of length, intensity, frequency, mode of delivery and mechanisms of action. Overall, cognitive behavioural therapies aim to help clients become aware of the way they interpret and evaluate experiences, while testing out new coping strategies (Westbrook, Kennerley & Kirk, 2011). Two of these studies specifically named the intervention as Cognitive Behavioural Therapy (CBT) as the intervention under investigation; one of these studies was conducted in an outpatient setting (Kern et al., 1997), and one in a prison (Riaz & Agha, 2012).

Kern et al. (1997) reported two case studies documenting treatment utilising CBT

(Linehan, 1993) for people with BPD and self-harm behaviours. The treatment involved strategies such as contracting behavioural agreements, 'mindfulness' and emotional regulation skills training, reinforcement and contingency management. In contrast, Riaz and Agha (2012) reported a group CBT intervention study with nine female prisoners and conducted 12 groups in total; one session conducted each week, lasting from 45 to 60 minutes. The groups included exercises aimed at identifying triggers, thoughts, feelings and maintaining factors. Psychoeducation was included in the group content, as well as cognitive restructuring, problem-solving and relaxation techniques.

Kern et al. (1997) found both case studies demonstrated improvement in the number of self-harm behaviours, the number of restraints and the number of increased observations required. Whereas, Riaz and Agha (2012) recorded that despite participants attending all 12 sessions of group CBT, they did not yield a statistically significant impact on rate of self-harm.

One of these studies explored the usefulness of a third wave cognitive therapy called Acceptance and Commitment Therapy (ACT) combined with Solution Focused Behavioural Therapy (SFBT) for adults who self-harm (Tapolaa, Lappalainen & Wahlström, 2010). Trained and supervised psychology students facilitated the four sessions based on an ACT and SFBT manuals for nine of the participants. The remaining seven participants received 'treatment as usual' (TAU). They found significant differences at four and six-month follow-ups for both groups in terms of reduction in self-harm. The experimental group demonstrated significantly more changes in depression and other secondary measures.

Pollock & Williams (2004) reported that problem-solving skills have been shown to be markedly poorer in people with a history of self-harm. This finding was

followed by research to investigate whether this component of cognitive therapies could significantly reduce rates of self-harm when formally tested in controlled conditions. The first RCT to evaluate problem-solving therapy (PST) in adults was conducted by McAuliffe et al. (2014). The study recruited 433 outpatients and provided the experimental group with 12 sessions of PST over six weeks.

Lamprecht et al. (2007) reported a single-session solution-focused pilot study for a brief intervention for people who self-harm. Total contact time with the participants was 90 minutes, where they were exposed to standard elements of Solution Focused Brief Therapy (SFBT) including being asked the 'miracle question'. The main outcome measure was repetition of self-harm at one year, which did not produce a significant treatment effect. However, the results were that the single-session SFBT was deemed feasible and acceptable for clients who have self-harmed.

Another therapy evaluated for use in the treatment of self-harm is called Manual Assisted Cognitive Therapy (MACT), developed by Schmit and Davidson (2003) with the aim of reducing depressive symptoms and increasing positive thinking in people who self-harm. The six-session therapy incorporates elements of CBT (Beck, Freeman & Davis, 2015), DBT (Dialectical Behavioural Therapy; Linehan, 1993a) delivered through the use of a manual. Weinberg et al. (2006) conducted a small scale RCT (N = 30), MACT versus treatment as usual (TAU), including people who had a diagnosis of BPD in an outpatient setting. Self-harm was assessed using the Parasuicide History Interview (PHI) (Linehan, Wagner & Cox, 1989) and Suicide Behaviours Questionnaire (SBQ) (Linehan & Nielson, 1981). They found repetition of self-harm decreased significantly at six months follow-up in the MACT group ($P < 0.05$). In contrast to previous MACT trials (Evans et al., 1999a; Tyrer et al., 2003), Weinberg et al. (2006) reported adherence to the experimental condition was high,

which may have been one reason for the improved outcome. Weinberg et al. (2006) differed from the previous trials (Evans et al., 1999a; Tyrer et al., 2003) in only including participants with a diagnosis of BPD, which may mean the participants would be more responsive to *any* form of treatment.

More recently, Davidson et al. (2014) conducted a feasibility study for the use of brief MACT for self-harm, which was also aimed at people with a diagnosis of BPD. Twenty-two people were randomised into a TAU or MACT group. The intervention consisted of six sessions of MACT designed to help patients understand their self-harm behaviours better, reduce distress and what to do in a crisis. The TAU group was referred to a community mental health team, which included appointments with a psychiatrist and community nurse. In terms of recruitment, they were able to consent 20 patients in a six-month time period and experienced some attrition, with nine out of the 14 (64%) attending four out of the six groups. However, this feasibility study had several limitations; the small sample and short follow-up period meant that full conclusions on feasibility remain unknown.

Dialectical Behaviour Therapy (DBT)

Dialectical behavioural therapy is part of the "third wave" cognitive behavioural therapies (Hofmann, Sawyer & Fang, 2010), with a focus on issues such as mindfulness, emotions, acceptance, relationships, values, goals and meta-cognition (Hayes & Hofman, 2017).

Four of the remaining studies used one of the "third wave" cognitive behavioural therapies called Dialectical Behavioural Therapy (DBT; Harned et al., 2012; Linehan et al., 1991; Linehan et al., 2006; van Goethem et al., 2012). Linehan (1987) noted high rates of dropout when using the standard CBT approaches, which focus on

changing thoughts, feelings and behaviours. This led to the development of DBT (Linehan, 1993a), which is a cognitive-behavioural treatment based on biosocial theory, initially developed for people experiencing suicidal ideation and then to treat people with BPD.

Both RCTs (Linehan et al., 1991; Linehan et al., 2006), the uncontrolled study (van Goethem et al., 2012) and the feasibility study evaluated DBT for 'suicidal behaviours'/self-harm and were conducted in outpatient settings. The experimental arms followed the first DBT structure developed by Linehan (1987; 1993a) involving weekly individual and group skills sessions for one year, including access to a crisis phone line. The RCTs used the Parasuicide History Interview (PHI; Linehan, Wagner & Cox, 1989) to measure the primary outcome, repetition of self-harm.

The first RCT (Linehan et al., 1991) reported results demonstrating a significant decrease in frequency of self-harm in the DBT group compared to TAU ($P < .005$), despite having a relatively low sample size ($N = 44$), suggesting a reasonably strong treatment effect. The latter RCT, Linehan et al. (2006) recruited 101 women with a diagnosis of BPD. They found DBT was associated with better outcomes; meaning participants in the experimental arm were half as likely to make a suicide attempt and had less medical risk from suicidal and self-harm behaviours. Van Goethem et al. (2012) used reliable change indices (RCIs) to understand what impact the treatment had made on their small sample of participants, which found that fewer participants used self-harm after treatment. Unfortunately, given the low sample size ($n = 13$) in Harned et al. (2012), it was not possible to calculate an effect size for the treatment given. However, the researchers reported a large reduction in suicidal ideation after the treatment, which indicated a positive impact. The research did further support the

use of the DBT protocol, which was found to be safe to administer in a "high-risk" client group.

Many critics suggest that a dialectical behavioural therapy (DBT)-informed approach to treating self-harm needs to be tested in other treatment settings, such as psychiatric inpatient wards in order to check applicability (Williams, 1997, p.216). Following this recommendation, many studies have attempted to adapt the protocol, which are detailed below.

Dialectical Behaviour Therapy (DBT)-informed therapies

A further six studies using an adaption of manualised DBT to treat self-harm in adults have been conducted since. Three of these studies were conducted in outpatient settings (Gratz & Gunderson, 2006; Gratz, Tull & Levy 2014; Stanley et al., 2007) and three studies were conducted in inpatient settings (Booth et al., 2014; Gibson et al., 2014; Low et al., 2001).

From the studies using an adapted version of DBT in outpatient settings, one reduced the length of treatment to six months (Stanley et al. 2007) and two used the emotional regulation element of DBT only (Gratz & Gunderson, 2006; Gratz, Tull & Levy, 2014). Gratz and Gunderson (2006) recruited 22 participants in a uncontrolled study, then Gratz, Tull and Levy (2014) conducted a RCT (n = 61) to evaluate the efficacy of emotional regulation group therapy (ERGT) among women with BPD. They both measured change during the 14-week intervention.

Stanley et al. (2007) included both male and female participants with a diagnosis of BPD (N = 20), although male participants were still in a minority (15%). The researchers measured the repetition of self-harm by self-report of incidents in the previous week. The results demonstrated a significant decrease in episodes of self-

harm ($P < .001$), which lead the authors to conclude that it is feasible to administer DBT over a six-month time period for these participants, gaining a similar treatment effect.

Gratz and Gunderson (2006) found a significant difference between the experimental group and TAU in repetition of self-harm ($P < 0.01$). Similarly later, Gratz, Tull and Levy (2014) found the experimental group demonstrated significantly lower rates of self-harm at follow-up than the TAU waitlist control group ($P = .01$). These results provide evidence for the central role emotional regulation plays in the development and maintenance of self-harm, which is consistent with previous literature (Gratz, 2007; Linehan, 1993a; Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006).

Dialectical Behaviour Therapy (DBT)-informed inpatient therapies

The treatment that started showing the most promise for likelihood of reducing repetition of self-harm at this point was Linehan's DBT (Linehan, 1993). Williams (1997) stated that this "pioneering work" needed to be extended beyond the community setting in which it was derived. Soon after, Low et al. (2001) replicated Linehan et al.'s (1991) original DBT treatment structure (group skills and individual sessions over one year), recruiting 13 females with BPD, but conducted the study in an *inpatient* setting. Three of these patients dropped out of treatment; therefore 10 patients remained and completed the therapy and follow-up. Rates of repetition of self-harm, as well as a range of psychological measures were collected. Low et al. (2001) found DBT produced significant reduction in rates of self-harm ($P < 0.01$).

Following this in 2014, Booth et al. also used Linehan's (1993) manualised DBT to produce a protocol that included *skills groups* only. This group was created to

conduct in an inpatient setting and called "Living Through Distress" (LTD). In contrast to previous research that had adapted DBT, Booth et al. (2014) produced a group that was run for 6 weeks only (24 sessions in total) and was transdiagnostic (not only for people with BPD). They recruited 114 participants in an inpatient setting to attend the group. The Deliberate Self-Harm Inventory (DSHI; Gratz, 2001) was used to measure the frequency and severity of self-harm, which was included in a three-month follow-up post attendance to the group. The researchers found significantly decreased self-harm after the participants attended the group (P = .01). They concluded that this suggested a brief DBT-based group conducted on an inpatient ward could be effective in reducing self-harm. This study was the first to assess the impact of the DBT skills groups only; therefore, these results provided tentative evidence that groups alone may be enough to have a positive impact on self-harm.

Following this, Gibson et al. (2014) extended the study conducted by Booth et al. (2014) in using the "Living Through Distress" (LTD) group protocol and also assessed the impact on inpatients with BPD. They recruited a similar number of participants (N = 103), who consented to attend the 24 sessions of the LTD group over six-weeks. The DSHI (Gratz, 2001) was used to measure self-harm. They found that when measured at three-months post-intervention, the self-harm was significantly reduced (P = 0.01). These findings add to the results of the study by Booth et al. (2014), suggesting that adding the LTD group to an inpatient's treatment plan reduced the rate of self-harm compared to TAU. The authors suggest that future research should study what impact the LTD group had on emotional regulation skills and the mediating factors in the reduction to self-harm (Gibson et al., 2014).

1.4.8.5 Characteristics of outcomes used

As a relatively under-researched area, there does not seem to be agreement in the literature about the most effective way of collecting data for interventions aimed at treating self-harm behaviours. The outcome measures used in each study are outlined in tables 1 and 2.

Repetition of self-harm is the main primary outcome among the studies, which varied in method of data collection. To collect this data, 13 of the studies (54%) used the self-report data (Booth et al., 2014; Erlangsen et al., 2015; Kapur et al., 2013; Kern et al., 1997; Lamprecht et al., 2007; Linehan et al., 2006; Low et al., 2001; McAuliffe et al., 2014; Stanley et al., 2007; Tapolaa, Lappalainen & Wahlström, 2010; van Goethem et al., 2012; Weinberg et al., 2006; Winter et al., 2007), 6 studies (25%) used the Deliberate Self-Harm Inventory (DSHI; Gratz, 2001) to collect frequency of self-harm (Davidson et al., 2014; Gibson et al., 2014; Gratz & Gunderson, 2006; Gratz et al., 2006; Gratz, Tull & Levy, 2014; Riaz & Agha, 2012) and the remaining studies used the Linehan's Suicide and self-Injury Interview (SASII; Harned et al., 2012) or hospital attendance (Evans et al., 1999b; Morgan et al., 1993) to find number of repeated episodes of self-harm. These methods of data collection are arguably not collecting the same data, although the intended outcome is the same. The method of measurement in the two latter studies (Morgan, Jones & Owen, 1993; Evans et al., 1999b) was found to be problematic in that collecting hospital attendances could mean that less severe or untreated self-harm episodes are missed from the analysis.

An alternative outcome was levels of depression, used as the *primary* outcome in two studies (Guthrie et al., 2001; Linehan et al., 2006). The level of depression also served as a *secondary* outcome for three of the studies (Gratz, Tull & Levy, 2014; McAuliffe et al., 2014; Tapolaa, Lappalainen & Wahlström, 2010). The levels of

depression in the participants were measured using a few different self-report questionnaires across the studies. Three studies used the Beck Depression Scale (BDI; Guthrie et al., 2001; McAuliffe et al., 2014; Tapolaa, Lappalainen & Wahlström, 2010), Hamilton Rating Scale for Depression (HAM-D; Linehan et al., 2006) and Depression and Anxiety Scales for Depression (DASS-D; Gratz, Tull & Levy, 2014).

1.4.9 Meta-analysis of intervention efficacy on the primary and secondary outcomes in Randomised Controlled Trials (RCTs)

A meta-analysis was conducted for this thesis in order to attempt to understand the effectiveness of different interventions by combining studies and evaluating their efficacy.

1.4.9.1 Primary outcome; Repetition of self-harm

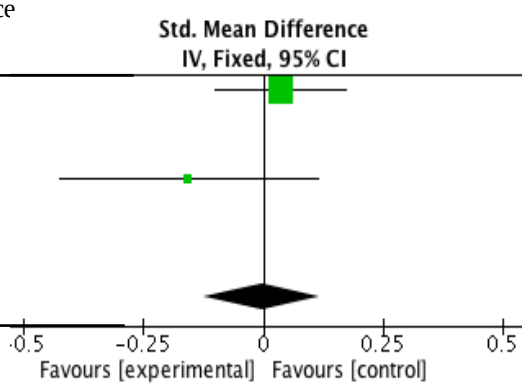
Repetition of self-harm was examined by all studies in the review. The two studies using 'crisis card' interventions offered participants a crisis or 'green' card, which allowed them access to professional support should they need it (Evans et al., 1999b; Morgan, Jones & Owen, 1993). These studies both measured repetition of self-harm through hospital attendance. A meta-analysis was conducted with these two RCTs (Evans et al., 1999b; Morgan, Jones & Owen, 1993; n = 1,039) separately from the other RCTs with data available due to the difference in intensity of the interventions. The 'crisis card' interventions did not give a defined intervention, but rather responded to the participants if required and was aimed at measuring the impact of the offer of help rather than the intervention itself (Evans et al., 1999b; Morgan, Jones & Owen, 1993). The remaining studies with available data (Gratz, Tull & Levy, 2014; Linehan et al., 1993; Tapolaa et al., 2010; Weinberg et al., 2006) offered a similar

intensity of treatment in line with 'third wave' cognitive behavioural therapies. The intervention (crisis cards) was compared with treatment as usual (TAU) (in both cases this meant no follow-up from hospital; see table 3; Appendix C for Revman outcome tables). Analysis did not suggest a difference in hospital attendances due to self-harm between the groups, although when the studies were combined the analysis was favouring the experimental group (Z = 0.04, P = 0.97), (OR 0.00, 95% CI -0.12, 0.12). Using the I^2 statistic (Higgins et al., 2003), hetrogenity between studies was found to be low (Chi^2 = 1.57, df = 1, P = 0.21, I^2 = 36%) as per Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2005).

Table 3

Comparison 1. Crisis card vs. treatment as usual (TAU) for repetition of self-harm

Outcome	**No. of studies**	**No. of participants**	**Statistical method** Std. Mean Difference (IV, Fixed, 95% CI)	Std. Mean Difference IV, Fixed, 95% CI
Evans et al. (1999b)	1	827	0.04 (-0.1, 0.17)	
Morgan et al. (1993)	1	212	-0.16 (-0.43, 0.11)	
Repetition of self-harm	**2**	**1039**	**-0.00 (-.12, 0.12)**	



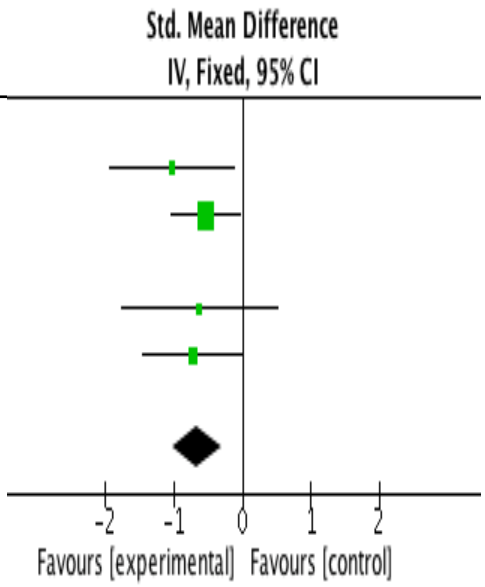
A further meta-analysis was conducted with the four RCTs (n = 128) evaluating CBT interventions (Gratz, Tull & Levy, 2014; Linehan et al., 1993; Tapolaa et al., 2010; Weinberg et al., 2006) using the data collected on the repetition of self-harm (see table 4; Appendix C for Revman outcome tables). The CBT interventions were compared to TAU. Analysis suggests a significant difference in self-harm hospital attendances between CBT and TAU groups (Z = 3.62, P = 0.0003), (OR -0.06, 100% CI -1.02, -0.03). Heterogeneity between studies was found to be low (Chi^2 = 0.91, df

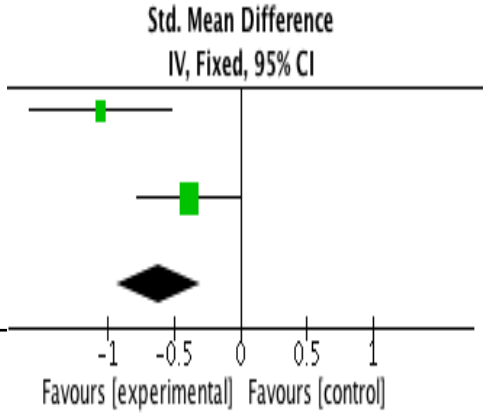
= 3, P = 0.82, I^2 = 0%) as per Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2005).

Table 4

Comparison 2. Cognitive therapies vs. treatment as usual (TAU) for repetition of self-harm and depression

Outcome	**No. of studies**	**No. of participants**	**Statistical method** Std. Mean Difference (IV, Random, 95% CI)
Weinberg et al. (2006)	1	30	-0.7 (-1.38, -0.02)
Linehan et al. (1991)	1	63	-26.72 (51.72, 1.72)
Gratz, Tull & Levy (2014)	1	22	-25.33 (-47.25, -3.41)
Tapolaa et al. (2010)	1	13	-0.69 (-1.9, 0.52)
Repetition of self-harm	**4**	**128**	**-0.73 (-1.32, -0.14)**
Linehan et al. (2006)	1	101	-0.38 (-0.78, 0.01)
Gratz, Tull & Levy (2014)	1	61	-1.06 (-1.59, -0.52)
Depression	**2**	**162**	**-0.69 (-1.35, -0.04)**





1.4.9.2 Secondary outcome; depression

Depression was examined by five RCTs in this review using self-report questionnaire. A meta-analysis was conducted with the two RCTs that had the data available for analysis (Gratz, Tull & Levy, 2014; Linehan et al., 2006; see table 4).

The interventions were compared with treatment as usual (TAU) groups. Analysis did suggest a significant difference in depression scores between groups (Z = 2.07, P = 0.04), (OR -0.69, 100% CI -1.35, -0.04). Using the I^2 statistic (Higgins et al., 2003), hetrogenity between studies was found to be high ($Chi^2 = 3.89$, df = 1, P = 0.05, I^2 = 74%) as per Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2005).

1.4.10 Discussion

This systematic review was aimed at identifying and evaluating the psychological evidence for the treatment of adults who self-harm. This review differentiates between controlled and uncontrolled studies, assessing the value that both bring to the psychological literature in terms of assessing feasibility and methodological rigour. A meta-analysis was conducted with the RCTs where sufficient data was available.

The review reflects similar results to those presented in previous reviews (Hawton et al., 1999; 2016), in that there remains a distinct lack of controlled trials providing evidence of efficacy for a psychological treatment of self-harm for adults, particularly in inpatient settings, where there are none to date that meet this criterion.

In terms of the controlled studies in this review, all nine used a RCT design and all of them were based in an outpatient setting. Although these studies are not without methodological issues, the RCT design demonstrates a high level of methodological rigor. Four of these RCT's evaluating CBT interventions were found to be significant when combined in the meta-analysis (Gratz, Tull & Levy, 2014; Linehan et al., 1991; Tapolaa et al., 2010; Weinberg et al., 2006), suggesting evidence of efficacy for the treatment of self-harm. However, caution has been advised with these findings as research suggests that combining several small studies in meta-analysis does not

predict the results of a single large study (LeLorier, Gregoire, Benhaddad, Lapierre, & Derderian, 1997).

In the 15 uncontrolled studies, five found a trend towards a decrease in the repetition of self-harm. All of the studies that produced these findings were from interventions based on Linehan's (1993) dialectical behavioural therapy (DBT) model (Booth et al., 2014; Gibson et al., 2014; Gratz & Gunderson, 2006; Low et al., 2001; Stanley et al., 2007). Three of these studies focused on group skills only (Booth et al., 2014; Gibson et al., 2014; Gratz & Gunderson, 2006), which provides tentative evidence for a positive treatment effect on rates of self-harm when using DBT-informed skills groups only.

As outlined above, the few RCTs that have been conducted seem to suggest that cognitive therapies have favourable outcomes for the treatment of self-harm. More recently, developments to DBT-informed therapy suggest that this could be the next step when looking for a brief therapy for treating self-harm. However, caution must be used when interpreting the findings of uncontrolled studies due to the nature of the methodology. In addition to this, four of the studies with significant treatment effects were treating people with BPD only (Gibson et al., 2014; Gratz & Gunderson, 2006; Low et al., 2001; Stanley et al., 2007). Again, this implies that the treatments are aimed towards people with this diagnosis and might not be applicable for people who self-harm with another or no mental health diagnosis.

1.2.11 Conclusion

Although there seems to be promising evidence of some useful ways to reduce self-harm, studies have been criticised for not being clear what they mean by self-harm (Evans et al., 1999a; Tyrer et al., 2003), which then makes replication of

research and the building of a reliable evidence base very difficult (Weinberg et al., 2006). In addition to this, treating self-harm as a symptom of BPD means that the explanatory power and psychological theory behind the intervention may be lost (Nock, 2009). For the purpose of this review, it cannot be determined whether the interventions aimed at people who have a diagnosis of BPD are treating the self-harm or other aspects of the diagnosis.

There is also a distinct lack of controlled studies specifically designed to evaluate treatments for adults who self-harm (with exception of cognitive therapies), in particular there is a lack of robust evidence found for DBT (Linehan et al., 1991). While this lack of research may be partly due to the lack of understanding of self-harm in its own right and the complexity of comorbid conditions, there are also ethical implications to conducting research like this. The sensitive nature of self-harm must not be disregarded when reviewing literature in this way; research delving into this issue with people must be able to have ends that justify the means. Alternatively, research is increasingly building a case for the costs of not discussing self-harm and suicide, resulting in a lack of research in this field (Becker-Blease & Freyd, 2006).

It is clear that more evidence is required for services to be enhanced to meet recommendations made by NICE (2011) to suggest that self-harm is treated as a priority. From the review above, there seem to be good indications that DBT in a manualised form can be successful (Linehan et al., 1991). The uncontrolled studies show that aspects of the DBT treatment, such as 'distress tolerance' (shown in Booth et al., 2014; Gibson et al., 2014), particularly using skills groups, could be helpful for people who self-harm. However, there is clearly a lack of research conducted on people who self-harm, regardless of their mental health diagnosis and within an inpatient environment.

When considering inpatient settings, promising findings from shorter-term interventions are very important (Booth et al., 2014; Gibson et al., 2014). It would be helpful to understand a bit more about what makes these DBT-informed protocols successful, by breaking them down and applying them in different settings. This would be particularly significant when targeting self-harm in inpatient settings where a short intervention is required.

The current study noted the promising findings of studies using DBT, but also lack of convincing evidence for DBT-informed interventions as a significant gap in the literature to be explored. The Medical Research Council (MRC) guidance for developing and evaluating complex interventions stipulate that a feasibility study must be done prior to a full trial in order to understand the parameters for completing the study on a larger scale (Craig et al., 2008). From this review, a feasibility study to prepare for a larger clinical trial to evaluate a brief version of DBT in an inpatient setting for people who self-harm, regardless of diagnosis is indicated.

1.5. Dialectical Behavioural Therapy (DBT)-informed therapy

Evidence has been provided for DBT effectively reducing self-harm in adults with BPD for the outpatient population (Linehan, 1993a). The original version of DBT is implemented over one year, including both group skills and individual therapy, with the first four months producing the treatment effects and the last eight used for skills consolidation (Linehan et al., 1991). A significant draw back to DBT is the difficulty to implement it in clinical practice owing to the duration and intensity of the therapy (Gratz et al., 2015). Therefore, since its inception adaptions have been made to the length and content of the therapy for family outpatient treatment (Miller, Rathus, Linehan, Wetzler, & Leigh, 1997) as well as inpatient settings (Robins & Chapman,

2004) with varying degrees of success.

Turner (2000) compared the original form of DBT with an adapted version, which saw the removal of the group treatment part, administering these skills in the individual sessions instead. The individual sessions were found to be effective, but significantly less so than the original DBT that included the skills groups.

Miller et al. (1997) also made adaptations to DBT for the treatment of adolescents with suicidal ideation. They shortened DBT to 12 weeks, reduced the number of taught skills and introduced caregivers into the treatment. Despite a shorter length treatment, they found significant reductions in suicidal ideation, general psychiatric symptoms and symptoms of BPD. This would need to be tested on an adult population to generalise the findings but shows promising results for adapting a successful treatment programme.

The length of manualised DBT (one year) is particularly problematic on inpatient wards, where there is need for a time-limited, efficient treatment due to high patient turnover (Gibson et al., 2014). There are also further challenges to overcome when conducting DBT on an inpatient ward, most pertinent of which can be the frequent overload of emotional triggers and the nature of hospitalisation itself often reinforcing self-harm as a way of managing these (Swenson, Sanderson, Dulit, & Linehan, 2001). However, an inpatient environment can also provide a unique opportunity to educate clients and their families about strategies, which can be reinforced by collaborative treatment relationships, teaching people skills to get out and stay out of hospital (Swenson et al., 2001).

Barley et al. (1993) conducted a study of DBT over 10 months in an inpatient setting for people with BPD; one of their outcomes was that self-harm was significantly lower at follow-up after treatment compared to rates with inpatient TAU.

These findings implied that it was possible for DBT to be "accelerated and improved" by an inpatient setting. Following this, Bohus et al. (2000) conducted outcome measures for 24 female inpatients before and after completing a course of DBT over three months, specifically aimed at treating BPD (not self-harm). They found a significant decrease in self-harm after the treatment compared to reports before. However, with a lack of a control group it is difficult to interpret these findings as solely related to the treatment the participants received. Later in a randomised control trial, Bohus et al. (2004) adapted DBT to provide inpatients with a diagnosis of BPD with three and a half hours of individual therapy, and four hours of group skills per week over three months. When compared to TAU, this adaption of DBT was found to provide improved results for levels of self-harm as well as depression, anxiety and interpersonal problems (Bohus et al., 2004). Further support for this research came in 2006, when Kröger et al. also examined an adapted DBT programme over a three-month period, using a combination of skills groups (five hours per week) and individual therapy (one hour per week), which found an overall reduction in symptoms of BPD including self-harm.

At this point, treating people receiving inpatient care with only skills groups to reduce self-harm had not been attempted. Of note, several studies evaluating group interventions had excluded people receiving inpatient care (Gratz & Gunderson, 2006; Slee, Garnefski, Van der Leeden, Arensman, & Spinhoven, 2008). But findings from Gratz and Gunderson's (2006) study demonstrated that improvements in emotional regulation might have been related to decreases in self-harm in an outpatient setting. Slee et al. (2008) later found that reductions in self-harm were related to improvement in impulse control skills and the ability to engage in goal-directed behaviour. These

findings signify that emotional regulation is an important aspect of treatment for self-harm, leading to adaptations to the model (Lynch et al., 2006).

Booth et al. (2014) and Gibson et al. (2014) evaluated a DBT-informed group called 'Living through Distress' (LTD). The group intervention utilised the four sets of skills that Linehan (1993a) outlines in the DBT manual to teach people how to better tolerate (dealing with and accepting) distressing events that happen in our lives. In contrast to previous studies, Booth et al. (2014) reported results on a group run for six weeks (24 sessions in total) with 114 participants, in an inpatient setting. Self-harm was measured using the DSHI (Gratz, 2001), which included a three-month follow-up. The researchers found significantly decreased levels of self-harm post-treatment (P = .01). These results must be taken with caution, as the study was uncontrolled, however it is a promising indication that a brief, DBT-informed group, delivered in an inpatient setting can be effective in reducing self-harm. This was the first study to attempt a DBT-informed intervention without individual sessions, which provides tentative evidence that groups alone may provide sufficient skills to reduce self-harm.

Although many of these studies are targeting BPD, rather than patients who self-harm, they offer promising results that DBT can be adapted by way of shortening the length of treatment (Barley et al., 1993, Bohus et al., 2000; 2004; Kröger et al. 2006). Offering group skills only (Booth et al., 2014; Gibson et al., 2014), the evidence suggests shortening treatment could be possible without losing the effectiveness of DBT for reductions in self-harm.

Although these are promising findings, the average length of stay for someone admitted to a psychiatric hospital in England is only 23 days (Health and Social Care Information Centre, 2014). Therefore, even the six-week intervention trialled above

(Booth et al., 2014) would not be a suitable treatment for the average patient admitted to a psychiatric ward with self-harm behaviours. Considering self-harm is the most common reason for admission to psychiatric inpatient services (Bowers, 2005; Way & Banks, 2001), there is an obvious need for an even shorter, better-focussed treatment of self-harm that is clinically applicable on an inpatient ward.

1.6. Research aims

The current study aimed to evaluate feasibility and acceptability of a novel DBT-informed skills group for adults who self-harm in an inpatient setting. The intervention will be based on DBT, driven by previous research (Linehan et al., 1991; Linehan 1993a,b). The treatment modality will include four group sessions conducted in less than 23 days (the average inpatient length of stay according to the Health and Social Care Information Centre, 2014). The treatment group will differ from groups previously studied in that it will be a shorter group programme, aimed at female *and* male inpatients who self-harm irrespective of their diagnosis. The group will aim to provide the participants with coping strategies derived from Marsha Linehan's DBT Skills Training Handouts and Worksheets manual (2014), with the aim of equipping them to manage times of crisis in their lives. The group will be called the 'Coping with Crisis' (CwC) group.

Based on the Consolidated Standards of Reporting Trials (CONSORT) guidelines (Eldridge et al., 2016), the aims for this feasibility study are:

1) To determine the number of eligible participants who are screened, recruited and accept the current treatment within this setting.
2) To determine whether retention of participants for four psychological groups over two weeks is achievable given the predicted short stays of patients on

wards.

3) To obtain means and a standard deviation for the outcome measures in order to estimate sample size for large-scale trials.
4) To determine suitability of a compact group skills programme.
5) To determine acceptability of the research process for this client group gained through feedback from participants.

This feasibility study was registered on ClinicalTrials.gov Protocol Registration Results System (record: 205350) on 24th January 2017.

Chapter 2.

Method

2.1 Epistemological positioning

The aims of the current study were to evaluate feasibility and acceptability of a novel DBT-informed skills group for adults who self-harm in an inpatient setting. This study is theoretically driven; however, it is important to consider the assumptions that underpin a project such as this and reflect on the researcher's epistemological position in an attempt to justify the chosen methodology (Willig, 2008).

Until the 1970s, quantitative methods were considered the 'gold standard' of educational research (Howe, 1992) and Psychology, as a 'social science' had traditionally been associated with the positivist end of the epistemological perspectives (Frank, 1984). Positivism is positioned on the contention that there is an observable 'truth' that can be measured in an objective and independent manner. Within the positivist approach, quantitative methods are often thought to be 'rigorous', where observed reality is measurable and can be confirmed through repetition of experiments (Sumner & Tribe, 2004). At the other end of the spectrum, constructivism is based on the idea that reality is intangible and does not exist independently from our experiences. Within this constructivist approach, qualitative methods are used to attempt to obtain a subjective reality (Sumner & Tribe, 2004). Between these two polarised positions, Molteberg and Bergstrom (2000) proposed a middle ground called 'realism', which offered the possibility of rigor without the "straitjacket of objectivity". Realism recognises that observations are fallible, and that theory is revisable, it also leaves room for questioning whether there is a way to know reality with certainty and without bias (Molteberg & Bergstrom, 2000).

The current study has adopted a mixed methods approach to data collection, where

quantitative data was collected for the use of sampling calculations for future clinical trials and a qualitative measure was used to understand the participants' views of the therapeutic intervention under investigation. The combination of qualitative and quantitative methods has not always been universally accepted, as it is often thought to violate basic assumptions of both methods (Morse, 2005). However, mixed methods research is now recognised by many disciplines as an appropriate way forward for researchers to select the best method for answering a research question, which allows them to work across positivist and constructionist paradigms (Johnson & Onwuegbuzie, 2004). As such, this study could be seen as consistent with the positivist framework in that the outcome measures for self-harm, distress and the tolerance of this distress are operationally defined and quantifiable. This leads to them being analysed based on certain assumptions about the data.

Alternatively, the study also understands that all measurement is fallible and so uses multiple methods of measurement to ascertain a better understanding of what is happening in reality (i.e. an additional open-ended questionnaire). Further to this, positivists would believe that researchers are objective and see reality for how it is, whereas the current study takes a different view, understanding that the intervention under study is driven by theory and that this and the researcher's own worldviews may impact on the interpretation of the data. The knowledge of this fallibility of measures and the impact of the researcher's beliefs, as well as the inclusion of multiple (albeit possibly erroneous) ways of acquiring data and the inclusion of other critical scientists in the review process aim to ensure that the project has a broad breadth and depth of investigation. This comes from the pragmatic approach of working across differing research perspectives (Johnson & Onwuegbuzie, 2004). Additionally, the measures used in the current study are self-reported and by using

this method and requesting feedback from participants on the given intervention the study attempts to enable a source of subjective views of reality for the participants.

The concept of subjective reality is particularly pertinent in this study, given the socially constructed nature and definitional issues of the main construct, self-harm. In the 1930s, the concept we now know as self-harm was described as 'wrist-cutting syndrome' and countless other terms have been used since (McAllister, 2003). Claes and Vandereycken (2007) proposed that the definition of self-harm should include "socially unacceptable behaviour" in order to differentiate 'self-harm' from 'self-care', working with the debatable assumption that a "socially unacceptable behaviour" is an objective and quantifiable concept. It was important for this project to be mindful of the assumptions held about self-harm, and in the light of the literature on the varied functions of harming the self, it may not always be viewed by participants or others as a negative, anti-social act to all people, at all times (Klonsky & Glenn, 2009). In fact, service-user led testimonies state that some people who self-harm consider it to be a useful coping strategy to manage their distress (Hume & Platt, 2007).

Philosophers have been debating the issues of research paradigms for thousands of years and it will continue to be debated. Therefore, a pragmatic approach is required in order to take the issues raised by the debate on board but continue to produce work in the field of psychological research. Critical realism is interested in the individual's understanding of reality, acknowledging the difficulties of socially constructed meaning and the 'real world', where methodology must be designed to solve problems and find solutions to existing problems (Bhaskar, 1979). This can be done through a pragmatic use of mixed research methods, where reality can be negotiated and interpreted in light of new information and drawn from strengths in

both paradigms (Morgan, 2007). Within this, an intervention can be put in place, driven by theory. A process for treating individuals can be focused on for the purpose of furthering understanding. The question raised then is 'Is it useful?'. This pragmatic approach seems to be a suitable method to subscribe to in the current study keeping the abovementioned issues in mind. In line with the critical realist approach, the results of the current study will be presented to offer possibilities and shape future research rather than to represent factual information about the reality of the concepts or people involved in the research.

2.2 Study design

The current study is a mixed method, single-centre, uncontrolled feasibility study of a novel DBT-based group intervention for use in a large clinical trial to test the treatment of self-harm in inpatient settings. No control group was included in this study as the primary focus was on gathering feasibility information within an inpatient setting, in line with Consolidated Standards of Reporting Trials (CONSORT) guidelines (Eldridge et al., 2016). Standardised self-report measures were used to gather data on the nature and functions of self-harm and how distress is tolerated, with the purpose of determining feasibility and to obtain parameters for a large clinical trial to be conducted. Non-standardised measures were also used to collect demographic data and participant feedback on the intervention and research process at the end of the study.

2.2.1 Participants

Participants were included if they; i) were aged between 18-65 years, ii) admitted to hospital, iii) had a history of or at least one episode of self-harm, and iv) had

capacity to understand the information sheet. They were excluded if; i) they were Non-English speakers (due to translation costs), ii) they lacked the capacity to give informed consent, which was assessed on an on-going basis by the researcher and group leaders (the participants were given the opportunity not to attend the groups or complete the forms at all times) and iii) if their symptoms prevented them from concentrating for an hour at a time (i.e. severe thought disorder). Clinicians assessed the presentation of the participants and made a clinical judgement about whether they would be able to benefit from group therapy (this is assessed by clinicians routinely on the ward in order for patients to attend psychology groups).

2.2.2 Sample size

Considering this is a feasibility study, power calculations were not required, but the aim was to recruit enough participants to each therapy group to provide an authentic group experience (three to eight people based on the ideal number of participants for group therapy proposed by Yalom & Leszcz, 1995) and to account for possible drop out. The aim was to recruit enough participants overall to perform a sample size calculation for a larger trial. For feasibility studies, sample sizes of 24-50 have been recommended in the literature (Browne, 1995; Julious, 2005; Lancaster, Dodd & Williamson, 2004; Sim & Lewis, 2012). This feasibility study aimed to recruit 30 participants, but due to issues with recruitment the researchers were only able to recruit 24 participants.

Ten sets of groups (each containing four sessions over two weeks) were run successively, which took 16 weeks in total. Each group contained from one to five participants.

2.2.3 Measures

The pre-intervention assessments included a measure of participant demographics (Appendix D). The post-intervention measures included a feedback questionnaire (Appendix E) that will provide the participants with the opportunity to give their views on both the acceptability and usefulness of the therapy groups and research process including suitability of outcome measures.

Standardised self-report measures were as follows - the participants each completed two outcome measures before and after the intervention. One of these outcome measures is used to assess the function and frequency of self-harm called 'The Inventory of Statements About Self-Injury' (Klonsky & Glenn, 2009) and the other is a measure designed to assess distress tolerance called 'The Distress Tolerance Scale' (DTS) (Simons & Gaher, 2005). Both are outlined below.

The Inventory of Statements About Self-Injury – Appendix F (ISAS; Klonsky & Glenn, 2009). The ISAS is a 46 item self-report measure, with two additional optional items, designed to assess the function and frequency of self-harm previously reported in the literature (Klonsky, 2007). The ISAS assesses the frequency of self-harm by giving the respondent options of the method of self-injury and then asks them to estimate how many times they have engaged in each. The function is assessed using a list of statements starting with "When I self-harm, I am…" and examples of responses are "calming myself down", "punishing myself", which the respondent is required to circle "not relevant", "somewhat relevant" or "very relevant" depending on how much they can relate to the statement. These statements indicate one of 13 functions scales in total (affect regulation, interpersonal boundaries, self-punishment, self-care, anti-dissociation, anti-suicide, sensation seeking, peer-bonding, interpersonal

influence, toughness, marking distress, revenge, autonomy), which are scored out of six and the higher scores indicate the higher use of that function.

The functions listed above are represented by a two-factor structure, interpersonal and intrapersonal. These factors account for 61% of the variance, in line with the previous self-harm literature (Nock & Prinstein, 2004). Klonsky and Glenn (2009) assessed test-retest reliability of the ISAS over one year, correlations ranged from .52 (biting) to .83 (burning), with a median of .68 for the behavioural scales, .60 for the superordinate intrapersonal functions scale and .82 for the superordinate interpersonal functions scale. Furthermore, the ISAS has outstanding overall internal consistency (interpersonal and intrapersonal scales were $\alpha = .88$ and $\alpha = .80$ respectively) and correlates with contextual variables (i.e. the tendency to self-harm when alone) and clinical constructs such as BPD, suicidality, depression, and anxiety (Klonsky & Glenn, 2009). In summary, this measure has shown evidence to indicate it is a reliable and valid measure, making it useful for clinical or research purposes to measure functions and frequency of self-harm (Klonsky & Glenn, 2009). The ISAS resides in the public domain; therefore, permission was not required to use it for the above study.

The Distress Tolerance Scale – Appendix G (DTS; Simons & Gaher, 2005).

Linehan (1993) proposes that self-harm is the dysfunctional attempt to reduce emotionality; one of the treatment goals for a DBT group is to gain skills in distress tolerance. Therefore, this study used a measure designed to assess distress tolerance called the 'Distress Tolerance Scale' (DTS; Simon & Gaher, 2005). The DTS consists of 15 items, which measures participants' appraisal of their emotional distress, their ability to tolerate this distress and any regulation efforts to alleviate it. The measure offers 15 statements that the respondent can indicate on a five-point Likert scale

whether they "strongly agree", "mildly agree", "agree and disagree equally", "mildly disagree", "strongly disagree", scoring one to five points for each respectively. The statements indicate situations where distress cannot be tolerated (i.e. "My feelings of distress or being upset are not acceptable", "There is nothing worse than feeling distressed or upset"), with lower scores indicating lower levels of distress tolerance.

The DTS demonstrates good internal consistency (Cronbach's alpha > .70, Nunnally & Bernstein, 1994; .89, Simon & Gaher, 2005) and has shown good test-retest reliability over six months (r = .61) (Simon & Gaher, 2005). The DTS was found to relate to other measures of emotional functioning, which supports the discriminant and convergent validity (Simons & Gaher, 2005). The DTS resides in the public domain; therefore, permission was not required to use it for this study.

Non-standardised self-report measures: In addition to the measures described above, there was a demographic questionnaire collecting data on age, gender, ethnicity, education, marital status, employment, diagnosis if appropriate, medication, length of stay in hospital and any previous treatments. An adverse events (AE) form was used to measure any untoward occurrence to a participant who is undertaking the treatment intervention whether or not there is a connection between the two. These were recorded for each individual to assess the risk to the client group, to comply with the 'Good Practice Guidelines for the Conduct of Psychological Research within the NHS' (Cooper, Turpin, Bucks, & Kent, 2005) and to assess the usability of the forms for a larger trial. Lastly, the feedback questionnaire was used to collect qualitative data from the participants about how they found the therapeutic groups and research process to inform a larger clinical trial of the service users perspective.

2.2.4 Research procedure

The clinicians were provided with information about the study and were asked to identify patients on the ward who met the eligibility criteria using the screening guidance provided (Appendix H). The clinicians were able to provide these patients with an information sheet (Appendix I) that they could take away and read in their own time. The information sheet contained material about the study and a slip at the bottom of the last page for the patient to sign, detach and return to their clinician if they wanted to meet with the researcher to discuss the project further. The researcher then arranged a time convenient for the patient, to explain the study's purpose and give them an opportunity to raise any questions they had about the study. They were given at least 24 hours to take in the information and discuss it with friends, family, and their healthcare workers, to help them to weigh up whether they would like to consent to take part in the study. If they indicated that they would like to meet again with the researcher, a further meeting was arranged where written consent (Appendix J) was obtained if they were still indicating that they would like to take part in the study. The participants were informed throughout the process, including at the information and consent stage that they could withdraw at any time without giving a reason and their treatment on the ward would not be affected by their participation or non-participation in the research.

The participants' general practitioners were made aware of their involvement via letter if the participant consented to this. The patient was then monitored throughout the study for on-going consent to take part in the research, this was done by making the research meetings and therapy groups 'opt-in'. In this way, the participants 'opted-in' on a session-by-session basis, were made aware of when the session was due to take place and were not forced in any way to attend meetings or groups that

they did not want to engage in.

When the participants had consented, the researcher administered the self-report assessment measures, in the same session or a further appointment was arranged if needed. These measures contained a demographic sheet and two outcome measures; The Inventory of Statements About Self-Injury' (ISAS; Klonsky & Glenn, 2009) and the 'Distress Tolerance Scale' (DTS; Simons & Gaher, 2005), described fully above. Once the measures were completed the participant was then invited to attend the next set of four group skills sessions that were being run on the ward.

The DBT-based skills groups were each run for one hour on four separate days within two weeks (the content of these groups is described fully below). Therefore, each participant attended four one-hour groups. The taught skills groups were informed by DBT theory (Linehan, 1993) and the handouts and worksheets were used from Marsha Linehan's training skills manual (Linehan, 2014) with permission. The groups were facilitated by two clinical psychologists, who recorded the skills they were able to cover in each group and who attended the groups in order to monitor fidelity to the protocol and for each participant in the intervention.

Once the participants had attended the set of four skills groups, the author then arranged a meeting with them individually to administer the post-treatment assessment measures, which contained the feedback questionnaire and the same two outcome measures (ISAS and DTS; described fully above). Figure 2 demonstrates the flow of participants through the study.

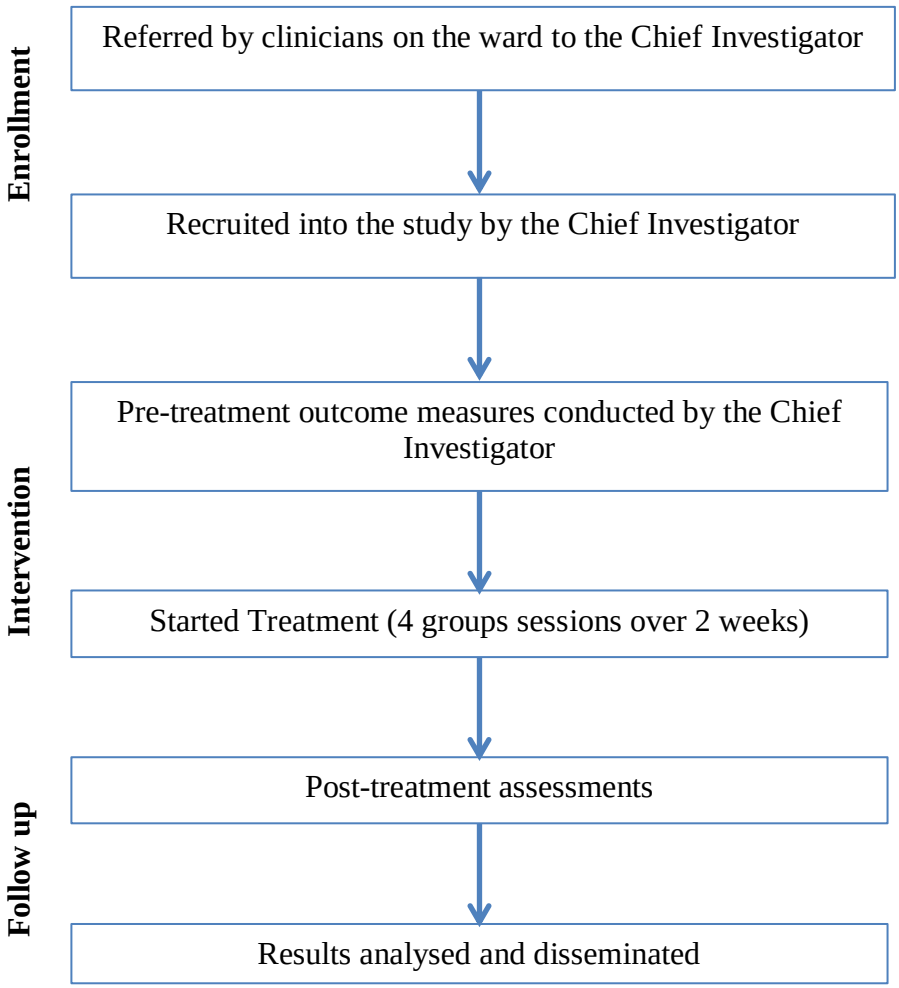


Figure 2. *Flow diagram of study procedure*.

2.2.5 Setting

The setting for the research was a mental healthcare unit, in a hospital of a major city in the UK. Patients were recruited from five inpatient wards within this unit, who were either being held informally or detained under the Mental Health Act (Bluglass & Beedie, 1983). The intervention was held for four, one-hour sessions within a two-week period, in a closed communal area. A qualified clinical psychologist started running the groups, after which assistant psychologists who work on the wards facilitated the groups. The participants were initially being approached and asked

about the study by a ward clinician. At this point, if they indicated that they would like to meet with the researcher to find out more about the study this was arranged at a time that suited them.

2.3 Intervention

Boyce et al. (2003) reported "no single treatment has confirmed superiority" for treating self-harm with a psychological intervention in any setting, but concluded, "DBT appears to confer most benefit". A review of the current literature (presented in this thesis) revealed that there remains a lack of evidence-based psychological interventions for adults who self-harm, but evidence for outpatient psychosocial treatment suggests DBT has been successful in reducing self-harm for people with BPD (Gratz & Gunderson, 2006; Stanley et al., 2007). Recently, this is being attempted in a shorter, adapted form for an inpatient setting, which saw promising results (Booth et al., 2014; Gibson et al., 2014), but these were uncontrolled trials. Therefore, a large clinical trial is required to provide evidence for psychological treatment that helps reduce self-harm in an inpatient setting. This recent research initiated the decision to inform the group content in the current study using DBT skills (Linehan, 1993a).

The intervention is a novel four-session group programme based on DBT skills. The protocol was informed by the DBT manual by Marsha Linehan (1993) using handouts and worksheets from 'DBT Skills Training Handouts and Worksheets' by Marsha Linehan (2014) with permission.

The first draft of the group protocol was developed by the author in consultation with a DBT specialist psychologist who advised on the content of the four groups. Consultation with the DBT specialist was important to decide what skills would be

most appropriate to include for the client group and given the short length of allocated time for the groups to take place. From the four DBT modules (mindfulness, distress tolerance, emotional regulation and interpersonal effectiveness), it was advised and decided that mindfulness should be included experientially through the practice to begin and end the group. With the time limit of four hours in mind and based on the self-harm literature (Klonsky, 2007, Linehan, 1993), distress tolerance and emotional regulation skills were thought to be more important skills to include than interpersonal effectiveness. It was also thought that the group would gain some of the interpersonal effectiveness skills by the nature of the group format.

Once the key skills were decided upon, together with the specialist psychologist, they were formed into four groups. Clinical psychologists at the hospital where the study was planned to take place, who have extensive experience with the client group under study, were sent the initial draft for review. The main feedback from the psychologists on the wards was the inclusion of some crisis management strategies in every group, to ensure that the participants received this even if they were only able to attend one group. They also felt that the content in the original protocol was too much to contain in one hour, they advised simplifying the content. Following feedback from the clinical psychologists, a further draft was written. This protocol was then adapted a final time (version 4; Appendix K) after it was run by a clinical psychologist on the ward, in order to make the protocol suitable for assistants to facilitate. The changes involved cutting down the group content, so it streamlined the group process and there was more room for thinking and discussion within the timeframe.

The skills that were decided on to be included in the group were: mindfulness (10 minutes to begin and five minutes to end each group), which included ideas of radical acceptance (from the distress tolerance module). The four sessions included

mindfulness focusing on i) operating from 'wise mind', ii) observing skills, iii) describing skills, iv) participating skills, all underlined with the skill of being non-judgemental and not self-critical. Reflection was a part of these sections to see how they found it, which also aids the teaching of mindfulness. For the remaining 45 minutes of the groups 'Distress Tolerance' (DT) and 'Emotional Regulation' (ER) skills were interwoven including the following skills; labelling emotions, STOP skill, (acting opposite), coping strategies (pros and cons, building mastery, taking care of the body), self-soothing (five senses), crisis survival strategies (contingency plan).

2.4 Ethical considerations

Due to the sensitive nature of the subject under study in this project (self-harm), there were several ethical considerations to contemplate. These ethical considerations were of particular importance given that the participants for this study were either informally held or detained under the mental health act in hospital. Due to this, the British Psychological Society (BPS), 'Code for Human Research Ethics' (Oates, Kwiatkowski & Morrison-Coulthard, 2010) and 'Good Practice Guidelines for the Conduct of Psychological Research within the NHS' (Cooper et al., 2005) were consulted when developing the methodology. Approvals for the methodology were subsequently received from the East of England Essex NHS Research Ethics Committee (REC reference: 17/EE/0001), Health Research Authority (HRA) approval (IRAS project ID: 205350; Appendix L), the University of Essex Research and Ethics Committee (Ref: 16062; Appendix M) and R&D letter of access was granted from the NHS Trust where this research was based.

2.4.1 Ethical considerations for research in an inpatient setting

Due to the nature of the participant's detainment, extra care was taken to ensure that their participation was completely voluntary, making use of the clinicians on the ward who had no motivation to recruit to the study and who knew the patients to discuss participation with them before a meeting with a researcher was held. Due to the participant pool for recruitment being a 'captive audience', caution was taken to ensure that there was no possibility of coercion. It was emphasised at the information and recruitment stage by the clinicians and researcher that there was no obligation for the potential participants to take part and that their decision would not affect their treatment on the ward. They were fully informed of what to expect if they took part and it was made very clear that they were free to decline or withdraw their consent at any time. Their voluntary participation and on-going assent was required at every stage, so that if they did not want to attend a meeting with the researcher or group at any time this was accepted as their decision. If they wanted to rearrange a researcher meeting, this was facilitated and if they wanted to miss a group or more and come to following ones, this was also accepted (and only recorded for fidelity monitoring). The only rule abided to in relation to this was that they were not invited to join half way through a set of groups or allowed to go to multiple sessions of the same group nor to attend more than one set of groups; this was to allow every patient a fair chance to receive the intervention.

All participants were given a 'participant information sheet' (Appendix I), which provided them with contact details of the researcher and supervisors. This sheet informed them of what to expect if they took part, details about data protection and confidentiality and their rights to withdraw at any time without giving a reason for doing so.

2.4.2 Ethical storage of participant data

Hard copies of consent forms, demographic questionnaires, outcome measures, and feedback questionnaires were stored in a locked filing cabinet on hospital premises. This will be kept securely for five years after the completion of the study in case any unforeseen amendments or corrections need to be made to the write up or analysis of the study. This comprises of two years for the duration of the researcher's doctoral training and an additional three years for any outstanding write up. This is in accordance with Good Practice Guidelines for the Conduct of Psychological Research within the NHS (Cooper et al., 2005), which states that for psychological research within the NHS, original data should be stored for up to five years if the research study is to be published. A copy of the consent form was placed in the patient record if the patient agreed to this on the consent form. All the other documents (except for the consent form, which will have the participants' signature on) were only identified by a number. The allocation document connecting the names of participants with the number assigned to them was kept for the duration of the study, but was encrypted and password-protected, then stored on a secure network drive. No hard copies of this document were made and it was destroyed when the study completed. Direct quotes from feedback forms are all anonymous and therefore not identifiable to individuals if used for the write up to evaluate the feasibility and in related publications.

The Chief Investigator (Sarah Fife), the academic supervisor (Dr. Frances Blumenfeld), and academic and field supervisor (Dr. Lisa Wood) had access to the participants' data. The participants were made aware and consented to the potential viewing of the data they provided in this research project by individuals from the University of Essex, from regulatory authorities and from the NHS Trust for monitoring and auditing purposes. They were made aware that this could include

access to personal information. This was included in the informed consent that the participants chose to agree to before participating in the study.

2.4.3 Ethical considerations for researching self-harm and suicidality

The topic of self-harm and suicidality is a sensitive one, and there is a risk that questionnaires and a group based on this sensitive subject could potentially increase thoughts of suicidality and self-harm behaviours. Key workers were made aware of the group content and informed of their patient's participation in the group to allow for increased monitoring of the patient if required. If any issues arose during the group, the group facilitators informed the relevant clinicians in line with ward and trust protocol. Risk procedures were followed in the group process, in line with the ward and trust protocol. In this regard, however, the literature does demonstrate that *not* discussing sensitive issues, such as self-harm and suicide, can be more detrimental to the person and this also results in a lack of progression in the field (Becker-Blease & Freyd, 2006).

2.4.4 Potential conflicts of interest

There were potential conflicts of interest in this project, due to the chief investigator's academic / field supervisor being the clinical psychologist in the trust where the group is planned to take place. This potential conflict of interest was managed by the supervisor having no part to play in recruiting the participants. The clinicians explained the research study to potential participants and asked for verbal consent for the chief investigator to approach them. The participants were encouraged to consult with their friends, family, and key worker when deciding whether to take part, the field supervisor had no involvement in this decision. The chief investigator

conducted all the recruitment and research outcome measures without involvement of the field supervisor. Only the field supervisor and the second group facilitator conducted the groups and had no other contact with the patients regarding the research project. It was also made clear to the patients that there was no obligation to take part and that their role or lack thereof in the research would have no impact on their treatment on the ward.

2.5 Dissemination

After the study completion, these results will be presented in written form and kept in the library at the University of Essex, as hard and electronic copies. It is also vitally important that the results of this study are disseminated to those clinicians treating people who are self-harming including those treating the patients themselves. The participants were offered a copy of the overall results, and it was explained to them that the individual results would be grouped together and reported as an overall result for the group that took part. If the patient is no longer residing at the hospital they will be told that the results will be left for collection if they wish. If there is positive feedback from clients and results indicate a trend towards reducing self-harming behaviour, a larger, randomised, controlled trial might be recommended for short stay patients on psychiatric wards. The longer-term plan for the results is publication in academic journals and presentations at conferences.

2.6 Data analysis

Feasibility studies aim to focus on whether the study can be done by evaluating the research and intervention processes (National Institute for Health Research; NIHR, 2012). The aims of the current study were to assess feasibility and acceptability of a

DBT-informed skills group for adults who self-harm in an inpatient setting. To evaluate the research and intervention processes, this feasibility study intended to; i) determine the demand for an intervention for self-harm in this setting, measured by the number of eligible participants who are screened, recruited and accepted treatment; ii) determine whether retention of participants for four psychological groups over two weeks is achievable given the predicted short stays of patients on wards; iii) to collect and examine descriptive statistics (means and a standard deviations) for the outcome measures in order to estimate parameters for large-scale trials; iv) determine suitability of a compact group skills programme and v) determine acceptability of the therapeutic group and research process for this client group gained through feedback from participants.

2.6.1 Demand for the intervention

To understand the demand for an intervention for self-harm in the inpatient setting, the capability for recruitment of 30 patients to the group within the pre-determined recruitment period of six months was examined. The potential for recruitment to a larger trial was measured in this study by collecting data on the percentage of patients who progressed to each stage of the recruiting process and the reasons why some did not. The number of people who met the eligibility criteria, were screened and initially referred by clinicians to the group was monitored. From this group, the number of people who agreed to meet with a researcher was recorded, then the number who consented to take part or declined was noted. The reasons for dropping out or declining to take part at each stage were logged for analysis.

To determine retention to the groups, the number of participants who attended or dropped out was recorded including reasons for dropout. The completion rate for the

outcome measures was also monitored before and after the intervention, reasons why these had not been collected was recorded if appropriate. Due to aims set out in line with guidelines for feasibility studies (Eldridge et al., 2016), the outcome measures were not used to assess the efficacy of the group, but rather the usability and acceptability of the combination of measures for the study and participants.

2.6.2 Acceptability of the therapy group protocol and research process

The acceptability of the therapeutic group for participants and the setting was also of importance in this study. The acceptability of the group to participants was assessed using a feedback questionnaire, collected alongside the post-group outcome measures. Content analysis was chosen in an attempt to objectively understand the meaning of the feedback from participants and put the results to practical use in recommendations for future research. In order to conduct the content analysis on the open-ended feedback questions, Bryman's (2008) stages of content analysis were followed. This was used to describe and make inferences about the antecedents of the communication given in these questionnaires. To use this approach the data was prepared by classifying the text into smaller content categories (Weber, 1990), then deciding what to analyse in detail before selecting a unit of analysis (Guthrie et al., 2001). The next step was to organise the data, including coding, creating categories and abstraction. Bryman (2008) recommends re-reading the text and making notes in the margin, which was done for each question. Chunks of text that were representative of the same phenomenon were labelled using manifest coding. The answers to each question were categorised into discrete codes. For the purpose of this analysis, there was no need to identify deeper meaning of these codes in this feedback questionnaire.

The acceptability of the group in the inpatient setting included the extent,

likelihood and manner in which the group could be run on the inpatient ward. The practicality of the intervention was assessed within this setting, by considering the resources required, the time taken, and commitment needed from the clinicians recruiting the participants and running the group. The level of change needed to integrate the new group was monitored and recorded in a researcher diary. Any adaptations that were made to the group programme, in order to accommodate the context, were also recorded. Group facilitators recorded the skills they managed to cover in each session to measure fidelity to the group protocol. Adverse events were also recorded for each individual (Appendix N), which is compliant with good clinical practice, to assess the risk to the client group, any potential or unexpected impact of the group and to assess the usability of the forms for a larger trial.

Chapter 3.

Results

Overview

This chapter will outline the results of this feasibility study. Firstly, the characteristics of the sample are summarised based on the demographic information collected at the baseline assessment. The number of patients involved at each stage of recruitment is presented; the reasons for attrition and adaptations made to the recruitment process and group are outlined. The group attendance rates and number of completed outcome measures are presented. Means, standard deviations and effect sizes are calculated for the two outcome measures. The acceptability of the research process and group were analysed using the feedback questionnaires from the participants, which is presented along with the adverse events recording.

3.1 Feasibility data

3.1.1 Sample characteristics

Ten sets of 'Coping with Crisis' (CwC) groups were delivered for the purpose of this study. A total of 24 participants consented to take part in the current study, and they were split by gender in order to examine any differences in the data between these groups. This would further inform a larger trial. Seventeen participants (71%) were male, 7 (29%) were female. Due to the method of recruitment (convenience sampling), the number in each gender group is not representative of prevalence of self-harm behaviour in this study. The participants had a mean age of 36.3 years (SD = 8.8). All participants were admitted and staying on an inpatient ward at the time of recruitment, referred by a clinician to the research and reported to have experienced at least one episode of self-harm. Demographic characteristics are outlined in Table 5.

Table 5 S*ample characteristics at baseline (characteristic / gender)*

	Gender		
Characteristic:	Male (n = 17)	Female (n = 7)	Total (n = 24)
Mean age in years (SD):	35.8 (5.7)	37.4 (14.3)	36.3 (8.8)
Age range in years:	21-55	25-48	21-55
Ethnicity: *n* (%)			
White British	14 (82%)	3 (43%)	17 (71%)
'Mixed' ethnicity	0	2 (29%)	2 (9%)
Black British	0	1 (14%)	1 (4%)
Pakistani	1 (6%)	0	1 (4%)
White European	1 (6%)	0	1 (4%)
Jamaican	1 (6%)	0	1 (4%)
Polish	0	1 (14%)	1 (4%)
Education: *n* (%)			
Primary	0	1 (14%)	1 (4%)
Secondary School	4 (25%)	4 (57%)	8 (33%)
O-Levels / GCSEs	11 (65%)	2 (29%)	13 (54%)
A-Levels	2 (12%)	0	2 (9%)
Marital Status: *n* (%)			
Single	13 (76%)	4 (57%)	17 (71%)
Married	2 (9%)	2 (29%)	4 (17%)
Engaged	1 (6%)	0	1 (4%)
Divorced	0	1 (14%)	1 (4%)
Separated	1 (6%)	0	1 (4%)
Employment status: *n* (%)			
Unable to work	5 (29%)	4 (57%)	9 (38%)
Out of work	4 (25%)	2 (28%)	6 (25%)
Employed	7 (41%)	1 (14%)	8 (33%)
Self-employed	1 (6%)	0	1 (4%)
Diagnosis: *n* (%)			
BPD	3 (18%)	3 (44%)	6 (25%)
Psychosis	3 (18%)	2 (28%)	5 (21%)
Not known	2 (11%)	2 (28%)	4 (17%)
Depression	5 (29%)	0	5 (21%)
No diagnosis	2 (12%)	0	2 (8%)
Anxiety	1 (6%)	0	1 (4%)
ASC	1 (6%)	0	1 (4%)
Medication:			
Yes	13 (76%)	5 (71%)	18 (75%)
Mean days in current hospital stay (SD):	20 (SD, 36)	66 (SD, 41)	31 (SD, 42)
Previous admission:			
Yes	11 (65%)	6 (86%)	17 (71%)
More than 5 previous admissions	4 (24%)	5 (71%)	9 (38%)
Mean length of previous stays	30 (SD, 19)	66 (SD, 41)	44 (SD, 33)
Previous talking therapies			
Yes	7 (41%)	6 (86%)	13 (54%)

Notes. BPD = Borderline Personality Disorder, ASC = Autism Spectrum Condition

Table 5 displays the demographic information, which was reported by all the participants who consented to take part in the study (n = 24). It demonstrates that the most common ethnicity reported by the participants was white British (71%) and most of the participants reported to having completed their education to O-Levels / GCSE level (54%). Most of the participants reported to being single (71%) and not currently working (63%), although despite being in hospital, eight people (33%) reported to be in work.

The most common primary diagnosis reported among all the participants was BPD (25%), followed by psychosis (21%) and depression (21%). It shows that when comparing between genders, 29% of male participants reported to have a diagnosis of depression, compared to no female participants. Furthermore, 44% of women were diagnosed with BPD compared to 18% of male participants. From the whole sample (n = 24), 18 participants (75%) reported to be on at least one psychiatric medication. It also shows that female participants reported over three times higher average current stay in hospital (66 days), compared to male participants (20 days). Seventeen participants from the whole sample (71%) reported to have been admitted to a psychiatric hospital before. Of the people who reported having a previous stay in hospital, 38% of participants reported to have had more than five previous stays. The table shows that 71% of the female participants reported more than five previous admissions to hospital, compared to 24% of the male participants. Among the people who had reported a previous stay in hospital, 16 people were able to estimate the average length of their previous stays in hospital, which was 44 days (SD, 32.9), ranging from seven days (one week) to 120 days (four months).

Despite a majority of participants reporting to having been admitted to a psychiatric hospital before (17 participants, 71%), 13 of these people (76%) reported

not to have received psychological support prior to the group being offered in the current study.

3.1.2 Recruitment

The pre-determined recruitment window for this study was six months. In this time, the study was able to recruit a total of 24 participants. This was 80% of the target sample size (30 participants). The recruitment process was terminated prior to obtaining the target number of participants due to a pre-determined recruitment window (six months) lapsing. However, the number obtained meets the recommended size for a feasibility study sample in the literature (24-50 participants, Browne, 1995; Julious, 2005; Lancaster, Dodd & Williamson, 2004; Sim & Lewis, 2012).

Of the 63 people who were referred by clinicians as eligible for the self-harm intervention over the recruitment period, 43 people (68%) agreed to meet with a researcher. From the participants who agreed to meet with the researcher, 24 people (56%) consented to take part in the study. One participant was deemed to meet the inclusion criteria, but later it was established that they did not due to an absence of at least one incident of self-harm. However, this participant deemed themselves eligible for the study as they had experienced thoughts of self-harm, so they were included in this study. This person could not complete the ISAS at baseline due to it specifically requesting details of self-harm events.

A Consolidated Standards of Reporting Trials (CONSORT) diagram (Moher et al., 2009; Schulz, Altman & Moher, 2010) depicting participant flow from the start of the study to completion is included in Figure 1.

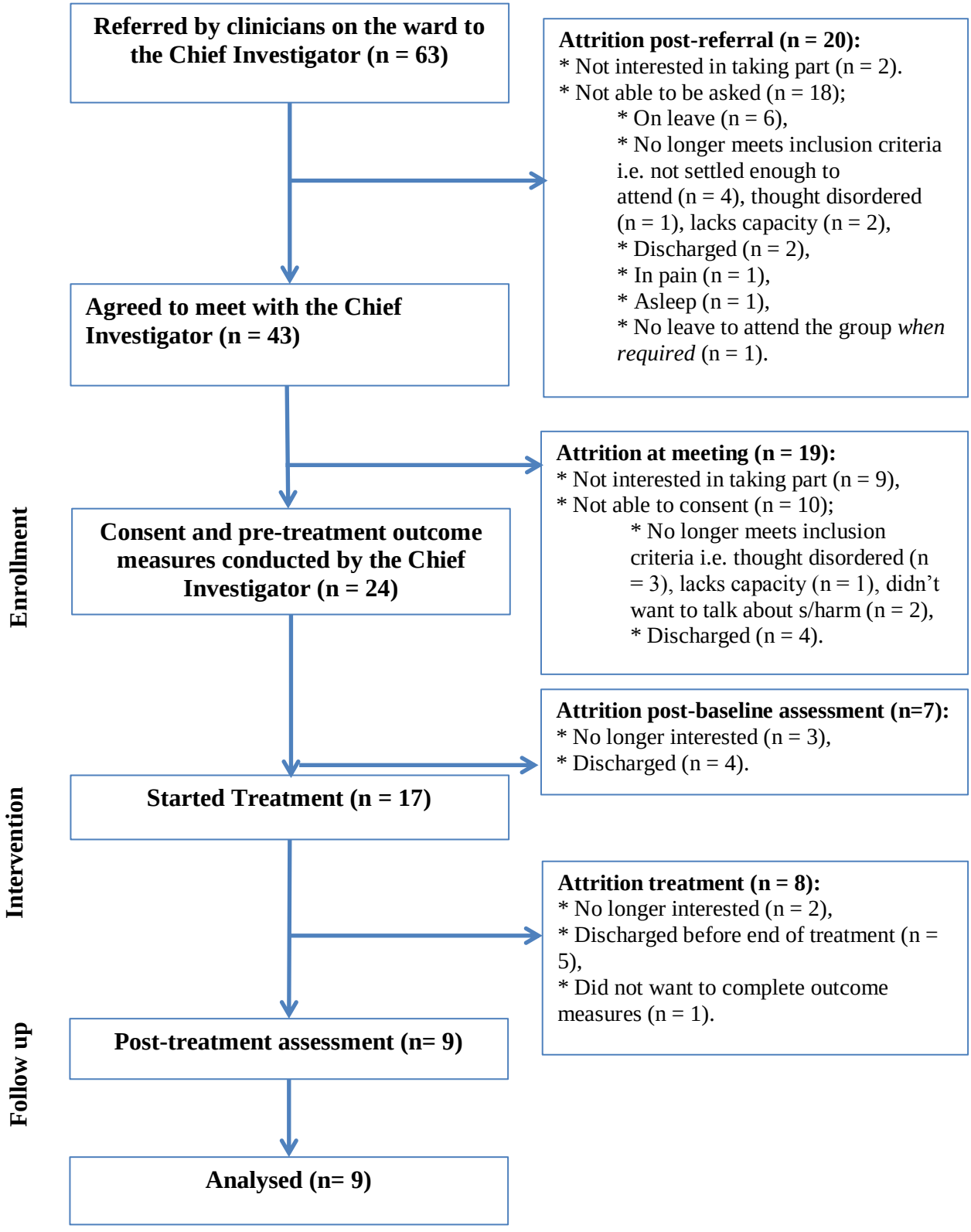


Figure 3. Flow diagram of participants progressing through the study.

3.1.3 Attrition post-referral

As demonstrated in the flowchart in figure 3, from the 63 patients who were screened as eligible to take part, 20 people (32%) did not consent to meet with the researcher. The reasons for not obtaining consent to meet with a researcher from these 20 people can be divided into two groups; those who actively declined to meet with the researcher (two people, 10%) and those who were not available to be asked (18 people, 90%). Of those who were not available to be asked, seven people (39%) no longer met the inclusion criteria (four people were deemed as not being settled enough to attend a group, two people were lacking capacity to consent to take part and one person was presenting as thought-disordered), six people (33%) were on leave, two people (11%) were discharged after initial screening but before being asked if they would like to take part, one person (6%) was in too much physical pain (due to digestion problems) to engage with the clinician, one person (6%) was asleep and one person (6%) did not have enough leave to attend when the groups were held off the ward.

As demonstrated in the flowchart in figure 3, from the 63 people who were screened as eligible, 43 (68%) agreed to meet with the researcher when a clinician initially presented the study to them. From this group of 43 people who attended the researcher meeting, 24 people (56%) agreed to consent and complete the outcome measures. From the 19 people (44%) who did not consent to take part when at the researcher meeting, nine people (47%) expressed that they were not interested in taking part in the group and 10 people (53%) were not able to take part. From these 10 people who were not able to take part, six people (60%) no longer met the inclusion criteria (one person lacked capacity, three people presented with thought

disorder, two people did not want to talk about their self-harm), four people (40%) were being discharged the same day or following day.

Further demonstrated in the flowchart in figure 3, once 24 people consented, seven people (29%) dropped out before treatment started, eight people (33%) dropped out during treatment. From the people who dropped out post-consent (n = 15), nine people (60%) were discharged and six people (40%) were not interested in taking part any longer.

3.1.4 Adaptations to recruitment method and group process

Several difficulties with recruiting participants to the study were identified during the recruitment period. These difficulties included lack of patient availability (lines 6-7, research diary in Appendix O), a lack of research team availability/flexibility (lines 22-26, research diary in Appendix O), patients not identifying with self-harm (lines 8-11, research diary in Appendix O), patient uncertainty over discharge dates (lines 12-14, research diary in Appendix O), self-harm not being present in notes when it has occurred (lines 19-20, research diary in Appendix O) and confusion for clinicians about the definition of self-harm (lines 51-55, research diary in Appendix O). Consequently, the following changes were made to the recruitment methods and group processes.

3.1.4.1 Availability of study team

The initial plan for group facilitation had been for two clinical psychologists to run the groups, with assistant psychologists and nurses screening potential participants on each ward. Due to early low recruitment rates, the study team (group facilitators and researcher) decided that the group could be made more flexible in order to increase

recruitment and engagement of participants. For example, it was found that the content could be adjusted in order to make it suitable for a low-intensity intervention. After the first set of groups were run, the assistant psychologists were trained by the clinical psychologist to facilitate this intervention. It was also found to be more efficient and flexible for the assistant psychologists to work in pairs to run groups continuously on each of their wards. As each group session was established to be 'stand-alone', the participants could consent at any time during the set of four group sessions and join an existing running set of groups allowing for easier recruitment. This allowed for higher recruitment after the first set of groups (see appendix O). In total, 10 sets of four, one-hour groups were run over 16 weeks. One set of groups (10%) was run by a clinical psychologist, one set of groups (10%) was run by a clinical psychologist alongside an assistant psychologist, and 8 sets of groups (80%) were run by two assistant psychologists working together.

3.1.4.2 Screening of participants

Potential participants were initially screened using only the risk assessments in the electronic clinical record. However, after the low recruitment to the first set of groups, a more detailed exploration in the notes was completed, which resulted in more patients found with a history of self-harm than had not been clearly evident in the notes on the first search of risk assessments. To maximise recruitment from screening, a plan was made to change the method of screening after the first set of groups to include searching patient progress notes for incidents of self-harm and asking the wider nursing team, in addition to checking the risk assessments. This change in method increased the likelihood of finding eligible people to recruit, which increased the numbers referred and consented.

3.1.4.3 Definition of self-harm

The researcher diary shows that the clinicians particularly expressed confusion about whether suicide attempts were to be included in 'self-harm behaviours'. In the UK, NICE (2011) argues against separation of self-harm and suicide attempts, while the US (APA, 2013) differentiate between them. This study found that in clinical practice, the clinicians on this ward (in the UK) tended towards the US guidance by distinguishing between the two behaviours (self-harm and suicide attempt). This issue of confusion around the definition of self-harm and the differences in how these behaviours are conceptualised and recorded in the clinical notes meant that there were potential eligible participants missed in the process of recruitment. In response to this, the researcher confirmed the definition of self-harm to screening clinicians ("self-poisoning or self-injury, irrespective of the apparent purpose of the act"; NICE, 2011) before screening took place. This change was implemented throughout the recruitment in the this after the first recruitment day in response to the clinician's questions.

In addition to clinician confusion, notes in the researcher diary (lines 8-11, research diary in Appendix O) demonstrate that some patients would deny harming themselves, despite it clearly being stated in their notes. By the second week of recruitment, clinicians had identified eight people who had harmed themselves, but four of these people (50%) had declined to attend the consent meeting due to not identifying with self-harm. This instigated concerns about the language around self-harm putting potential participants off taking part in the study.

In order to account for this, following the first day of recruitment to the first set of groups, it was decided by the study team (researcher and facilitators) that the group

would be introduced as "skills to help people cope with overwhelming emotions", offering "strategies to help when someone is in crisis". Self-harm was discussed in the researcher meeting and the participant information sheet was not adapted, but self-harm was made less of a central theme in initial discussions, the emphasis being focussed on coping with crisis emotions. The researcher still obtained agreement from the patient during the consent meeting that they had self-harmed, but this was done by asking them about their understanding of their behaviour and confirming with them that they had participated in acts to hurt themselves on purpose. This allowed the potential participant to understand the group better and hear the participant study information, before having to discuss and answer questions about their self-harm with the researcher. If the potential participant was not able to identify with the study aims and did not want to take part the meeting with them was terminated.

Further to this, a conversation with an assistant psychologist was recorded in the researcher recruitment diary (lines 102-105 in researcher diary, Appendix O), which raised concerns about how to explain the nature of the groups to other patients on the ward who were curious about the group. The difficulty was that if the assistant had explained to the other patients that it was a 'self-harm group', they would be disclosing that the attendees had self-harmed, thus breaching confidentiality of the participants in the group. Following this, at the same time as the recruitment meeting was changing, the group was renamed the 'Coping with Crisis' (CwC) group.

3.1.5 Group attendance rates

Once consented, all 24 participants were invited and encouraged to attend all four groups offered to them over the following two weeks. Attendance to groups could be a tentative indicator of whether the participants found the group useful. However, due

to the nature of the inpatient setting, there are other reasons for non-attendance; table 6 demonstrates the cumulative attendance rates of participants to the groups. Figure 4 includes reasons recorded by the participants for non-attendance to the groups. Out of the 24 people who were consented to start the groups, seven participants (29%) did not attend any groups after consenting to take part. Out of these seven people (29%) who consented but did not attend any groups, three participants (43%) decided not to attend the groups, despite still being treated on the ward, three participants (43%) were discharged before the first group and one participant (14%) was away from the ward without being granted leave (away without leave; AWOL), and therefore was not on the ward when the groups met.

Table 6

Coping with Crisis (CwC) group cumulative attendance numbers and percentages

0 Groups	1+ Group	2+ Groups	3+ Groups	4 Groups
N (%)	N (%)	N (%)	N (%)	N (%)
7 (29%)	17 (71%)	12 (50%)	5 (21%)	2 (8%)

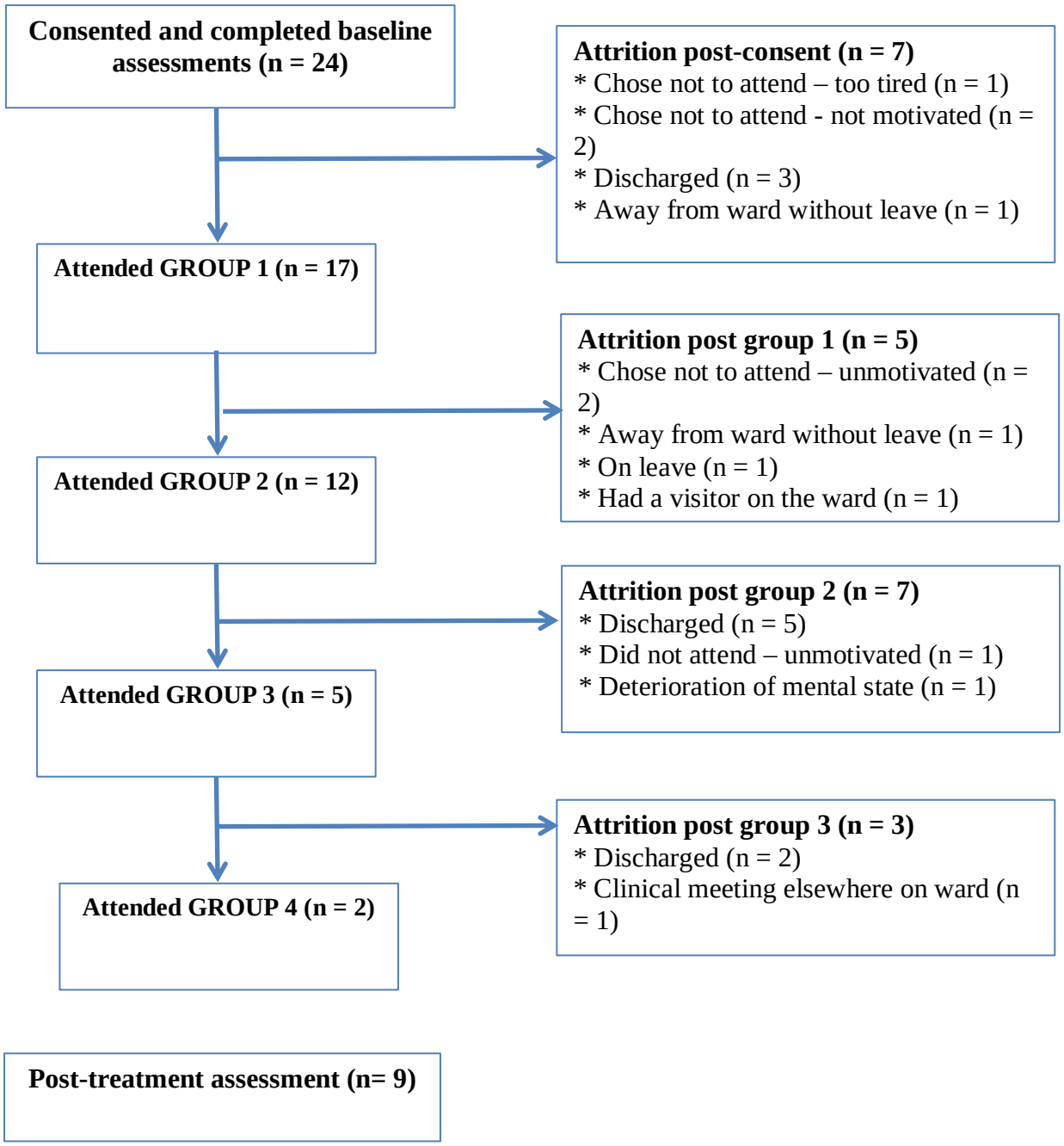


Figure 4. Flow diagram of participants progressing through the groups

Out of the 24 consented participants, 17 participants (71%) attended at least one group. Following their attendance to one group, five people (29%) did not come to a second group. Three of the people who did not attend a second group (60%) reported

that they were not interested in attending any further groups, despite still receiving treatment on the ward, one person (20%) was on leave and one person (20%) had a visitor to the ward at the time of the second group. This left a remaining 12 participants (50%), who attended at least two groups. Following attendance to a second group, seven participants (58%) did not make it to a third group. Five of these participants (71%) were discharged before they could attend a third group, one participant (14%) reported to be unmotivated to attend and one participant (14%) experienced a deterioration of their mental state, which precluded them from attending a further group. This left five participants (21%) who attended at least three groups. Following this, one person (20%) had a meeting during the final group and two people (40%) were discharged before they could attend a fourth group. This meant that only two people (8% of the full sample) attended all four groups. Overall, being discharged from the ward accounted for the most common reason people did not attend the groups (45%), being tired or unmotivated to take part accounted for the next highest reason people excused themselves from groups (27%), followed by people having other commitments, such as meetings or being on leave from the ward (23%) and lastly the deterioration of mental state exempted one person from attending groups (5%).

The study aimed to have groups containing three to eight people, following a recommendation by Yalom and Leszcz (1995). However, some of the groups in this feasibility study had only one person in attendance and the maximum number of participants in a group only ever went up to four people.

3.1.7 Outcome measures

The participants were asked to complete a demographic information sheet, two

outcome measures (ISAS and DTS) at baseline and after the intervention and a feedback questionnaire.

Table 7

Completion rates of researcher administered data collection at baseline and post-intervention time points.

Measure	Baseline (n = 24) (n, % complete)	Post intervention (n, % complete)
Demographic information	24 (100%)	-
ISAS Section 1	23 (96%)	9 (38%)
ISAS Section 2	22 (92%)	9 (38%)
DTS	24 (100%)	9 (38%)
Feedback	-	9 (38%)

As table 7 demonstrates, out of the 24 participants who consented to the study, 24 people completed the demographic information, 23 people completed section one of the ISAS baseline measure, one person could not complete due to no previous incidents of self-harm. It was found that the participant had been screened in to the study, despite not meeting the eligibility criteria, due to them having thoughts of self-harm. The participant also considered themselves to be suitable for the group, so it was left open for them to continue to take part. One additional person refused to finish the questions in section two (function of self-harm) due to distress of talking about their self-harm, therefore 22 people completed section two of the ISAS. The DTS baseline measure was completed by all 24 (100%) participants. Of the 24 people who consented to take part in the study, nine participants (38%) completed post-intervention outcome measures and feedback questionnaires, which meant 15 participants (62%) were not able to complete the post-intervention outcome measures.

Of these 15 participants, six people (40%) decided not to complete the measures despite remaining on the ward for treatment, eight people (53%) were discharged before they were asked to complete the measures, one person (7%) was not able to complete the measures due to deterioration in their mental state.

3.1.8 Analysis

Given the low post-intervention measures completion rates (38%), resulting in a high level of missing data, the analysis of the pre and post outcome measures was limited to descriptive statistics presented below.

The participants were asked to complete the Inventory of Statements about Self-Injury (ISAS; Klonsky & Glenn, 2009). This measure requires the respondents to select the method of self-harm behaviour they have used in their lifetime (i.e. cutting, scratching, pinching) and how many times they have used each one. Most of the sample found it difficult to estimate how many times they had used the method listed, so when they indicated that they had used the method at least once this was recorded, the answers given at baseline are summarised in table 8.

Table 8

Lifetime frequency of self-harm from the Inventory of Statements about Self-Injury, Section 1

Type of behaviour	Used at least once (%)
Cutting	20 (87%)
Swallowing (inc. overdoses)	13 (57%)
Banging or hitting self	10 (43%)
Severe scratching	6 (26%)
Interfering with wounds	6 (26%)
Biting	5 (22%)
Burning	5 (22%)
Rubbing skin against rough surfaces	4 (17%)
Carving	3 (13%)
Pinching	3 (13%)
Needle sticking	2 (9%)
Hair pulling	2 (9%)

Five additional questions in section 1 of the ISAS measure descriptive and contextual factors. The participants were asked whether they experience pain when self-harming. Of the 24 participants, 14 people (58%) answered that they do not feel pain when they self-harm, seven people (29%) answered ‘yes’ and three people (13%) were not sure how to answer this. Within this section, they were asked whether they are alone when they self-harm; 20 people (83%) in this sample said yes, they were alone when they self-harmed, the remaining four people (17%) said they were sometimes with people. The participants were also asked whether they would like to stop harming themselves, 20 people (83%) replied ‘yes’, two people (8%) were ‘unsure’ and one person (4%) said ‘no’.

If the participants endorsed at least one form of self-harm, then they are asked to complete section two of the ISAS. Despite one episode of self-harm being a criterion

for eligibility, one participant consented, but then did not endorse any form of self-harm. This section of the ISAS has been developed to comprehensively assess the functions of self-harm (Klonsky & Glenn, 2009). Twenty-three participants (96%) completed this section at baseline and nine participants completed this section post-intervention. The statements measure thirteen different functions of self-harm as listed in table 6 and also give the participants an opportunity to contribute their own function if it is not listed. Six participants (26%) did contribute further suggestions, which are listed in table 9.

Table 9

Other functions of self-harm suggested in the ISAS section 2

Participant	Suggested function for self	Suggested function for others
13	"*To get attention*"	"*Obeying voices*"
41	"*I can't remember what I am doing*"	
42	"*Blocking out thoughts*"	
46	"*Frustrated with voices in my head*"	
58	"*Getting out of problems*"	
	"*Having no other option*"	
	"*Nowhere else to run*"	
59	"*Having an outlet for my upset*"	

Table 10 summarises the descriptive data obtained from both outcome measures. This table includes the mean and standard deviations of each module in the DTS (tolerance, absorption, appraisal and regulation) and function in the ISAS (affect regulation, interpersonal boundaries, self-punishment, self-care, anti-dissociation, anti-suicide, sensation seeking, peer-bonding, interpersonal influence, toughness, marking distress, revenge and autonomy). There were a low number of completed

follow-up measures (n = 9); therefore, meaningful conclusions cannot be drawn from the results. However, there are some changes in the answers after the intervention that could be of interest for further study.

Table 10

Descriptive statistics for outcome data

	Baseline Mean (SD)	Post-test Mean (SD)	Mean difference	Effect size	Confidence intervals
ISAS; Function					
-Affect Regulation	3.1 (1.9)	2.6 (2.2)	-0.5	r = -.25	-1.02 – 0.53
-Interpersonal boundaries	0.6 (0.9)	1.6 (2.6)	1	r = .64	-0.17 – 1.41
-Self-Punishment	3.4 (2.2)	3.3 (2.0)	-0.1	r = -.05	-0.82 – 0.73
-Self-Care	1.0 (1.6)	1.7 (1.9)	0.7	r = .41	-0.38 – 1.19
-Anti-Dissociation	1.6 (1.8)	2 (1.5)	0.4	r = .23	-0.55 – 1
-Anti-Suicide	2.4 (2.2)	3.6 (2.1)	1.2	r = .55	-0.25 – 1.32
-Sensation-Seeking	0.7 (1.3)	0.9 (1.4)	0.2	r = .15	-0.63 – 0.92
-Peer-Bonding	0.0 (0.0)	0.6 (1.3)	0.6	r = .88	-0.05 – 1.66
-Interpersonal influence	1.1 (1.4)	1.8 (2.3)	0.7	r = .41	-0.38 – 1.18
-Toughness	0.4 (1.0)	1.2 (1.5)	0.8	r = .69	-0.12 – 1.47
-Marking Distress	1.4 (1.3)	2.0 (1.7)	0.6	r = .42	-0.37 – 1.19
-Revenge	0.3 (0.7)	0.2 (0.7)	-0.1	r = -.14	-0.92 – 0.64
-Autonomy	0.2 (0.4)	0.9 (1.6)	-0.7	r = .77	-0.05 – 1.55
DTS					
-Tolerance	6.9 (3.6)	6.4 (3.0)	-0.5	r = -.14	-0.91 – 0.63
-Absorption	6.1 (4.0)	6.7 (3.2)	0.6	r = .16	-0.61 – 0.92
-Appraisal	16.7 (7.5)	14.1 (3.8)	-2.6	r = -.39	-1.15 – 0.4
-Regulation	7.7 (4.7)	6.9 (3.3)	-0.8	r = -.18	-0.95 – 0.59

For this group of participants (n = 9), the results show that at baseline the most

common function of self-harm the study sample endorsed was 'self-punishment' (M, 3.4; SD, 2.2), followed by 'affect regulation' (M, 3.1; SD, 1.9). The results also show an increase between the baseline and post-intervention measures of the reported function of self-harm 'to create a boundary between the participant and others' (1, *r* = .64, -0.17 – 1.41) and 'to bond with peers' (0.6, *r* = .88, -0.05 – 1.66). The increase in both of these functions may demonstrate an improved awareness of the impact of their self-harm on their relationships with others (distancing or bringing closer through their self-harm behaviours). There was also an increase in reporting self-harm as a way to manage suicidal thoughts (1.2 *r* = .55, -0.25 – 1.32), which may demonstrate an acknowledgement of their suicidality and the use of their self-harm in relation to this. These results may indicate an increased awareness of the function of self-harm following the group or greater willingness to report this behaviour.

Further to this, the score for the way the participants *appraised* their tolerance of distress in the DTS decreased after the intervention (-2.6, *r* = -.39, -1.15 – 0.4). This could mean that the participants who completed the post-intervention measures are more aware of their distress, but this did not accompany a change in how they felt they *tolerated* (-0.5, *r* = -.14, -0.91 – 0.63), *regulated* (-0.8, *r* = -.18, -0.95 – 0.59) and *absorbed* (-2.6, *r* = -.39, -1.15 – 0.4) the distress, which were shown to have small effect sizes. The results of these measures may also be used to estimate parameters for a larger trial. Further debate on the possible conclusions from the results of these outcome measures is presented in the discussion section of this thesis.

3.1.9 Acceptability of the intervention and study procedures

Acceptability of the intervention and research procedures was measured using adverse events recording and feedback questionnaires. The feedback questionnaire

asked the participants to comment on their experience of the group and the research process separately.

3.1.9.1 Adverse events

Clinicians were asked to monitor any adverse events that happened as a result of the novel psychological group intervention (Appendix N). This practice is compliant with good clinical practice and is used to assess any potential (unexpected) impact or risk of the group to the clients. The intention was also to assess the feasibility of using the forms for a larger trial. The purpose of this in clinical practice is for patients to be able to make informed decisions when they are opting in to a psychological treatment, having full knowledge of all the potential side effects and to facilitate clinical decision-making. As this is a feasibility trial, it was important that this information was collected in order to collect data about any negative consequences as well as the data collected to ascertain whether it has a positive impact. Fortunately, clinicians reported no adverse events, therefore the forms were not used, so were not fully tested for this purpose in this study.

3.1.5.2 Preliminary feedback on the intervention

The questions used in the feedback questionnaire were related to gaining an understanding of whether the group intervention and research process under investigation was feasible from the point of view of participants attending the group. Inductive content analysis was the method chosen so that a systematic approach could be taken to analysing the open-ended questions provided in the feedback questionnaire. All nine participants who completed the post-intervention outcome measures also completed the feedback questionnaire.

The feedback questionnaire started by asking participants what they found helpful about the 'CwC' therapy groups. Figure 5 demonstrates the answers given by the participants, showing that there was some agreement in what they found helpful. Three people (33% of respondents) named "mindfulness" as a helpful aspect of the group intervention, one person (11%) named 'distress tolerance cards', and two people (22%) reported the "strategies" given overall were helpful. These answers demonstrate that participants found the *strategies* within the intervention particularly helpful, rather than other aspects of the group process, such as the sharing / hearing of the experiences of others.

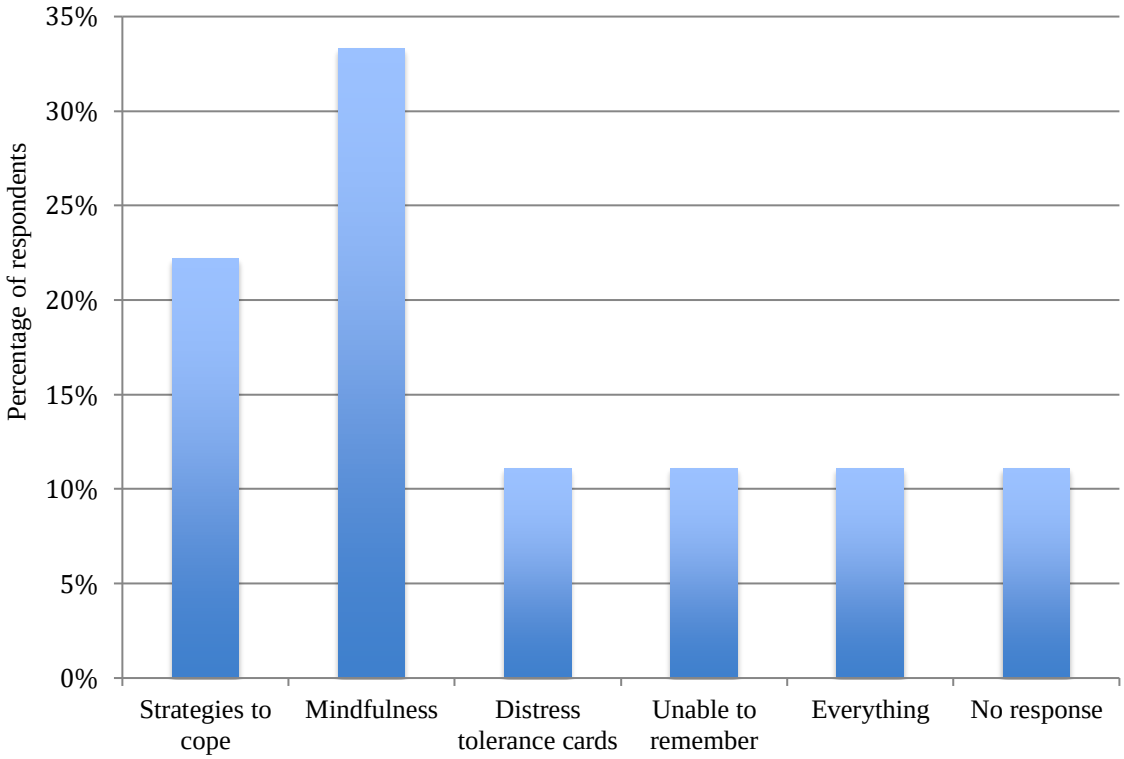


Figure 5. Feedback of helpful aspects of the Coping with Crisis (CwC) group

Next, the participants were asked what they found unhelpful (figure 6) about the group intervention. Out of the nine people who agreed to fill in the questionnaire, five

people (56%) left this question blank, three people (33%) answered 'nothing' was unhelpful and one person named mindfulness as not very helpful. This demonstrates that most of the participants (88%) who contributed to the feedback could not name any part of the intervention that was unhelpful. Only one person (11%) felt that mindfulness was unhelpful.

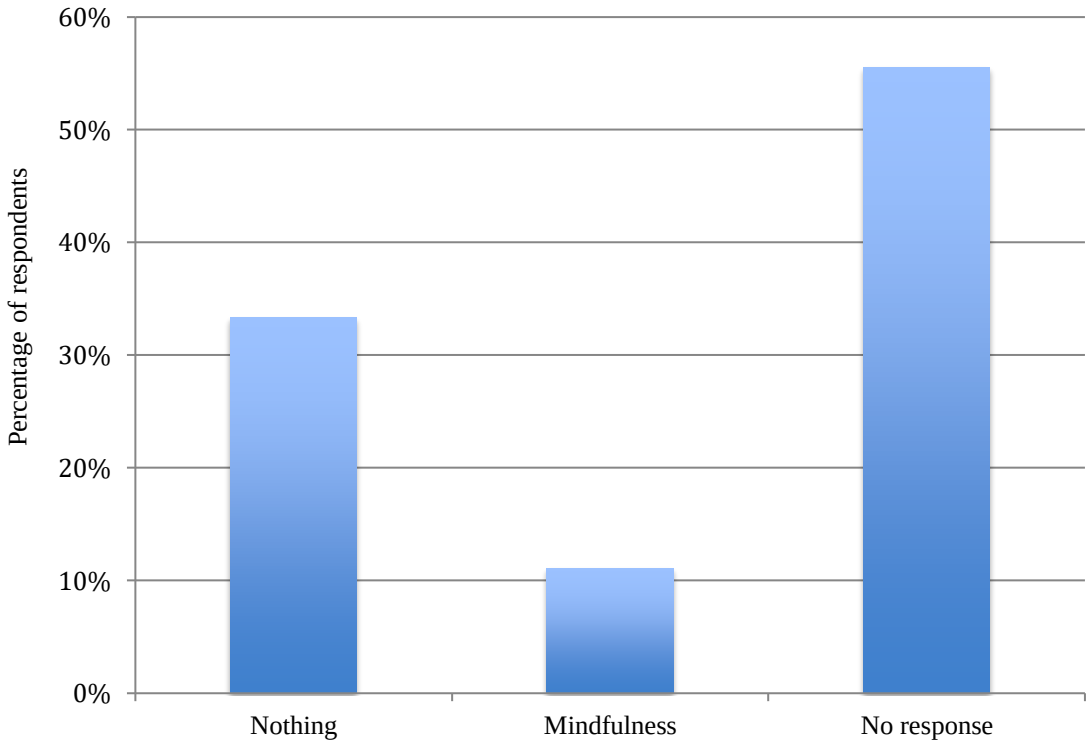


Figure 6. Feedback of unhelpful aspects of the Coping with Crisis (CwC) group

When asked what could be improved in the intervention (figure 7), three participants did not respond (33%), two (22%) said no improvement was needed, two people (22%) felt that the group did not feel safe at times, one person (11%) said they would like more individual help and one person (11%) thought there should be more content about self-harm. The highest number of participants did not respond with any suggestions about how the group could be improved (33%), which could indicate that

people did not think there was any way the content could be improved, or that they could not think of any ways it could be improved. Four people (44%) gave responses that made suggestions about possible improvements to the group compared to three people (33%) responding that no improvement was needed.

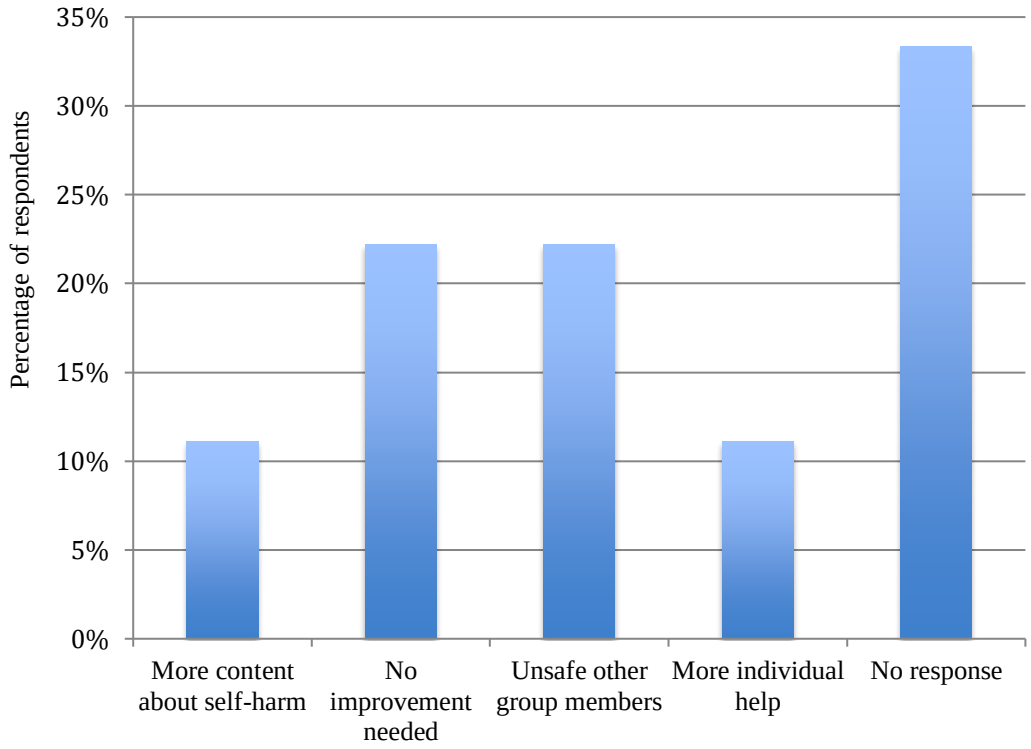


Figure 7. Feedback of possible improvements in the Coping with Crisis (CwC) group

The questionnaire went on to ask how many times the participants had harmed themselves since completing the group intervention. Most of the participants (five people, 56%) said that they had not harmed themselves since attending the groups. Two people (22%) did not respond to this question, one person (11%) said twice and one person (11%) said 10 times.

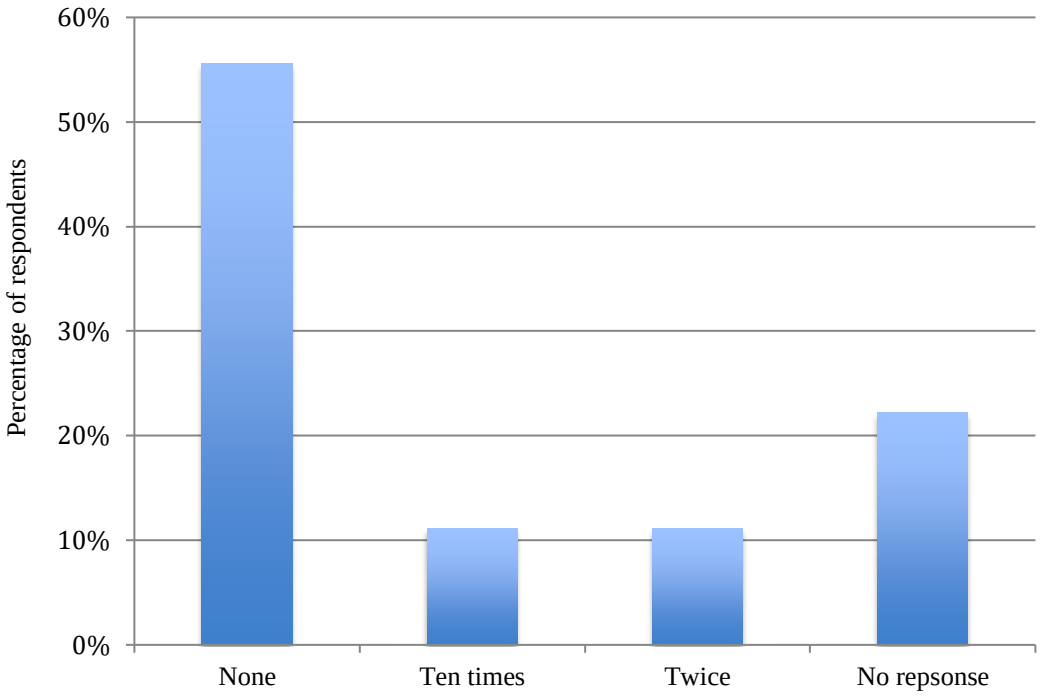


Figure 8. Feedback on number of self-harm events since the Coping with Crisis (CwC) group

The next question asked whether the participants thought they had been able to manage difficult times differently since completing the groups. Three people (33%) did not respond, three people (33%) said they had managed to react differently to difficult experiences, two people (22%) said ‘no’ and one person said they had ‘not yet’ managed to respond differently.

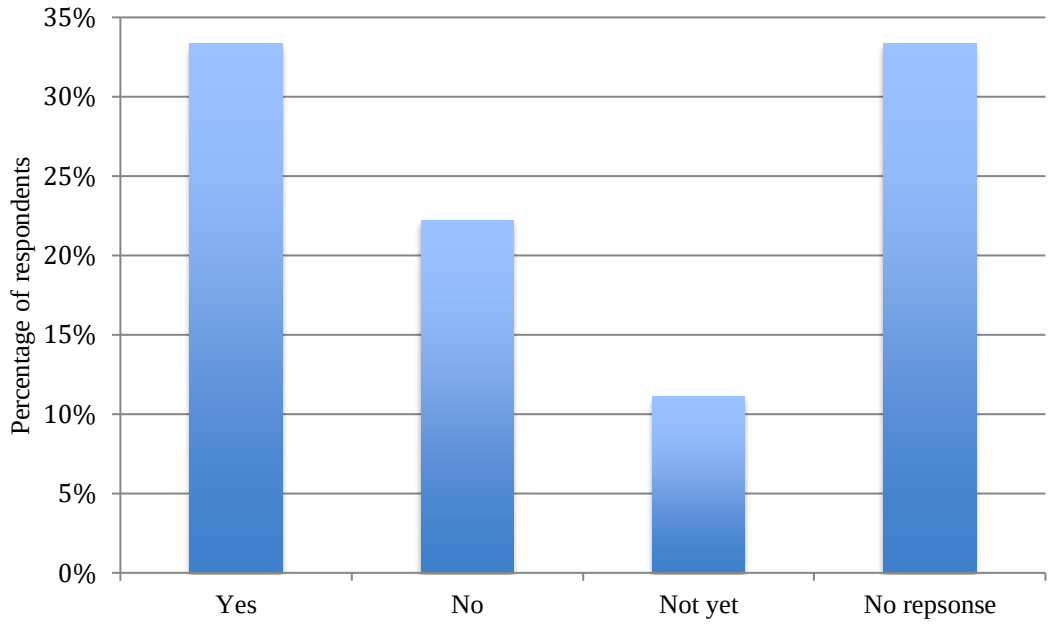


Figure 9. Feedback on if respondents used the group skills from the Coping with Crisis (CwC) group

If the respondents had said "yes" to the previous question (above), in the next question they were then asked *how* they had managed things differently since the group ended. Three people (33%) said "yes" to the previous question and all of them responded to the next question. Participant 13 wrote; "I no longer feel affected by voices", participant 42 wrote that their "feelings of suicide have gone", and participant 58 was hopeful that the "reminders" provided by the group "will help me". Only participant 58 directly referred to the possibility that the group might be helpful for how they manage difficult times. Participants 13 and 42 referred in this question to their "voices" and "feelings of suicide" no longer being present. This could be an indication that the group helped them with the reduction of these symptoms, but they did not directly refer to the group in this way.

3.1.9.2 Preliminary feedback on the research process

When asked about the research process, particularly what they found difficult (figure 8), three of the participants (33%) answered that they were "not sure". Two people (22%) said they found the experience of being with others difficult, which may have been referring to the group rather than the research process, indicating that some of the participants had misunderstood this question. One person (11%) said that the research process had meant "talking about difficult things", one person (11%) said the research part was "too long", one person (11%) said they had found "nothing" difficult about the research part and one person (11%) did not respond. The responses to this question indicate a bit of confusion for the participants about which part of the process they were giving feedback on.

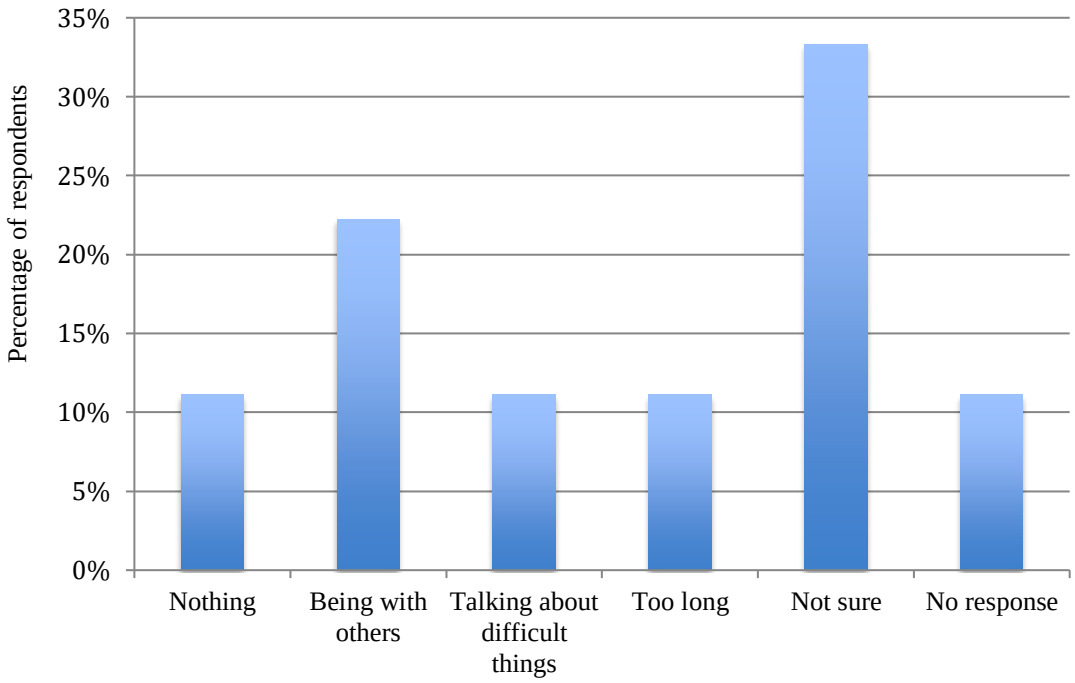


Figure 10. Feedback on difficulties in the research process

Lastly, the participants were asked if they could suggest any improvements to the research process. Five people (56%) said that they could not suggest any improvements, one person (11%) thought it could have been shorter, one person (11%) did not feel it was relevant to them ("N/A") and one person (11%) did not respond.

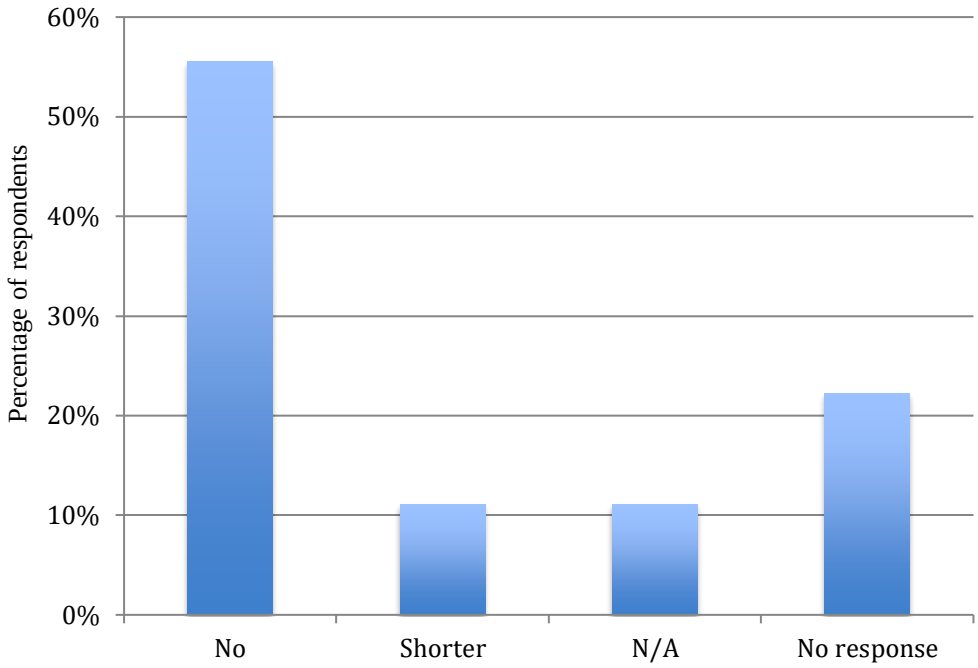


Figure 11. Feedback on improvements to the research process

3.1.9 Summary

The results in this section outline the sample characteristics and the factors used to measure the feasibility of this study to determine the parameters and possibility of a larger clinical trial for evaluating the efficacy of a novel intervention for self-harm.

The recruitment in this study was challenging, it took longer than expected and the number of participants able to be recruited was less than initially expected. The researcher diary (Appendix O) found that there were a several factors affecting

recruitment initially, including i) availability of the study team, ii) screening methods, and iii) inconsistencies with the conceptualisation of self-harm by patients and clinicians. Adaptions were made to improve the outcomes of this feasibility study and to further understand the optimum methods to use for future research.

Although the completion of post-intervention outcome measures and group attendance rates were low, and it was a self-selected sub-group of the initial sample, the people who gave feedback about this had more positive elements to comment on than negative. Only one person indicated that they did not want to take part in the study because they were uncomfortable with talking about their self-harm. One further person did not want to continue to answer questions about their self-harm, therefore did not complete the ISAS, section 2.

Means, standard deviations and effect sizes are calculated for the two outcome measures, which demonstrated no significant difference between before and after the intervention, therefore obtaining effect sizes in this study was not possible. However, the study has provided the means and standard deviations for this sample.

The acceptability of the research process and group are analysed using adverse events recording and participant feedback questionnaires. There were no adverse events recorded, which indicates that no incidents were linked with the study in the study time period. The participant feedback gave the participants an opportunity to voice any concerns they had about the study, unfortunately this could only be completed by 38% of the full sample. This feedback was also limited to a questionnaire, which could only give limited information within the structure of the questionnaire.

Chapter 4.

Discussion

Overview

The current chapter will discuss the findings from this feasibility study. The strengths and limitations of the design will be discussed, and suggestions for future research will be made. Lastly, the implications of this project for the literature and current clinical practice will be outlined.

This project aimed to take a critical realist approach; as such the findings discussed in this section are aimed at offering possibilities for future research without presuming that they represent factual information about the reality of the concepts or people involved in the research. Furthermore, the chapter considers the possible implicit assumptions made in the literature and in clinical practice about the people and behaviours at the centre of this research, including the guidelines that influence this.

4.1 Aims of project

The overall goal of this project, as with all feasibility studies, is to answer the question *"can this study be done?*" (National Institute for Health Research, NIHR, 2012). To answer this, feasibility studies make it possible to design a study that tests the research methods that are required. These studies can then provide a description of possible adaptations that can be made in order to improve outcomes for a larger trial.

Currently, there is a lack of research providing evidence to guide clinicians when treating adults who self-harm (Turner, Austin & Chapman, 2014). In particular, the literature review conducted at the start of this study demonstrates that there are currently no RCTs conducted on inpatient wards to evaluate the efficacy of a

treatment for self-harm in adults. Given that self-harm is one of the most common reasons for people to be admitted to psychiatric inpatient services (Bowers, 2005; Sansone, Songer & Miller, 2005), it seems important that research for a suitable, evidence-based treatment to address self-harm behaviours is conducted.

In line with CONSORT guidelines (Eldridge et al., 2016), this study aimed to provide feasibility data on recruitment, retention and outcome measure completion required in order to design a main study evaluating a self-harm intervention on a psychiatric inpatient ward. To do this, the current study listed the parameters that were important to examine. Investigations were carried out into the practical considerations and decisions about how to run the intervention and conduct the research process were made, while monitoring the impact of adaptions made. This study also allowed for the experience of the participants to be examined through open-ended questions in a feedback form.

4.2 Summary of findings

This study examined the feasibility of a DBT-informed 'Coping with Crisis' (CWC) group (protocol presented in appendix K, informed by the DBT manual by Marsha Linehan, 2014) through implementing the intervention on an inpatient ward, measuring recruitment rates, retention rates and outcome completion. The results of this feasibility study indicate that within the clinical, inpatient environment it was practically possible and acceptable to clinicians and participants to hold four one-hour DBT-informed groups and to conduct the research study in the inpatient setting. There were no adverse events reported to occur during the groups and research process. However, this study also found that in six months a total of 24 participants (only 80% of the target sample size) were recruited.

The reasons behind low recruitment rates were initially found to include the lack of availability of the study team, preliminary screening methods, and inconsistencies with the conceptualisation of self-harm in patients and clinicians. Some adaptations were made to the method to rectify these, however it was found that the problems with the conceptualisation of self-harm were particularly difficult to overcome. In addition, the high rate of dropout during the groups and at post-intervention data collection meant that there would be less chance of gaining meaningful outcomes for a larger trial. The low predicted recruitment rates from inpatient wards in this study, small group sizes and difficulty in maintaining the sample size over the study period indicates a potential risk of bias when conducting a larger trial. These factors have meant that overall it was not possible to deem the study *feasible* in the current form. However, this study can be used to determine what changes could be made to the method in order to make it feasible (recommendations outlined for future research later in this chapter).

4.2.1 Recruitment

Firstly, this study was not able to recruit to target within the pre-defined recruitment window (six months). Adaptations were made to the research methods in response to this in order to improve the recruitment capability. For example, assistant psychologists were trained to run the group to increase flexibility of the group times, screening methods were made more comprehensive, and self-harm was defined for clinicians. However, despite these changes the study only recruited 80% of the target number of participants. Future research should consider a longer recruitment time frame, increased availability of the research team to conduct the research and facilitate the groups, a wider recruitment pool by accessing more wards and focus on

the importance of consistency in the conceptualisation of self-harm.

The conceptualisation of self-harm was found to be problematic in this study from the beginning of the recruitment process for both the clinicians and participants. Despite attempts to overcome this by taking care to define self-harm to clinicians and carefully introducing the idea to potential participants, it continued to have a significant impact on both screening participants and recruiting them at consent meetings (notes available in researcher diary, Appendix O).

As outlined in the introduction chapter of this thesis, the difficulty with the conceptualisation of self-harm is not a new subject in the literature. Inconsistencies in defining self-harm have had a significant impact on the collection of self-harm data and the quality of research in this field (Muehlenkamp, 2005; Ougrin & Zundel, 2009; Turner, Austin, & Chapman, 2014; Washburn et al., 2012). Therefore, the current research findings are in line with previous literature, which suggests that the on-going debate and resulting inconsistency in the definition of self-harm is a significant barrier to the progress of research and clinical care in this field (NICE, 2011).

In light of this, it is important to consider ways of overcoming this issue for future research trials and how it can be managed in a clinical environment. The clinical impact of the introduction of 'non-suicidal self-injury disorder' (APA, 2013) in the USA is debated in the literature. Many believe that a clearly defined diagnosis improves the ability to differentiate self-harm behaviours from BPD (Zetterqvist, 2015). It could also provide a research or inpatient team with a clear idea of what constitutes 'self-harm', rather than being uncertain about whether to use the definition from the USA (APA, 2013) or the UK (NICE, 2011). However, there is also a vast amount of literature countering this in expressing the possible dangers of 'over-diagnosing', which include increased stigma associated with being labelled as

'mentally ill' (Moynihan, Doust & Henry, 2012). In research trials, it would be recommended that clinicians screening participants are very clear on the definition of self-harm from the offset. This issue may be more difficult to change in clinical practice and further understanding of this is beyond the scope of this thesis, however future research should be focussed on what the impact of this inconsistency is and how it may be overcome.

In addition to the clinicians' difficulty with the definition, the participants were also found to be uncertain about what constitutes self-harm. Once they were referred to the study by clinicians, the researcher found that several male participants denied that they had 'self-harmed', despite evidence suggesting that this was the case in their patient records (lines 8-10, appendix O). Bowen and John (2001) found that when looking at gender differences in self-harm, rather than self-harm being more prevalent in females (as was previously believed, Fox & Hawton, 2004), males tend to use particular methods of self-harm that were related to anger and aggression, which is not universally understood as self-harm in the same way as cutting is viewed. Considering this definition of self-harm, which includes aggressive acts, less difference in prevalence between genders was found (Bowen & John, 2001). Males are also found to be more likely to attempt suicide (Hawton, Zahl & Weatherall, 2003), which, despite the UK definition as included in self-harm behaviours, many people do not associate with self-harm. This study found that male participants do not identify with self-harm as a behaviour they take part in, due to their conceptualisation of the behaviour (lines 8-10, appendix O).

The observation of this issue led to an adaptation of the recruitment method (fully explained in the results chapter). Based on these findings, future research should focus on the dimensional nature of self-harm. This research should consider an

exploratory study aimed at examining people who self-harm view and understand the meaning of their self-harm. Furthermore, future studies should consider carefully the definition of the behaviour under study and should involve service users in the design of the research to aid the use of a broader conceptualisation of self-harm behaviours in line with the NICE guidelines (2011). Within the research exploring the definition and subjective experience of self-harm, there should be consideration given to the positionality of the people involved in the research. Further exploration is required in terms of the connection between self-harm and gender. Consideration should also be given to varying perspectives, including experts by experience and experts by profession, enquiring what is different here and why.

4.2.2 Attrition rates

The intervention had a high attrition rate of 62%, based on the participants who consented to take part but had dropped out by the post-intervention outcome measures. This attrition rate is higher than previous small-scale inpatient intervention studies in the literature. Booth et al. (2014) reported 49% and Gibson et al. (2014) reported 37% of their recruited participants were lost to post-intervention follow-up. Of the participants who dropped out of the current study between consent and administration of post-treatment measures (62% of full sample), 60% of the drop-out was due to being discharged from hospital and 40% reported that they were not interested in taking part any more. Booth et al. (2014) and Gibson et al. (2014) also found that discharge from hospital was the main reason for drop-out from the research. It had been thought that the current study's shorter timescale (two-week intervention) in comparison to Gibson et al.'s (2014) six-week intervention, would mean there would be fewer dropouts due to discharge of participants from the ward.

However, unexpected discharge leading to non-attendance to treatment groups remained problematic despite the shorter time scale of the intervention.

The degree of adherence to an intervention has a significant influence on the quality of assessment for intervention efficacy and would therefore be problematic in a large randomised trial. This finding emphasises the importance of assertive follow-up in the community setting in future trials, which would require availability of researchers and clinicians who are able to be flexible to provide this. It would be important to follow the participant into their community setting to continue the treatment and research measures.

For other possible reasons for dropout, previous literature and theories can be used to further understand the client group under study and how aspects of the presentation at this time could contribute to the high attrition rate. The literature suggests people who self-harm have had difficult early experiences and a vulnerability, which results in difficulty with regulating emotions and tolerating distress (Linehan, 1993). The point at which people are admitted to an inpatient ward represents a time of crisis for the person (Bowers et al., 2005). The current study approached people at this crisis point. Therefore, to attend four group sessions reliably over two weeks represents an understandable challenge for people in this situation and with a high level of distress that they inherently find it difficult to tolerate.

These individual aspects of the participants' presentation were mentioned as a factor that may be contributing to low recruitment and high attrition rates by clinicians during the study (see recruitment diary, Appendix O). Therefore, it would be important to take these participant factors into account when designing a further study of this kind. It would be particularly helpful to recruit clinicians on the ward to help the participants attend the groups. For example, reminding them about the group

before they go on leave, encouraging them to get out of bed to attend the group or arranging ward meetings around the times of the group.

4.2.3 Outcome measures

Overview

The aim for feasibility studies is not for outcome measures to be used to assess the efficacy of the intervention, but rather whether the measures are acceptable and feasible given the context of the study (CONSORT guidelines; Eldridge et al., 2016).

Due to problems with recruitment and retention with a relatively small sample, limited analysis could be conducted. However, the outcome measures could be used to ascertain the feasibility of administering measures about self-harm to an inpatient population. The response of the participants to the number, length and subject of the measures was monitored during the study. At baseline, all the outcome measures were completed in full by 22 of the participants (92%), despite it being emphasised by the researcher that they were not obliged to complete them. The feedback from the participants after the intervention and post-intervention measures suggested that only one person (11% of respondents) felt the research process was “too long”.

It was found that the main reason for drop-out before the post-outcome measures were completed was participants discharge from the ward. With these findings in mind, the outcome measures element of the research process was deemed to be feasible to administer in this setting and acceptable to the recipients. In fact, consideration could be made for additional measures to be used in order to gain more meaningful information on the mediators of change in future research. The following section will further discuss in detail the use of the outcome measures and results of these.

4.2.3.1 Demographics information

All participants (100% of the study sample) completed the demographics information. This information allowed for the findings to include more information about the people who self-harm on the inpatient ward. These participants have experienced at least one episode of self-harm and have opted in to trialling a form of treatment that addresses their self-harm.

The demographic data demonstrated that only 25% of the whole sample reported to have been given a diagnosis of BPD, despite much consensus in the previous literature that the association between BPD and self-harm is much higher (Andover, Pepper, Ryabchenko, Orrico, & Gibb, 2005; Glenn & Klonsky, 2009; Jacobson et al., 2008; Klonsky, Oltmanns & Turkheimer, 2003). This finding indicates that treatments for self-harm aimed solely at people with a diagnosis of BPD could potentially miss many people who self-harm who do not have this diagnosis (shown to be up to 75% in this study). These findings add weight to the argument from critical psychology that for people who self-harm, giving a diagnosis of BPD is a way of "ignoring other conditions and social situations" and "can lead to inappropriate, ineffective treatments" (McAllister, 2003). This demonstrates that there is a requirement for a transdiagnostic treatment of self-harm that is not aimed at treating a specific diagnosis, but attempts to meet the individual's needs, such as the treatment protocol presented in the current study.

Although assumptions about prevalence of self-harm across genders cannot be commented on in regard to this project due to the method of recruitment (convenience sample), some differences between genders were also noted in the demographic information. Almost a third (29%) of males reported to be diagnosed with depression,

whereas no female participants had reported to have this diagnosis. Furthermore 44% of women participants recruited reported to be diagnosed with BPD compared to 18% of male participants. Previous literature suggests that females are more likely to receive a diagnosis of BPD, accounting for 75% of those diagnosed with BPD (Becker & Lamb, 1994; Johnson et al., 2003). One explanation for the higher number of men reporting to have depression in this study could be that men who self-harm are more likely to be given a diagnosis of depression, whereas females are more likely to be diagnosed with BPD when they present with self-harm behaviours. Survivor research has reported a similar finding, in that the BPD diagnosis is predominantly given to women and argues that the diagnosis of BPD can detract from the aetiological importance for psychological distress and pathologises women for their response to be oppressed (Shaw & Porctor, 2005). This issue seems of particular importance considering the oppressive nature of an inpatient environment. The differences between males and females in this regard would be benefit from being explored in future research.

4.2.2.2 Inventory of Statements About Self-injury (ISAS; Klonsky & Glenn, 2009)

The Inventory of statements about self-injury (ISAS; Klonsky & Glenn, 2009) was chosen due to the inclusion of data collection of the proposed primary outcome (repetition of self-harm) and information about the function of self-harm. Based on the previous literature and varied nature of the theories explaining self-harm, it was also deemed important to ascertain the function of self-harm for this population, which was included in section two of the ISAS.

At baseline the ISAS, section one was completed by 23 people (96% of sample)

and section two was completed by 22 people (92%). One person could not complete either section of the measure following their consent to take part; this was due to this participant having no previous incidents of self-harm. This demonstrated the measure worked well as a tool for checking eligibility for an intervention for self-harm. The other person did complete section one, but found section two too difficult to complete, caused them to become distressed and when asked if they would like to stop, they agreed. Considering the direct nature of the measure and the sensitive topic of self-harm, it is not unexpected that people in crisis (residing on an inpatient ward), would find this a difficult measure to complete. Considering that the measure was offered to the participants as an option and they were not encouraged to continue if they were unsure, the fact that only one person (4% of whole sample) opted out of completing it could be viewed as a positive sign for the use of this measure in future research.

The ISAS, section one produces findings related to incidence of self-harm. In the current study, the most common form of self-harm was found to be cutting, used by 87% of participants. This finding is in line with the estimates of 70-97% of people who self-harm use cutting reported in previous literature (Skegg, 2005). This measure also established that 83% of the sample in this study wanted to stop harming themselves, which is further evidence that an evidence-based treatment to help them is required.

The ISAS section two requires participants to endorse functions of their self-harm. This revealed that at baseline ‘self-punishment’ (M, 3.4; SD, 2.2) was the highest endorsed function of self-harm in the study sample. This endorsement reflects the literature on self-harm related to abusive childhoods and the propositions of the object relations theory (Mahler, 1968; Townsend, 2000). Van der Kolk, McFarlane and Weisaeth (1996) suggested that the self-punishment function of self-harm is an effect

of a child being unable to cope with the good and bad in themselves as a result of abuse.

The next highest endorsed function of self-harm was 'affect regulation' (M, 3.1; SD, 1.9), which is supported by cognitive behavioural theories. The affect-regulation model of self-injury (Favazza, 1992; Gratz, 2003) and the dialectical philosophical position both also take account of early experiences that have involved abuse, which they posit leads to a vulnerability in a child's ability to regulate their emotions (Linehan, 1993a). Behavioural theories suggest that the act of self-harm is then reinforced internally by the relief felt (Gratz, 2007) and externally by the care received from others as a result (Bandura, 1973; Iwata et al., 1994). The observed increase in the functions of self-harm endorsed after the intervention in relation to the distance / closeness of others is also supported by the latter theory involving external reinforcement (Bandura, 1973; Iwata et al., 1994). The other significant increase in function of self-harm endorsement from baseline to post-intervention assessment was 'anti-suicide'. Given the complexity of separating suicide attempts and self-harm, with the people who self-harm being unsure about their intent (Hawton, Saunders & O'Connor, 2012), it is not surprising that this is endorsed as a function of self-harm and the group may have played a part in increasing the awareness of this for people. However, it is unclear whether the change in this and the other functions of self-harm are related to the intervention or due to multiple possible confounding variables inherent on an inpatient ward.

Overall, the results of this study suggest that the ISAS could be used in future clinical trials for the purpose of obtaining details of the self-harm behaviours, including frequency and function of self-harm. The measure should be accompanied with other measures that collect details on the hypothesised mediators for change in

psychological treatment for self-harm. In this study the extent to which the participants could tolerate distress was measured using the Distress Tolerance Scale, summarised below.

4.2.3.3 Distress Tolerance Scale (DTS; Simons & Gaher, 2005)

The Distress Tolerance Scale (DTS; Simons & Gaher, 2005) was chosen based on the biosocial theory, from which the intervention in the current study is derived. The biosocial theory states that invalidating environments work to contribute to difficulties in recognising and regulating emotions, and tolerating distress (Linehan, 1993a), leading to self-harm behaviours. With origins in the biosocial theory, one of the aims of DBT-based interventions is to acquire skills in distress tolerance (Linehan, 1993a). This was one of the main skills embedded in the Coping with Crisis (CwC) group protocol (Appendix K), so the acquisition of this skill was thought to be a useful measure and the DTS has been found to be useful in measuring this (Simons & Gaher, 2005).

The DTS was completed by 24 people (100%) in this study sample at baseline, with no negative feedback on the completion of this, which indicates that they found it acceptable to complete at this point. However, it is unclear how far the participants understood the concept of 'distress tolerance', an explanation of which is recommended in future research using this measure. The findings demonstrate no large changes in the self-reported existence of the four aspects of distress tolerance asked about in the DTS (tolerance, absorption, appraisal, and regulation), which was one of the targets of the novel DBT-informed treatment protocol (Appendix K).

Overall, this study recommends that the DTS be used in future clinical trials for the purpose of obtaining details of a person's capacity of tolerate their distress. This

measure was self-report, which means that it is not clear whether the changes are in the actual presentation of the participant or the participants' increased awareness of their capabilities or lack thereof. Improvements to monitoring changes in distress tolerance could be gained by collecting data from the clinicians looking after them. This would confirm the changes that are reported by the participants and add a different perspective. The benefits of inpatient research are that it is possible to monitor and control for confounding variables and collect observation data from clinicians around the participants, which this study did not directly benefit from, but future studies should consider.

Overall, this study found that the DTS could be used in future clinical trials for the purpose of obtaining details on what extent the participants could tolerate distress. However, in future trials, additional mediators for change could be collected in order to further assess the impact of the intervention. The current intervention protocol (Appendix K) included emotional regulation activities, so future research could use additional outcome measures associated with the ability of the participants to regulate their emotions before and after taking part in the intervention. An example of a measure that would collect information on emotional regulation is the Cognitive Emotion Regulation Questionnaire, Short Form (CERQ-short; Gamefski & Kraaij, 2007), which measures cognitive strategies to cope with negative events. Due to the nature of the group process and as one of the DBT modules, it may also be beneficial to measure interpersonal abilities, which is also included as a module in the DBT manual (Linehan, 1993b). It may also be helpful, considering that the participants were comfortable with filling in questionnaires, to collect data about the mood of the participants using the Hamilton Rating Scale for Depression (Hamilton, 1960).

4.2.3.4 Feedback questionnaire

Only nine participants (38%) completed post-intervention outcome measures from the full sample (n = 24), as such the views express do not represent the whole sample and must be viewed with caution. This study did demonstrate that the feedback questionnaire was acceptable to the participants and addressed the areas of interest for future studies and would be appropriate if this study was replicated.

In the feedback from this questionnaire, mindfulness skills were found to be the most helpful from the groups (named by three people). When asked what was unhelpful in the groups, most people left the question with no response (five people), and a further three people said 'nothing' was unhelpful. Mindfulness was named by one person as not helpful. When the participants were asked what could be improved in the group, some found other group members "unsafe" and one person said they would like more individual help. This is useful information for future studies of this nature to consider ensuring sufficient individual support was taking place with the participants clinicians in conjunction with the group. It is also important for studies of interventions of this kind to make sure that the group feels safe for participants, ideally the groups would be 'closed' in nature (not allow new members in).

In terms of the research process, only one person indicated that they thought it was "too long" and that it could be improved by being shorter. Most of the participants (five people) felt that nothing could be improved in the research process. Future research with larger samples should give participants the opportunity to feedback their experience of the intervention and research process in order to further knowledge of how the studies are experienced by people who take part. It may provide more useful, in depth data to conduct interviews for this purpose, rather than feedback questionnaires.

4.3 Strengths of the study

This study had a number of strengths. First, the trial protocol was registered before recruitment began (ClinicalTrials.gov; no.: 205350), which meant that the intention to complete the research was made public to avoid replication. Secondly, the study procedure was developed in line with good clinical practice guidelines, which ensured the protection of the rights, safety and wellbeing of research participants. Thirdly, the study closely followed CONSORT guidelines (Eldridge et al., 2016) for feasibility studies. In the literature, the terms 'feasibility' and 'pilot' studies have been used interchangeably and until the publication of the updated CONSORT guidelines (Eldridge et al., 2016) there was little consensus about what differentiates the two (Whitehead, Sully & Campbell, 2014). Pilot studies are now defined as the main study that is run in miniature to test whether the components work together, whereas the main goal of a feasibility study is to estimate parameters in order to design a main study. A strength of the current study is the stringent abidance to these latest guidelines for feasibility studies (Eldridge et al., 2016).

This study sought to highlight and make progress with developing an evidence-based treatment for self-harm, which is currently untested in the parameters of an inpatient setting (see meta-analysis in current paper). In order to meet this aim, a novel psychological intervention for self-harm was successfully designed with input from several experienced clinical psychologists. The novel protocol was successfully run with participants in an inpatient environment, demonstrating it does not produce adverse effects and is acceptable to the facilitators and participants who were able to give positive feedback on the utility of the intervention. These findings provide promising results for the intervention to be evaluated further in a larger clinical trial.

A further strength to the current thesis and an important aspect that would be recommended in future research is that it takes account of the NICE guidelines (2001; 2013), while acknowledging the limitations of them. It is important to acknowledge the current guidelines, as well as the influence of guidelines on an international level (APA, 2013), especially due to the nature of the treatment model, while also holding a critical stance with respect to the limited scope of guidelines to serve each individual.

4.4 Critique of the study

Although not required for a feasibility study (CONSORT guidelines; Eldridge et al., 2016), the main limitations of this study are the lack of control group and the lack of follow-up data collected. The inclusion of a control group would have provided insight into the practicalities of requiring more participants at one time point and to assess the willingness of the participants to be randomised. The aim of this feasibility study was to test the novel intervention within an inpatient setting; the next stage of preparation for a larger trial should be a pilot study that includes a control group to ascertain whether the participants would be willing to be randomised. A follow-up time point should also be added to a pilot study, which would provide more information about how feasible it would be to capture data from people several weeks after the intervention was terminated, which may involve following the participants into the community setting. Both of these aspects of the study were not attempted for the current thesis due to time restraints of the thesis.

Further limitations to the current study include the uncontrolled nature of the study on an inpatient ward, particularly the lack of monitoring of possible confounding factors that could account for changes made by the participants between baseline and post-intervention measures. For example, research suggests that when patients are

referred to inpatient wards, they are at high risk of self-harm and suicidality (Bowers et al., 2005), as such it is expected that they are experiencing extreme difficulties with their mental health. Based on the assumption that the purpose of inpatient settings is to provide a safe environment, it is likely that the severity of their mental health crisis will show a regression towards the mean the longer they are residing there (Bland & Altman, 1994). This means that any changes in the outcome measures could be affected by maturation bias, which has not been monitored in this study. This being the case, the impact of factors such as these largely remains unknown and therefore the results should be viewed with caution. However, it would be possible to put measures in place to monitor the therapeutic input that the patients are having while on the ward and the inclusion of a control group could control for maturation effects. Future research should not only consider a control group, but also additional measures that allow researchers to collect data on the therapeutic and pharmacological input the patients are receiving while on the ward.

Further limitations to this study should it be extrapolated to a larger trial would include the questionable ecological validity of the findings. The three wards used in this study were all part of the same hospital in one geographical location in the UK. As such, some of the factors related to feasibility presented in this study may not be generalised to other inpatient environments. For example, the demographics of patients and staff working on the wards will vary depending on location, which may impact the response to the research and intervention.

The small sample size is also a limitation in the study, which meant that when there was high attrition, the number of people who completed the post-intervention measures is very low (n = 9). Feasibility would be better measured with a higher sample size, as there is more chance that there is a representative outcome. This is

particularly true for the feedback questionnaire, which represented a select proportion of the original sample; the non-responders may differ from the responders, which could lead the results to be subject to bias (Melton III, Dyck, Karnes, & O'Brien, 1993).

Open-ended questions were used in order to get richer, participant-led data, but in practice, the questionnaire was not found to produce particularly detailed or rich data. This could be due to the participants wanting to complete the questionnaire quickly, which could explain why some questions were left blank. The lack of detail could also be explained by understanding that participants could have struggled to remember the detail of the groups or understand what they were being asked. This could explain a noticed preference in the questionnaires for naming obvious more memorable parts of the intervention, for example the high incidence of 'strategies'.

Service-user led research has criticised the current evidence-base that informs the policy-making for being over reliant on studies that have carried out research 'on' people who self-harm with a focus on managing and preventing self-harm in a medical way (Hume & Platt, 2007). By not conducting a study exploring the views of service-users, the current study risks completing research of this kind. In addition to this, the theories this project is based on (cognitive / dialectical behavioural theories) tend to put responsibility on the individual to change, when perhaps it would be more helpful to consider the collective responsibility of wider social and political systems. Critical psychology suggests that self-harm can be understood as more than a 'disordered individual', but issues such as culture, power and marginalisation are important to consider (McAllister, 2003). It is believed that these and other contentious issues are not readily understood by society and so blaming the individual denies the need to consider the dialectical tension in society (McAllister, 2003). By

focusing on problems within the individual and putting them in hospital, the collective narrative and pressures that insight mental health difficulties go unchallenged.

To begin to overcome these issues, future research of this kind should include a service-user group in the design of research and treatment protocol. Again, the reason service-user input was not included in the current study design was due to time restraints; therefore, feedback from the participants was gained after their participation. In doing so, the thesis took a critical viewpoint, while also taking a pragmatic stance in moving forward with attempting to contribute to the evidence-base and develop treatment of people who self-harm.

4.5 Implications of findings

Despite the limitations outlined above, there were findings from the current study that can be used to better understand whether it is feasible to use the intervention and conduct research on this intervention for self-harm on inpatient wards. The findings also have implications for increasing awareness of the challenges of inpatient research and possibilities of overcoming these. The results and adaptations made to the design provide information for future research studies, particularly in the field of self-harm and inpatient research. The feedback questionnaire also provides insight into the preferred aspects of the therapeutic intervention. Overall, the study met the original aims of furthering understanding in order to design and conduct a larger trial to assess the efficacy of a self-harm intervention on an inpatient ward.

There are distinct and numerous challenges faced when contemplating research on inpatient wards. Considering that the potential participants are residing in the place the research will be taking place (on the ward), it can be surprising to researchers that there is difficulty in making contact with the patients. One of the unexpected findings

was that 60% of the dropout from the research process was accounted for by patients being discharged from the ward. This finding demonstrates an unpredictable nature of the inpatient environment; an example of this in the current study was demonstrated in the participants not being aware that their discharge would be taking place within the next two weeks. Research suggests that the average length of stay for patients on an inpatient ward is 23 days (Health and Social Care Information Centre, 2014), which infers that many stays are shorter than this. With the national drive towards 'deinstitutionalisation' of psychiatric services and funding being focused into community settings (Lakeman, McGowan & Walsh, 2007), it is understandable that stays are short. It is also the case in current services that the main reason for admitting a patient is if they are at risk of harm to themselves or others (Bowers et al., 2005). This means that at a time of crisis, a person at risk will be moved to what is often an unfamiliar location (an inpatient ward) to live for several days. As soon as the crisis has 'settled', they are moved back (without substantial prior warning) to where the crisis had occurred. The current evidence-base for theories of self-harm suggest that early experiences have often been chaotic and traumatic, meaning that capacity for tolerating distress and regulating emotions is limited (Linehan, 1993a). Therefore, the impact of the drive for community-based treatments and the resulting unpredictability of where one is residing should be considered in more detail. It should be questioned whether this treatment pathway could be detrimental to those with difficulty tolerating distress and regulating their emotions. At best, the upheaval it is making them re-live the traumatic past experiences with more inconsistent, unpredictable experiences and at worst it could be damaging to the individual. The finding in this study was that a significant number of patients experienced disruption to treatment that they had started on the ward and, as in most cases, this treatment could not continue in the

community. This is not only failing to offer a patient a complete experience of a treatment but may also contribute to their emotional and relational difficulties. Research such as this should highlight the impact of the chaotic nature of inpatient wards on the safe delivery of treatment. The next section attempts to summarise the expectations of future research to explore these issues further.

4.6 Future research

Future research in this area should consider methods that will increase the recruitment of inpatient participants and the retention of them in research of this kind. Some suggested ways of doing this are providing education for clinical staff about self-harm and how to screen potential participants, conducting the participant consent interviews in a sensitive manner (particularly when broaching the topic of self-harm), training assistants and clinicians to motivate the participants to attend the groups, have a system to intervene before the participants are discharged in order to collect post-intervention measures and feedback from them.

In addition to this, future research would ideally have a system in place to collect data from patients who have been discharged from hospital to the community. It would be equally important to get feedback on whether they would have continued with the groups and research if they had not been discharged or if they would consider continuing in the community. Without this information, reasons for drop-out largely remain unknown. If future research were able to collect this data, it could be used to further understand the needs of the patients. A way this could be facilitated would be to link with the person and their community team on discharge.

Furthermore, future research should increase the reliability of the primary outcome data by confirming the repetition of self-harm data through reports from the

clinicians as well as self-report data. This would give a more reliable (data collected even when the participant is on leave) and accurate portrayal of the number before and after, this would better measure any changes to this, which would not be as influenced by reporting bias.

Future research should consider using the method of interviewing participants for feedback on the intervention. Individual interviews or focus groups would have gained deeper, meaningful feedback, which may have allowed the participants to talk freely about their experience. However, given the difficulty experienced with getting participants to attend the groups and fill out a quick questionnaire, it could be reasonably predicted that it would be challenging to encourage participants to spend more time on an interview or a focus group.

As discussed earlier in this thesis, following this research with the focus on inconsistencies with the conceptualisation and definitions of self-harm, it would be beneficial for future research to explore the ways in which service users define their behaviours. This research could aid a wider drive for understanding among clinical staff and researchers about self-harm behaviours and introduce a wider conceptualisation that perhaps will not include everyone, but would move towards more people feeling understood in their difficulties.

Furthermore, the unequal percentage of women to men diagnosed with BPD should be explored in conjunction with participants feeling about being detained in relation to feelings of oppression. This could be useful to explore alongside the perceptions of people on the diagnosis of BPD and the different function of self-harm, which may or may not include a reaction to feeling oppressed (Shaw & Proctor, 2005).

4.7 Conclusion

This feasibility study is required before a main study to evaluate whether an intervention for self-harm in an inpatient setting can be run. The study successfully provided findings about the methods and created opportunities to adapt these while the project was in progress in order to make observations and monitor the value of the changes. This led to a better understanding of what methods would be best used to make the most of the opportunity to design a main study (National Institute for Health Research, NIHR, 2012).

Given that self-harm remains one of the most common reasons for people to be admitted to inpatient services (Bowers, 2005; Way & Banks, 2001; Sansone, Songer & Miller, 2005) and there is currently little evidence for an intervention to address these behaviours in this setting, it remains important that this is addressed. Recommendations from the findings of this study have been made for future research, which involve better understanding of self-harm behaviours and a move towards a better treatment for people who self-harm on an inpatient ward.

Above all, this project has acknowledged the challenges of inpatient settings for patients, staff and researchers. The main challenges for research in this setting is the recruitment and retention of patients to talking therapies who are in distress and at a point of crisis. It was found in practice that when this point of crisis for the patient had come to an end and their presentation had become more ‘settled’, they are usually discharged within a short space of time. It would seem that this might represent the main challenge for patients, who seem to be unaware of when they will be discharged. Among the significant challenges highlighted in this research is the definition and conceptualisation of self-harm, which hampered the progress of this research and has implications on the care and support people who self-harm receive.

This thesis has considered the impact of service funding on treatment outcomes and data collection on wards. This research also attempted to readdress the balance, if only in a small way, by giving patients the opportunity to feed back views on the treatment they were receiving. The practical considerations and decisions about running the intervention and the research process have been presented; with discussion around possible alternative methods and ways to overcome the limitations of the current study have been proposed. It is hoped that the findings will encourage more inpatient research and be a source of help for those endeavouring to conduct research in this field in future.

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Appendix A – Studies with reduction of self-harm as an outcome excluded from the meta-analysis

Reason for exclusion	**Study authors**
Intervention aimed at treating BPD only	Barley et al. (1993) Bateman & Fonagy (2009) Bohus et al. (2000) Davidson et al. (2014) Harned, Korslund & Linehan (2014) Kröger et al. (2006) McMain et al. (2009) Turner (2000)
Intervention aimed at treating suicidality only	Cedereke, Monti & Ojehagen (2002) Liberman & Eckman (1981) Patsiokas & Clum (1985) Torhurst et al. (1987) Torhurst et al. (1988) Vaiva et al. (2006) Van der Sande et al. (1997a)
Intervention aimed at treating alcohol use only	Crawford et al. (2010)
Participant age range from 12 years	Hassanian-Moghaddam et al. (2011) Hvid et al. (2011) Morhurst et al. (2012)
Participant age range from 15 years	Dubois et al. (1999) McLeavey et al. (1994) O'Connor et al. (2017) Slee et al. (2008) Van Heeringen et al. (1995) Wei, 2015
Participant age range from 16 years	Beautrais et al. (2010) Bennewith et al. (2002) Brown et al. (2005) Carter et al. (2005) Clarke et al. (2002) Hawton et al. (1981) Hawton et al. (1987a) Husain et al. (2014) Preibe et al. (2012) Salkorski, Atha & Storer (1990) Welu (1977)
Participant age range from 17 years	Gibbons et al. (1978) Hatcher et al. (2015)
Participant age range from 20 years	Kawanishi et al. (2014)
Participants included were older adults	Almeida et al. (2012)

Appendix B – Assessment of bias

Table 1

Study quality scores using Downs and Black (1998) scale: checklist for measuring study quality and risk of bias in the RCTs (n = 9)

Study	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**Total**
Evans et al. (1999b)	1	1	1	0	1	1	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	20
Gratz, Tull & Levy (2014)	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	24
Guthrie et al. (2001)	0	1	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	20
Linehan et al. (1991)	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	23
Linehan et al. (2006)	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	25
McAuliffe et al. (2014)	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	22
Morgan et al. (1993)	1	1	0	1	1	1	1	0	0	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	0	0	17
Tapolaa et al. (2010)	1	1	1	0	0	1	1	0	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	0	0	0	15
Weinberg et al. (2006)	1	1	1	0	0	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	19

Yes = 1, No / unable to determine = 0

Appendix C – RevMan outcome tables

Table 1

All studies with available data for primary outcome; repetition of self-harm

Study or Subgroup	Experimental (treatment) Mean	SD	Total	Control (TAU) Mean	SD	Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Evans et al., 1999a	0.23	0.54	417	0.21	0.55	410	0.0%	0.02 [-0.05, 0.09]
Gratz et al. (2006)	5	4.94	12	30.33	35.08	10	15.8%	-1.02 [-1.93, -0.12]
Linehan et al. (1991)	6.82	12.35	32	33.54	69.97	31	50.8%	-0.53 [-1.03, -0.03]
Morgan et al. (1993)	0.07	0.32	101	0.13	0.43	111	0.0%	-0.06 [-0.16, 0.04]
Tapolaa et al. (2010)	0.17	0.41	7	0.86	1.46	6	10.1%	-0.62 [-1.75, 0.50]
Weinberg et al. (2006)	0.63	0.77	15	1.33	1.09	15	23.3%	-0.72 [-1.46, 0.02]
Total (95% CI)			**66**			**62**	**100.0%**	**-0.66 [-1.02, -0.30]**

Heterogeneity: Chi² = 0.91, df = 3 (P = 0.82); I² = 0%
Test for overall effect: Z = 3.62 (P = 0.0003)

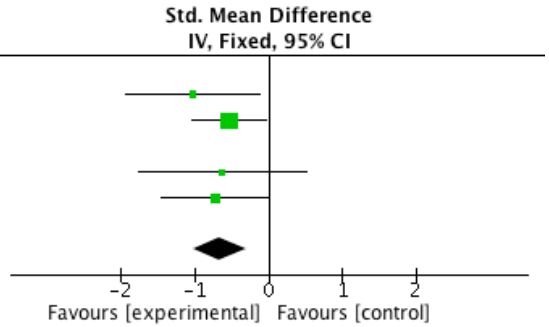
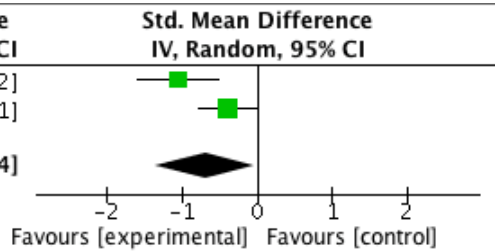


Table 2

All studies with available data for secondary outcome; depression

Study or Subgroup	Experimental (treatment) Mean	SD	Total	Control (TAU) Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Gratz, Tull & Levy (2014)	19.98	8.26	31	28.81	8.26	30	46.1%	-1.06 [-1.59, -0.52]
Linehan et al. (2006)	14	7.3	52	17	8.2	49	53.9%	-0.38 [-0.78, 0.01]
Total (95% CI)			**83**			**79**	**100.0%**	**-0.69 [-1.35, -0.04]**

Heterogeneity: Tau² = 0.17; Chi² = 3.89, df = 1 (P = 0.05); I² = 74%
Test for overall effect: Z = 2.07 (P = 0.04)



Appendix D – Demographic information questionnaire – page 1

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

Demographic Information Questionnaire

1. Age:.....

2. Gender: Female Male

3. Ethnicity: _____

4. Education – circle highest level achieved:

   No schooling
   Nursery School
   Primary school
   Secondary School
   O-Levels / GCSEs
   A-Levels
   Undergraduate degree
   Masters Degree
   Doctorate / PhD
   Other.....

5. Marital status

   Single Married / domestic partnership Widowed Divorced Separated

6. Professional / employment status (circle appropriate)

Employed	Self-employed	A student
A homemaker	Military	Retired
Out of work and looking		Out of work, not looking
Unable to work		

IRAS Project ID: 205350 Version 1 – 10.11.2016

Appendix D – Demographic information questionnaire – page 2

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID……

7. Mental health diagnosis:……..

……..

8. Medication:……

……

9. Length of current stay in hospital:……..

10. Previous treatment:

Hospital admissions (please circle one) 0 1 2 3 4 5+

Average length of stay in hospital (if appropriate)……

Talking therapy (please circle one) Yes No I don't know

If yes, which talking
therapies?……

And how long did you have these talking therapies?.....

Please use the space on back of sheet to expand on the previous questions if needed:

……

Appendix E – Feedback form – page 1

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

1. Could you please write in your own words about your experience of the **group therapy intervention for self-harm.**

   a. What parts did you find helpful?

   b. What parts did you find unhelpful?

   c. What would you change about the intervention to improve it?

Appendix E – Feedback form – page 2

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

2. How many times have you harmed yourself since the intervention?

3. Have you felt differently in how you managed times when you feel distressed / wanted to harm yourself?

4. If yes, how has this changed?

Appendix E – Feedback form – page 3

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

5. Could you please write in your own words about your experience of the **research study** (being asked to consent, fill out the questionnaires before and after the groups etc.).

   a. What aspects did you find difficult?

   b. Would you make any changes to improve the process?

Appendix F - Inventory of Statements About Self-Injury (ISAS) page 1

Participant ID.....

Inventory of Statements about Self-Injury (ISAS)

This questionnaire asks about a variety of self-harm behaviors. Please only endorse a behavior if you have done it intentionally (i.e., on purpose) and without suicidal intent (i.e., not for suicidal reasons).

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

Cutting _____ Severe Scratching _____ Biting _____ Banging or Hitting Self ____

Burning ____ Interfering w/ Wound _____(e.g., picking scabs) Carving ____

Rubbing Skin Against Rough Surface _____ Pinching ____ Sticking Self w/ Needles ____

Pulling Hair _____ Swallowing Dangerous Substances _____

Other _____

Important**: If you have performed one or more of the behaviors listed above, please complete the final part of this questionnaire. If you have not performed any of the behaviors listed above, you are finished.

2. **If you feel that you have a main form of self-harm, please circle the behavior(s) above that you consider to be your main form of self-harm.**

3. **At what age did you:**

First harm yourself? _____ Most recently harm yourself? _____
(approximate date – month/date/year)

4. **Do you experience physical pain during self-harm?**
Please circle a choice: YES SOMETIMES NO

5. **When you self-harm, are you alone?**
Please circle a choice: YES SOMETIMES NO

6. **Typically, how much time elapses from when you have the urge to self-harm until you act on it?**
Please circle a choice:

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

7. **Do/did you want to stop self-harming?**

Please circle a choice: YES NO

Appendix F - Inventory of Statements About Self-Injury (ISAS) page 2

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

Instructions

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

0 - not relevant for you at all, 1 - somewhat relevant for you, 2 - very relevant for you:

"When I self-harm, I am …	Response		
1. … calming myself down	0	1	2
2. … creating a boundary between myself and others	0	1	2
3. … punishing myself	0	1	2
4. … giving myself a way to care for myself (by attending to the wound)	0	1	2
5. … causing pain so I will stop feeling numb	0	1	2
6. … avoiding the impulse to attempt suicide	0	1	2
7. … doing something to generate excitement or exhilaration	0	1	2
8. … bonding with peers	0	1	2
9. … letting others know the extent of my emotional pain	0	1	2
10. … seeing if I can stand the pain	0	1	2
11. … creating a physical sign that I feel awful	0	1	2
12. … getting back at someone	0	1	2
13. … ensuring that I am self-sufficient	0	1	2
14. … releasing emotional pressure that has built up inside of me	0	1	2
15. … demonstrating that I am separate from other people	0	1	2
16. … expressing anger towards myself for being worthless or stupid	0	1	2
17. … creating a physical injury that is easier to care for than my emotional distress	0	1	2
18. … trying to feel something (as opposed to nothing) even if it is physical pain	0	1	2
19. … responding to suicidal thoughts without actually attempting suicide	0	1	2
20. … entertaining myself or others by doing something extreme	0	1	2
21. … fitting in with others	0	1	2
22. … seeking care or help from others	0	1	2
23. … demonstrating I am tough or strong	0	1	2
24. … proving to myself that my emotional pain is real	0	1	2
25. … getting revenge against others	0	1	2
26. … demonstrating that I do not need to rely on others for help	0	1	2
27. … reducing anxiety, frustration or other overwhelming emotions	0	1	2
28. … establishing a barrier between myself and others	0	1	2
29. … reacting to feeling unhappy with myself or disgusted with myself	0	1	2
30. … allowing myself to focus on treating the injury, which can be gratifying/satisfying	0	1	2
31. … making sure I am still alive when I don't feel real	0	1	2
32. … putting a stop to suicidal thoughts	0	1	2
33. … pushing my limits in a manner akin to skydiving or other extreme activities	0	1	2
34. … creating a sign of friendship or kinship with friends or loved ones	0	1	2
35. … keeping a loved one from leaving or abandoning me	0	1	2
36. … proving I can take the physical pain	0	1	2
37. … signifying the emotional distress I'm experiencing	0	1	2
38. … trying to hurt someone close to me	0	1	2
39. … establishing that I am autonomous/independent	0	1	2

Appendix F - Inventory of Statements About Self-Injury (ISAS) page 3

Participant ID.....

(Optional) In the space below, please list any statements that you feel would be more accurate for you than the ones listed above:

(Optional) In the space below, please list any statements you feel should be added to the above list, even if they do not necessarily apply to you:

Appendix G – Distress Tolerance Scale

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

Distress Tolerance Scale

Directions: Think of times that you feel distressed or upset. Select the item from the menu that best describes your beliefs about feeling distressed or upset.

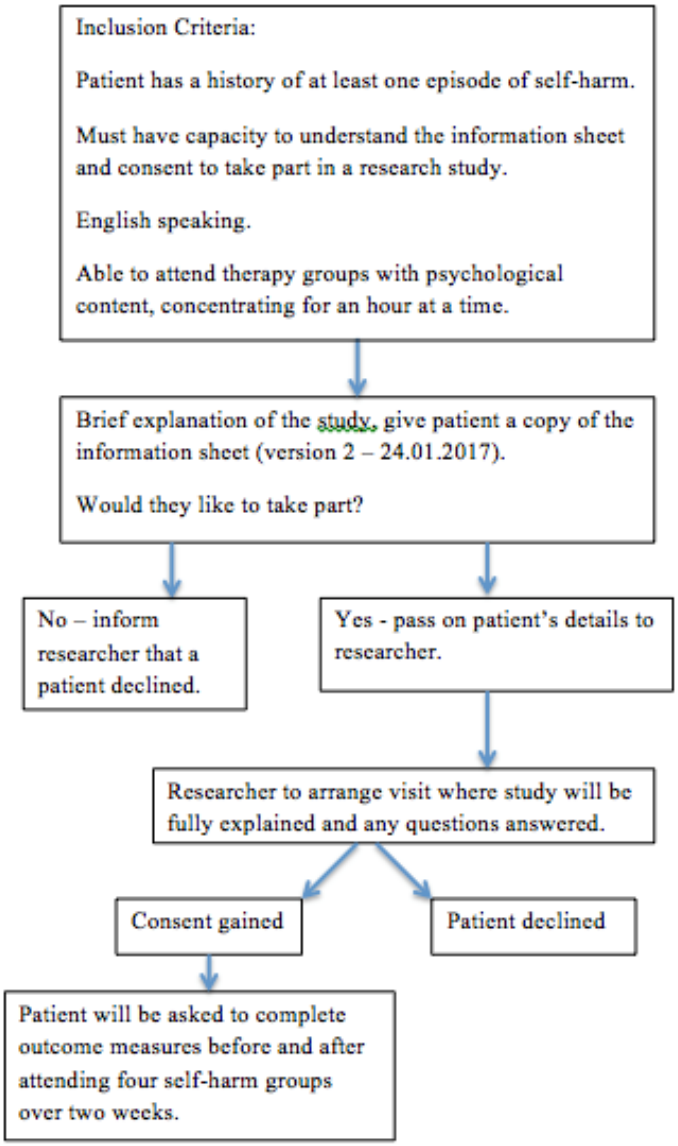
1. Strongly agree
2. Mildly agree
3. Agree and disagree equally
4. Mildly disagree
5. Strongly disagree

	ITEMS	1	2	3	4	5
1.	Feeling distressed or upset is unbearable to me					
2.	When I feel distressed or upset, all I can think about is how bad I feel.					
3.	I can't handle feeling distressed or upset					
4.	My feelings of distress are so intense that they completely take over.					
5.	There's nothing worse than feeling distressed or upset.					
6.	I can tolerate being distressed or upset as well as most people.					
7.	My feelings of distress or being upset are not acceptable.					
8.	I'll do anything to avoid feeling distressed or upset.					
9.	Other people seem to be able to tolerate feeling distressed or upset better than I can					
10	Being distressed or upset is always a major ordeal For me.					
11	I am ashamed of myself when I feel distressed or upset.					
12	My feelings of distress or being upset scare me					
13	I'll do anything to stop feeling distressed or upset.					
14	When I feel distressed or upset, I must do something about it immediately.					
15	When I feel distressed or upset, I cannot help but concentrate on how bad the distress actually feels.					

Appendix H – Screening guidance

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

SCREENING GUIDANCE FOR CLINICIANS



IRAS Project ID: 205350 Version 2 – 24.01.2017

Appendix I – Participant information sheet – page 1

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

PARTICIPANT INFORMATION SHEET

This information sheet is to let you know about a research study that you are invited to take part in. The researcher will go through this sheet with you and answer any questions you have. This should take about 10 minutes. Please ask us if there is anything that is not clear.

This study has been reviewed by 'Essex Research Ethics Committee' to make sure that the rights, safety, dignity and well being of everyone that takes part in this study are protected.

Principal Investigators
Miss Sarah Fife - Trainee Clinical Psychologist, University of Essex, Wivenhoe Park, Colchester CO4 3SQ, Email: sarah.fife@essex.ac.uk

Supervised by:
Dr Frances Blumenfeld – Programme Director Doctorate in Clinical Psychology, Clinical Lead, University of Essex, Colchester CO4 3SQ, IG3 8XJ, Tel: 0300 555 1217, Email: fblume@essex.ac.uk

Dr Lisa Wood – Lecturer in Clinical Psychology / Clinical Tutor, University of Essex, Wivenhoe Park, Colchester CO4 3SQ, IG3 8XJ, Tel: 0300 555 1217, Email: ljwoodm@essex.ac.uk

What is the purpose of the study?
This study is being run as part of the researcher's doctorate and is to see if it is possible to test a skills group programme as a treatment for people who self-harm on an inpatient ward. We are also interested in finding out what the participants think about the group and this research.

Why have I been given this information?
This study is looking at a treatment to support people who have self-harmed. You have been asked to take part as you have experience of harming yourself.

Do I have to take part?
No. Taking part in this research study is voluntary; it is up to you whether or not to take part. If you do decide to take part, you will be asked to sign a consent form. Even after signing this form you will still be free to drop out of the study at any time and without giving a reason. This will not affect on your treatment on the ward. All information collected prior to your withdrawal with your permission will be used, but if you decide to drop out no further data will be collected.

Appendix I – Participant information sheet – page 2

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

What will happen to me if I take part?
If you decide to take part you will be asked to complete a few questionnaires, which will take about 30 minutes. You will then be invited to four, one-hour skills groups over two weeks. The researcher will meet with you for another session after the groups to complete measures, which will take about 30 minutes. There are more details about this below.

Groups
The skills groups will last 1 hour each and you will be invited to attend 4 over two weeks. There will be about 3 – 8 people in each group. The groups will be aimed at helping you learn strategies that could be used instead of self-harm to deal with stressful or difficult situations.

Will the study cost me anything?
No. The study will only involve your time.

What are the advantages to taking part?
Taking part in this research will help us understand if we can test this therapy with more people, which you may find it an enjoyable or helpful experience. If you are able to complete the questionnaires before and after the skills groups you will be given a £10 token of appreciation for your time.

What are the disadvantages?
It is possible that thinking and talking about your experiences could lead to feeling upset. The researchers and group leaders will be sensitive to your needs, but you are also free to stop taking part in the study at any point.

Who will know I am participating in the study?
Other people involved in your care such as your Consultant Psychiatrist, Care Coordinator and your GP (if you agree to this).

Will my information be kept confidential and anonymous?
Therapy Groups: What is said in these groups will not be passed on to anyone outside the group, *unless* there are concerns about your safety or the safety of others, then information will be shared with a member of your clinical team.

Questionnaire data: You will be given a number, which will be used instead of your name. The data will be kept safe in a locked filing cabinet or on a password-protected computer, which only the researcher and supervisors will have access to until they are no longer required. The information given when filling out these measures will not be passed on to anyone, *unless* there are concerns about your safety or the safety of others, then information will be shared with a member of your clinical team. The information may also be looked at by people from the University of Essex or from North East London Foundation Trust, this may include access to personal information.

IRAS Project ID: 205350 Version 2 – 24.01.2017

Appendix I – Participant information sheet – page 3

The results of this research study will be anonymous, however direct quotes from the feedback forms may be published with your consent. These quotes will not be named, but we cannot guarantee that they could not be identified by what has been said in the quote.

What if there is a problem?

If you have a problem with the study, you should ask to speak to the researcher who will do their best to answer your questions (to contact **Miss Sarah Fife** call **01206 873910).** If you are still unhappy and wish to complain further, you can do this by contacting the Research Governance and Planning Manager, Research Office, University of Essex, Wivenhoe Park, Colchester CO4 3SQ, by emailing: **sarahm@essex.ac.uk**.

Independent Advice

If you would like independent advice about taking part in research please contact: Patient Advice and Liaison Service (PALS), North East London Foundation Trust, Trust Headquarters, Goodmayes Hospital, Barley Lane, Ilford, IG3 8XJ. Tel: 0300 555 1200.

What happens next?

If you would like to take part speak to your key worker and hand in the slip below with your name clearly printed on it, put it in an envelope provided and hand to your key worker. The researcher will then contact you to arrange a time to meet that is convenient for you.

You can ask to receive a copy of the results of the study, which we can provide on the ward but we do not usually provide individual results.

Please cut off slip here

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

I, ……*(insert name)*…… would like to talk to a researcher about taking part in this project and if needed to contact me by phone ……. *(insert phone number – optional)*

Please return this slip to your key worker.

Appendix J – Consent form

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Participant ID.....

CONSENT FORM

Name of researcher: Sarah Fife

Please initial each box:

1. I confirm that I have read and understood the participant information sheet dated 24.01.2017 (version 2) for the above study. I have been given a copy to keep and had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, and without my medical care or legal rights being affected. ☐
3. I consent to take part in the study that will involve both my participation in groups *and* completing questionnaires before and after the groups. ☐
4. I understand that the data collected during this project may be looked at by individuals from the University of Essex, from regulatory authorities or from the NHS Trust. I give permission for these individuals to have access to my data. ☐
5. I agree to a copy of this consent form being kept in my medical notes. ☐
6. I give permission for quotes from my feedback form to be used in publications of the study. ☐
7. I agree for my GP to be informed of my participation in the study. ☐
8. I agree to take part in the above study. ☐

Name of Participant	Date	Signature
Researcher	Date	Signature

[1 copy for participant, 1 copy for researcher, one copy for medical notes if applicable]

IRAS Project ID: 205350 Version 2 – 24.01.2017

Appendix K – Coping with Crisis group protocol; Version 4, page 1

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Coping with Crisis Emotions Group Protocol

Group 1

Introductions (5 minutes)

- Welcome everyone to the group, and thank them for coming

- Everyone to go round and introduce themselves

Group outline / rationale:

-Brief overview of the group:

"*This group is run over 4 one-hour sessions over a two week period. The aim of the group is to focusing on coping with distressing crisis emotions. Many people have learned over time that escaping from the moment (through avoidance, alcohol/drug use, and/or self-harm for example) has powerful short-term benefits. However, these behaviours can be bad for us in the long-term. Therefore it is important to learn to tolerate or cope with difficult emotions in the moment without using these potentially unhelpful short-term ways of coping. This group will aim to understand our emotions better and try and identify some ways of coping that may be more helpful. We will be learning different strategies over the four groups including, mindfulness, understanding our emotions better, crisis planning, and different ways of coping*".

"Does that seem okay? Does anyone have any questions?"

Guidelines and group values (10 minutes):

To be generated through group discussion and written on a flip chart.

Suggested group rules include:

- Participants who miss a session can continue attending the groups.
- Participants support each other
    - Keep names and information obtained in sessions confidential.
    - Make an effort to practice skills between sessions.
    - Be respectful and avoid judging each other and assume the best about each other.
    - Give non-critical, helpful feedback when asked.
    - Be willing to accept help from a person you ask or call for help.

1

Appendix K – Coping with Crisis group protocol; Version 4, page 2

  - Compassion
- Other:……

Assumptions underpinning the group. These should be emphasised through group discussions and in response to issue discussed by group members.

- People are doing the best they can.
- People want to improve.
- The emotions we experience are there to try and help us and are understandable but its when the become distressing and lead us to harm ourselves that we need to consider how we manage them.
- Our responses to difficult emotions are understandable however we need to address them when they are becoming unhelpful for us.
- People may not have caused all of the problems they have, but we do have the ability to try and make them better (life change can happen if we change our own behavioural responses and alter our environment).
- It is important that new coping strategies are practiced where the skills are needed, not just in the situation they are learned.
- There is always a cause to actions, thoughts and emotions, even if we do not know the cause.
- Figuring out the causes works better than judging and blaming ourselves.

MINDFULNESS (15 minutes)

[These mindfulness sections should be 3-5 minutes of mindfulness practice with 5-7 minutes taking reflections from everyone about how they found it. While doing this, it is important to encourage them to think about self-critical / judgemental thoughts and asking if they were able to 'let them go' – it can be really helpful for a co-facilitator to start this feedback so that the participants can imitate]

RATIONALE FOR MINDFULNESS

"This group and every group will start off some mindfulness practice. Does anyone know what mindfulness is? Have you experienced it before? Can anyone explain what it is to the group?

Mindfulness is a very important skill that helps us develop a non-judgmental awareness to our thoughts and feelings. Sometimes we can have distressing thoughts, feelings, difficult memories from the past, or worries about the future, that can make us feel distressed. Can anyone relate to that? Therefore it is important to learn to try and tolerate the moment as it is without avoiding or escaping. The idea of mindfulness is that it helps people put aside these difficult experiences to try and allow people to focus on the present moment,

Appendix K – Coping with Crisis group protocol; Version 4, page 3

which can help improve our emotions. The rationale for practicing mindfulness every session is that it can feel very difficult initially and it requires returning to and training like building a muscle".

PRACTICE –MINDFUL BREATHING:

"We are going to start by practicing a mindfulness breathing exercise. The primary focus of mindful meditation is the breathing, however the primary goal is a calm, non-judging awareness, allowing thoughts and feelings to come and go without getting caught up in them. This creates calmness and acceptance.

Assume a comfortable position sitting in your chair, making sure your back is straight and let your shoulders drop. Have your feet flat on the floor and your arms beside you in a position that feels comfortable.

Now either close your eyes or focus on a point in front of you. Whatever feels comfortable for you.

So we are going to start by taking some deep breaths and focusing on our breathing. Bring your attention to your belly, feeling it rise or expand gently on the in-breath and fall or recede on the out-breath.

Keep noticing this for a few moments..... (allow them to focus on this for a minute or so)

Keep focus on the breathing, 'being with' each in-breath for its full duration and with each out-breath for its full duration, as if you were riding the waves of your own breathing.

Keep noticing this for a few moments.... (allow them to focus on this for a minute or so).

Every time you notice that your mind has wandered off the breath, notice what it was that took you away and they gently bring your attention back to your belly and the feeling of the breath coming in and out.

If your mind wanders away from the breath a thousand times then that's okay, that's what our mind does... but try to bring it back to the breath, no matter what has distracted you.

Keep focusing on your breath for a few moments (allow this for a minute or so).

When you're ready, we're going to slowly bring this exercise to a close. If you have your eyes closed, start to notice the room around you, move about your arms and legs slighty, and open your eyes".

"How was that exercise? How did you find it? Was it difficult? Did you notice your mind wander?"

What to do if my emotions get too much and I experience a crisis… (15 minutes)

"For the remainder of the session today we are going to focus on developing some skills to manage a crisis.

- Use Distress Tolerance hand-out 3 to explain when to use skills.

Appendix K – Coping with Crisis group protocol; Version 4, page 4-6

[Distress Tolerance Handout 3 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

- Distribute DT hand-outs 7 & 9 – go through the handouts and ask them to tick ones that they could try ask them to keep hold of these to draw on when they need to when in crisis.

4

[Distress Tolerance Handout 9 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

[Distress Tolerance Handout 7 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Review and recap (mindfulness and crisis management)

- Review what mindfulness and why its important. Suggest smart phone apps e.g. insight timer and headspace
- Review skills covered in the handouts

Homework planning and practicing (10 minutes) - Contingency planning (using distress tolerance handouts 7 & 9 – plan what to do when things go wrong. Think of a crisis situation and choose ways to cope). Troubleshoot anything that may make it difficult for people to complete the homework.

6

Appendix K – Coping with Crisis group protocol; Version 4, page 7

My crisis situation is:

.....

.....

When I experience this I could respond by:

1.....

2.....

3.....

Appendix K – Coping with Crisis group protocol; Version 4, page 8

Group 2

Introductions (5 minutes)

- Welcome everyone to the group, and thank them for coming

- Everyone to go round and introduce themselves

Group outline / rationale:

-Brief overview of the group:

"This group is run over 4 one-hour sessions over a two week period. The aim of the group is to focusing on coping with distressing crisis emotions. Many people have learned over time that escaping from the moment (through avoidance, alcohol/drug use, and/or self-harm for example) has powerful short-term benefits. However, these behaviours can be bad for us in the long-term. Therefore it is important to learn to tolerate or cope with difficult emotions in the moment without using these potentially unhelpful short-term ways of coping. This group will aim to understand our emotions better and try and identify some ways of coping that may be more helpful. We will be learning different strategies over the four groups including, mindfulness, understanding our emotions better, crisis planning, and different ways of coping".

"Does that seem okay? Does anyone have any questions?"

Guidelines and group values (10 minutes):

To be generated through group discussion and written on a flip chart.

Suggested group rules include:

- Participants who miss a session can continue attending the groups.
- Participants support each other
    - Keep names and information obtained in sessions confidential.
    - Make an effort to practice skills between sessions.
    - Be respectful and avoid judging each other and assume the best about each other.
    - Give non-critical, helpful feedback when asked.
    - Be willing to accept help from a person you ask or call for help.
    - Compassion

Appendix K – Coping with Crisis group protocol; Version 4, page 9

- Other:……
- **MINDFULNESS** (15 minutes)
- [These mindfulness sections should be 3-5 minutes of mindfulness practice with 5-7 minutes taking reflections from everyone about how they found it. While doing this, it is important to encourage them to think about self-critical / judgemental thoughts and asking if they were able to 'let them go' – it can be really helpful for a co-facilitator to start this feedback so that the participants can imitate]

- **RATIONALE FOR MINDFULNESS**
- *"This group and every group will start off some mindfulness practice. Does anyone know what mindfulness is? Have you experienced it before? Can anyone explain what it is to the group?*
- *Mindfulness is a very important skill that helps us develop a non-judgmental awareness to our thoughts and feelings. Sometimes we can have distressing thoughts, feelings, difficult memories from the past, or worries about the future, that can make us feel distressed. Can anyone relate to that? Therefore it is important to learn to try and tolerate the moment as it is without avoiding or escaping. The idea of mindfulness is that it helps people put aside these difficult experiences to try and allow people to focus on the present moment, which can help improve our emotions. The rationale for practicing mindfulness every session is that it can feel very difficult initially and it requires returning to and training like building a muscle".*

- **PRACTICE –MINDFUL BREATHING**:
- *"We are going to start by practicing a mindfulness breathing exercise. The primary focus of mindful meditation is the breathing, however the primary goal is a calm, non-judging awareness, allowing thoughts and feelings to come and go without getting caught up in them. This creates calmness and acceptance.*
- *Assume a comfortable position sitting in your chair, making sure your back is straight and let your shoulders drop. Have your feet flat on the floor and your arms beside you in a position that feels comfortable.*
- *Now either close your eyes or focus on a point in front of you. Whatever feels comfortable for you.*
- *So we are going to start by taking some deep breaths and focusing on our breathing. Bring your attention to your belly, feeling it rise or expand gently on the in-breath and fall or recede on the out-breath.*
- *Keep noticing this for a few moments….. (allow them to focus on this for a minute or so)*
- *Keep focus on the breathing, 'being with' each in-breath for its full duration and with each out-breath for its full duration, as if you were riding the waves of your own breathing.*
- *Keep noticing this for a few moments…. (allow them to focus on this for a minute or so).*
- *Every time you notice that your mind has wandered off the breath, notice what it was that took you away and they gently bring your attention back to your belly and the feeling of the breath coming in and out.*

Appendix K – Coping with Crisis group protocol; Version 4, page 10 - 11

- *If your mind wanders away from the breath a thousand times then that's okay, that's what our mind does… but try to bring it back to the breath, no matter what has distracted you.*
- *Keep focusing on your breath for a few moments (allow this for a minute or so).*
- *When you're ready, we're going to slowly bring this exercise to a close. If you have your eyes closed, start to notice the room around you, move about your arms and legs slighty, and open your eyes".*
-
- *"How was that exercise? How did you find it? Was it difficult? Did you notice your mind wander?"*

- Observe skills [hand-out 4a] – observing is paying attention on purpose to the present moment. Get service user to read through, check items that apply to them and have a group discussion.

[Mindfulness Handout 4a 7 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Review homework (10 minutes) – What contingency planning did they use (distress tolerance hand-outs 7 & 9)? Have a discussion with patients about what they had written down.

Labelling emotions (15 minutes)

- **Observe and describe** emotions:
  - What emotions do for you? [Emotion Regulation Hand-out 3]
    - Motivate
    - Communicate to others
    - Communicate to ourselves

[Emotion Regulation Handout 3 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Appendix K – Coping with Crisis group protocol; Version 4, page 12

Describing emotions – Initially use emotions cards to have a discussion around the different types of emotions that we experience.

"What emotions do you identify with? Can you explain why?" What situations have caused you to feel X? What have you done in response to these emotions?"

ANGER	*JEALOUSY*
DIGUST	*LOVE*
ENVY	*SADNESS*
FEAR	*SHAME*
HAPPY	*GUILT*

Once the group have discussed the key emotions, pick the two or three which are most discussed and go through the respective worksheets with the group. Ask them to work through the sheet and tick the items which apply most to them.

The types of emotions, possible causes, interpretations from this, biological changes, expressions of emotions, after effects of emotions [Emotion Regulation Hand-out 6 pages 1-10].

Appendix K – Coping with Crisis group protocol; Version 4, pages 13 - 21

Page 13:
[Emotion Regulation Handout 6 (1) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 14:
[Emotion Regulation Handout 6 (2) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 15:
[Emotion Regulation Handout 6 (3) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 16:
[Emotion Regulation Handout 6 (4) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 17:
[Emotion Regulation Handout 6 (5) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 18:
[Emotion Regulation Handout 6 (6) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 19:
[Emotion Regulation Handout 6 (7) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 20:
[Emotion Regulation Handout 6 (8) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Page 21:
[Emotion Regulation Handout 6 (9)from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Appendix K – Coping with Crisis group protocol; Version 4, pages 22 - 23

Page 22:
[Emotion Regulation Handout 6 (10) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

What makes it hard to regulate emotions? (Emotion Regulation hand-out 4) (10 minutes) Get participant to check which items make it difficult for them to regulate their own emotions.

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Page 23:
[Emotion Regulation Handout 6 (10) from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Review and recap (mindfulness and labelling understanding emotions)

- Review what mindfulness and why its important. Suggest smart phone apps e.g. insight timer and headspace. Review skills covered in the handouts

Homework set and practice (10 minutes)

- Observing and describing emotions [Emotion Regulation Worksheet]
- Explain worksheet and set for homework
- Troubleshoot anything that may make it difficult for people to complete the homework.

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Appendix K – Coping with Crisis group protocol; Version 4, pages 24

Homework sheet (2)

Emotion I felt:

……

Prompting event (who, what, where):

……

……

……

I said……

I did……

……

How I felt afterwards……

……

Appendix K – Coping with Crisis group protocol; Version 4, pages 25

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Group 3

Introductions (5 minutes)

- Welcome everyone to the group, and thank them for coming

- Everyone to go round and introduce themselves

Group outline / rationale:

-Brief overview of the group:

"*This group is run over 4 one-hour sessions over a two week period. The aim of the group is to focusing on coping with distressing crisis emotions. Many people have learned over time that escaping from the moment (through avoidance, alcohol/drug use, and/or self-harm for example) has powerful short-term benefits. However, these behaviours can be bad for us in the long-term. Therefore it is important to learn to tolerate or cope with difficult emotions in the moment without using these potentially unhelpful short-term ways of coping. This group will aim to understand our emotions better and try and identify some ways of coping that may be more helpful. We will be learning different strategies over the four groups including, mindfulness, understanding our emotions better, crisis planning, and different ways of coping*".

"Does that seem okay? Does anyone have any questions?"

Guidelines and group values (10 minutes):

To be generated through group discussion and written on a flip chart.

Suggested group rules include:

- Participants who miss a session can continue attending the groups.
- Participants support each other
    - Keep names and information obtained in sessions confidential.
    - Make an effort to practice skills between sessions.
    - Be respectful and avoid judging each other and assume the best about each other.
    - Give non-critical, helpful feedback when asked.
    - Be willing to accept help from a person you ask or call for help.
    - Compassion

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Appendix K – Coping with Crisis group protocol; Version 4, pages 26

- Other:……
- **MINDFULNESS** (15 minutes)
- [These mindfulness sections should be 3-5 minutes of mindfulness practice with 5-7 minutes taking reflections from everyone about how they found it. While doing this, it is important to encourage them to think about self-critical / judgemental thoughts and asking if they were able to 'let them go' – it can be really helpful for a co-facilitator to start this feedback so that the participants can imitate]
-
- **RATIONALE FOR MINDFULNESS**
- *"This group and every group will start off some mindfulness practice. Does anyone know what mindfulness is? Have you experienced it before? Can anyone explain what it is to the group?*
- *Mindfulness is a very important skill that helps us develop a non-judgmental awareness to our thoughts and feelings. Sometimes we can have distressing thoughts, feelings, difficult memories from the past, or worries about the future, that can make us feel distressed. Can anyone relate to that? Therefore it is important to learn to try and tolerate the moment as it is without avoiding or escaping. The idea of mindfulness is that it helps people put aside these difficult experiences to try and allow people to focus on the present moment, which can help improve our emotions. The rationale for practicing mindfulness every session is that it can feel very difficult initially and it requires returning to and training like building a muscle".*
-
- **PRACTICE –MINDFUL BREATHING**:
- *"We are going to start by practicing a mindfulness breathing exercise. The primary focus of mindful meditation is the breathing, however the primary goal is a calm, non-judging awareness, allowing thoughts and feelings to come and go without getting caught up in them. This creates calmness and acceptance.*
- *Assume a comfortable position sitting in your chair, making sure your back is straight and let your shoulders drop. Have your feet flat on the floor and your arms beside you in a position that feels comfortable.*
- *Now either close your eyes or focus on a point in front of you. Whatever feels comfortable for you.*
- *So we are going to start by taking some deep breaths and focusing on our breathing. Bring your attention to your belly, feeling it rise or expand gently on the in-breath and fall or recede on the out-breath.*
- *Keep noticing this for a few moments….. (allow them to focus on this for a minute or so)*
- *Keep focus on the breathing, 'being with' each in-breath for its full duration and with each out-breath for its full duration, as if you were riding the waves of your own breathing.*
- *Keep noticing this for a few moments…. (allow them to focus on this for a minute or so).*
- *Every time you notice that your mind has wandered off the breath, notice what it was that took you away and they gently bring your attention back to your belly and the feeling of the breath coming in and out.*

Appendix K – Coping with Crisis group protocol; Version 4, pages 27

- *If your mind wanders away from the breath a thousand times then that's okay, that's what our mind does… but try to bring it back to the breath, no matter what has distracted you.*
- *Keep focusing on your breath for a few moments (allow this for a minute or so).*
- *When you're ready, we're going to slowly bring this exercise to a close. If you have your eyes closed, start to notice the room around you, move about your arms and legs slighty, and open your eyes".*
- *"How was that exercise? How did you find it? Was it difficult? Did you notice your mind wander?"*

Describe skills [hand-out 4b] – putting into words what is being observed; it distinguishes between what is being observed and what is not being observed. Get client to check the items that apply to them.

Recap homework [worksheet 4a] (10 minutes) should have a 'problem behaviour' identified and the chain of events – if not, fill this in in this time. For clients who attended previous session, ask them if they could explain to the new group members what the homework was. Have discussion with the whole group about the topic of the homework and facilitate members who completed the homework to share what they put if they feel comfortable.

Coping strategies; (10 minutes)

- **Taking care of your body** [ER hand-out 20] – go through hand-out (perhaps allow the group to have a think about the different ways to take care of your body and tick off – how can they adapt their habits around this?) Ask participant about items… what is easiest for them to do? What is harder? What are the barriers? How can they overcome this?
- **Build mastery** [ER hand-out 19] encourage them to think about something that they can aim towards doing – where can they start with this?

Recap and review session

- Review what mindfulness and why its important. Suggest smart phone apps e.g. insight timer and headspace
- Review skills covered in the handouts

Homework set and practice (10 minutes)

- Distress Tolerance (Distress Tolerance hand-out 4) [worksheet 2a] practicing STOP skill.
- Troubleshoot anything that may make it difficult for people to complete the homework.

Appendix K – Coping with Crisis group protocol; Version 4, pages 28

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Group 4

Introductions (5 minutes)

- Welcome everyone to the group, and thank them for coming

- Everyone to go round and introduce themselves

Group outline / rationale:

-Brief overview of the group:

"*This group is run over 4 one-hour sessions over a two week period. The aim of the group is to focusing on coping with distressing crisis emotions. Many people have learned over time that escaping from the moment (through avoidance, alcohol/drug use, and/or self-harm for example) has powerful short-term benefits. However, these behaviours can be bad for us in the long-term. Therefore it is important to learn to tolerate or cope with difficult emotions in the moment without using these potentially unhelpful short-term ways of coping. This group will aim to understand our emotions better and try and identify some ways of coping that may be more helpful. We will be learning different strategies over the four groups including, mindfulness, understanding our emotions better, crisis planning, and different ways of coping*".

"Does that seem okay? Does anyone have any questions?"

Guidelines and group values (10 minutes):

To be generated through group discussion and written on a flip chart.

Suggested group rules include:

- Participants who miss a session can continue attending the groups.
- Participants support each other
    - Keep names and information obtained in sessions confidential.
    - Make an effort to practice skills between sessions.
    - Be respectful and avoid judging each other and assume the best about each other.
    - Give non-critical, helpful feedback when asked.
    - Be willing to accept help from a person you ask or call for help.
    - Compassion

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Appendix K – Coping with Crisis group protocol; Version 4, pages 29

- Other:……
- **MINDFULNESS** (15 minutes)
- [These mindfulness sections should be 3-5 minutes of mindfulness practice with 5-7 minutes taking reflections from everyone about how they found it. While doing this, it is important to encourage them to think about self-critical / judgemental thoughts and asking if they were able to 'let them go' – it can be really helpful for a co-facilitator to start this feedback so that the participants can imitate]

- **RATIONALE FOR MINDFULNESS**
- *"This group and every group will start off some mindfulness practice. Does anyone know what mindfulness is? Have you experienced it before? Can anyone explain what it is to the group?*
- *Mindfulness is a very important skill that helps us develop a non-judgmental awareness to our thoughts and feelings. Sometimes we can have distressing thoughts, feelings, difficult memories from the past, or worries about the future, that can make us feel distressed. Can anyone relate to that? Therefore it is important to learn to try and tolerate the moment as it is without avoiding or escaping. The idea of mindfulness is that it helps people put aside these difficult experiences to try and allow people to focus on the present moment, which can help improve our emotions. The rationale for practicing mindfulness every session is that it can feel very difficult initially and it requires returning to and training like building a muscle".*

- **PRACTICE –MINDFUL BREATHING**:
- *"We are going to start by practicing a mindfulness breathing exercise. The primary focus of mindful meditation is the breathing, however the primary goal is a calm, non-judging awareness, allowing thoughts and feelings to come and go without getting caught up in them. This creates calmness and acceptance.*
- *Assume a comfortable position sitting in your chair, making sure your back is straight and let your shoulders drop. Have your feet flat on the floor and your arms beside you in a position that feels comfortable.*
- *Now either close your eyes or focus on a point in front of you. Whatever feels comfortable for you.*
- *So we are going to start by taking some deep breaths and focusing on our breathing. Bring your attention to your belly, feeling it rise or expand gently on the in-breath and fall or recede on the out-breath.*
- *Keep noticing this for a few moments….. (allow them to focus on this for a minute or so)*
- *Keep focus on the breathing, 'being with' each in-breath for its full duration and with each out-breath for its full duration, as if you were riding the waves of your own breathing.*
- *Keep noticing this for a few moments…. (allow them to focus on this for a minute or so).*
- *Every time you notice that your mind has wandered off the breath, notice what it was that took you away and they gently bring your attention back to your belly and the feeling of the breath coming in and out.*

Appendix K – Coping with Crisis group protocol; Version 4, pages 30 - 31

- *If your mind wanders away from the breath a thousand times then that's okay, that's what our mind does… but try to bring it back to the breath, no matter what has distracted you.*
- *Keep focusing on your breath for a few moments (allow this for a minute or so).*
- *When you're ready, we're going to slowly bring this exercise to a close. If you have your eyes closed, start to notice the room around you, move about your arms and legs slighty, and open your eyes".*
-
- *"How was that exercise? How did you find it? Was it difficult? Did you notice your mind wander?"*

10 minutes – **Mindfulness** (mindfulness hand-out 4c; participate skills) participating skills is the act of entering wholly into an activity with awareness into life itself, non-judgementally, in the present moment. Participating is the ultimate goal of mindfulness.

[Mindfulness Handout 4c from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Recap homework [Distress Tolerance worksheet 2a] (10 minutes) go through one situation for each person – how they had used the STOP skill, if it had helped. For clients who attended previous session, ask them if they could explain to the new group members what the homework was. Have discussion with the whole group about the topic of the homework and facilitate members who completed the homework to share what they put if they feel comfortable.

Self-soothing [Distress Tolerance hand-out 8] (5 minutes) 5 senses – go through the hand-out – can you think of any more? Get participants to read through, tick options and have discussion in group about their choices.

[Distress Tolerance Handout 8 from DBT Skills Training Handouts and Worksheets by Marsha Linehan (2014)]

Appendix K – Coping with Crisis group protocol; Version 4, page 32

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Recap and review session

- Review what mindfulness and why its important. Suggest smart phone apps e.g. insight timer and headspace
- Review skills covered in the handouts

Homework set and practice – self-soothing (DT hand-out 8) (10 minutes) – pick at least one of each sense and make a plan of how to achieve them. Troubleshoot anything that may make it difficult for people to complete the homework.

Appendix L - East of England Essex NHS research ethics committee approval letter – page 1

NHS
Health Research Authority

Miss Sarah Fife
University of Essex
Wivenhoe Park
Colchester
CO4 3SQ

Email: hra.approval@nhs.net

21 February 2017

Dear Miss Fife

Letter of HRA Approval

Study title:	**A Feasibility Study to Evaluate Self-Harm Group in Inpatient Settings**
IRAS project ID:	**205350**
REC reference:	**17/EE/0001**
Sponsor	**University of Essex**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details

Appendix L - East of England Essex NHS research ethics committee approval letter – page 2

IRAS project ID	205350

and further information about working with the research management function for each organisation can be accessed from www.hra.nhs.uk/hra-approval.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The document *"After Ethical Review – guidance for sponsors and investigators"*, issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

In addition to the guidance in the above, please note the following:

- HRA Approval applies for the duration of your REC favourable opinion, unless otherwise notified in writing by the HRA.
- Substantial amendments should be submitted directly to the Research Ethics Committee, as detailed in the *After Ethical Review* document. Non-substantial amendments should be submitted for review by the HRA using the form provided on the HRA website, and emailed to hra.amendments@nhs.net.
- The HRA will categorise amendments (substantial and non-substantial) and issue confirmation of continued HRA Approval. Further details can be found on the HRA website.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please email the HRA at hra.approval@nhs.net. Additionally, one of our staff would be happy to call and discuss your experience of HRA Approval.

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Appendix L - East of England Essex NHS research ethics committee approval letter – page 3

IRAS project ID	205350

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

Your IRAS project ID is **205350**. Please quote this on all correspondence.

Yours sincerely

Beverley Mashegede
Assessor

Email: hra.approval@nhs.net

Copy to: Ms Sarah Manning-Press, Sponsor Contact

Fiona Horton, Lead NHS R&D Contact

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Appendix L - East of England Essex NHS research ethics committee approval letter – page 4

IRAS project ID	205350

Appendix A - List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Contract/Study Agreement [Statement of Activities]		20 February 2017
Covering letter on headed paper [Cover letter]	1	10 November 2016
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Indemnity Letter]	1	10 November 2016
GP/consultant information sheets or letters [GP Letter]	1	10 November 2016
IRAS Application Form [IRAS_Form_22112016]		22 November 2016
IRAS Application Form XML file [IRAS_Form_22112016]		22 November 2016
IRAS Checklist XML [Checklist_07022017]		07 February 2017
Letter from sponsor [Sponsor Letter]	1	10 November 2016
Non-validated questionnaire [Demographic questionnaire]	1	10 November 2016
Non-validated questionnaire [Feedback questionnaire]	1	10 November 2016
Other [Adverse Events Form]	1	10 November 2016
Other [Screening Guidance]	1	10 November 2016
Other [Risk Policy]	1	04 November 2016
Other [Group Register]	1	10 November 2016
Other [Withdrawn application]	1	22 November 2016
Other [Group Protocol]	2	07 February 2017
Other [Screening Guidance Final]	2	24 January 2017
Other [Schedule of Events]		20 February 2017
Participant consent form [Participant Consent Form Final]	2	24 January 2017
Participant information sheet (PIS) [Participant Information Sheet Final]	2	24 January 2017
Referee's report or other scientific critique report [Proposal Feedback]	1	23 June 2016
Referee's report or other scientific critique report [Proposal Feedback1]	1	10 April 2016
Research protocol or project proposal [Thesis Proposal]	1	10 November 2016
Summary CV for Chief Investigator (CI) [CI CV]	2	24 January 2017
Summary CV for student		
Summary CV for supervisor (student research) [Summary CV Supervisor]	1	08 August 2016
Summary CV for supervisor (student research) [Summary CV Supervisor]	1	31 October 2016
Validated questionnaire [ISAS outcome measure]	1	04 November 2016
Validated questionnaire [Distress Tolerance Scale]	1	04 November 2016

Appendix L - East of England Essex NHS research ethics committee approval letter – page 5

IRAS project ID	205350

Appendix B - Summary of HRA Assessment

This appendix provides assurance to you, the sponsor and the NHS in England that the study, as reviewed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing and arranging capacity and capability.

For information on how the sponsor should be working with participating NHS organisations in England, please refer to the, *participating NHS organisations, capacity and capability* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections in this appendix.

The following person is the sponsor contact for the purpose of addressing participating organisation questions relating to the study:

Name: Sarah Manning-Press
Tel: 01206873561
Email: sarahm@essex.ac.uk

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	No comments
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	The sponsor intends to use a Statement of Activities as the form of agreement with the participating NHS organisation.
4.2	Insurance/indemnity arrangements assessed	Yes	Where applicable, independent contractors (e.g. General Practitioners) should ensure that the professional indemnity provided by their medical defence organisation covers the activities expected of them for this

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Appendix L East of England Essex NHS research ethics committee approval letter – page 6

IRAS project ID	205350

Section	HRA Assessment Criteria	Compliant with Standards	Comments
			research study.
4.3	Financial arrangements assessed	Yes	No application for external funding made. No funds will be provided to the participating organisation.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Yes	Provisional Opinion issued 23 January 2017. Favourable Opinion issued 09 February 2017.
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

Appendix L - East of England Essex NHS research ethics committee approval letter – page 7

IRAS project ID	205350

Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.
This is a non-commercial student (Doctorate in Clinical Psychology) study and there is one site type. The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website. If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Confirmation of Capacity and Capability

This describes whether formal confirmation of capacity and capability is expected from participating NHS organisations in England.
Participating NHS organisations in England **will be expected to formally confirm their capacity and capability to host this research**. • Following issue of this letter, participating NHS organisations in England may now confirm to the sponsor their capacity and capability to host this research, when ready to do so. How capacity and capacity will be confirmed is detailed in the *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* section of this appendix. • The Assessing, Arranging, and Confirming document on the HRA website provides further information for the sponsor and NHS organisations on assessing, arranging and confirming capacity and capability.

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and the minimum expectations for education, training and experience that PIs should meet (where applicable).
A PI is expected at the participating organisation. GCP training is not a generic training expectation, in line with the HRA statement on training expectations.

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HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken
As a non-commercial study undertaken by local staff, it is unlikely that letters of access or honorary research contracts will be applicable, except where local network staff employed by another Trust (or University) are involved (and then it is likely that arrangements are already in place). Where arrangements are not already in place, network staff (or similar) undertaking any research activities that may impact on the quality of care of the participant, would be expected to obtain an honorary research contract from one NHS organisation (if university employed), followed by Letters of Access for subsequent organisations. This would be on the basis of a Research Passport (if university employed) or an NHS to NHS confirmation of pre-engagement checks letter (if NHS employed). These should confirm enhanced DBS checks, including appropriate barred list checks, and occupational health clearance. For research team members undertaking activities that do not impact on the quality of care of the participant (for example, administering questionnaires), a Letter of Access based on standard DBS checks and occupational health clearance would be appropriate.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England to aid study set-up.
The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Appendix M - University of Essex research and ethics committee approval letter

03 July 2018

MISS S. FIFE

Dear Sarah,

Re: Ethical Approval Application (Ref 16062)

Further to your application for ethical approval, please find enclosed a copy of your application which has now been approved by the School Ethics Representative on behalf of the Faculty Ethics Committee.

Yours sincerely,

Lisa McKee
Ethics Administrator
School of Health and Human Sciences

cc. Research Governance and Planning Manager, REO
Supervisor

Appendix N – Adverse events form

A Feasibility Study to Evaluate a Self-Harm Group in Inpatient Settings

Adverse Events Form

Deliberate Self-Harm Psychological Group Programme Feasibility Study

Group Number: _____

Pt_ID: _____

Has the participant had any Adverse Events during this study? ☐ Yes ☐ No ***(If yes, please list all Adverse Events below)***

Severity	Study Intervention Relationship	Action Taken Regarding Study Intervention	Outcome of AE	Expected	Serious
1 = Mild 2 = Moderate 3 = Severe	1 = Definitely related 2 = Possibly related 3 = Not related	1 = None 2 = Discontinued permanently 3 = Discontinued temporarily 4 = Reduced Dose 5 = Increased Dose 6 = Delayed Dose	1 = Resolved, No Sequel 2 = AE still present- no treatment 3 = AE still present-being treated 4 = Residual effects present-not treated 5 = Residual effects present- treated 6 = Death 7 = Unknown	1 = Yes 2 = No	1 = Yes 2 = No (If yes, complete SAE form)

Adverse Event	Start Date	Stop Date	Severity	Relationship to Study Treatment	Action Taken	Outcome of AE	Expected?	Serious Adverse Event?	Initials
1.									
2.									
3.									

Appendix O – Recruitment diary – page 1

Tuesday 18th April *1pm-5pm, Ward A (male acute)*

Recruitment day:

I met with the assistant psychologist from Ward A today (male acute ward) who had identified six patients who had self-harm in their clinical notes. We approached these people first.

Main challenges today:

- Patients were out for the day if they were informal – not present on ward to approach.

- Patients sleeping / napping in the afternoon (medication side effects?)

- Men saying that they don't harm themselves – despite it being clear of their notes that they d (i.e. hitting walls etc.) questioning how they define self-harm…or implications for admitting to this, wondering if men construct self-harm as something that makes them look weak or perhaps people will not admit to self-harm as it might have implications on their section 17 leave…?

- There was also a difficultly with patients thinking they would still be here in two weeks time – many hope to be discharged despite no discharge plan in place – unable to commit to two weeks (despite confirming they can drop out during groups).

Discussed with assistant psychologist (ward A) the potential of discussing the group with other patients, who may not have clear indication of self-harm in their notes.

The only person we ended up recruiting today had only self-harmed 4 times in his life but wanted to stop. He had no self-harm on his notes. One person recruited for the first group.

Other practicalities that make the process difficult are the availability of each person involved - me (researcher – study day every two weeks), consultant clinical psychologist (leave and other commitments) and clinical psychologist (leave and other commitments). Decision made to wait until researcher has more time (towards summer) to access the ward to recruit and the facilitators have more time to run groups.

Appendix O – Recruitment diary – page 2

Assistant helping to run the group? Assistant Psychologist, Ward A has only just started – could lack in confidence to recruit participants?

10th July 2017

Screening preparation:

Organising second stage of recruitment – problem with Ward B(?) – undergoing some sort of refurbishment (found out later this was a ligature risk assessment).

Email sent to assistants doing screening. One assistant on annual leave so no screening possible on Ward D for next group.

Visited three wards in one day – assistants couldn't do Monday so all wards will be visited on Tuesdays from now on. Assistant on Ward C (female acute), Assistant on Ward B (male acute), Assistant Ward A (male acute).

1st August 2017

Recruitment day:

I was not able to go to Ward C today as Assistant Psychologist (Ward C) was unavailable this week - so hopefully this will be included next time.

Ward B - physically moved from Ward E yesterday (had been relocated for a ligature refurbishment for several weeks) so were in flux a little bit this morning. Assistant Psychologist (Ward B) (assistant) and I sat down with the Lead Nurse and they could only identify one person. I encouraged them to let me speak to them if they were unsure about self-harm. I had a dicussion about the definition of self-harm, which they consider not to include suicide attempts (US definition) – found that they were assuming someone who had hung himself the week before admission was attempting to kill himself and therefore was not suitable for the study – when questioned about the assumption of the patient's

Appendix O – Recruitment diary – page 3

intent they were vague about this, but seemd sure in their assumption. I think it is also a conceptual issue with self-harm and people's perception of what that means vs. the patients etc. When I met with the one they had identified at the end of the day he refused to do it, he couldn't relate to self-harm I think they had identified him as more self-neglect, either way he didn't want to engage in a group.

Assistant psychologist (Ward C) has been on holiday so had to catch up with the patients, we sat down with clinical psychologist (Ward A), but they were only able to come up with three names (they said usually it is more and there were a few more that I have recorded that are currently on leave) - one Clinical Psychologist (Ward C) wanted to see before I spoke to them, he said they were too anxious about groups, the other two I was able to consent - one was v. keen. I have a feeling if I had been able to see more people I would have got a few more, but unless they are very obviously self-harming it feels like I am unable to talk to them, despite my best efforts. I wondered if speaking to Clinical Psychologist (Ward C) (and Assistant Psychologist (Ward C)) about the possiblity of me sitting down with more people next time, even if they dont have obvious wounds (which is the case for one of the person I saw today), that might be helpful. It may be that people have self-harmed in the past and would like help with that, even though they are not actively self-harming. Obviously I said all of this, but I wonder if confirmation of that would help for next time when we come to ask them to screen.

Assistant Psychologist (Ward A) identified five people, two on leave for week, I sat down with three - one didn't want to talk about his self-harm, which he needs to do to complete the questionnaires and one was slipping in and out of understanding what I was talking about. I consented one on Ward A, very keen and very appropriate so I really hope he attends (NB. from our brief meeting I would say he would benefit from on-going support along the lines of DBT in the community - from what Assistant Psychologist (Ward A) said the risk assessment was properly done and he seemed at very high risk and really receptive to talking therapy).

Appendix O – Recruitment diary – page 4

I know it doesnt seem much, but I think we have a few challenges;

1. gate-keeping (inevitable as I need to go through a clinician as much as I would like to just go around everyone on the ward!),

2. recruiting people to therapy in this environment, a problem that you will have all the time,

3. that the clinicians and the patient have to think that they self-harm,

4. they have to fill in a consent form and questionnaires when all they want to do is go for a cigarette(!), which I think gives it an added complication that just encouraging them from the ward to a group.

8th August 2017

Clinical Psychologist reports only two / three people came to the group. One person does not want to continue attending.

- Suggestion of assistants on the female wards being trained to run the groups so that they can be done every week till September?

- Suggestion that assistants could do the consents for the group?

15th August 2017

Meeting with assistant to show them how to consent for the group. Female wards chosen due to higher rate of percieved clinical need.

Assistant raised an issue in terms of recruitment – with it being a 'self-harm' group, confidentiality issues are raised in terms of other patients asking why they are not able to attend groups – telling them it is for people that self-harm means implicating the people that join the group. [NB. Evidence that this is still a taboo, even within the patient group.]

Appendix O – Recruitment diary – page 5

Consent and measures training done with one assistant, the other just back from holiday difficult to pin down for very long, may have to actually sit with her to do a consent before she is able to do one by herself.

One assistant away for the week so may have to stagger the group, meaning one runs on later.

Due to meet them again next week to help Assistant Psychologist (Ward C) with consents.

***CQC visit means clinicians are hectic, busy ward, patients are less settled, difficult to get staff time.*

22nd August 2017

Assistant Psychologist (Ward B) is leaving post and on annual leave so the group will now be run on female acute and a male acute staggered over three weeks.

I met with Assistant Psychologist (Ward C) and Assistant Psychologist (Ward A) this morning, who have put aside time in the next three weeks for the groups. Assistant Psychologist (Ward A) had annual leave so times of groups had to be changed.

Assistant Psychologist (Ward C) identified 6 females who have self-harm on their risk profile, we approached all 6, one is being picked up by home treatment tomorrow, two said no to groups when we approached them, Assistant Psychologist (Ward C) is going to try to ask them again in the morning tomorrow. Three consented to take part, two managed to get through the questionnaires, the other one was a bit distracted... (thought disorder?).

Planning to go in next Tuesday to consent with Assistant Psychologist (Ward A) for the group starting on male acute next week.

24th August 2017

Appendix O – Recruitment diary – page 6

Email from Ward C assistant:

"Hi,

Hope you are well. Just to let you know that I have consented one more person. What participant number would be?

Many thanks

Best wishes"

29th August 2017

Ward A ward – two recruited. One particpant – suicide attempt – hanging. Also drug abuse (cocaine) he constitued this as self-harm.

5th September 2017

Assistant Psychologist (Ward C), conducted two post-measures. One consent.

Assistant Psychologist (Ward C) mentioned difficulty recruiting may be due to the difficult client group – unstable nature of them.

Ward A – two consents. Due to join group before as a rolling group.

Assistant Psychologist (Ward A) (Ward A Ass due to go on holiday next week for a week).

11th September 2017

Assistant Psychologist (Ward C) unwell, Assistant Psychologist (Ward A) on holiday – plan was to go to the ward to recruit today, but will leave it till tomorrow and if Assistant Psychologist (Ward C) isnt back I will need to use the nurses to recruit.

Email from Clinical Psychologist – perhaps reducing number of participants.

12th September 2017

Appendix O – Recruitment diary – page 7

Email from Assistant Psychologist (Ward C) to Clinical Psychologist and I.

"I hope you both are well.

It's been a busy time and Clinical Psychologist (Ward C) has not been around (the ward was more unstable than usual). I have been finding the self-harm group a bit difficult to fit in with my other ward duties and I would like to prioritise my general H work to ensure that the last two weeks end smoothly (I hope this makes sense!).*

I am thinking that maybe Assistant Psychologist (Ward B) (who mentioned her interest in running the group) and Assistant Psychologist (Ward A) could run it from next week? How does it sound? I also would like to say thank you for giving me the opportunity to support you! Let me know what your thoughts are."

Collected post-measures from the ward.

Clinical Psychologist confirmed Assistant Psychologist (Ward B) (from male ward) will run the next groups with Assistant Psychologist (Ward A).

19th September 2017

Assistant Psychologist (Ward A) – x2 recruited.

26th September 2017

Assistant Psychologist (Ward A) x4 recruited.

4th October 2017

T Ward – only had until the group, only one person self-harming, recruited. Participant said it was exactly the help he needed.*

11th October 2017

Ward A – only one person eligible today, recruited.

Appendix O – Recruitment diary – page 8

16th October 2017

Planned to go to Ward A, but Assistant Psychologist (Ward A) emailed to say he is off sick – reorganised for 8.30 Weds.

18th October 2017

8.30 – ward chaotic this morning, two asked refused to talk – one fed up with being an inpatient and doesn't want to do psychology groups, one wanted to talk later, but was not keen. Asked Assistant Psychologist (Ward A) if he would mind consenting him later.

23rd October 2017

Assistant recruited participant.

20th November 2017

Recruited two people, one person did not want to talk about self-harm.