

AN EXPLORATION OF FEMALES WHO USE SOCIALLY INTRUSIVE  
BEHAVIOURS – FROM PSYCHOLOGICAL CHARACTERISTICS TO  
TREATMENT

NICOLA WYLIE

Thesis submitted to the University of Nottingham for the degree of  
Professional Doctorate in Forensic Psychology (D.Foren.Psy.)

DECEMBER 2013



## **Abstract**

This thesis explores the relatively unknown area of female stalkers. Throughout the thesis the newly defined term 'Socially Intrusive Behaviours' (SIBs) is used to unify previous stalking definitions. Chapter One provides an introduction to the topic of females who display SIBs. Chapter Two includes a Thematic Analysis and explores the motives and justifications for SIBs and examines the personality traits, attachment styles and experiences of anger with female patients. Results indicate that SIBs are a maladaptive coping strategy that benefit the perpetrator, provide feelings of safety, are a response to perceived threats of abandonment and require over-control of emotional arousal. Assessment of personality, anger and attachment are also examined and treatment recommendations are discussed. An interesting finding was that SIBs are a maladaptive coping strategy to manipulate the perpetrators' feelings rather than the feelings or actions of others. Dialectical Behavioural Therapy (DBT) is a recognised treatment which targets a range of maladaptive coping strategies. Chapter Three provides a systematic review of the effectiveness of DBT with female-only populations in Randomised Control Trials. Results found DBT was superior at reducing a range of maladaptive coping behaviours including self-harm, substance misuse and binge/purge eating. It was therefore considered a potentially useful intervention for females whose maladaptive coping strategies are SIBs. Whether DBT could effectively target an adult female patient's SIBs was tested by a single case study in Chapter Four. The results indicated that DBT reduced her SIBs and improved her anger management skills. Chapter Five is a critique of the State Trait Anger Expression Inventory (Spielberger, 1999) as used in Chapter Two and Four. Chapter Six discusses the clinical and theoretical implications of this thesis, explores its limitations, and provides recommendations for future research.

**KEYWORDS:** Stalking, females, Socially Intrusive Behaviours (SIBs), Dialectical Behavioural Therapy (DBT), anger, STAXI-2

### **Statement of Authorship**

The idea for the thesis was the author's own and reflects her interest in the area of female stalking.

Chapter Three contains material that has been submitted for publication to Clinical Psychology and Psychotherapy. This chapter has been co – authored by Shihning Chou and Simon Duff from the University of Nottingham. Double scoring of included studies was completed by Jamie Walton, to whom I am grateful. A copy of the journal submission can be found in Appendix A.

Chapter Three was presented via poster Symposium at the British Psychological Society, Division of Forensic Psychology, Annual Conference (Belfast, June 2013). Please see Appendix B for a copy of this poster. The poster will also be presented at the European Association of Psychology and Law (EAPL) Annual Conference (Coventry, September 2013).

## **Acknowledgements**

There are many people that I want to thank because without them this thesis would not have been possible.

I want to begin by thanking a very special friend of mine who made me realise that everyone deserves care and attention. I hope that I am the person and the psychologist she would have wanted me to become.

I want to thank my family for their infinite generosity, love and support. Mum and Dad, thank you for always treating me like your little girl. You have always been there to celebrate the positives and pick me up when things were difficult and without your encouragement I would never have made it. I hope I have made you proud. Thank you to my sister for helping me and realising how much dedication this required. They might not know it but my treasured companions have always been there and will always be special to me.

Thank you to each and every one of my friends – I hope you know how important you all are to me and I am sorry I have abandoned you while writing this thesis. I have missed you. As my favourite band put it, “I don’t shine if you don’t shine” and I dedicate that to two great friends in particular, Jemma and Emma – you always make me laugh. Thanks to Hannah, Laura and Jamie who have motivated me since we met.

I owe a huge thanks to everyone I have worked with during my various placements. Phil Coombes, thank you for putting up with my ‘banter’ and being so kind. You have been a wonderful supervisor and I wouldn’t be anywhere near as good a psychologist if it wasn’t for you. Thanks to Kevin Browne for accepting me onto the Doctorate and to Shihning Chou and Simon Duff who have been patient and approachable throughout.

Finally, I want to thank everyone who agreed to take part in my research with a special thanks to the patient who agreed to be my case study. I hope I have represented you all fairly.

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**Chapter One:**  
**Introduction**

According to the British Crime Survey (BCS) there are over 1.3 million victims of stalking every year in Britain (Crime Survey in England and Wales (CSEW), 2013). According to the CSEW (2013) 8% of women and 6% of men are stalked every year with lifetime victimisation rates reaching 19% for women and 12% for men. Stalking is most often perpetrated by ex-intimate partners who pose a higher risk of violence to their victims than strangers do (Scott, Lloyd & Gavin, 2010).

When this research began there was no formal offence of stalking in England and Wales. However, recent advances led The Protection of Freedoms Act (2012) to create two new offences of stalking. This is important for three reasons; firstly it acknowledges that stalking presents a serious risk to victims; secondly it acknowledges the need to understand the risks that perpetrators pose; and thirdly it reflects the growing research in the field. In 2010, over 10,000 prosecutions were brought under the Act with almost 8,500 offenders found guilty in the same year (Home Office, 2011). The Act accepts that individual stalking behaviours must be acknowledged even although they may not constitute an offence. Therefore, researching convicted stalkers and those without a conviction appears relevant. The definition of harassment includes causing alarm or distress; offenders are subject to a maximum of 6 months imprisonment. Stalking is regarded with more caution; the offence is subject to a maximum of five years imprisonment and involves causing the victim fear of violence on at least two occasions.

As awareness of the risks of stalking increases, The Home Office Consultation on Stalking (2011) funded six organisations with the intention of improving the responses to stalking crimes. In 2012 the National Stalking Clinic was built in London and provides specific treatment for stalkers based on the work of the Melbourne Stalking Clinic. These advances indicate that growing attention is being given to the crime of stalking and create a need for more research within this area.



Perpetrators of stalking can be classified and the most widely accepted classification system is Mullen, Pathé, Purcell and Stuart's (1999) five stalker typology system. The details of the characteristics of the five stalker types are detailed in Table 1.1 below. The five different stalker types display different personality traits, appear to have different motives and have experienced different relationships with their victim. The Rejected stalkers have had prior relationships with the victim and aim to re-establish or revenge their victim. Intimacy seekers have never had a relationship with the victim but desire one and view their victim as their true love. The Incompetent Suitor stalkers aim to increase their chances of a relationship with their victim despite recognising the feelings are not reciprocated. Restful stalkers aim to frighten and distress their victim and are hypersensitive to their actions. Predatory stalkers have a sense of power where stalking may be part of a fantasy which is motivated by sexual desires.

**Table 1.1: Characteristics of stalkers (Mullen et al., 2009)**

Stalker typology	Characteristic of stalker
Rejected	Rejected from relationship
	Desire to re-establish relationship
	Desire for revenge
	Sense of loss
	Negative emotions
	Personality disorder
Intimacy Seeking	Identify victim as true love
	Erotomaniac delusions

	Mental health problems
	Morbid infatuation
	Persist despite being unsure of success
	No previous relationship with the victim
	Want to establish a relationship
	Victim has unique qualities
Incompetent Suitor	Acknowledge affection is not reciprocated
	Feel stalking increases likelihood of relationship
	Lack of pro-social skills
	Sense of entitlement
Resentful	Aim to frighten and distress victim
	Revenge and grievance with victim
	Perceive victims emotions or actions as personal attacks
	Prior sexual relationship with victim
Predatory	Sense of power
	Fantasy and rehearsal of attack
	Use of paraphilias
	Previous convictions for sexual offences

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Included in the many nebulous definitions of stalking are terms such as “persistent”, “harassing”, “obsessional following” and “criminal harassment” (Meloy & Gothard, 1995; Kropp et al., 2002; Mullen,

Mackenzie, Ogloss, Pathé, McEwan et al., 2006). Victims are expected to experience a number of negative emotions such as "anger", "sadness", "depression", "anxiety" and "distress" (Hill, Rubin & Peplau, 1976; Dutton, Saunders, Starzomski & Bartholomew, 1994; Sprecher, 1994; O'Hearn & Davis, 1997). Broadly, stalking definitions have included different motives of the perpetrator whether their behaviours aim to seek "revenge", to "frighten" or "distress", to "establish a new relationship" or to "re-establish romance" with an ex-partner (Baumeister, 1997; Meloy, 2000). More recently definitions include how the victims respond and take into account the consequences of responding to a "threat" such as being forced to move area, changing job and losing a job and/or partner (Tjaden & Thoennes, 1997; CSEW, 2013). As literature expands, stalking definitions have more specifically involved the use of "violence" (Storey, Hart, Meloy & Reavis, 2008).

The aim of this thesis is to better understand the psychological functioning of females who display stalking behaviours. Given that stalking is difficult to define (Meloy, 1996) and the existing literature includes such a range of terms, this thesis uses a unique definition of stalking referred hereafter as Socially Intrusive Behaviours (SIBs). It is hoped that the use of the term SIBs accounts for the range of behaviours the media refer to as stalking and is inclusive of females without a conviction of stalking. As media coverage and interest of SIB crimes increase it seems relevant to determine a definition that accurately describes this offending style. As Meloy (1998) acknowledges, some SIBs are normal within certain contexts. One of the important considerations that must be taken into account is the context in which stalking occurs. For example, it may be acceptable to pursue someone you want to have a relationship with. What appears to distinguish normal behaviour from that which is socially intrusive is the repetition and relentlessness in which it is perpetrated.

Therefore, when establishing what elements of behaviours could be considered socially intrusive within the context of this thesis, the following considerations were made. Mullen et al.'s (1999) definitions of stalker characteristics were considered and explored specifically in Chapter One because they are relevant to clinical and forensic samples. It was decided that when patients were in a hospital setting, the term SIBs could involve non-threatening behaviours and those that did not have the intention to harm. It was also considered that some SIBs were motivated by a desire to begin a relationship with their victim. In these cases the perpetrator may not use threats, so threats were not a compulsory aspect of the SIBs definition. Having said that, using threats, swearing and sending obscene material are considered SIBs thus they may include causing alarm and distress for the victim. The definition of SIBs is largely based on Tjaden and Thoennes (1997) list of stalking behaviours as these are accepted as a summary of the behaviours commonly used in stalking literature. They include monitoring and watching, repetitively phoning or writing to, threatening, intimidating and abusing others. The term SIBs encompasses the range of stalker-like conduct used within previous research as well as the range of behaviours covered by legal definitions and includes behaviours such that the victim might not notice. For example, implicit behaviours such as 'watching and monitoring', which were observed by all participants from this research, to more explicit and widely recognised threatening behaviours which cause alarm and/or distress such as persistently phoning a victim were included. Similarly, SIBs may include damage to a person or property which may require planning but could also be impulsive. Additionally, as in previous studies (Lewis, Fremouw, Del Ben & Farr, 2001) the current study does not rely on a conviction of stalking to determine the stalker and non-stalker group thus the use of the term SIBs encompasses perpetrators who do not have a conviction. The term SIBs also takes into account the context of perpetration and the experience of the perpetrator when displaying SIBs. The study of SIBs in a patient population could also provide the extent to which offence

paralleling behaviours are observed which is important in regards to risk management. The term SIBs aims to unify all previous academic and legal concepts and allow for females without a conviction to be studied. SIBs are defined herein as ***any behaviour which is manipulative for person or situation, is repetitive in nature and may or may not be illegal. Under the umbrella term SIBs are actions that may: cause alarm or distress, interfere with or damage property or person, are obscene or threatening, require planning and are either implicit or explicit in nature.*** Table 1.2 below shows the definition of SIB as discussed.

**Table 1.2: Definition of Socially Intrusive Behaviours (SIBs)**

SIBs definition must include	SIBs may include
Repetitive behaviour	Threats or behaviours that are obscene in nature
Manipulation of person or environment	Behaviour that causes alarm or distress for the victim
Legal and illegal behaviours	Damage to person or property
	Planning
	Implicit or explicit behaviour

The focus of this thesis is also to expand on previous knowledge of female offenders as there is little knowledge about this group in general. Females represent between 10% and 25% of perpetrators (Purcell, Pathé & Mullen 2001; Baum, Catalano, Rand & Rose, 2009) yet very little is known about them. Although worldwide SIB crimes are receiving growing attention it remains that little is known about females who display such behaviours as most studies involve more male perpetrators than female (Zona, Sharma & Lane, 1993; Meloy & Gothard, 1995; Harmon, Rosner & Owens, 1995; Meloy, Rivers, Siegel, Gothard, Naimark & Nicolini, 2000; Purcell et al.,

2001). In part, the limited knowledge of females is due to their limited numbers when compared to their male counterparts (CSEW, 2013) and there are a number of reasons for this. Firstly, males may be less likely to report stalking victimisation (Catalano, Smith, Snyder & Rand, 2009) so actual prevalence rates are unclear. Secondly, incidents of stalking may not be recorded because the victim may not know they are being stalked (Meloy & Boyd, 2003). Thirdly, female perpetrators often stalk female victims who may not perceive their 'friend's' behaviour as stalking so not report the crime (Purcell, et al., 2001). Fourthly, it may be that victims do not recognise that any support is available so do not report their victimisation. Fifthly, relationships with the perpetrator may mean stalking is not reported due to emotional attachments (Westrup, Fremouw, Thompson & Lewis, 1999). And finally it may be that murder, domestic violence or sexual offences are preceded by stalking which is not known or reported.

More recently researchers have suggested that there are as many female as there are male perpetrators of stalking (Schwartz-Watts & Morgan, 1998; Rosenfeld, 2003; Spitzberg & Cupach, 2003; Haugaard & Seri, 2004) so it is necessary to bridge the obvious gaps in literature and understand why females stalk. Moreover, research has found that the rates of females' stalking increase when forensic samples are explored (Harmon, O'Connor, Forcier & Collins, 2004; Meloy, Mohandie & Green, 2011) suggesting the risks are not yet well understood. This thesis aims to begin to link the overwhelming gap between the psychological functioning of females who display SIBs and potential psychological treatment.

## Structure of Thesis

This thesis is organised into six chapters including this introduction and a final overall discussion of the research findings to close. The four main chapters (Chapters Two, Three, Four and Five) consist of an empirical research study, a systematic review, a case study and a psychometric critique. These chapters demonstrate what psychological knowledge can add to our limited knowledge of female stalkers, how effective treatment for female patients is and how these two areas may merge effectively. The main chapters of this thesis can be viewed as independent studies because each has a unique focus. They are presented in sequence to best guide the reader from the broad exploratory study of females who display SIBs, to potential effective treatment, assessment and evaluations within the female population.

## *Chapter Two*

The next chapter is an exploratory Thematic Analysis of females who display SIBs. To the author's knowledge the use of Thematic Analysis with this perpetrator group is the first of its kind. This progressive methodological shift provides valuable insight into the motives and psychological functioning of females who display SIBs. It is the first study to interview perpetrators and explore their motives rather than use archival case review (Kienlen, Birmingham, Solberg, O'Regan & Meloy, 1997; Purcell et al., 2001; Spitzberg & Cupach, 2007) or victim studies (Hall, 1998; Kropp, Hart, Lyon & Le Pard, 2002; Wigman, 2009).

This chapter also presents the personality and emotional management difficulties that females who display SIBs demonstrate. Presenting problems and risks were explored through interview in order to expand the current knowledge of these areas. Risk assessment for stalking is in its infancy (Kropp, Hart & Lyon, 2008) so this chapter also aimed at identifying the specific risks evident in a female population.

The overall aim of this chapter is to gain knowledge of the psychological functioning of females who display SIBs. Additionally, specific hypotheses are tested: (a) females who display SIBs will possess personality traits associated with Borderline Personality Disorder (BPD; APA, 2000); (b) females who display SIBs will have an insecure attachment style (c) females who display SIBs will over-control their anger.

### *Chapter Three*

A systematic review of the effectiveness of Dialectical Behaviour Therapy (DBT; Linehan, 1993) with female populations was completed. The benefit of this chapter is that treatment for females with emotion regulation difficulties can be better understood. DBT was developed to target the maladaptive coping styles of individuals with BPD (Linehan, 1993) and Chapter Two found that SIBs are a maladaptive coping strategy. In order to explore the possible treatment of maladaptive coping strategies via SIBs DBT was examined. For this reason the first female-only systematic review of how effective DBT is at managing different maladaptive coping responses was explored. The only existing literature includes studies which examine females with Eating Disorder, Substance Dependence and BPD so Chapter Three examined these. The range of disorders explored in this chapter gives insight into how DBT can support a range of different maladaptive coping strategies. In this way, the potential effectiveness of DBT to help regulate more appropriate responses in a group of females who display SIBs is suggested.

### *Chapter Four*

In order to link the preceding two chapters, the case study focuses on risk assessment, formulation and treatment effectiveness of an adult female who displayed SIBs. This 1:1 methodology involves using the skills of DBT to reduce the over-controlled presentation of a female with BPD and a conviction of Harassment. Therefore, this chapter tests whether DBT can be an appropriate intervention with a female who displays SIBs as



maladaptive coping responses to over-controlling her anger. The maladaptive coping responses and difficulties communicating distress were given specific attention in an attempt to address the function of her SIBs.

Mastronardi, Pomilla, Ricci, and D'Argenio (2013) suggested that females are most likely to stalk professionals in a hospital setting. The subject of the case study displayed SIBs within a low secure hospital which made the participant particularly relevant to what is already known about female stalkers. In order to address her maladaptive coping strategies the findings of Chapter Two and Three were combined and explored here. It was hypothesised that this chapter would give a more detailed account of a female's SIBs and explores how an intervention adapted to specifically meet her needs could address her risks.

### *Chapter Five*

This chapter is a critique of the State Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999). The STAXI-2 was used in Chapter Two and Chapter Four because it specifically measures anger control (Spielberger, 1999). How anger is controlled was relevant to this thesis because it is hypothesised that when over-controlling emotions, the risk of displaying SIBs increases. The purpose of this chapter is to examine how well the STAXI-2 measures anger and therefore gives understanding to the role of over-controlled anger as endorsed in previous chapters.

### *Chapter Six*

The final discussion brings together the findings and implications from the main body of this thesis and explores the gaps that exist within the research. This chapter discusses the recommendations highlighted throughout the thesis and places the findings within the wider literature. Recommendations for future research are discussed here, with particular attention to UK treatment and risk assessment/management.

How the thesis may inform future Offending Behaviour Programmes for females who display SIBs is also discussed. Additionally, the relevance of the findings of this thesis in regard to current UK policy and procedure for assessing and treating female offenders is considered.

## **Chapter Two:**

### **An exploratory Thematic Analysis to investigate what characteristics motivate females to use Socially Intrusive Behaviours**

## **Abstract**

**Introduction:** Stalking is not a rare crime, nor one that is well defined or understood. This study uses the term SIBs to categorise behaviours recognised within the stalking literature. It examined SIBs in a female forensic population drawing upon the limited previous knowledge of this group to understand their psychological functioning and justifications for displaying SIBs.

**Method:** A qualitative approach using Thematic Analysis, interview, questionnaire and psychometric assessment was completed with ten females in a low secure hospital. This allowed the role of anger, personality disorder and attachment style to be specifically addressed as well as establishing themes between six participants who endorsed SIBs and four who did not.

**Results:** Results indicated that maladaptive coping strategies and over-controlled presentation were two main motivators to displaying SIBs. Insecure (dismissive-avoidant) attachment, over-controlled anger and Avoidant, Depressive, Anxiety and Self-Defeating personality traits were found within the perpetrator group. Results also indicate that the use of SIBs aimed to manipulate the perpetrators emotional arousal rather than influence their victims.

**Conclusion:** There is limited knowledge of female stalkers and this study has added the first known qualitative research with female perpetrators. Females who display SIBs differ from those who do not and appear to struggle to manage emotional arousal and perceived threats. Limitations and future research recommendations are discussed.

**KEYWORDS:** stalking, socially intrusive, female, Thematic Analysis

## **Introduction**

Since stalking research began, there has been little progress in the methodological sophistication of studies particularly in the female perpetrator population. Meloy (1996) proposed a 'typical stalker' type however over a decade later little is still known about females who stalk. Throughout this chapter the term SIBs is used to unify the diverse definitions of stalking provided previously (Hill et al., 1976; Dutton et al., 1994; Sprecher, 1994; Meloy & Gothard, 1995; Baumeister, 1997; O'Hearn & Davis, 1997; Tjaden & Thoennes, 1997; Meloy, 2000; Kropp et al., 2002; Mullen, et al., 2006; Storey et al., 2008; CSEW, 2013). For a full description and definition of SIBs please refer to Chapter One and in particular Table 1.2 (page 7).

To date, most studies of female stalkers involve archival case reviews (Spitzberg & Cupach, 2007; Purcell et al., 2001; Mullen and Boyd, 2003; Zona Sharman & Lane, 1993; Kienlen et al., 1997). While some of this information is gathered over long periods of time (Purcell et al., 2001), using large sample sizes (Meloy, Mohandie & Green, 2011), or from mental health and law enforcement professionals (Meloy & Boyd, 2003), little can be understood about the motives and psychological characteristics of female stalkers without speaking to them directly. Empirical studies that involve questionnaires often rely on responses of the victims of ex-intimates, not the perpetrator (Wigman, 2009; Kropp et al., 2002), meaning research to date has offered descriptive statics or chi-square analysis of female stalkers (Kienlen et al, 1997). Studies that examine perpetrator characteristics rarely use standardised psychometric assessments of psychopathology such as the Millon Clinical Multiaxial Inventory (MCMI-III; Millon, Millon, Davis & Grossman, 2009).

Stalking is most often explored via victimisation studies which indicate that women are seldom prosecuted; criminal justice interventions are most

likely to proceed with cases involving a male suspect accused of stalking a woman (Heidensohn, 1985; Hall, 1998). As rates of SIB offending steadily increases (CSEW, 2013) and the option of cyber-stalking amplifies possibilities to threaten victims, research needs to understand these offenders risks and psychological functioning more clearly (Alexy, Burgess, Baker & Smoyak, 2005).

Kienlan et al. (1997) found that female patients most often display SIBs towards professionals or those they perceive to be in a position of authority. Mastronardi et al. (2013) found that in private mental health settings women are most likely to demonstrate stalking. Additionally, Abrams and Robin (2011) found that professionals working in forensic services were at an increased risk of harassment. Purcell et al. (2001) found that women were more likely to stalk a former professional contact; with 40% of their female perpetrators most often stalking a mental health professional. It is therefore relevant for the present study not to discriminate participants by conviction as it is believed patients without a current conviction for harassment may utilise SIB during their hospital admission. What we do know about females who display SIB can be categorised in the following areas; attachment style, personality disorder and emotion regulation. These are discussed in turn below.

### **Attachment style**

While some findings suggest that stalking is highly connected to expressions of love and the level of anger, jealousy, and obsessiveness (Davis, Ace & Andra, 2000) others suggest that stalking by an ex-partner is generally considered less dangerous than stalking cases involving strangers (Sheridan & Boon, 2002). Furthermore, findings suggest that stalking is often not reported, due to the victim-perpetrator relationship (Westrup et al., 1999). This could be because participants appear to rely on the availability heuristic (Laibson & Zeckhauser, 1998) and 'stranger

danger' phenomenon to rate the seriousness of victimisation. More recently Duff and Scott (2013) found that the more context that is given in a case vignette, such as information about the actions of the stalker and the relationship between the victim and perpetrator, the more realistic are the perceptions of stalking risk. This is relevant given that actually those in a previous relationship with the victim are more likely to present as a risk of harm to the victim than strangers (Scott et al., 2010). This lends important consideration to the influence attachment styles have on females who stalk, and there has been much debate in this area in the past fifteen years. Feeney (1995) suggests that people who are anxious over relationships worry about not being lovable. Feeney (1995) suggests that females stalk due to insecure attachments towards those they are interested in romantically. Similarly, Bartholomew (1990) suggests that individuals with positive models of self are self-sufficient and confident, whereas those with negative models of self lack confidence and require ongoing external validation. Therefore it could be that stalking serves to gain proximity to, while avoiding rejection from, someone the perpetrator admires (the victim).

Knobloch, Soloman and Cruz (2001) propose that those with a preoccupied attachment style (high on attachment anxiety) report increased fear/distress and sadness in response to jealousy-arousing situations. These individuals were also found to spy and check on their partner more (Knobloch et al., 2001) which suggests that perpetrators are motivated to display SIBs in response to negative emotions driven by their attachment to the victim.

Westrup et al. (1997) found insecure attachment styles were common in a mixed sample of self-reported stalkers. In particular traits of attachment styles were ambivalent and avoidant. Meloy (1996) implies that difficulties in attachment are due to interpersonal attachments associated with characteristics of BPD and Langhinrichsen-Rohling et al., (2000) also found that individuals with BPD have insecure attachment styles. These

personality traits may therefore increase the pre-occupied attachment style observed in female stalkers (Meloy & Boyd, 2003) and in turn challenge the chivalry hypothesis that women are less dangerous than men. Using a standardised measure of attachment such as the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) may add credence to a link between females who display SIBs and attachment, if such a link is found. Again literature into females who express SIBs has repeatedly lacked this methodological sophistication; the present study is the first to advance in this way.

### **Personality Disorder**

To date research has found that personality disorders are prevalent among individuals who stalk (Sandberg, McNeil, & Binder, 1998). For example, of the one hundred and two cases Spencer (1998) studied 86 (84.3%) males and 16 (15.7%) females were found to have a Personality Disorder. Spencer (1998) concluded that a greater understanding of the characteristics of female stalkers was required through clinical interview however previous research has failed to advance in this way. BPD is specifically prevalent among females who stalk (Lewis et al., 2001; Purcell et al., 2001; Meloy & Boyd, 2003) with other personality traits also found such as narcissistic, histrionic, antisocial, schizoid and dependent (Akhtar, 1987; Meloy & Gothard, 1995). As in previous studies, Strand and McEwan (2012) found that borderline, narcissistic and dependent personality disorders were most prevalent among violent female stalkers. These antisocial traits appeared to distinguish stalking from other offending behaviours (Meloy & Gothard, 1995; Spencer, 1998). Previous literature therefore implies that females who display SIBs will possess the same emotion regulation difficulties as found in general BPD populations (Linehan, 1993). Trull, Ueda, Conforti and Doan (1997) defined females with BPD as aggressive, emotionally labile and manipulative which may be features of SIBs. Again this implies that the use of standardized psychometric assessments of psychopathology is advantageous.



Similarly, by not limiting knowledge of SIB perpetrators to working diagnoses more can be understood regarding the differences between those who display SIBs and those who do not. It is for this reason that the present study investigates personality disorder but does not consider it necessary for inclusion.

### **Emotion Dysregulation**

This area remains the most under studied, however common traits have been observed in samples of females who demonstrate SIBs.

Mullen et al. (1999) found that the majority of stalkers struggled to regulate emotional arousal effectively. In particular they found that in-patients had anger and impulsivity difficulties. Additionally, anger and hostility were observed in over 60% of Meloy and Boyd's (2003) sample which echoed results from Meloy, Rivers, Sigel et al. (2000). Previously it was found that when anger was investigated in a female sample it increased the risk of stalking perpetration (Hill et al., 1976; Sprecher, 1994; O'Hearn and Davis, 1997). Meloy (1996) proposed that stalkers experience intense rage associated with rejection and humiliation. These intense emotional experiences may create difficulties in managing anger, particularly if a diagnosis of BPD is also evident (Linehan, 1996). A general predisposition to intense mood fluctuations may create an environment whereby the individual seeks to act in a way to manage emotional arousal. Therefore, in the present study it is hypothesised that in order to manage labile mood females will suppress angry feelings and present in an over-controlled way.

Meloy and Boyd (2003) suggest that females who display SIBs experience a relentless emotional experience of loneliness, dependency, jealousy, a need for power and control and a desire to retaliate. These could be viewed as risk factors for displaying SIBs as the emotional valence is negative. This is clearly worthy of further exploration.

## **The present study**

Given the growing attention to stalking by the media and the limited knowledge of female stalkers, the present study focused on determining how a group of females who display SIBs may present. The first of its kind, this study uses qualitative interview techniques to explore what the psychological functioning of females who demonstrate SIBs may be. The current study will compared females who display SIBs and those who do not from an in-patient population as these two groups are expected to have different psychological characteristics (Kienlen et al, 1997).

**Aim:** The overall aim of this preliminary qualitative research into females who display SIBs is to gain knowledge of their psychological functioning.

The following research questions are explored:

- 1) What is the psychological functioning of females who display SIBs?
- 2) Do females who display SIBs have insecure attachment styles?
- 3) Do females who display SIBs over-control their anger?
- 4) Do females who display SIBs have BPD traits?
- 5) What stalker typology, as defined by Mullen et al. (1999), do females who display SIBs endorse?

Given the limited existing knowledge of females who stalk the following hypotheses are tested:

**Hypothesis one:** Females who display SIBs possess personality traits associated with BPD such as poor emotion regulation skills, aggressive tendencies and manipulative characteristics.

*Examined by: responses to MCMI-III*

**Hypothesis two:** Females who display SIBs will show preoccupied attachment styles

*Examined by: responses on the RSQ*

**Hypothesis three:** Females who display SIBs over-control their anger

*Examined by: STAXI-2 responses*

## **Method**

### **Ethical Considerations**

#### *Ethical Approval*

This study was given ethical clearance by the National Research Ethics Service Committee East Midlands (Leicester), The University of Nottingham and the hospital where it took place.

#### *Confidentiality and Data Protection*

This study involved a face to face interview with patients and collection of archival psychometric data completed on admission to the hospital. Only the researcher had access to the recorded interviews, their transcriptions and the archival data collected for the research. Personal information was not identifiable as participant numbers were used to label interview transcripts.

The Participant Information Sheet (PIS; Appendix C) explained to participants that no information would be shared with the staff of the low secure hospital unless issues of risk (to self or others) or jeopardy to the security of the hospital were disclosed. The PIS also explained that the interview would be digitally recorded and once transcribed all details would be rendered anonymous.

### **Recruitment**

Capacity to consent was taken determined in a three stage process before any participant was involved in the research. Initially the clinical teams were approached and asked for consent to approach patients who

demonstrated capacity. Those patients who did not demonstrate capacity to take part were listed and were not approached at any stage of the data collection process. Secondly, potential participants were approached by a member of staff independent of the research and issued with the PIS a week prior to interview. This limited any bias that may have resulted from the researcher conducting this part of the recruitment process. Additionally, previous research has found that only advertising studies does not attract many participants, particularly in forensic services (Godin & Davis, 2005), therefore it was felt that informing the nursing staff and handing out the PIS would draw more interest in the study. This provided participants with information so they could make an informed decision to take part without feeling pressure from the researcher. It also provided participants the opportunity to refuse to take part, or withdraw. Finally, prior to taking part in the interview, the interviewer asked questions to assess capacity. At this time capacity was established following the five principles of capacity according to the Mental Capacity Act (2005). This included checking information was understood, retained, used to make a decision, and communicated clearly. No patient displayed a loss of capacity at the time of, or during, the interview therefore no data was excluded on this basis.

### *Consent*

The PIS explained consent. Copies of the Consent form (Appendix D), identifying agreement to take part, were signed before the interview began.

### *Participants*

In total, of the 46 patients in the hospital, ten were included in the research. Reasons for attrition were:

- Commissioners did not reply to correspondences meaning **eight** patients could not be approached.

- A further **three** participants were assessed by their clinical team as not having capacity to engage in the research so were not eligible.
- Patients on 1:1 observations were not asked to take part due to problems of confidentiality; at the time of data collection **six** patients were on 1:1 observations.
- **Eight** patients refused to take part when initially approached
- **Two** patients initially agreed to take part but were unwell at the time of interview
- **Nine** patients were unable to take part due to attending therapies on the day the researcher was available to collect data.

Of the ten patients interviewed, none withdrew or discontinued the interview so all data were used in the analysis. Participant demographic information can be found in Table 2.1. The mean age of participants was 32.8 years (sd = 6.42) and most had a diagnosis of BPD, were White British and had an index offence.

**Table 2.1: Participants' demographic information**

Participant number	Age (years)	Ethnicity	Section (MHA,1983)	time since section (years)	Diagnosis (DSM-IV)	Index Offence	Sub-group
1	38	White British	37/41	10	Schizophrenia	Grievous Bodily Harm and Wounding	SIB-P
2	20	White British	3	2	BPD	None	Non-SIB
3	29	White British	37/41	6	BPD	Arson	SIB-P
4	31	White British	37/41	3	BPD	Unlawful wounding	Non-SIB
5	36	White British	37/41	4	BPD	Arson	Non-SIB
6	40	White British	37	6	BPD	Burglary, theft, possession of a bladed article	Non-SIB
7	28	White British	37/41	3	BPD	Possession of a bladed article	SIB-P
8	42	White British	3	3	BPD	None	SIB-P
9	32	White British	37	5	BPD	Criminal damage	SIB-P
10	32	Indian	3	2	Bipolar	Threats to harm	SIB-P

As can be seen in Table 2.1 the SIB-P and non-SIB group were similar in terms of age, ethnicity, Section, years since Section given, Diagnosis and whether they had a conviction or not.

## **Procedure**

### *Structure of the Interview*

Existing literature was used to develop the interview which was split into three different sections as described below. A copy of the interview schedule can be viewed in Appendix E.

### *Section A*

The first section of the interview explored SIBs as defined by Tjaden and Thoennes (1997). This section asked participants to rate how often, if ever, they had utilised different SIBs and asked participants to explain why they had acted in that way, what they were trying to achieve and how the victim may have felt. This section aimed to elicit what types, frequency and motives females who display SIBs showed.

Only if the participant endorsed more than 60% of these items or indicated significant risk (conviction) did they complete the second section of the interview which consisted of 10 SIB-related semi-structured questions. Clear differences between the two sub-groups of participants were shown during this section of the interview. The non-SIB group endorsed only the first item of this section of the interview which explored “watching and monitoring others”. No other items were endorsed by this group. In contrast, the SIB-P group endorsed a range of the different SIBs.

### *Section B*

Questions were multilayered and attempted to explore the motives for the females SIBs.

These questions were based on the most recent stalker typology as developed by Mullen, Pathé, Purcell and Stuart (1999) and defined by Mullen et al. (2009). A summary is shown in Table 1.1 (page 3). These are defined as the *Rejected stalker* who has been rejected from a relationship and desires to re-establish contact with their previous partner. They have a desire for revenge and experience a sense of loss since the relationship was terminated. These stalkers are most likely to have a personality disorder and experience negative emotions. The *Intimacy Seeking stalker* identifies the victim as their true love. They may experience erotomaniac delusions and are likely to have mental health problems. This group has a morbid infatuation with their victim and stalking behaviours persist despite the perpetrator recognising they may be unsuccessful at attaining a relationship. These stalkers have never had a previous relationship with the victim and attribute unique qualities to the victim. The *Incompetent Suitor stalker* acknowledges affection from their victim is not reciprocated but feels that stalking will increase their chance of establishing a relationship with the victim. These stalkers have a lack of appropriate social skills and experience entitlement in regards to deserving a relationship. The *Resentful stalker* uses stalking to frighten and distress their victim and is usually motivated by revenge. They perceive the victims' behaviours as personal attacks and become hypersensitive to any action the victim makes. The final typology is the *Predatory stalker* who stalks to gain power and act out fantasies by stalking. They often use paraphilias as part of their stalking and have previous convictions for sexual offences. The responses were examined in terms of what characteristics females who display SIBs have and the nature of their relationship with the victim.

### Section C

The third section of the interview was the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994). In addition to this questionnaire being completed the participants were also asked to explain



their responses. This meant that the RSQ also included a qualitative as well as quantitative section and allowed the responses to be used during the Thematic Analysis. All participants completed this section of the interview.

The RSQ was preferred over alternatives such as the Adult Attachment Inventory (AAI; George, Kaplan & Main, 1985) and the Experiences in Close relationships (ECR; Brennan, Clark & Shaver, 1998) due to its application within forensic samples. Alternatives rely too heavily on experiences of close relationships which offender groups rarely encounter (Tobin & Begley, 2004) or were too focused on one relationship which may not have been most relevant to this research if multiple victims were identified. The RSQ uses four categories of adult attachment which are well understood in the literature meaning this was a tool that could easily be compared to the current literature. As a self-report tool the RSQ is said to be a good assessment of adult relationships (Bernier & Dozier, 2002). The RSQ is used to assess attachment in adult relationships and most stalking is of another adult meaning it provides exploration of thoughts and feelings towards the most common victim group.

### *Archival Data*

In addition to completing the interview with participants the MCMI-III and STAXI-2 responses were collected. These assessments were analysed to explore the personality traits and management of anger within the population. Participants had already completed this assessments upon admission to the hospital so they were not re-administered. This reduced any impact of taking part on the participants.

### *MCMI-III*

The MCMI-III assesses different personality traits and is used extensively in clinical and forensic settings. The MCMI-III correlates with DSM-IV diagnosis meaning it was advantageous over alternative personality

assessments. It also categorises Axis I and Axis II disorders allowing interpretations to link to previous literature on female stalkers. Additionally, as well having already been completed, the MCMI-III was chosen over possible alternatives such as the International Personality Disorder Examination (IPDE; Lorranger, 1995), the Personality Assessment Inventory (PAI; Morey, 2007) and the Minnesota Multiphasic Personality Inventory (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen & Kreammer, 1989) due to the number of items these scales consist of and the length of time it would have taken for participants to complete these scales. It would also have added time pressure to the researcher to score and interpret these lengthy assessments.

### *STAXI-2*

This assessment was used in the current study due to its strong psychometric properties (Spielberger, 1999) and its definition of 'anger-control' as this was an element of emotional arousal specifically examined in the current study. Other anger measures such as the Novaco Anger Scale and Provocation Inventory (NAS-PI; Novaco, 2003) could have been used but these do not have a specific anger-control scale so would not have provided as much insight into females' anger as the STAXI-2. Similarly, the Buss-Durkee Hostility Inventory (BDHI; Buss & Durkee, 1957) could have been used to measure anger given its increased sensitivity within forensic populations (Biaggio, 1980) however again this tool does not measure anger states or behaviours specifically. Therefore, the STAXI-2 appeared to be the most useful tool to explore any differences in the participants' ability to manage anger and whether or not the SIB-P group over-control anger.

### *Conducting the Interview*

Before the research began the interview schedule was rehearsed with peers. This was to make sure the interview could answer the research question and was also used to determine a logical first question. It was

felt that 'watching other people' was a neutral question so this was chosen as the first interview question. The order of subsequent questions was guided by the dialogue of the participants and how they responded to the semi-structured items. This allowed the interview to flow and meant that the initial section seemed less like a list of SIBs and more like a conversation about communication styles. By rehearsing the interview schedule the researcher also became familiar with questions and was able to prompt participants without directing their dialogue.

All interviews were conducted by the researcher, and were digitally recorded. Prior to interview, the researcher and participant read through the PIS and the Consent Form together to allow the participant to ask any questions before the interview began. It was explained to participants that no expenses or payment would be made for taking part, and that taking part or refusing to would have no impact upon their treatment pathway and regular therapies. Advantages and disadvantages of taking part were explored. It was important to highlight that archival data would also be collected, but that this did not require further participation from the subjects.

Because some participants did not endorse SIBs and others endorsed a number of the behaviours the length of the interviews varied between 25 and 70 minutes. During the interview prompts to aid the researcher's understanding of what had been said and to gain perspective of the situation were used. All participants answered all questions given to them and completed the RSQ fully.

At the end of the interview, as well as the Participant Debrief Form (Appendix F), participants were asked if they needed any additional support. The contact details of the researcher, supervisor, Lead Psychologist and The Samaritans were issued to participants in case of distress. One participant asked for the interview to stop half way through

the RSQ section but returned after a few minutes stating she was happy to continue. This participant requested a 1:1 from her Named Nurse at the end of the interview and this was facilitated immediately. No other participant requested additional support.

### *Archival Data*

This research also involved the researcher collecting participant's responses on the State Triat Anger Expression Inventory (second edition) (STAXI-2; Spielberger, 1988) and the MCMI-III. These assessments are completed on admission to the hospital. Responses were collected and noted anonymously, with participant numbers allocated to ensure anonymity. No action was required by the participants for this part of data collection. All collected data was valid with no omissions.

## **Data Analysis**

### *Transcribing the Interviews*

The researcher transcribed all data to ensure familiarity was maximised (Guest et al., 2012). Participants were given ten days to withdraw before the interviews were transcribed. Once transcribed, the interview was anonymous so data could not be distinguished. In this report all quotations are denoted by the use of italics with the participant number and the line number of the quote preceding each quote. For example Participant 1 (377): *"I just wanted to be with him but he might not have wanted to be with me"*

To ensure that confidentiality and data protection regulations were adhered to the following rules were applied to transcriptions:

- If the participant named a third party; [name(1)] was entered instead of the name said.
- If the participant named a place; [place(1)] was entered instead of the place name.

- Long pauses were denoted by [pause]
- To make quotations concise and clear ... was used to represent deleted discourse.

Phonetic errors such as “ehh” and “umm” were removed as this is not a requirement of Thematic Analysis because it is not a conversational analysis method (Guest, MacQueen & Namey, 2012).

### *Process*

Due to the exploratory nature of this study, Thematic Analysis was chosen to analyse the data. This method is flexible in its approach to analysing data and is one of the most common methods of data analysis in qualitative research (Guest et al., 2012). Through Thematic Analysis the motives and emotions of individuals who display SIBs could be understood. Thematic Analysis provided scope to investigate each participant on an individual basis, with codes emerging from each interview and being used to determine superordinate themes between subjects. Thematic Analysis also allowed for within group comparisons to be made between those who displayed SIBs (SIB-P) and those who did not (non-SIB).

Thematic Analysis has been criticised for not providing the researcher clear guidelines on how to make use of the method. However, recent guidelines have been provided (Braun & Clarke, 2006) which present a sequential methodology to analyse data using Thematic Analysis. While Thematic Analysis remains more flexible than other qualitative approaches (Braun & Clarke, 2006) it provided the most useful framework to analyse data for the current research as it is exploratory in nature and provided insight into ‘how’ the two sample groups differ as well as their rationale for ‘why’ SIBs were displayed. This meant that each participant’s individual experiences were acknowledged and their reality, albeit often skewed by cognitive distortions, was interpreted. The meaning that the participants attached to their SIBs provided insight into their offending behaviour that has not been examined previously. Once individual accounts were analysed they

were considered in the wider context of the other participants' responses. Then, superordinate themes between the groups were created which grouped together common elements of the participants' rationale and experiences (Guest et al., 2012).

### *Process*

To demonstrate rigor during data analysis extensive reading on the procedure of Thematic Analysis was undertaken before analysis began (Fereday & Muir-Cochrane, 2004). The process is based upon recommendations from Fereday and Muir-Cochrane (2004) and follows guidelines and interpretive processes as outlined by Braun and Clarke (2006). The data was peer reviewed; one transcript was given to a peer to code, and themes were reviewed by a professional working with female patients. The peer review process identified similar codes to the researcher and allowed the data to be revised, suggestions of how to group data that the researcher had struggled to make meaningful were considered. The stages of analysis are defined below:

#### 1. Code Manual

As suggested by Braun and Clarke (2006) 'repeat reading' of the data took place. This was such that transcriptions were read through without any notes being taken and increased the researcher's familiarity and closeness to the data. This reduced the chances of data being missed or ignored. Transcripts were re-read and notes were taken of words that stood out and appeared to relate to different patterns of behaviours or motives. As suggested by Braun and Clarke (2006), the codes had already been considered and were based within theoretical literature. Having some pre-determined code names allowed the data to be meaningful from the initial stages and as it was expected to answer a research question these pre-determined codes helped to shape the research interview. Transcriptions were then read again with notes taken in regards to how behaviours were linked. These codes were the initial interpretations of the data. It was at

this stage that a 'code manual' was developed (Crabtree & Miller, 1999). As Crabtree and Miller (1999) suggest, a code manual is used to assist in the interpretation of the data as it is used to organise the small and abundant codes. Table 2.2 highlights how this process was undertaken.

## 2. Frequency of Codes

Frequent codes were identified for each individual in terms of how they answered the research question. The full data set was considered at this stage to explore repeated patterns within it.

## 3. Initial Themes

A formulation for each participant was then completed to identify themes and further questions from the data. This involved combining codes that were very similar.

## 4. Additional Coding

These themes were then compared between participants creating common themes between participant groups. Codes were named to summarise the data collected and inform the themes they determine. Again as suggested by Braun and Clarke (2006) maps were used to visually represent the data and evidence the generation of themes in a unique way. This mapping also allowed the researcher to refine themes within and between SIB perpetrators (SIB-P) and those who did not use SIBs (non-SIB).

## 5. Identifying Themes

Codes were then grouped which created three between group familiarity themes. At this stage the themes were named. The names represented both the story told by the data set as a whole and also go some way to answer the research question. The names of the themes are short and indicate the fundamental meaning of the data.

## 6. Corroborating themes

Finally, the grouped data was further analysed and clustered to create four superordinate themes. At this stage examples that clearly demonstrate the theme were extracted from the data and are included in this report.

**Table 2.2: Example of data analysis**

Thematic Analysis process	Example of data
Example of data collected	<p>Interviewer: Have you ever ended up going to places that you thought someone might be so you could see them and spend time with them?</p> <p>Participant 8 (195): <i>"yeah I went to his office to feel safe - it wasn't really about spending time with him, but it was just so I felt safe knowing he was nearby"</i></p>
1. code manual	If I am close to others I am safe
2. frequency of codes	safe
3. initial themes	Close means safe
4. additional coding	Maladaptive coping strategy to feel safe
5. identifying themes	Other people give me safety
6. corroborating themes	Safety

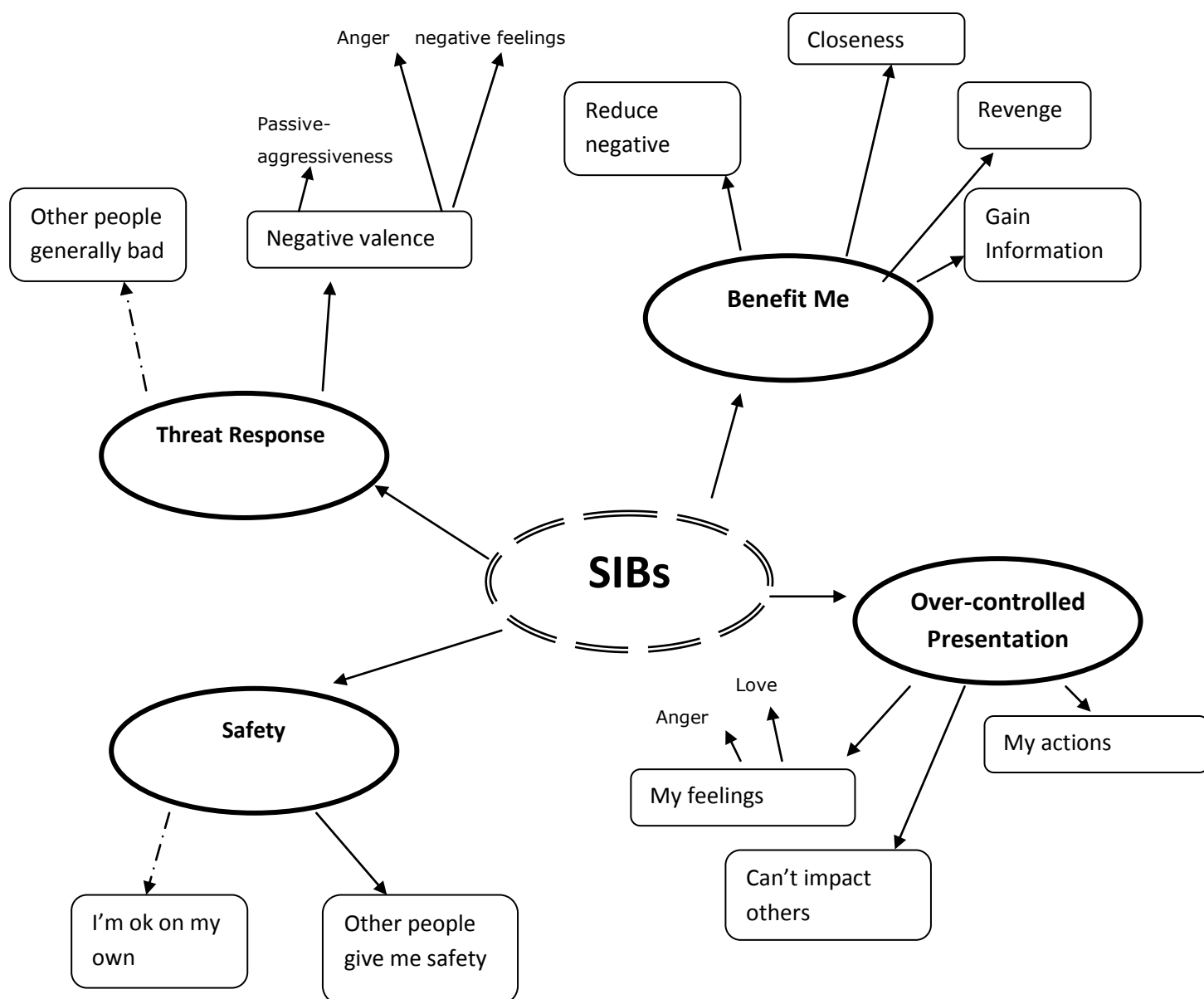


## **Results**

### **Interview**

A diagrammatical version of the Thematic Analysis process is shown in Figure 1. Some overlap is observed in the coding that made up the subthemes. This was expected to occur because the themes were not made up of isolated concepts, but were statements that occurred frequently during the coding of the transcripts.

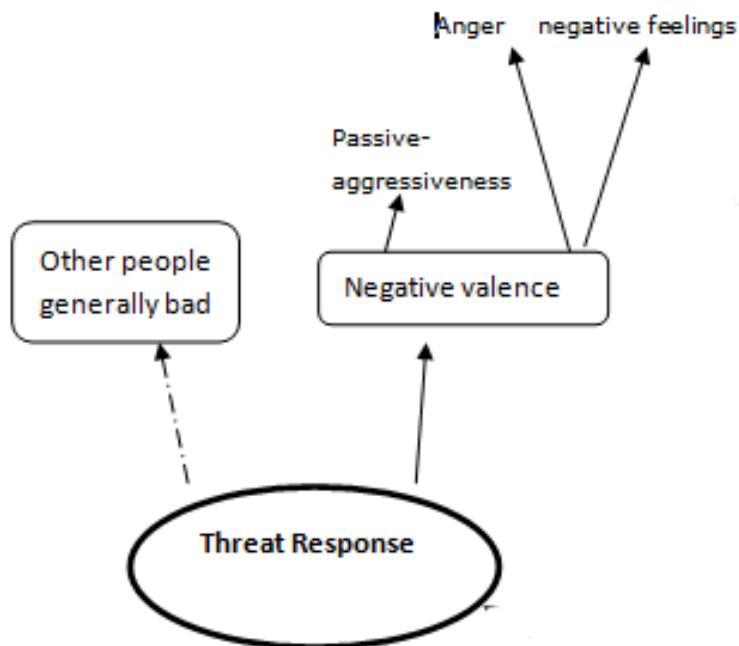
Throughout this chapter quotes are used as supporting evidence for the themes that emerged. Appendix G provides vast supporting evidence of this process.



**Figure 2.1: Outcome of Thematic Analysis**

- > SIB-P coding  
 - - - - -> Non-SIB coding

## Superordinate Theme A: Threat Response



**Figure 2.2: The Threat Response superordinate theme and subthemes**

This theme is defined by SIBs being part of a maladaptive coping response that encourages the perpetrator to display SIBs in response to perceived threat, or in order to threaten their victims. It was observed the SIB-P group perceived any negative emotion as a threat which was exacerbated when actual or perceived rejection from the victim occurred. Table 2.3 shows the participants that endorsed these items and shows that these SIBs were not unique to the SIB-P group.

**Table 2.3: Participants who endorsed the Threat Response Subthemes**

Subthemes	Participants who endorsed this theme									
	SIB-P						non-SIB			
	1	3	7	8	9	10	2	4	5	6
Negative Valence	Y	Y	Y	Y	Y	Y			Y	Y
Other people are generally bad							Y	Y	Y	Y

### **Negative valence**

The Threat Response was also observed in the SIB-P as they appeared to feel threatened by the victim. They also attempted to threaten the victim when responding to perceived intimidation. Negative emotions were discussed during the interview frequently by the SIB-P group.

Anger was a frequent emotion experienced by the SIB-P group towards their victims. It appears that they view anger as a reaction to feeling threatened by the victim.

Participant 9 (155): *"I used to feel angry if she didn't answer. I used to feel paranoid and angry about phones ringing and people not answering – thinking people didn't want to speak to me. It would make me phone them more, but then I got more angry each time."*

The SIB-P group also discussed feeling negatively such as *jealous*, *nervous* and *annoyed*. It appeared these emotions were viewed as threats to the perpetrators, so SIBs were more likely to be used to manage the perpetrators negative affect.

Interviewer: "I often worry that romantic partners don't really love me"

Participant 1 (536): *"very much like me"*

Interviewer: "and does that impact on how you interact with them do you think?"

Participant 1 (539): *"yeah I get nervous and keep my distance."*

*Passive-aggressive* responses were observed only by the SIB-P group and indicate a preference to respond to others in a way that lacks assertiveness, avoids the other person/issue or is fearful of a comeback from the other person. The SIB-P group stated they displayed SIBs because they were *passive aggressive*. It appeared SIBs serve a function to the SIB-P group in terms of communicating how they feel but not receiving a negative reaction from their victim.

Participant 10 (27): *"I can be quite passive-aggressive and intense...More non-verbally than verbally. Because if I respond to them I get a response that hits me like a jack in the box and that would be awful. So if I say something passive-aggressively or non-verbally then they have nothing to say back to me. It's a sort of defence mechanism – a learnt behaviour."*

Members of the non-SIB group appeared to be more direct with their anger.

Participant 5 (43): *"I threatened them to stop. I was angry. I was angry at them and what they had done to me."*

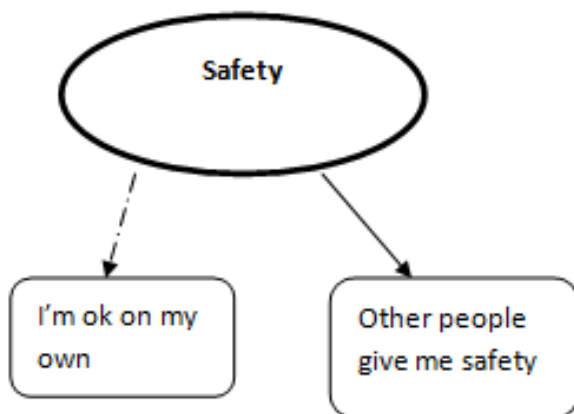
### **Other people are generally bad**

One of the main differences between the SIB-P and non-SIB group is observed in this theme. Here the non-SIB had their own view of others as being generally bad which was not a view held by the SIB-P group. The non-SIB group spoke about paranoid beliefs that others needed to be *sussed out* because they were *difficult to trust*. It appeared these views derived from experiences of being *let down* before. Here their avoidance

prevents them from wanting to display SIBs as they do not want anything to do with other people.

Participant 2 (247): *"to get close to anybody you are gonna get hurt at some point."*

### **Superordinate Theme B: Safety**



**Figure 2.3: The Safety superordinate theme and subthemes**

This theme is defined by the SIB-P group feeling safer with some proximity to their victims and the non-SIB group feeling safer without others in their lives. In Table 2.4 the participants who endorsed the different subthemes are shown.

**Table 2.4: Participants who endorsed the Safety subtheme**

Subthemes	Participants who endorsed this theme									
	SIB-P					non-SIB				
	1	3	7	8	9	10	2	4	5	6
Other people give me safety	Y	Y		Y						
I am ok on my own							Y			Y

**Other people give me safety**

The SIB-P group also appeared to view SIB as making them feel safe. This was in comparison to the non-SIB group who preferred distance and felt at more risk if close to others.

For the SIB-P group proximity to others made them feel safe as it allowed them to avoid rejection and confrontation.

Participant 8 (193): *"I went to his work, but it was not like I was waiting for him, I just went to his office to feel safe and when I saw him I felt safe."*

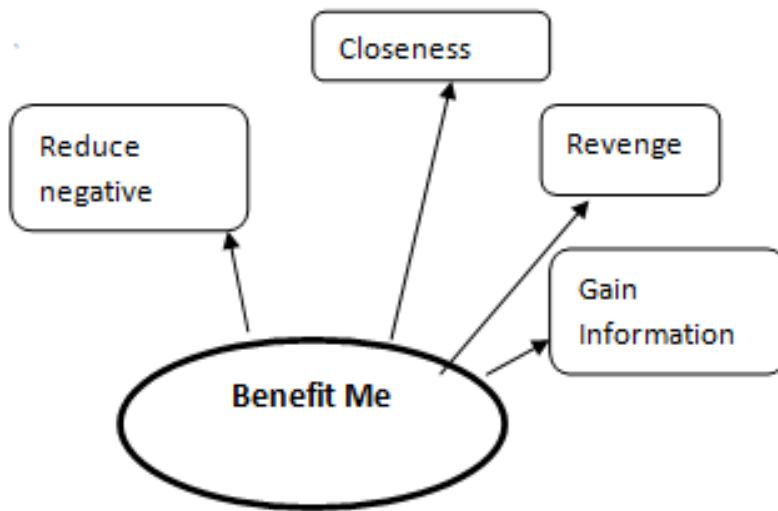
**I'm ok on my own**

The non-SIB group viewed distance as meaning safety and showed a preference to be on their own; for them distance meant they were safe.

Interviewer: "I am comfortable without close emotional relationships."

Participant 2 (235): *"that's very much like me - I wouldn't mind life like that at all- I could be on my own all the time with no one pestering me."*

### **Superordinate Theme C: Benefit Me**



**Figure 2.4: The Benefit Me superordinate theme and subthemes**

This theme is defined by participants' viewing the use of SIBs as useful, good and reassuring. The SIB-P group were able to discuss how SIBs were useful to them in a number of ways whereas the non-SIB group only viewed the SIBs useful so they could revenge a perceived wrong-doing. Table 2.5 details the participants who endorsed the subthemes.

**Table 2.5 Participants who endorsed the Benefit Me subtheme**

Subthemes	Participants who endorsed this theme									
	SIB-P						non-SIB			
	1	3	7	8	9	10	2	4	5	6
Revenge	Y	Y		Y	Y	Y			Y	Y
Closeness	Y	Y	Y	Y	Y	Y				
Gain Information	Y	Y	Y			Y	Y			Y
Reduce negative feelings		Y	Y	Y	Y	Y				



## **Revenge**

The SIB-P group appeared to see SIBs as benefitting them because they were able to exact *revenge* on the victim and seek *payback* from the victim for a wrong doing and watch their victim's response. Making sure the reaction from the victim is just also appeared a concern of the SIB-P group.

Participant 9 (276): *"So things like that yeah I do think about getting revenge but I don't know what sort of revenge I want to get – like physical or smash her car up but I did have feelings of revenge yeah."*

## **Closeness**

In this sub-theme the SIB-P group appear to display SIBs in order to feel close whereas the non-SIB group view distance a greater benefit. This closeness appeared a benefit to the SIB-P group as it brought them and the victim together.

Participant 9 (190): *"I would drive in the area just, not really knowing, but I used to live round the corner from one of her ex's. I used to drive to see if I could see her car – just for a connection. Nothing un-to-ward, I wouldn't have done anything to her ex, I just wanted to be close to her [ex partner]. It was just a connection."*

Participant 7 noted that once she had established a relationship with the victim of her SIBs she did not feel a need to display SIBs anymore. This indicates that the motives of her SIBs were to ultimately benefit her by securing herself a partner.

Participant 7 (235): *"I just don't feel I need to grab her attention by talking about us being together now [we are together]."*

Participant's 7 and 10 challenged the view that SIBs were to benefit them and showed a desire to attempt to benefit their victims.

Participant 7 (140): *"I mean I don't carefully pick my words out now, I just say whatever comes to my head, but I don't mean it in a nasty way – just keeping her informed of how I feel...I'm trying to make her feel good by being open and honest"*

Participant 10 (469): *"I would get a glimpse of them and then try to be at the place to say "hello" so they knew I hadn't forgotten about them."*

### **Gain Information**

The SIB-P group demonstrated the importance of getting what they want by *watching, spending time with* and *avoiding rejection* from the victim and finding out if the victim was *interested in being in a relationship* with them. This may suggest some entitlement to display SIBs to gain information.

SIB were seen as a benefit to the SIB-P group as they used the SIBs to gain information about their victim. This appeared to benefit the SIB-P group as it helped them get to know the victim better, and where they stood in relation to interest being reciprocated, or being hurt.

Interviewer: "have you ever got information about someone without asking them directly for it? Maybe you ask someone else about them?"

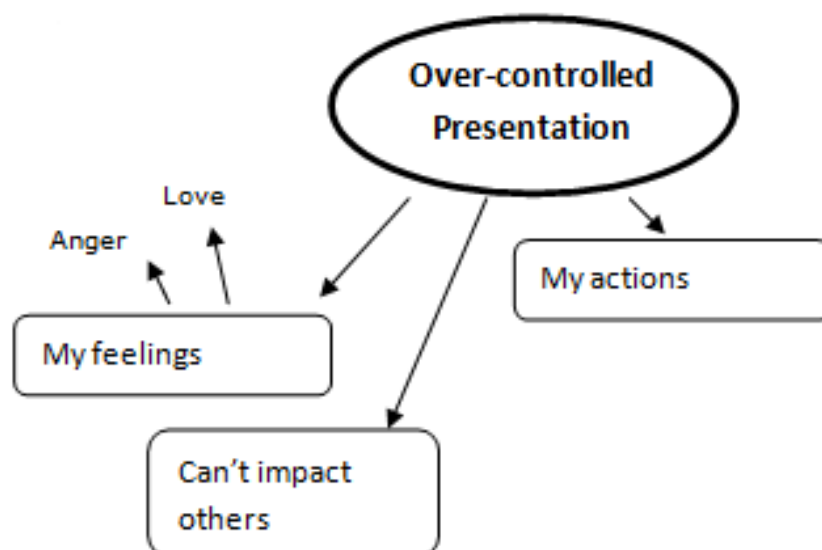
Participant 7 (87): *"Yeah every chance I got...so I could gather as much information as I could. What is she like? What is she into? Do you think she likes me?"*

### **Reduce Negative feelings**

SIB also benefited the SIB-P group by *reducing negative feelings* which likely served to reinforce the use of SIBs as the benefit of using SIBs was that intense emotional arousal was reduced.

Participant 3 (44): "I'll give an example – my ex and his partner – I intimidated her for a while, I didn't stalk her or anything but if I saw her around I'd cause her problems but it was because I was in love...Yeah I was in love and jealous cause I felt I couldn't manage without him"

### **Superordinate Theme D: Over-Controlled presentation**



**Figure 2.5 Over-controlled Presentation superordinate theme and subthemes**

This theme is defined by the participants SIBs being part of a generally over-controlled presentation where emotions are not expressed, recognised or management with efficacy. This superordinate theme describes how the SIB-P group appear vulnerable to their lack of control of others, their feelings and how they act in response to these feelings. Table 2.6 shows the participants that endorsed these items.

**Table 2.6: Participants in the SIB-P group who endorsed the Over-controlled Subthemes**

Subthemes	Participants who endorsed this theme					
	1	3	7	8	9	10
My feelings	Y	Y	Y		Y	Y
Can't impact others	Y	Y	Y		Y	Y
My actions	Y	Y	Y		Y	Y

### **My feelings**

Analysis found that the SIB-P group demonstrated unique characteristics when compared to the non-SIB group. The vulnerability to their feelings and the *overwhelming* nature of emotions was one such subtheme. By over-controlling their emotions the SIB-P group make themselves more vulnerable to their emotional experiences. The non-SIB group did not mention love once, while it was a frequent emotion expressed by the SIB-P group for both ex-partners to whom they displayed SIBs to gain closeness to as well as new love interests.

Interviewer: "did you believe the nurse was your one true love?"

Participant 10 (525): *"I think so yes. I just felt it inside. I can still feel it inside me. I think I will never ever forget her in my life."*

The SIB-P group also spoke of anger in the same way; this being an intense emotion that they are vulnerable to but over-control to stay close to the victim. In this way it can be seen that the SIB-P group over-control their emotions due to feeling vulnerable of the actions of others.

Participant 9 (167): *"And she was my first love so it was a very bad first experience of love and lead to my first hospital admission. It was a very*

*bad first experience of love to have. I took it all personally. I was vulnerable and angry for most of the relationship."*

### **Other people's actions**

The SIB-P group also appeared vulnerable to the actions of others and unable to control how others respond or treat them. Unlike the non-SIB group, they do not expect everyone to treat them badly, but do not feel they have an impact on other people. Here the SIB-P group appear to display SIBs to communicate their feelings even though they identified communication with others is difficult given their lack of control over the other person.

Participant 1 (377): *"I just wanted to be with him but he might not have wanted to be with me"*

### **My actions**

The SIB-P group also display SIBs because there is nothing they can do to change. They feel that their behaviours and personality are unchangeable and therefore become vulnerable to the consequence of their actions. This resulted in them summarising their personalities using concrete phrases and being vulnerable to their own actions.

Participant 10 (514): *"well there was nothing I could do 'cause my emotions were so strong for her."*

### **Summary**

Following the Thematic Analysis approach which was applied to the full data set key concepts and themes were derived (Braun & Clarke, 2006). At the superordinate level four themes were elicited; Over-controlled Presentation, Safety, Benefit Me and Threat Response. These themes summarised the justifications of displaying SIBs by the SIB-P group and served to distinguish the SIB-P and non-SIB groups. The non-SIB group

felt better without anyone close to them so did not employ SIBs. Similarly, the SIB-P group displayed SIBs to feel safe when close to others, but the non-SIB group felt safer without anyone close by. The SIB-P group's over-controlled presentation was viewed as deriving from overwhelming emotions, not having an impact on other people and not being able to change their reactions to their emotions. Additionally the view that SIBs benefit the perpetrators were viewed by both the SIB-P and non-SIB groups but for the later this only referred to SIBs to exact revenge.

### **Stalker Typologies (Mullen et al., 1999)**

As the questions for this part of the interview were derived from Mullen et al.'s (1999) stalker typology, the responses could determine what 'type' of stalker the SIB-P group was made up of.

Responses indicated that the most common stalker type was the Incompetent Suitor, with the Intimate Seeker and Rejected stalkers also being endorsed. All SIB-P members endorsed actions of the Incompetent Suitor, while the other types were endorsed more specifically in the following ways: Participants 1, 3 and 9 endorsed the rejected stalker type; Participants 7, 8 and 10 endorsed the intimate seeker.

#### **Incompetent Suitor**

The Incompetent Suitor is someone who lacks the skills to effectively manage relationships despite a strong wish to seek intimacy with the victim (who often does not have feelings for the perpetrator) (Mullen et al., 1999). Mullen et al., (1999) make reference to the type of victim the Incompetent Suitor may desire and state that it is unlikely that they will have any special features. Incompetent Suitors are aware that the feelings are not mutual but appear to possess a sense of entitlement to have a partner. This supports the 'SIB Benefit Me' subtheme in the Threat

Response maladaptive coping response theme as the SIB-P group benefit by gaining closeness and proximity to the victim.

Participant 10 (542): *"She didn't give any [signs she wanted to be in a relationship with me]. But then she didn't know I wanted to be until I left. She must not though 'cause she could get in touch now. I don't think she wanted to be in a relationship with me."*

### *Rejected*

The SIB-P group members who endorsed the Rejected stalker pursued former intimate partners. They wanted either *revenge* (payback) or, more commonly, to re-establish a *relationship* with their victim. Rejected stalkers are the most common type of stalker and are the most likely to be violent (Mullen et al., 1999). Only Participant 1 had an index offence of violence towards others from the rejected SIB-P group.

Participant 9 (276): *"So things like that yeh I do think about getting revenge but I don't know what sort of revenge I want to get – like physical or smash her car up but I did have feelings of revenge yeh."*

### *Intimacy Seeker*

The SIB-P who met this stalker type endorsed items that relate to a desire for a relationship with someone they believe to be their "true love" and who they have not been in a previous relationship with. Intimacy Seekers are less aware of the response of the victim which also appeared to be true to the participants in this group.

Participant 3 (56): *"I just thought that when you love people you do things that you want people to notice."*

Participant 8 did not endorse the Intimacy Seeker stalker type but her responses indicate that she wanted the qualities of an intimate relationship with her victim such as safety and *respect*.

Participant 8 (175): *"he was really good – he understood, he helped me deal with everything. He spent time with me, doing his job, making me safe...yeah it was positive for me at that point – but looking back on it, it shouldn't have occurred really"*

Interviewer: "why?"

Participant 8: *"I have a husband"*

### **Relationship Styles Questionnaire (Griffin & Bartholomew, 1991)**

The results of the RSQ did not distinguish the SIB-P and non-SIB group and are shown in Table 2.7.

**Table 2.7: RSQ raw scores for the SIB-P and non-SIB group members**

RSQ ATTACHMENT STYLE	SIB-P						non-SIB			
	1	3	7	8	9	10	2	4	5	6
Secure	11	15	10	14	15	18	12	10	15	14
Fearful	13	18	16	16	9	5	12	16	15	18
Pre-occupied	14	5	12	4	9	15	4	4	8	8
Dismissive	19	25	23	24	12	19	21	17	18	21

The results, as shown in Table 2.7, showed that both the SIB-P and non-SIB groups had an insecure attachment style. All but one participant, (Participant 9; member of the SIB-P group), whose results indicated a secure attachment style, showed dismissive-avoidant attachment patterns. The least common attachment style was pre-occupied as responses were lowest for all but Participant 1 (also in the SIB-P group) on this scale. Participant 1's lowest score was for a fearful attachment style.



The Dismissive-avoidant attachment style is characterised by individuals who desire independence. From the RSQ responses such as *"it is very important for me to feel independent"*, *"I am comfortable without close emotional relationships"*, *"it is very important for me to feel self-sufficient"*, *"I prefer not to have other people depend on me"* and *"I prefer not to depend on others"* were endorsed to support this view. While the non-SIB group demonstrated no desire for closeness to others at all both in the RSQ and the Thematic Analysis, the SIB-P group differ in their desire for, all be it distal, closeness to others. Dismissive-avoidant attachment is characterised by a suppression of feelings. This was observed via the Thematic Analysis and is supported by the STAXI-2 results described below. Griffin and Bartholomew (1991) note that the dismissive-avoidant attachment style is also associated with a sense of self-worth and this links to the 'SIB Benefits Me' theme by reducing negative feelings and gaining information about victims. Additionally this attachment style is characterised by a positive view of the self which may link to the 'SIB benefits me' responses where there is a sense of entitlement that may link to positive view of the self.

### **State Trait Anger Expression Inventory (Spielberger, 1988)**

Each participant answered all STAXI-2 items and their scores have been individually summarised in Appendix H. Group summaries also can be found in Appendix H.

Table 2.8 shows the results obtained on the STAXI-2 from the SIB-P and non-SIB groups.

**Table 2.8: The STAXI-2 percentile scores for the SIB-P and non-SIB groups**

STAXI-2 scale	SIB-P group members percentile scores						non-SIB group members percentile scores			
	1	3	7	8	9	10	2	4	5	6
S-Ang	80*	80*	65	40	80*	90*	15	15	85*	40
S-Ang/F	90*	80*	35	35	80*	90*	15	15	93*	35
S-Ang/V	60	85*	85*	45	85*	80*	35	35	85*	45
S-Ang/P	60	80*	50	70	50	97*	50	50	50	50
T-Ang	60	90*	30	5	60	85*	70	5	70	40
T-Ang/T	40	95*	35	30	70	90*	95*	35	85*	35
T-Ang/R	70	90*	20	10	70	80*	20	5	30	70
AX-O	90*	95*	10	10	30	90*	85*	10	20	10
AX-I	95*	80*	95*	50	85*	80*	55	10	70	85*
AC-O	40	5	80*	80*	85*	1	5	85*	10	55
AC-I	80*	60	55	99*	60	5	30	90*	15	35
AX	40	90*	85*	10	50	97*	85*	5	80*	50
Index										

\* for scores above normal range

Table 2.8 shows that overall the SIB-P group members scored higher on scales of the STAXI-2. Responses indicated that the Anger Expression-in (AX-I) scale and the Anger Control scales (AC-O and AC-I) were most commonly scored above the 75<sup>th</sup> percentile. Closer inspection shows that Participant 3 and 10 consistently scored highly and that there was less variability between members of the SIB-P than non-SIB group.

#### *SIB-P STAXI-2 responses summary*

Overall analysis of the psychometric supports the findings that those who display SIBs have commonality in terms of how they manage and express angry feelings. The non-SIB group showed more variability and were less alike in their experience, expression and control of anger.

The means and standard deviations for the SIB-P and non-SIB groups are shown in Table 2.9 below.

**Table 2.9: Mean and Standard Deviation scores for SIB-P and non-SIB groups on the STAXI-2**

<b>STAXI-2 scale</b>	<b>SIB-P group Mean (sd)</b>	<b>non-SIB group Mean(sd)</b>
S-Ang	72.5 (17.82)	38.75 (33)
S-Ang/F	68.3 (26.20)	39.5 (36.89)
S-Ang/V	73.3 (16.9)	50 (23.80)
S-Ang/P	67.83 (18.44)	50 (0)
T-Ang	55 (32.56)	46.25 (30.92)
T-Ang/T	60 (28.81)	62.5 (32.92)
T-Ang/R	56.7 (33.27)	31.25 (27.8)
AX-O	54.2 (41.76)	31.25 (36.14)
AX-I	80.83 (16.56)	55 (32.4)
AC-O	48.5 (38.83)	38.75 (38.16)
AC-I	68.5 (17.72)	42.5 (32.79)
AX Index	62 (34.26)	55 (36.74)

It can be seen in Table 2.9 that the SIB-P group scored higher on all scales of the STAXI-2 with the exception of the Trait Angry-Temperament scale. This suggests that in general the non-SIB group report more frequently experiencing anger. Table 2.9 shows the standard deviations for all scales in both the SIB-P and non-SIB were large expect for the non-SIB S-Ang/P value. This could relate to better recognition of physical aggression over other components of anger. Due to a lack of statistical power, statistical analysis was not performed. Table 2.9 shows that the SIB-P mean scores for anger expression-in (AX-In) was above the 75<sup>th</sup> percentile which is the highest mean score.

While it is hard to summarise each case as a group it can be said that each participant in the SIB-P group showed tendencies to respond to angry feelings in a passive-aggressive way given the high anger-control scores

(AC-O and AC-I) and anger-expression-in scores (AX-I). This may be because they have poor anger recognition skills which means that it is only when anger is intense that they express it, at other times over-controlling their emotions and suppressing angry feelings as best as they can. Therefore it is thought that the suppression of anger until it is intense leads to a passive-aggressive offending style (displaying SIBs) due to the lack of assertiveness in expressing anger. As the SIB-P group appear to manage anger by over-controlling (AC-O and AC-I) and suppressing angry feelings until such times that anger is intense their risk of continuing to display SIBs until emotional management work is addressed may remain problematic.

**Millon Clinical Multiaxial Inventory (MCMI-III; Millon, Millon, Davis & Grossman, 2009)**

Responses

Results of the MCMI-III were used to examine the potential role of personality in displaying SIBs. Table 2.10 shows the frequency of results for the endorsed personality types of the MCMI-III. The results are for the items endorsed above normal range as identified by the MCMI-III manual to indicate clinically significant personality traits and the presence of clinical syndromes. As can be seen every member of the SIB-P and non-SIB group scored high on Depressive, Masochistic and Anxiety scales. Differences emerged as all members of the SIB-P group also scored highly on the Avoidant scale, while only half of the non-SIB group endorsed this scale. The non-SIB group members all endorsed the Post Traumatic Stress Disorder (PTSD) scale, whereas only one of the SIB-P group did. Three of the four non-SIB participants scored highly on dependent and delusional subscales. Other items on the MCMI-III were not shared frequently in the SIB-P group. As with the STAXI-2 results it was found that the results of the MCMI-III assessment was more variable for the non-SIB group.

**Table 2.10: The total number (%) of SIB-P and non-SIB group members who endorsed MCMI-III scales**

CLASSIFICATION	Number of SIB-P endorsing item (%)	Number of non-SIB endorsing item	Total number of participants endorsing item
DEPRESSIVE	6 (100)	4 (100)	10 (100)
SELF-DEFEATING	6 (100)	4 (100)	10 (100)
ANXIETY	6 (100)	4 (100)	10 (100)
DEPENDENT	2 (33)	3 (75)	5 (50)
DELUSIONAL	2 (33)	3 (75)	5 (50)
AVOIDANT	6 (100)	2 (50)	8 (80)
PTSD	1 (16)	4 (100)	5 (50)

Appendix I shows all the personality and clinical scales of the MCMI-III that were observed over the 75<sup>th</sup> Percentile for all participants. Additionally, Appendix I shows the personality characteristics endorsed by only the non-SIB group.

This section described the scales endorsed by the SIB-P group.

#### *Depressive Personality*

This was experienced by the SIB-P and non-SIB groups. This is on the MCMI-III Moderate Personality Disorder Scale and is defined as a sense of loss of pleasure and of giving up with lack of hope that joy can or will be experienced again (Millon et al., 2009). An experience of pain is generalised and the expectation that pleasure can no longer be considered as possible also characterise this personality type (MCMI-III; Millon et al., 2009).

#### *Self-Defeating Personality*

This was also experienced by the SIB-P and non-SIB groups. This scale, on the Moderate Personality Disorder Scale is defined by subjugating needs to meet the demands of others meaning that individuals who endorse this scale are likely to be taken advantage of by others and exploited (Millon et

al., 2009). On this scale individuals believe they deserve to experience negative affect such as shame and blame and place themselves in situations where their inferiority is magnified (Millon et al., 2009).

### *Anxiety*

This was also experienced by both the SIB-P and non-SIB groups. This Clinical Syndrome Scale defines that feelings of anxiety are prolonged and enduring and are exaggerations of a normal reaction to perceived provocation (Millon et al., 2009).

### *Avoidant*

This scale was endorsed by the SIB-P group only. The MCMI-III defines this subscale as a Moderate Personality Disorder Scale that reflects a lack of positive reward or reinforcement from others. On this scale individuals are likely to keep their distance and avoid situations that are emotionally arousing. While individuals who score highly on this scale have a strong desire to relate to others, they maintain distance from others to feel safe. This scale therefore has a large impact on social integration and leads to social isolation from others who the individual may want to be close with emotionally. Individuals who score on this scale are also hypersensitive and respond with feelings of shame to provocation.

## **Summary Results**

There have been many different areas discussed in this section. Table 2.11 summarised all the results for the SIB-P group. The final column of this table attempts to direct the reader to associations between the different results. These links will be addressed further in the following Discussion section of this report.

**Table 2.11: Summary of SIB-P group**

Assessment	Findings	Conclusions	Links to other results
Themes	Over-controlled personality	SIB-P over-control their emotions and reactions to events and see this as a fixed state. They feel vulnerable to the actions of others because they could be rejected or abandoned at any time. They are also vulnerable to intense emotional arousal such as anger and love. These theme aims to manipulate their own emotional experience rather than the actions or reactions of others.	Incompetent stalker typology STAXI-2 results Avoidant Self-defeating Depressive Anxiety Dismissive-avoidant attachment
	Threat Response	The SIB-P group experience negative valence such as guilt and anger and respond to emotional arousal as if it were a threat by using passive-aggressive behaviours.	Stalker typologies STAXI-2 results Avoidant Depressive Anxiety
	Benefit Me	The use of SIBs are a benefit to the SIB-P group as they gain proximity to others and see the reaction of the victim. They are able to gain closeness which reduces negative feelings and are also able to gain information about their victim rather than having to approach the victim which may be a negative emotional experience for the SIB-P group members.	Avoidant Dismissive-avoidant attachment Self-defeating Anxiety Incompetent stalker
	Safety	SIB are used to gain safety as when others are near the members of the SIB-P group feel safe.	Dismissive-avoidant attachment Incompetent and Intimacy seeker Avoidant

			Self-defeating
Stalker Typology	Incompetent Rejected Intimacy Seeker	SIB-P group have a strong desire for relationships but lack the skills to achieve this. SIB-P may be aware the victim does not share feelings to them but feels entitled to closeness. The Rejected SIB-P perused ex-intimates and aimed to re-establish the relationship or seek revenge on their ex-partner for hurting them. The Intimacy Seeker desire relationships with those who they think are their "true love" and are less aware of the feelings of others.	threat response Dismissive-avoidant attachment Passive-aggressive Avoidant
RSQ	Dismissive- Avoidant	SIB-P demonstrated a desire for independence and a lack of awareness of the impact of SIBs on others. The SIB-P group had a generally positive view of themselves using SIBs to benefit them and showing a lack of awareness of the impact of the SIBs on their victim. Additionally this attachment style is associated with over-controlling emotions and also a sense of self-worth.	Over-controlled presentation STAXI-2 results Incompetent stalker typology
STAXI-2	Passive-Aggressive Over-controlled	SIB-P over-control emotions and present in a passive-aggressive way as they are not able to assert how they feel towards others.	Over-controlled presentation threat response Avoidant Anxiety Self-defeating RSQ responses Rejected and Incompetent stalker typologies



MCMI-III	Avoidant Depressive Anxiety Self-defeating	The personality disorders endorsed appear to relate to one another, and to the SIBs demonstrated by the SIB-P group. Avoidant tendencies serve to keep some distance from the victim; however avoidance aims to reduce emotional arousal and the Anxiety traits challenge this meaning that although avoidant, the SIB-P experience intense emotion. They are hypersensitive and may attempt to control this by seeking proximity to their victim. Their previous experiences may have led them to subjugate their own needs and experience a loss of joy and pleasure, increasing their desire to keep a distance from others.	Over-controlled presentation STAXI-2 results Threat Response Dismissive-Avoidant Attachment Incompetent stalker typology
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## **Discussion**

### Findings in relation to the aims of study

The overall aim of this preliminary qualitative research into females who display SIBs was to gain knowledge of their psychological functioning. Results found that female in-patients who display SIBs have traits of BPD (hypothesis one), have insecure attachment styles (hypothesis two) and have difficulty controlling anger (hypothesis three). Findings from existing literature were built upon by the Thematic Analysis and quantitative evaluation of results. Additionally, closer inspection of the RSQ showed that females who display SIBs have dismissive-avoidant attachment which has not previously been found. Similarly, the females who displayed SIBs met the criteria for the Intimacy Seeker, the Rejected and the Incompetent Suitor stalkers (Mullen et al., 1999); the latter has not previously been found in literature and suggests that the use of qualitative data added to the knowledge of females who display SIBs. Furthermore the Thematic Analysis results provide new information on the motives, rationalisation and psychological make-up of this offender group.

The Thematic Analysis results found four superordinate themes:

- Threat Response: SIBs displayed in response to perceived threats
- Benefit Me: Displaying SIBs benefits the perpetrator
- Safety: SIBs make me feel safe as I am close to others
- Over-controlled Presentation: SIBs are a result of the perpetrator attempting to over-control their own affect

These themes will now be summarised before a larger discussion of the implications of each theme. The results of the psychometric assessments will follow and finally the results will be grouped to determine what findings are most relevant to risk and females' demonstration of SIBs.

### Thematic Analysis Summary

The Threat Response theme showed that the SIB-P group perceive negative emotions as threats. This suggests that a focus of the SIB-P group is to achieve or maintain a consistent level of emotional arousal. The Benefit Me theme showed that the SIB-P group view SIBs as beneficial as they help to achieve a goal. At times, the goal was to gain information about their victim or exact revenge however it appears the benefit of seeking closeness was more relevant because this linked to the other theme; Safety. The Safety theme developed because the SIB-P group feel safe when around other people. This appears to be important because female patients who display SIBs are motivated to gain closeness to their victim to feel safe. However, when they are too close they feel vulnerable. Thus, the use of SIBs occurs when proximity to the victim is achieved at some level that allows the perpetrator to feel safe, but also serves to maintain some distance. Interestingly, the SIB-P group did not appear to emphasise the action or reaction of the victim when trying to gain closeness, thus the use of SIBs appear to relate to the perpetrators attempts to manipulate their own feelings rather than the feelings or actions of others. The Over-controlled Presentation theme also supports this conclusion. This theme showed that the SIB-P individuals attempt to over-control their own presentation by using SIBs. This theme also acknowledges that perpetrators cannot control the actions of others so feel vulnerable to rejection or abandonment. It seemed SIBs are a means of reducing the likelihood of rejection or abandonment. An interesting idea thus emerges; the use of SIBs by female in-patients is an attempt to manipulate their own emotional arousal and not the victim. This has not been discussed in previous stalking literature which suggests this study has added insight into the limited existing knowledge of this population. The implications of these finds are now discussed.

### Implications: using SIBs as maladaptive coping strategies

SIBs appear to be a maladaptive coping strategy to a number of different emotions, perceptions and events. One of the most prominent findings of the Thematic Analysis was that the use of SIBs benefit the perpetrators. This is similar to proposals from Fox, Nobles and Akers (2011) who stated that the risks of SIBs are secondary to the perceived benefits of investing in such behaviours. Like Fox et al. (2011), the Thematic Analysis identified that perpetrators not only feel justified to display SIBs but the behaviours are viewed as beneficial as they allow perpetrators to achieve their goals such as closeness to the victim.

According to previous literature, maladaptive coping strategies are observed less in female populations. Lewis et al. (2001) found that compared to female controls and male perpetrators, female stalkers had better problem-solving skills. In the current study this appears to link to the perpetrators' ability to display SIBs in order to solve their own problem; how can I reduce this negative affect? So it seems SIBs were used to manipulate the perpetrators' own emotions. Martin and Tesser (1996) and Calhoun, Cann, Tedeschi and McMillan (2000) found that ruminating thoughts perpetuate the want to display SIBs and reinforce the view that the behaviours are useful. The current study supports this view and has added insight into this area as the 'usefulness' of SIBs appears to relate to the perpetrator feeling less negative emotions. While it may be a consequence of SIBs that victims are impacted upon, it appears the fundamental motive of females using SIBs is to make themselves experience less distress.

The use of SIBs as maladaptive coping strategies was also observed in regards to the perpetrators' over-controlled presentation. Perpetrators appear to over-control their presentation because they feel overwhelmed by emotions such as 'love' 'anger' and 'jealousy'. Meloy and Boyd (2003) suggested that the preference to over-control emotions stems from the

transference of negative feelings towards the victim. He states this is based in a deep-rooted rage and Patton, Nobles and Fox (2010) found anger-related issues were significantly associated with the use of a range of SIBs. It appeared from the Thematic Analysis that females display SIBs in order to manage a range of negative (and positive) emotions. It is likely that the intensity of the emotion was the motivating factor for displaying SIBs and suggests that SIBs are not used when emotions are not intense; rather, SIBs are a maladaptive coping response to intense emotional arousal. The intense emotions are viewed as threats to the perpetrator. This links to the view that forensic populations are poor at recognising their emotions (Bland et al., 2004) and supports the idea that only when emotions are over-whelming are they recognised as threatening and negative. This suggests that the use of SIBs is associated with other people in some way. It may be that third parties provide an ally to whom the perpetrator can displace some of their negative emotions as a consequence of actual rejection (Meloy & Boyd 2003). This indicates that the role of attachment and personality traits are necessary to understand females who display SIBs.

This was also indicated by the superordinate theme Safety, whereby female perpetrators view others as providing feelings of safety. The need for others in regards to the risk of displaying SIBs was understood in this theme because the non-SIB group did not share this view. It could be that the risk of perpetration can be differentiated by the view individuals have about others. It seems that viewing others as providing safety increased the risk of SIB perpetration and this may indicate that the more an individual views others as providing safety the more their risk of SIB perpetration increases. This could be why previous literature has found that females are more likely to stalk professional contacts as it may be that these stalkers view the mental health professional as providing an extreme level of safety. This finding was not replicated in the current study as only two SIB-P group members displayed SIBs towards mental

health professionals. It did however appear that, particularly for Participant 8, the feeling of safety was desired and achieved whenever she was near her victim. Further investigation into the extent to which others are viewed as providing safety would be a worthy area of future research.

#### Implications: Attachment

The finding that females who display SIBs have insecure attachments was not a surprise and supports previous literature (Fremouw, Westrup & Pennypacker, 1997; Mullen et al., 1999; Tjaden, Thoennes, & Allison, 2000; Nobles, Fox, Piquero, & Piquero, 2009). This attachment style may make individuals more vulnerable to becoming perpetrators as Davis et al. (2000) and Lewis et al. (2001) found. Our results however differ from the existing literature as the SIB-P group had a dismissive-avoidant attachment style. It appeared that the Thematic Analysis allowed better understanding of the risk of SIB perpetration than relying on the RSQ only.

Dismissive-avoidant attachment involves a desire for independence and individuals with this attachment style view themselves positively but others negatively. This attachment style is characterised by over-controlled emotions which was a unique theme to the SIB-P group. Therefore, dismissive-avoidant attachment may result from over-controlling emotions such as anger and love (Davis et al., 2000) and therefore increase the risk of SIB perpetration. This supports the results of the Thematic Analysis and the view of Miller (2012) who identified that perceptions of threat motivate stalking behaviours. In short, if SIBs are maladaptive coping strategies to perceived threats, rather than a response to love for the victim, the risk of SIB perpetration may increase.

The Dismissive-avoidant attachment style is characterised by suppression of feelings and a positive view of the self (Bartholomew, 1993); when endorsed by females who display SIBs, Meloy's (1998) view that stalkers have narcissistic tendencies is supported. Thematic Analysis found that

SIBs occur in response to negative valence such as passive-aggressiveness, anger and negative emotions (e.g. jealousy). The ending of a relationship is seldom mutual and often the partner who has been left experiences a mixture of negative emotions (Hill, Rubin & Peplau, 1976; Sprecher, 1994). Meloy acknowledges this and proposes that due to experiencing negative emotions most would not attempt to re-establish the relationship. Instead, Meloy suggests that those with pathological narcissism respond with feelings of anger. Meloy suggests that those who stalk respond to rejection in a unique way because they are hypersensitive to negative emotions. By suppressing the negative emotions and displaying passive-aggressive tendencies, as observed in the Thematic Analysis, the risk of SIB perpetration increases. It appears that Meloy's (1998) theory best fits with the Rejected stalkers identified within this thesis because SIBs reduce negative emotions by exerting payback and revenge on the victim. Therefore, SIBs benefits the perpetrator by reducing distressing feelings. By experiencing a loss of control in the relationship, it is likely the rejected partner struggles to manage their emotions when compared to the partner who chose to end the relationship (Sprecher, Felmlee, Metts, Fehr, & Vanni, 1998). So, as the Thematic Analysis concluded, it seems that female patients who have been rejected over-control their emotions and the actions of others in order to re-establish control within this relationship. It may be that the intensity of emotions and effort put into over-controlling arousal increases the risk of displaying SIBs as identified in the Thematic Analysis. When considering how to manage these females, hypersensitivity to rejection should be considered as a treatment need.

#### Implications: Personality Disorder

The MCMI-III results support information elicited from previous research and found most SIB-P group members endorse traits of BPD. These traits were associated with anxiousness, avoidant and labile mood. It was found that the SIB-P group have a preference to keep their distance from others

in order to avoid negative valence as recognised in their Avoidant and Anxious traits. Because the results of the MCMI-III were similar across SIB-P and non-SIB groups it is suggested that the role of personality is better understood when considered with the results of the Thematic Analysis.

The MCMI-III and Thematic Analysis indicate that individuals who experience anxious, avoidant and labile mood are hypersensitive to rejection from their victims. Because the victims do not reciprocate attention, SIB perpetrators do not get what they need. This increases the SIB-P groups risk of feeling rejected and experiencing negative valence. This may most clearly be observed in Mullen et al.'s (1999) rejected stalker type.

The Avoidant Personality Pattern was unique to the SIB-P group and is characterised by, as well as other factors, a lack of positive reward. While SIBs increase proximity to the victim there is always distance between the perpetrator and the victim suggesting perpetrators aim to control the level of proximity achieved. This could indicate that being 'too close' increases feelings of vulnerability for the perpetrators. Proximity is controlled by the perpetrators who often do not want their victim to know they are being watched or followed. As noted, it seems the maladaptive coping response to perceived threats of abandonment may motivate the perpetrator to maintain distance between themselves and the victim. Therefore, SIBs are orientated towards controlling the perpetrators emotional arousal rather than the actual closeness to their victims. The lack of positive reward may be associated with the effort perpetrators place on over-controlling emotions, rather than the relationship with their victim. This could link most closely to the Incompetent Suitor stalker discussed below.

Previous literature found traits of narcissistic, histrionic and antisocial traits (Akhtar, 1987; Meloy & Gothard, 1995) but these were only endorsed once



in the current study. This could be due to the small sample size, or could indicate that these traits are not relevant to female in-patient populations. Further research into the difference between in-patient and community samples could explore the possible differences in personality.

#### Implications: Stalker Typologies

The Incompetent stalker (Mullen et al., 1999) was endorsed by all females who displayed SIBs. The Incompetent Suitor is someone who seeks intimacy with their victim but does not have the skills to manage a relationship. This could be in line with the finding that females who display SIBs do not have the ability to successfully manage their emotions and therefore the emotions associated with seeking a partner add further confusion to their ability to attain a relationship. Thus, the distance created by SIBs relates to the perpetrators desire to manage their own emotional arousal rather than actually be with their victim. It has been discussed earlier that closeness makes the perpetrator feel safe but it seems that the proximity to others needs to be managed by themselves in order to not feel vulnerable when too close.

Similarly, those who endorsed the Rejected stalker type (Mullen et al., 1999) seek to re-establish a former partner and are motivated by revenge and payback; events which are associated with negative emotional arousal. Therefore, it could be that these individuals display SIBs to control their own emotional arousal and are less motivated by the reaction of others. Although they report wanting revenge participants who wanted revenge did not comment on how they felt, or would have felt, had this been achieved.

The findings also indicate that Intimacy Seekers were observed in the SIB-P group. These individuals want a relationship with someone who they believe is their true-love. It is suggested that given the vulnerability to their emotions endorsed by the SIB-P group that the love they experience

makes them feel vulnerable. This vulnerability then appears to motivate them to over-control emotions by using SIBs in response to a fear of rejection. The 'erotomania' definition, whereby delusions of reciprocated feelings are experienced, were not endorsed in the SIB-P group. It may be that the lack of delusional disorder prevented such erotomania delusions being observed.

## Evaluations

### *Research methods*

This study aimed to investigate what characteristics motivate females to display SIBs. Within a low secure unit individual and group themes were uncovered. Meddings and Perkins (1999) identified that when interviewed by psychologists more disclosures are made, and this may be relevant to the volume of self-reported SIBs in the current study. The qualitative methodology allowed participants to talk about their use of SIBs spontaneously and bring to discussion aspects that they felt important. The methodology also used stalking behaviours as defined by Tjaden and Thonnes (1997) which provided definitions of different SIBs and prevented potentially relevant risks and behaviours being missed.

This study analysed data of ten participants in total, six who reportedly displayed SIBs and four who did not. As the study was focused on the traits of those who endorsed SIBs it made sense that this group was the larger. Six participants is a suitable number for qualitative research (Smith & Osborn, 2003), and this sample size allowed detailed information to be collected and analysed. A greater number of participants would have made it difficult to compare and contrast narratives beyond a superficial level given restrictions upon the researcher.

## Thematic Analysis

Thematic analysis involves the identification and analysis of themes and patterns of similarity within qualitative research (Braun & Clark, 2006). It

is most useful for exploratory studies as it is not grounded in any particular theoretical or epistemological framework which means it can be applied reliably within a range of qualitative designs (Braun & Clark, 2006). As a guide the essentialist method which explored the females' experiences, understandings and justifications of displaying SIBs was used. Therefore more than just a description of their behaviours was provided. In this study deductive and inductive thematic analysis was used. Initially the data were explored using inductive methods which explored the data as a whole. Then deductive analysis which asked more specific questions of the data were examined occurred. This was guided by hypothesis testing (Braun & Clark, 2006).

### Limitations

This study is not without its limitations and caution should be drawn when generalising findings from qualitative research. Generalisability refers to the extent to which findings from one study apply to the wider population and is more widely tested and accepted in quantitative research. A difficulty with generalisability within qualitative work is that the participants are selected based on existing theory. The participants therefore represent a situational, rather than demographic quality of the sample; thus findings cannot be generalised to other groups. Qualitative approaches provide generalisable findings only in comparable groups with similar demographic traits rather than representing the general population. Therefore the question is how far can the findings of the Thematic Analysis be extrapolated? Given the findings of qualitative research often aim to support existing findings from other studies and the current study results supported previous quantitative results they go some way to being representative of existing literature. Additionally, the current study included a comparison group (non-SIB) to demonstrate differences between the two subgroups and improve the ability of inferences to be applied to wider populations. The current study also demonstrated using

by using inductive and deductive coding techniques (Fereday & Muir-Cochrane, 2004).

Secondly, the use of psychometrics is not without criticism. The RSQ is a self-report assessment of attachment style and is based upon Griffin and Bartholomew's (1994) four category model of attachment. Other attachment assessments such as the Experiences in Close Relationships (ECR; Brennan et al., 1998) may have provided more detailed relationship information between the perpetrator and victim. However the RSQ was used instead of the ECR because, as Tobin and Begley (2004) state, the latter is too relationship focused for offender groups who have very limited experience of close relationships. Similarly, McEwan, Davis and Mackenzie (2009) highlight how susceptible to social desirability the STAXI-2 is, but due to its ability to measure emotional control it was preferred.

A third limitation is the sample used; 10 female in-patients in the same hospital. Additionally, the study used self-report SIBs rather than a conviction which could mean the risk factors of females who are convicted have not been identified. However Thornberry and Krohn (2000) indicated that self-reports of forensic behaviours were valid and reliable means of obtaining information. Fox et al. (2011) also argue that females are more willing to admit the use of SIBs as they do not perceive such serious stigma associated with the behaviours when compared to males. This supports the use of self-report in the current study.

Despite these shortcomings, the findings establish some important groundwork for further research into females who display SIBs. As Fox et al. (2011) recommend, this study has moved on from the common college victim sample study design and distribution statistics and has established preliminary knowledge of females who display SIBs. Findings should be regarded with caution due to their preliminary and tentative exploration of a relatively unknown population.

### Future research implications

There are several avenues for future research. One of the most important is to build consensus of the definition of SIBs. Recent advances in the area of 'stalking' should allow the associated behaviours to be identified and managed by professionals rather than be inappropriately glamorised by the media. More research in the UK is necessary.

### Conclusion

Very few researchers have empirically addressed the underlying psychological functioning of female stalkers. The present exploratory study investigated SIBs in a female forensic in-patient sample and found through Thematic Analysis, questionnaires and psychometric assessment that they possess specific traits that appear to increase their risk of displaying such persistent behaviours. The females who displayed SIBs differed from those who did not and were more alike than the non-SIB perpetrators. 'Monitoring and watching' others was a trait endorsed by all participants and suggests this may be a normal aspect of in-patient presentation. SIBs were viewed as maladaptive coping strategies motivated by a desire to manipulate the perpetrators' emotional experience rather than manipulate what their victims do. The female in-patients who displayed SIBs had insecure attachment styles, showed emotion dysregulation and over-controlled their anger. The fact that perpetrators cannot control others or use SIBs to try to control others does not appear to be fundamental for this perpetrator group. It seems that their over-controlled presentation is more relevant when considered in terms of how they feel. That is, female in-patients appear to use SIBs in order to control how they feel, not what others do. By over-controlling their actions and suppressing their emotions the SIB-P group appeared to perceive others as less threatening and experience fewer difficulties within their relationships. Limitations such as generalisability, the use of psychometric assessments and self-report SIBs could be improved upon in

future research. Larger Thematic Analysis may provide more robust themes to be derived from the female in-patient population. It seems that the unique approach of interviewing the perpetrators rather than their victims has offered initial insight into female SIB perpetrators but it is not clear how the results would apply to non in-patient samples and females in different conditions of security.

**Chapter Three:**

**A Systematic Review of the Effectiveness of Dialectical Behavioural  
Therapy with Female Populations; Exploration of Randomised  
Control Trials**

## **Abstract**

**Objective:** Dialectical Behavioural Therapy (DBT) is used in the treatment of Borderline Personality Disorder (BPD), Eating Disorders (ED) and Substance Dependence (SD). This review evaluated the effectiveness of DBT with female populations only. DBT aims to address different maladaptive coping styles associated with these disorders therefore this review examines the relevance of DBT in light of viewing SIBs as maladaptive also. The objective was to determine if DBT is an effective treatment for the maladaptive coping styles of females with a diagnosis of BPD, ED or SD.

**Method:** Systematic searches were completed using five online databases (EMBASE, PsycINFO, Medline, Cochrane, Campbell Collaboration). Only Randomised Control Trials (RCTs) were included. Initially 15,382 references were identified, of which 451 duplicates were removed and 15,168 were rejected based on title. At the second stage screening, 214 abstracts were evaluated and 193 references were rejected using strict inclusion and exclusion criteria. In total, 21 full references were assessed using pre-defined quality assessment and data extraction pro-forma.

**Results:** Overall, DBT was found to be effective in reducing maladaptive coping behaviours. Studies included small samples, varying lengths of DBT intervention and the follow-up periods were generally short. A positive effect of DBT compared to Treatment As Usual or Waiting List was found. Additionally, when compared to community treatment and Comprehensive Validation Therapy, DBT was superior.

**Conclusions:** Future research should compare DBT with alternative therapies, serve long-term follow-up and deliver DBT for twelve months as proposed in the original treatment manual.

**KEYWORDS:** Dialectical Behavioural Therapy, DBT, Female, Systematic Review, RCT.



## **Introduction**

According to National Statistics more women than men are treated for mental health difficulties annually (The NHS Information Centre, 2011a). Despite this, there is a lack of research into the effectiveness of treatment for female populations particularly in clinical or forensic settings. Dialectical Behavioural Therapy (DBT) (Linehan, 1993) was initially developed for female populations, and was evaluated as an outpatient treatment program for chronically suicidal females meeting the criteria for borderline personality disorder (BPD). DBT is a skills-based intervention that aims to address a number of different maladaptive coping strategies. There are currently a number of adaptations to the treatment programme, in order to meet the needs of different patient groups and for specific settings such as adaptations for eating disorders (ED) and substance dependence (SD) (Miller, Ramey, Linehan, Wetzler, & Leigh, 1997).

To date no research has addressed the effectiveness of DBT with female SIB perpetrators however, as found in Chapter Two, the use of SIBs are viewed as maladaptive coping strategies therefore this chapter examines the effectiveness of DBT in light of it being potentially suitable to target SIBs.

### **DBT with BPD**

Through biological irregularities and dysfunctional childhood environments, it is proposed that individuals with BPD struggle to effectively manage personality functioning (APA, 2000). The original DBT manual discusses four modules that are designed to help individuals in four key emotional regulation areas (Linehan, Bohus, & Lynch, 2007). The modules aim to address all major deficits found within BPD despite recognising that individuals may not possess all difficulties. These deficits include invalidation of emotions, dependence on others for support, setting unachievable goals and applying too simplistic problem-solving skills which limit the number of goals that can be achieved. As a consequence of these

deficits individuals experience failure and feel shameful. This increases the risk of patients acting on impulse where anger and problems with immediate gratification impact directly on a lack of emotional control (Black, Baumgard & Bell, 1995). For most DBT interventions, the target population involves individuals with BPD who are said to be highly impulsive. As well as this, individuals with BPD present with significant levels of self-harm and suicidal ideation (Brown, Comtois, & Linehan, 2002); because of the life-threatening nature of these behaviours, a prominent treatment target of DBT has been to reduce their risk.

The first stages of DBT aim to encourage motivation both to remain in treatment and gain control over maladaptive coping strategies. Patients are then encouraged to explore their emotional experiences and work through previous trauma before beginning weekly 1:1 and group therapy. The four key components of the 1:1 and group therapy are to encourage individuals to build mindful attention skills, accept emotional distress (Gratz, Rosenthal, Tull, Lejuez, & Gunderson, 2006), develop interpersonal effectiveness and assertiveness skills (Kremers, Spinhoven, Van der Does & Van Dyck, 2006), and to regulate emotions. This involves developing skills in problem solving, exploring different coping strategies and attending psycho-educational components of therapy. Interpersonal relationship skills develop between the patient and the therapist to support change and achieve goals (Linehan, 1993). These goals can include reducing self-destructive behaviours such as substance misuse, self-harm or binge eating. Later in treatment, issues less pertinent to life or death are dealt with. Emergency contact for patients is also available via telephone intervention. DBT also supports the therapists through the treatment modules and they are offered weekly supervision and encouraged to work as a team in meetings. This 'treatment hierarchy' is detailed in the DBT treatment manual developed by Linehan and provides an effective structure of DBT that prioritises the most life threatening behaviours as initial treatment targets (Linehan, 1993).

### DBT with Eating Disorder

DBT has been adapted within female populations and it may be that the changes made to the original manual provide better outcomes. One adaptation was for ED populations because individuals with ED share many high risk characteristics with BPD diagnosis (Dulit, Fyer, Haas, Sullivan & Frances, 1990). Studies have found that suicide is one of the leading causes of death in patients with Anorexia Nervosa (Herzog et al., 2000), and that most patients with ED engage in high risk behaviours. It appears that many of the difficulties experienced by those with ED involve being overcome by emotion. Because this is similar to those with BPD the underpinnings of DBT may be suitable to their needs. Additionally, DBT specifically aims to target maladaptive (and life threatening) behaviours, which means it is able to target the eating behaviours during treatment. Furthermore, individuals with ED are difficult to treat owing to their ambivalence about changing. This means that the introductory sessions of DBT, where motivation is addressed may be particularly useful. Similarly, this focus is extended to the pattern of eating patients employ leading to long terms goals that include acceptance of changes considered. There is growing research to explore the effectiveness of DBT within female populations with ED (Safer et al., 2001; Telch et al., 2001) adding value to reviewing current studies evaluating the effectiveness of DBT for female populations. Certainly, one study included in this review excluded males from their sample due to the biased prevalence of binge/purge eating behaviours within female populations.

### DBT with Substance Dependence

Another adaptation to the original DBT manual was for SD populations. Due to the similarity between criterion on the Diagnostic and Statistical Manual Fourth Edition (DSM-IV; APA, 2000) for BPD and substance misuse, RCTs exploring drug or alcohol dependence *and* BPD are also

included in this review. Previous research has found that many of the patients included in studies for BPD also meet the criteria for SD (Koenigsberg, Kaplan, Gilmore & Cooper, 1985; Kosten, Kosten & Rounsaville, 1989; Zanarini Gunderson, Frankenburg & Chauncey, 1989; Nace, Davis & Gaspari, 1991) with risk behaviours being similar to those demonstrated in groups of individuals with SD and BPD.

### DBT with SIBs

This has not been explored in previous literature however the treatment of stalkers is of growing interest. Given the National Stalking Clinic now addresses the needs of stalkers specifically via tailored treatment interventions it would be useful to begin to explore what treatment may work with female stalkers. DBT is the treatment of choice for patients with BPD so it may be useful to consider the use of SIBs as maladaptive coping strategies and explore if DBT could address stalking-style behaviours.

### **Existing Review**

Preliminary searches for existing reviews of the effectiveness of DBT with female populations was conducted using online databases (PsychINFO, MEDLINE and Cochrane Library and Campbell Collaboration). The current review appears to be the only one relevant to only female populations as no previous reviews with this focus were found. However a review of the effectiveness of DBT with inpatient populations with BPD was returned (Bloom, Woodward, Susmaras & Pantalone, 2012).

Bloom et al. (2012) evaluated eleven studies none of which were RCT's. They used only three online databases; PsychINFO, PubMed and Google, the latter having little scientific regard. Search terms were also limited and included "short term treatment" which is not a characteristic specific to DBT thus limiting the usefulness of this term for their criteria. Three of the authors were involved in searching the relevant references, with two

completing the quality assessment and data extraction of the studies and one exploring the effect sizes of the included studies. These are not reported in the review.

The aim of Bloom et al.'s (2012) review was to explore the effectiveness of DBT within voluntary inpatient settings where patients display BPD characteristics and are receiving treatment for BPD. This meant they excluded forensic hospital samples, patients in prison and residential treatment programmes due to considering these populations not 'voluntary'. They included only published papers that had been peer reviewed and reported outcome data. However, one serious methodological compromise of this review is that only two of their included studies reported a comparison group to DBT.

DBT implementation was reported by Bloom et al. (2012). They found that of the eleven studies included in their review the duration of DBT varied from two weeks to three months. All four modules of DBT were reported in each included study, but again across studies the duration and frequency of these group skill training sessions varied from weekly 90 minute sessions, to daily sessions of 45 minutes. These variations cause problems when comparing outcome results.

Bloom et al. (2012) discussed the variety of behaviours measured and the adaptive nature of the studies included in their review. They found that across the eleven studies included in their review nine different treatment outcomes were assessed. Six out of eight studies included in their review reported reductions in self harm and depressive episodes, two out of three reported reductions in dissociative episodes and anxiety. Of all the studies that explored anger and hostility, DBT reduced symptoms in one study, but this did not have a comparison group. Suicidal ideation was reported to have increased by Bloom et al. (2012) in one of the studies included in their review, while in others there was no significant change. Violence was reportedly reduced in both studies that examined this style of presentation

in patients and global adjustment also improved. Bloom et al. (2012) also reported the results of one study and stated DBT had a positive impact on increasing patients self-esteem. Of the treatment outcome results reported by Bloom et al. (2012) follow up was only defined in one study making conclusions difficult to draw.

Although reductions in outcome measures were found the methodological difficulties discussed above and encountered by Bloom et al. (2012) limited the value of their conclusions. They concluded that DBT “may” be effective at reducing maladaptive coping behaviours and symptoms of BPD in inpatient populations.

## **Method**

### ***Scoping***

Bloom et al. (2012) highlight that most studies had a majority female population and because most patients receiving DBT are female (Linehan, 1993) the current review is the first to specifically explore the effectiveness of DBT with females.

The current review considered all RCT articles published before September 2012.

### ***Inclusion/Exclusion Criteria***

#### **Studies**

Specific inclusion and exclusion criteria were developed after an extensive scoping search. In order to present the highest quality research, only Randomised Controlled Trials (RCT) studies were included. The PICO criteria for included studies is shown in Table 3.1 below.

**Table 3.1: PICO inclusion and exclusion criteria for the first stage screening of a systematic review of the effectiveness of DBT with females with BPD, ED and SD**

	<b>Inclusion</b>	<b>Exclusion</b>
<b>Population</b>	Female Female adults (18 years and older) with a Formal Diagnosis of BPD, SD or ED	Male Juvenile No formal diagnosis of BPD, SD or ED
<b>Intervention</b>	DBT Patient setting delivery	Not DBT
<b>Comparator</b>	Different 'treatment as usual' type No treatment Waiting list	No comparator
<b>Outcome</b>	Emotional regulation: official records and/or self-report of self-harm, binge/purge or substance misuse.	
<b>Study Design</b>	Randomised Control Trial	Case-Study Quasi-Experimental Cohort

### Participants

Studies that included adult females (aged 18 and over) were eligible for inclusion. Participants must have had a formal diagnosis of BPD, SD or ED. If no instrument was used to make a formal diagnosis the paper was excluded.

## Interventions

Any DBT interventions (adapted or otherwise) which addressed maladaptive coping responses and emotional dysregulation were included if compared to a control.

The intervention had to include DBT but could also include adaptations of DBT specific to problematic risk behaviours such as binge/purge eating patterns and substance misuse. Given the growing research in DBT, all lengths of DBT were eligible. This review was not specific to the full DBT programme as 20 weeks of DBT has been found to be effective (Bohus, Haaf, Simms et al., 2004). Included studies had to involve a comparator group which could include naturalistic conditions such as other forms of therapy, alternative therapeutic interventions or waiting lists. Waiting list comparators were included as these often represent non specified “treatment as usual” conditions.

## Outcome measures

Outcome behaviours were specific to the DBT intervention and emotional regulation skills given to the participants. These included self-harm, parasuicidal behaviours, suicidal ideation and behaviours specific to EDs such as binge and purge episodes, and SD such as drug or alcohol use.

Studies that included self-report of maladaptive coping behaviours were considered eligible. Self-report was included due to the lack of research that solely used official recordings, but may also be unavoidable in outpatient studies due to the lack of supervision of such behaviours. The risks of how self-report may increase bias or distort results is not ignored and is discussed later in this review.

## ***Sources of Literature***

Five bibliographic electronic databases (PsychINFO; MEDLINE; EMBASE; Cochrane Library and the Campbell Collaboration) were searched initially on 8/2/12 and again on 16/8/12.



Authors were contacted where necessary. Reference lists of studies were hand searched. Other methods were also utilised to increase the likelihood of finding relevant articles and possible 'grey' literature, these included using the ethesis portals, international DBT websites, the British Psychological Society website and that of The Royal College of Psychiatry.

### ***Search methods for identification of studies***

Search Syntax details are provided in Appendix J. The search terms used for PsychINFO; MEDLINE; EMBASE; Cochrane Library and the Campbell Collaboration are presented below:

(in-patient) OR (patient) OR (female) OR (women) OR (client) OR (offender) OR (hospital) OR (out-patient) OR (incarcerated)

AND

(DBT) OR (Dialectical Behavioural Therapy) OR (Dialectical Behaviour Therapy) OR (intervention) OR (treatment) OR (therapy) OR (behavior)

AND

(Personality disorder) OR (Borderline Personality Disorder) OR (BPD) or (personality) OR (disorder) OR (Eating Disorder) OR (Substance Dependence) OR (substance misuse)

AND

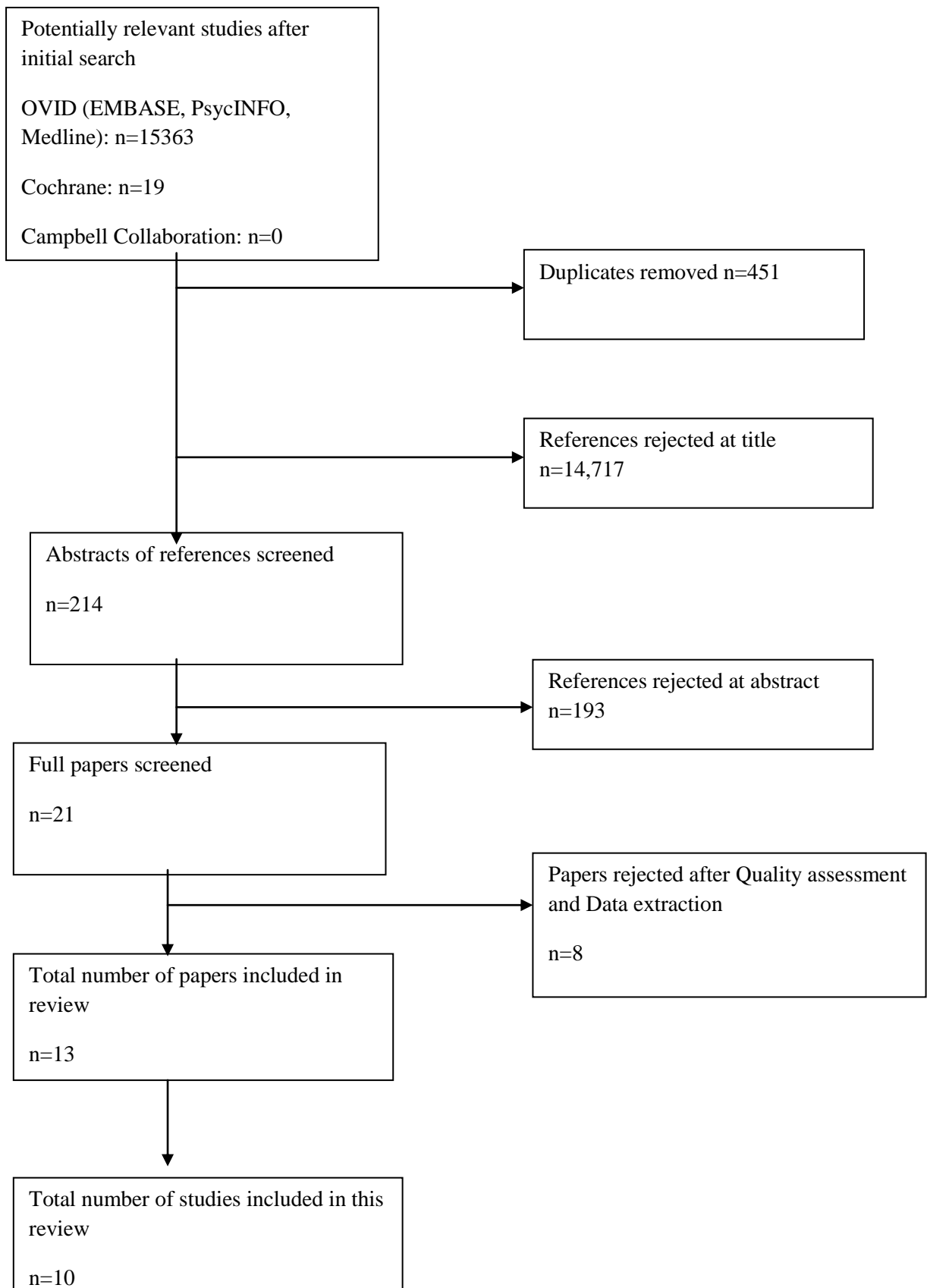
(offending behaviour) OR (self-harm) OR (parasuicidal) OR (suicide) OR (emotional regulation) OR (eating) OR (binge) OR (purge) OR (substance)

## **Data Collection and analysis**

### ***Sorting Process***

Two reviewers independently assessed each reference identified by the search to check its eligibility. The sorting process is illustrated in Figure 3.1.

Initial searches identified 15, 382 potentially relevant papers. However, 451 duplicates were removed and 14, 717 irrelevant papers were rejected based on title. The remaining 241 study abstracts were reviewed, and applying the PICO criteria to these, a further 193 papers were rejected. The remaining 21 papers were screened using the Inclusion and Exclusion criteria, quality assessment and data extraction pro-forma. Eight of these papers were rejected for not meeting the PICO criteria. Five were excluded for mixing the results of their male and female participants. One did not have a comparator to DBT, one did not formally diagnose the participants and the other was a review paper.



**Figure 3.1 the sorting process conducted to narrow search terms to included studies**

Three of the included papers explored the same drug dependent population over different follow-up periods, and similarly two of the BPD papers explored the same population over a four month and twelve month follow-up. In order not to miss important information regarding the populations, data collection and treatment delivery included in these studies, all relevant papers are included in this review.

Details of included and excluded studies are shown in Table 3.2 and Table 3.3 respectively.

**Table 3.2: Demographics of included studies and summary conclusions assessing maladaptive coping responses**

Authors	Sample trait	Sample size	Age range	Comparator	Follow-up period	Treatment duration	Measures	Summary Conclusions
Linehan, McDavid, Brown, Sayrs and Gallop (2008)	BPD	24	28-46	Medication	5 months	20 weeks	Aggression Irritability Depression Suicide	DBT reduced aggression, irritability, depression and self-harm.
Linehan, Heard and Armstrong (1993) & Linehan, Armstrong, Suarez, Allmon and Heard (1991)	BPD	39	18-44	TAU	24 months	52 weeks	Self-harm Hospital days Treatment Anger Social Functioning Anxiousness	At one year DBT superior compared to TAU for anger, self-harm and hospitalisation; however effects not seen at two year follow-up.  DBT not more effective for anxiety or employment features

							Employment	
Linehan, Tutek, Heard and Armstrong (1994)	BPD	26	18- 34	TAU	12 months	12 months	Self-Harm Anger Social Functioning	DBT reduced self-harm, suicide, depression and anxiety and improved social functioning
Koons et al. (2001)	BPD	20	21- 46	TAU	6 months	6 months	Self-harm Suicide Depression Anxiety Hopelessness Dissociation Hospital Visits	DBT reduced suicide intent, hopelessness, depression, and anger
Linehan et al.	BPD	101	18-	CTBE	24	12	Suicide ideation	DBT reduced suicidal risk

(2006)			45			months	months	Reasons for living	
								Depression	
								Hospital treatment	
van den Bosch, Koeter, Stijnen, Verheul, and van den Brink,	SD	58	27-41	TAU		11 months	12 months	Substance use Impulsivity Self-Harm	DBT reduced alcohol misuse, self-harm and impulsivity
(2005) &  Van den Bosch, Verhuel, Schippers and van den Brink (2002) &  Verheul et al. (2003)									

Linehan et al. (2002)	SD	24	28-43	CVT and 12-Step intervention	12 months	16 months	Substance use Self-harm Social Functioning Symptoms	DBT maintained reductions that were observed in both groups after 12 months
Linehan et al. (1999)	SD	28	24-37	TAU	16 months	12 months	Substance use Self-harm Anger Anxiety	DBT reduced substance misuse and suicidal ideation and increased social functioning at follow-up
Safer, Telch, Agras (2001)	ED	31	18-54	Waiting List	20 weeks	20 weeks	Number of binge/purge episodes  Mood  Depression	DBT reduced binge/purge behaviours at follow-up



Telch, Agras and Linehan (2001)	ED	33	40- 59	Waiting List	6 months	20 weeks	Self-esteem	Significantly less behaviours associated with ED expect for depression and mood
							Number of binge/purge episodes	
							Weight	
							Self Esteem	
							Depression mood	

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**Table 3.3: Characteristics of excluded studies and reasons for exclusion**

Authors	Sample	Study design	Reason for exclusion
Lynch, Morse, Mendelson and Robins (2003)	Males and Females	RCT	Included males (mixed results)
Soler et al. (2005)	Males and Females	Double-Blind Placebo Controlled	Included males (mixed results)
Safer and Joyce (2011)	Males and Females	RCT	Included males (mixed results)
Safer, Robinson and Jo (2010)	Males and Females	RCT	Included males (mixed results)
Feigenbaum et al., (2012)	Males and Females	RCT	Included males (mixed results)
Harned, Jackson, Comtis and Linehan (2010)	Females	RCT	No Comparator
Hill, Cragihead and Safer (2011)	Female	RCT	No formal diagnosis
Neacsiu, Rizvi and Linehan (2010)	Females	Review	Review not RCT

***Quality assessment***

Included studies (n=10) were assessed for quality using the Quality assessment forms provided in Appendix K. This included applying the quality assessment criteria to the papers exploring extended follow-up periods. Table 3.4 is a summary table of the biases observed in the included studies.

Studies received a score of two if they fully met the criteria, a score of one if they partially met the criteria, or a score of zero if they did not meet the criteria or if it was unclear that the criteria were met. This scoring system was then used to sum scores and yield a percentage – with studies providing less than 65% being rejected.

Searches, quality assessment and data extraction were peer reviewed by a blinded third party. At least 20% of included studies were independently assessed to increase the validity and reliability of this review.

**Table 3.4: Table to show the risk of bias and direction of bias from included studies**

Study	Summary of Limitations					
	Small sample size	Drop-outs not included in analysis	Short follow-up	Variation from 12 months DBT delivery	Staff skills training unclear	Possible cohort effects
Linehan et al. (2008)	●		●	●	●	
Linehan et al. (1993) & Linehan et al. (1991)				●	●	
Linehan et al. (1994)	●	●			●	
Koons et al. (2001)	●		●	●	●	
Linehan et al. (2006)		●				
van den Bosch et al. (2005) & van den Bosch et al. (2002) &		●			●	

Verheul et al. (2003)

Linehan et al. (2002)

Linehan et al. (1999)

Safer et al. (2001)

Telch et al. (2001)



### ***Data extraction and management***

Data extraction was carried out by two reviewers independently using pre-specified forms for the studies that met the quality assessment Criteria. Data regarding population specific information including mean age (years), number of participants at start and follow-up (dropout rates also examined), methodological processes, variables measured at baseline and follow-up and the type of statistical tests used was extracted. The data extraction form is provided in Appendix L. Table 3.5 shows the range of information gathering tools used by the included studies to measure outcomes.

**Table 3.5: Statistical details of included studies for DBT with females with BPD, ED and SD and details of outcome measures used.**

Authors	Sample trait	Outcome measure	Intervention scores		Effect size
			Pre	Post	
Linehan et al. (2008)	BPD	Overt Aggression Scale – Modified (OAS-M; Sorgie, Ratey, Knoedler, Markert, Reichman, 1991)			
		Aggression	6.0	2	-0.56
		Irritability	6.5	4.5	-0.72
		Suicidality	50	12.5	0.85
		Self-harm	33.3	12.5	1.48
		Hamilton Rating Scale for Depression (Hamilton, 1960)	19.3	15.4	-0.20
Linehan et al. (1993) &	BPD	Parasuicide History Interview (Linehan, Wagner, Cox, 1983) Self-harm	Not reported	0.11	Not reported

Linehan et al. (1991)		Treatment History Interview (Linehan & Heard, 1987)			
		Hospital days		0	
		State-Trait Anger Scale (Spielberger, Jacobs, Russell & Crane, 1983)			
		Anger		32.99	
		Social Adjustment Scale-Interview (Weissman & Paykel, 1974)			
		Global Assessment Scale		57.41	
		Anxiousness		1.98	
		Employment Performance		1.42	
Linehan et al. (1994)	BPD	State-Trait Anger Expression Inventory -2 (Spielberger, 1999)	36.77	32.15	0.56
		Global Assessment Scale (Endicott, Spitzer, Fleiss, Cohen, 1976)	37.73	51.42	1.36



		Social Adjustment Scale – Longitudinal interval follow-up (Keller et al., 1987)	4.14	3.31	1.14
Koons et al. (2001)	BPD	Parasuicide History Interview (Linehan, Heard & Wagner, 1994)	5.1	0.4	0.35
		Hamilton Depression Rating Scale (Hamilton, 1960)	29.7	17.1	1.12**
		Beck Depression Inventory (Beck, Steer & Brown, 1996)	22.8	13.4	0.96*
		Hamilton Anxiety Rating Scale (Hamilton, 1959)	18.4	19.1	-0.31
		Speilberger Anger Expression Scale (Spielberger, Jabocs, Russell & Crane, 1985)			
		Anger-In	22.9	17.3	1.04**
		Anger-Out	18.2	14.5	1.16**
		Dissociative Experiences Scale (Bernstein & Putnam, 1986)	22.3	13.2	1.13**

Linehan et al. (2006)	BPD	The Suicide attempt self-injury Interview (Linehan, Comtois, Brown, Heard & Wagner, 2006)	51.7	29.8	0.47
			2.8	3.3	
		The Reasons for Living Inventory (Linehan, Goodstein, Neilson & Chiles, 1983)			
		The Hamilton Rating Scale for Depression (Hamilton, 1960)	20.2	14	
		Hospital admissions	58.8	29.4	
van den Bosch et al. (2005) &	SD	BPD Severity Index (Arntz et al., 2003)			
		Impulsive behaviour	1.76	1.08	Not reported
van den Bosch et al. (2002) &		Parasuicidal behaviour	0.55	0.23	
		Alcohol use	3.78	2.55	
		Soft drug use	2.00	1.55	
Verheul et al. (2003)		Hard drug use	1.96	0.90	
		Lifetime Parasuicide Count (Comtois & Linehan,			

		1999)	48.9	10.9	
Linehan et al. (2002)	SD	Urinalysis (probability)	0.68	0.35	Not reported
Linehan et al. (1999)	SD	Urinalysis (clean)	0.43	0.50	Not reported
		Parasuicide History Interview (Linehan, Heard & Wagner, 1994)	Not reported	2.25	
		The State Trait Anger Expression Inventory (Spielberger, 1999)	Not reported	62	
Safer et al. (2001)	ED	Negative Mood Regulation Scale (Catanzaro & Mearns, 1990)	81.3	96.1	Not reported
		Beck Depression Inventory (Beck, Steer & Brown, 1996)	22.9	13.4	
		Emotional Eating Scale (Arnow, Kenardy & Agras, 1995)	7.7	5.2	
		Multidimensional Personality Scale (Tellegen &			

Telch et al. (2001)	ED	Waller, 1994)	15.4	16.4	
		Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)	56.3	51	
		Rosenberg Self-Esteem Scale (Rosenberg, 1965)	23.5	26.4	
		Negative Mood Regulation Scale (Catanzaro & Mearns, 1990)	99.8	110.1	-.36
		Emotional Disorders Scale (Fairburn & Cooper, 1993)			
		Weight concerns	3.4	2.2	0.82*
		Shape concerns	3.7	2.3	0.80*
		Eating concerns	1.6	0.4	1.11***
		Restraint	1.6	1.4	0.33
		Binge Eating Scale (Gormally, Black, Daston & Rardin, 1982)	28.8	15.7	1.6**
		Rosenberg Self-Esteem Scale (Rosenberg, 1965)	26	29.4	0.04

Beck Depression Inventory (Beck, Steer & Brown, 1996)	12.8	9.9	0.31
Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)			
Positive	25.8	30	0.13
Negative	23.6	17.9	0.35

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### ***Assessment of risk of bias***

Two review authors independently assessed the risk of bias of the eligible studies. Bias is minimised in the current review because only RCTs are included.

Publication bias, where non-significant results do not get published, clearly impact upon the favourable treatment effects discussed in this review (Rosenthal & Dimatteo, 2001).

### ***Measures of treatment effect***

Only Koons et al. (2001) and Telch et al. (2001) reported significant within group effect sizes for pre-post DBT intervention using Cohen's (1988) criteria.

Koons et al. (2001) explored the effectiveness of DBT with BPD patients and found DBT reduced depression, anger and dissociative experiences. Using the Hamilton Depression Rating Scale (Hamilton, 1960) an effect size (ES) 1.12 was found, The BDI showed ES 0.96. The ES from the Speilberger Anger Expression Scale (Speilberger, Jabocs, Russell & Crane, 1985) was 1.04 for anger in (suppressed anger) and 1.16 for anger out (expressed anger) with  $p < 0.01$ . An ES 1.13 was found for the Dissociative Experiences Scale (Bernstein & Putnam, 1986).

Telch, Agras and Linehan (2001) found significant ES using the Emotional Disorders Scale (Fairburn & Cooper, 1993) for weight concern (ES 0.82;  $p < 0.05$ ), body shape concern (ES 0.80;  $p < 0.05$ ) and eating concern (ES 1.11;  $p < 0.00$ ) with an ED population. Telch et al. (2001) also found significant ES pre and post DBT using the Binge Eating Scale (Gormally et al., 1982) to measure episodes of binge/purge behaviours. On this scale the ES of the reduction was 1.6 ( $p < 0.01$ ).

## **Main Findings**

Linehan et al. (1999), Linehan et al. (2002) and van den Bosch et al. (2005) explored the effectiveness of DBT intervention on females with SD. Telch et al. (2001) and Safer et al. (2001) evaluated the effectiveness of DBT on females with ED. All other studies evaluated DBT with females with BPD (Linehan et al., 1993; Linehan et al., 1994; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006; Linehan et al., 2008).

All studies involved a control group as specified by the Inclusion Criteria. These were Treatment As Usual (TAU) (n=5), Waiting List (n=2), and alternative therapeutic intervention (n=3).

Overall studies concluded that DBT was superior to control and alternative treatment conditions in reducing maladaptive behaviours. This means that overall in RCTs DBT is effective at reducing self-harm (Linehan et al., 1993; Linehan et al., 1994; van den Bosch et al., 2005; Linehan et al., 2006), suicidal ideation (Linehan et al., 1993; Linehan et al., 1999; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006), drug misuse (Linehan et al., 1999; Linehan et al., 2002; van den Bosch et al., 2005), anger (Linehan et al., 1993; Linehan et al., 1994; Koons et al., 2001), hospital admission days (Linehan et al., 1993), binge/purge episodes (Safer et al., 2001; Telch et al., 2001), depression (Linehan et al., 1994; Koons et al., 2001), hopelessness (Koons et al., 2001) and interpersonal functioning (Linehan et al., 1994).

## **Discussion**

RCTs are regarded as methodologically superior to most other study designs and are regarded as the best way to establish if a post-treatment outcome is due to treatment (Sibbald & Roland, 1998). Research has suggested that RCT methodology reduces expectations that treatment has been effective and therefore results show a 'truer' treatment effect. Moher, Schulz, Altman, Lepage (2001) suggest that non-RCTs yield an

exaggeration of treatment effects of up to 40% which was supported by a later study of CBT intervention (Tarrier & Wykes, 2004).

### **Borderline Personality Disorder**

There were mixed results across studies for six RCTs that investigated different forms of DBT with BPD populations (Linehan et al., 1993; Linehan et al., 1994; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006; Linehan et al., 2008). Generally parasuicidal and self-harm behaviours were reduced at follow-up in DBT groups (Linehan et al., 1993; Koons et al., 2001; Linehan et al., 2006). Linehan et al. (1993) found that at six and twelve month follow-up self-harm, anger and social functioning had improved in the DBT condition compared to TAU. However the differences were not significant at 24 months. Linehan et al. (1993) supported that DBT reduced self-harm and suicidal intent but found this was not significant with one year follow-up.

Additionally, Linehan et al. (1994) found between group differences for suicidal risk, including depression and hopelessness, were significantly better than TAU at six months but not significantly different at 12 month follow-up, which may suggest that shorter follow-up periods show better outcomes. Linehan et al. (1993) also found that DBT significantly reduced self-harm at 12 months, but not 24 months. Although not directly measured by Linehan et al. (1994) the DBT group showed improvements in social functioning and anger control, but the TAU group did too so the specific components of DBT that were effective are undefined.

A positive impact of DBT on suicidal ideation was generally observed (Koons et al., 2001; Linehan et al., 2006; Linehan et al., 2008). The major finding from Linehan et al. (2006) was that fewer female DBT completers attempted suicide compared to a Community Treatment By Expert (CTBE) control. Koons et al. (2008) found that DBT compared to TAU demonstrated significant improvements in self-harm, anger and dissociation. However, the criteria of self-harm behaviours were less strict



than in the previously discussed studies which may account for no between group differences being found.

Linehan et al. (2008) also support the overall effectiveness of DBT with placebo or Olanzapine treatment in reducing self-harm and other common BPD characteristics such as irritability. They found both DBT plus placebo and DBT plus Olanzapine groups reduced aggression, irritability and self-harm over time which suggests that DBT is useful in reducing these maladaptive behaviours.

van den Bosch et al. (2005) also supported the effectiveness of DBT for female BPD patients' impulsive drug and alcohol misuse. They reported that after 12 months, DBT had significantly better positive treatment effects compared to TAU for alcohol consumption, self-harm and impulsivity. This is important as impulsivity and problems with immediate gratification are thought to be key problems for people with substance misuse problems (van den Bosch et al., 2005).

### **Substance Dependence**

Two studies specifically evaluated the effectiveness of DBT with females who had SD and BPD (Linehan et al., 1999; Linehan et al., 2002). These studies applied an adapted version of DBT to target SD. Overall the findings supported the effectiveness of DBT within this population. The Home Office reports that drug misuse interventions were expected to prevent around 680,000 crimes in 2011 suggesting that effective DBT for drug dependence could have a key role in the reduction of crime within this population (NHS Information Centre, 2011b).

The earliest of these studies (Linehan et al., 1999) found that for a number of different substances DBT successfully enhanced participants' Social Adjustment and Global Adjustment scores and reduced drug use. However, parasuicidal behaviours after 16 month follow-up did not differ between groups but had reduced in both TAU and DBT conditions. This

suggests that DBT had a positive impact of the emotional vulnerability of participants and supported them in managing emotional arousal and developing more positive alternatives.

Similarly, Linehan et al. (2002) found that DBT compared to Comprehensive Validation Therapy and 12 Steps Intervention was more effective after eight months at reducing opiate use. Although initially the control group showed positive treatment effects, these were not maintained after eight months, unlike in the DBT group. At 12 months, results were also positive for DBT; however at 16 month follow-up there were no between group differences. The study reported by Linehan et al. (2002) may be prone to bias for two reasons. Firstly the sample size was small (n=24). Secondly, most drop-outs were from the same therapist so drop-out may have reflected the therapist's style rather than the effectiveness of DBT.

### **Eating Disorders**

Telch, et al. (2001) and Safer et al. (2001) examined the effectiveness of DBT adapted for ED and concluded that DBT is better than no treatment in reducing binge and purge episodes and concern over weight (Telch et al., 2001; Safer et al., 2001). Overall, Telch, et al. (2001) and Safer et al. (2001) supported the use of DBT in reducing binge and purge behaviours at 20 and 21 week follow-up. Caution is drawn to these conclusions however as the follow-up was less than six months in both studies. Participants in the DBT condition demonstrated fewer concerns over eating and their anger also reduced (Telch et al., 2001) which again draws question to the specific elements of DBT that were most effective for specific problematic behaviours.

Safer et al. (2001) found that DBT was more helpful than no treatment in supporting abstinence from binge/purge behaviours, with 28% of the DBT group achieving abstinence, while no waiting list participants managed this. However, at 20 week follow-up 35% of the DBT group met DSM-IV

(APA, 2000) criteria for Bulimia Nervosa, questioning the longer term effects of DBT within this population. The impact of DBT for this female population is difficult to conclude without further RCTs.

## **Methodological Considerations**

### Search Strategy

Time limitations meant it was not possible to translate non-English papers.

It appears this review is the only female-focused review of DBT, allowing for new perspectives of this intervention to be considered.

### Quality assessment

The quality assessment used during this review was heavily based on those from the Solutions for Public Health's Critical Appraisals Skills Programme (CASP; 2006). This added value to the quality of papers included in this review due to the specific medical and epidemiological background of its creators. For quality assessment the peer review inter-rater agreement was 0.78 suggesting substantial agreement (Gwet, 2012).

## **Included studies**

### Follow-Up

Four of the studies follow-up periods were six months or less and therefore considered to be at a high risk of bias (Safer et al., 2001; Telch et al., 2001; Koons et al., 2001; Linehan et al., 2008). Positive treatment effects could have been due to retention of DBT skills by the participants not application of skills. Given this review is exploring the effects of intervention on maladaptive behaviours and emotional regulation difficulties, it would be more effective if studies' follow-up periods had been of at least one year. This would have more reliably shown the application of taught skills from the participants, and allowed participants to have been exposed to emotionally arousing situations likely to increase their risk of employing these maladaptive behaviours.

### Losses to follow-up

Losses to follow-up were given particular attention in this review due to the risk participants may pose to themselves (self-harm and suicide, Substance misuse and problematic eating) if not given an efficacious treatment in RCTs.

Only the two studies evaluating DBT with females with ED recruited participants (n=64) through newspaper advertisement and interview. All other participants (n=320) were recruited via referral from community treatment centres or clinics.

Due to the varying length of studies, and some follow-up measures being conducted after 12 months of treatment end, dropout rates were almost unavoidable. This is expected in studies where the follow-up is so long, due to lack of contact with outpatients. Of the included studies only Linehan et al. (1994), Linehan et al. (1999), van den Bosch et al. (2005) and Linehan et al. (2006) accounted for dropouts in their analysis. However others (Linehan et al., 1993; Koons et al., 2001; Safer et al., 2001; Telch et al., 2001; Linehan et al., 2002) only included participants who completed treatment in their analysis. Due to the small number of participants included in their studies square root transformations were completed to account for varying numbers of participants and a lack of normal distribution. This will have therefore skewed reported results.

Dropout rates were examined for each study. Rates ranged from one (Safer et al., 2001) to 17 (Linehan et al., 1993). Considering the different conditions, it appeared that for most DBT was better at motivating individuals to remain in treatment than the control condition. Conversely, Linehan et al. (2002) found that dropouts only occurred in the DBT condition and concluded that DBT was poor at maintaining engagement. They did not report the reasons for drop-out but it may have been that factors relating to the participants Substance misuse or physical health lead to attrition.

### Treatment delivery and duration

Quality assessment found that all included studies followed the DBT manual, however the number of sessions offered, and the duration of DBT varied greatly and this may have biased findings. Only five studies delivered DBT for the full 12 months (Linehan et al., 1994; Linehan et al., 1999; Linehan et al., 2002; van den Bosch et al., 2005; Linehan et al., 2006), this most consistently being demonstrated for the drug dependent populations. Koons et al. (2001) reduced the length of sessions so as not to interrupt the everyday function of the medical centre in which DBT was delivered. Telch, et al. (2001) and Safer et al. (2001) used an adapted version of DBT and followed the manual for this intervention. This limited DBT to 20 weekly sessions rather the original 52 session programme. This variation is likely to lead to different conclusions being drawn about the drop-out rates of participants and whether motivation to engage can be compared between studies. However, due to the claim from all studies that all modules of DBT were delivered, it appears that participants from all groups (SD, ED and BPD) were willing to engage in all modules. Indeed Linehan et al. (2008) identified that further exploration of what modules specifically support certain groups and disorders would be useful in future research. Additionally, Linehan et al. (2008) suppose that given their findings that DBT reduced some but not all irritability measures within a SD population, clarity of the impact of different modules would be particularly useful.

Across all included studies staff were trained at varying levels and this might have biased the results in terms of the quality of DBT being delivered. In the Linehan et al. (2002) and Linehan et al. (2006) studies staff received eight months or 45 hours of training respectively to ensure they possessed adequate DBT skills. Linehan et al., (1993), Linehan et al., (1994), Linehan et al., (1999), Telch et al., (2001) and Koons et al., (2001) identified that staff were trained in delivering DBT. However Safer

et al. (2001), van den Bosch et al. (2005) and Linehan et al. (2008) were unclear in their reports.

All included studies assessed the effectiveness of DBT in outpatient treatment settings. The value of DBT within forensic settings could not be assessed within the current review as no RCTs applying this framework with females have been conducted. This highlights the need for further research in this area.

### Measures and definitions

All included studies involved validated tools to measure baseline and outcome behaviours specific to their populations. However, this meant that no standardised assessment battery was specifically implemented. Due to the range of tools used between each study it was difficult to conclude which were most applicable to the populations. The range of tools used across included studies is shown in Table 3.5. Safer et al. (2001) and Telch et al. (2001), who both explored ED, used the most similar assessment tools. This suggests that uniform assessment screening would be useful to further understand the treatment effects observed following DBT intervention.

A benefit of studies involving self-report of harmful behaviours was that they also used 'days admitted to hospital' criteria to support the participants' own disclosures. There is, however, no guarantee that this validated the self-report, or accounted for all episodes of self-harm, drug misuse or binge/purge behaviour. A benefit of the SD studies was that urinalysis was used to test for drug misuse, supporting any self-report.

Similarly studies varied on their use of different phrases such as 'parasuicidal behaviours' or 'self-harm' and 'binge/purge' where episodes varied in length, severity and risk to life.

### Generalisability

The sample sizes of the included studies ranged from 20-101 participants, with the mean age across studies of participants being 34.7 years. In general, all participants were aged between 20-40 years; however the study by Telch et al. (2001) had a mean age of 50 years for its participants which may reduce the generalisability of their findings to younger populations. This is relevant as the scoping search highlighted a need to better understand the possible benefits of DBT with juvenile populations.

This review included eight studies from the USA (Linehan et al., 1994; Linehan et al., 1999; Koons et al., 2001; Safer et al., 2001; Telch et al., 2001; Linehan et al., 2002; Linehan et al., 2006; Linehan et al., 2008) one from Germany (Linehan et al., 1993) and another from the Netherlands (van den Bosch et al., 2005). This reduces the generalisability of findings to UK samples, however the inclusion criteria used in each study appears to suggest that UK females meeting the criteria for BPD, SD or ED would not differ greatly from the populations previously used. It is however worth considering the need to complete an RCT of DBT within a UK sample of females who are given this treatment as part of their community or inpatient treatment. Additionally, DBT is a manualised programme thought to be applicable across cultures; therefore the findings of studies included in this review are expected to be generalisable to UK populations.

While the results cannot be generalised to female populations where SIBs are their maladaptive coping response it can be suggested that given the effectiveness of DBT for self-harm, binge/purge and substance misuse, it could be adapted to address the needs of these perpetrators.

### Review limitations

To the author's knowledge this is the first female focused systematic review of DBT, allowing for new perspectives of this intervention to be considered. The quality assessment used during this review was heavily

based on those from the Solutions for Public Health's CASP (2006). This added value to the quality of papers included in this review due to the specific medical and epidemiological background of its creators.

However, due to time limitations it was not possible to follow-up authors who did not respond to requests for further information. Additionally, it was not possible to translate non-English papers, which may have introduced some geographical bias to the studies included in this review and should be considered for future reviews.

Another limitation of this review is that it did not examine the effectiveness of 'standardised' DBT as specific adaptations were made to the ED and SD populations. While efforts were made to maintain adherence to the original DBT manual, the specific modules of DBT that are most effective in managing maladaptive coping strategies are not clear.

In this review only two studies used control conditions that were 'other treatment' specific, with others relying on waiting list or TAU conditions. These limit the findings of this review in two ways. Firstly, treatment change could be limited to the conclusion DBT was better than no treatment because it cannot be attributed solely to the DBT intervention. Secondly, control conditions could have varied greatly between studies, with some control participants receiving treatment, while others did not. This means the control groups are less comparable. Indeed it could be said that over time DBT is effective in supporting patients to decrease maladaptive behaviours, but not in other areas of general satisfaction with life.

### **Conclusions**

In conclusion, the results of the RCTs specific to the treatment of female patients demonstrated that DBT is more effective than TAU, Waiting List and alternative treatments in motivating patients to remain in treatment.



DBT was found to be effective in reducing maladaptive functioning across multiple domains. DBT led to decreased suicidal and self-harm behaviours and reduced impulsive behaviours (including drug misuse, binge/purge eating, impulsivity and aggression). Caution is however drawn to these conclusions given the findings in relation to the short follow-up periods employed. It was observed that with time, DBT was not found to be significantly better than control groups in most of the aforementioned behaviours. Additionally, it could be that one year of DBT is not sufficiently long enough to maintain treatment changes after twelve months. This review has highlighted that due to the life-threatening nature of many of the behaviours addressed by DBT it may be necessary, in order to reduce risk of eventual death, to offer more than one year of DBT (Linehan et al., 1991).

While this review has not been able to suppose what specific tools of DBT are effective in the treatment or management of maladaptive behaviours, adaptations were found to support females with ED and SD. Further research could explore whether females in general require adaptations to be made to the original DBT manual for specific maladaptive coping strategies. Prioritising what modules are most effective would be a useful next step in research. Determining priorities for different target populations will provide value to future studies of DBT. Some research has begun to explore this area. Koons et al. (2006) found that the skills training section of DBT was effective solely as an intervention for BPD patients.

In general the sample sizes of included studies are small. This bias could be addressed in future research by including larger sample sizes so results can be generalised, and larger effect sizes determined.

Recommendations for future DBT studies:

- Compare DBT to a treatment alternative
- Conduct RCTs for DBT in UK populations
- More research into ED, SD and juvenile populations
- When populations are similar, studies should employ the same measurement tools to allow standardisation

## **Chapter Four:**

### **A single case study: the effectiveness of DBT with a female patient who displays Socially Intrusive Behaviours**

## **Abstract**

**Objective:** This chapter aims to link the findings of Chapter Two and Chapter Three; can DBT effectively address the risk of SIBs as maladaptive coping strategies and what is the role of over-controlling emotions in displaying SIBs? Case B is a thirty-four year old female who was convicted in 2005 for harassment, threats to kill and criminal damage. She was referred to psychiatric services with a diagnosis of Borderline Personality Disorder (BPD). Since admission she began to display SIBs towards staff and her risk of re-offending therefore increased.

**Method:** Dialectical Behavioural Therapy (DBT) is viewed as the most relevant intervention for females with BPD and a DBT informed approach whereby the skills from its four modules were addressed over 12 months. The State Trait Anger Expression Inventory (STAXI-2) was administered pre and post-DBT.

**Results:** At post intervention Case B's SIBs had reduced. The results of the STAXI-2 were compared and showed that at post-intervention Case B experienced more intense anger than at pre-assessment and spent less time trying to suppress angry feelings. Responses suggested that at post-intervention her scores reflected better recognition and regulation of anger.

**Conclusions:** Case B appears to have continuing needs that are associated with her Interpersonal Effectiveness Skills and perceived benefits of displaying SIBs. Overall it appears a DBT skills based approach was a useful intervention to support Case B to manage feelings of anger and reduce her maladaptive coping strategies of demonstrating SIBs.

**KEYWORDS:** female, STAXI-2, BPD, Socially Intrusive Behaviours, harassment, anger, DBT

## **Introduction**

### **Case Information**

Case B is a thirty-four year old female who in 2005 received a four year custodial sentence for harassment, threats to kill and criminal damage. At this time she was sent to prison but began to self-harm during her sentence and was transferred to hospital for assessment.

Case B has a long forensic history with all offences relating to SIBs such as harassment or violence to others. She had been known to mental health services since the age of 16. At this time she was dependent upon alcohol and harassing her parents' neighbour; a female aged 42 in a position of authority. Case B has been detained in services since 2005 (age 26), and had received psychological intervention for the majority of this time.

Case B's current working diagnosis is Borderline Personality Disorder (BPD) as detailed in the Diagnostic and Statistics Manual Fourth Edition (DSM-IV; APA, 2000). According to the Mental Health Act (MHA, 2007) she is a Section 37/41 patient.

### **Self-Harm and Suicidal Ideation**

Case B had a long history of self-harm beginning at age eight. Since her conviction she began displaying suicidal ideation and made three serious attempts to take her life while in prison using ligatures. Most commonly Case B burnt herself with cigarettes, and when intervention began this was her preferred method of self-harm.

Most self-harm and attempts at suicide are made by females (Bancroft & Marsack, 1977) and self-harm is found to be associated with previous trauma (Bancroft, Skrimshire, Casson, Harvard-Watts & Reynolds, 1977; McLeavey, Daly, Ludgate & Murray, 1994; Wood, Trainor, Rothwell, Moore & Harrington, 2001). It was determined during intervention that Case B's self-harm began following an incident of sexual assault from a girl in her

school when both were nine years old. Case B stated she did not disclose the abuse.

## **Diagnosis**

Case B received a formal diagnosis of Borderline Personality Disorder (BPD) (DSM-IV; APA, 2000) in 2006. BPD specifically is prevalent among female stalkers (Lewis et al., 2001; Purcell et al., 2001; Meloy & Boyd, 2003) and there are strong links between self-harm and BPD (Klonsky, 2007). Following diagnosis, Case B was transferred to a medium security hospital, and then to low security in August 2008. Since this time she has remained in a low secure hospital receiving therapy from a multi-disciplinary team (MDT).

Personality Disorders have emerged as important risk factors for violence by females. The most common personality disorders associated with violence are antisocial, narcissistic, borderline, and psychopathic (Putkonen Komulainen, Virkkunen, Eronen & Lönngqvist, 2003). Females who display violent behaviours are characterised by emotional instability, low frustration tolerance and high levels of impulsivity (Leenaars, 2005; Henning, Jones, & Holdford, 2003). Difficulties controlling anger, experiencing intense anger and perceiving it as inappropriate are factors of BPD according to the DSM-IV criteria (APA, 2000). This highlights the significance of intense emotional arousal in terms of risk of reoffending (DiGuiseppe & Tafrate, 2007). It may be that when Case B experiences intense anger she is less able to manage the distressing emotion appropriately and displays SIBs or self-harms as maladaptive coping strategies in an attempt to communicate her distress.

Mullen, Pathé, Purcell & Stuart (1999) found that the majority of stalkers in hospital had anger and impulsivity difficulties. When anger was investigated in female stalker groups it increased the risk of perpetration (Hill et al., 1976; Sprecher, 1994; O'Hearn and Davis, 1997). Difficulties managing anger may relate to general problems managing emotions, in

line with BPD diagnosis. However, it is expected that over-controlling anger may increase the risk of females stalking, due to Meloy's (1996) proposal that stalkers experience intense rage towards their victims associated with rejection and humiliation.

## **Referral**

The referral came from the MDT who met twice monthly in Ward Round to assess risk. It detailed that Case B was to engage in psychological intervention due to an increase in SIBs towards staff. Staff reported feeling vulnerable and Case B's SIBs were indicative of offence paralleling behaviours whereby she was following staff and using sexualised and aggressive language towards them. The referral also requested that skills in managing the risk to self were addressed as self-harm remained problematic for Case B.

## **Case History**

A file audit was completed to guide formulation and intervention goals; this included clinical team members' reports, nursing summaries and observations from ward staff. Areas relevant to Case B's risk and presentation are presented below.

### **Psychosocial Risk Factors**

#### ***Trauma***

Case B had a difficult childhood, being adopted when she was six years old after being neglected by her birth mother. At this time her adoptive parents also adopted a boy (not same biological parentage as Case B) who is two years older than Case B. These early maladjustments have been found to increase the risk of future violent offending (Harris, Rice & Quinsey, 1993; Hodgins, 1994) and may relate to Case B's use of SIBs.

Risks to self and others are identified from her history of trauma (Klegg, 2005; Chapman, Gratz & Brown, 2006) which may have exposed Case B

to feelings of shame and blame and increase her likelihood of over-controlling emotions (Westrup et al., 1999). According to the Cycle of Violence theory, sexual victimisation is found to be a contributing factor to future violence (Kaufman & Zigler, 1986), and emotion regulation difficulties (Filipas & Ullman, 2006), which increase the risk of re-offending in the future. In particular, females who are violent observe violence from experiences in childhood such as victimisation, trauma and post-traumatic symptoms (Swan & Snow, 2006).

Case B was the victim of repeated sexual abuse beginning at age nine, when a girl from her primary school allegedly touched her inappropriately. Case B was later the victim of repeated sexual and physical violence from her brother, peers and older members of the public from age 11. Case B was frequently referred to by her brother and his friends using derogatory names, which reduced her confidence in finding other people to spend time with or in telling people about the abuse. This was the second account of abuse that Case B did not report and indicates a preference from a young age not to disclose negative events and over-control emotional arousal; the latter being a theme identified in Chapter Two.

### ***Care-giving relationships***

Another risk factor for re-offending is a lack of support received by caregivers (Bartholomew, 1990). At the time of her offending, Case B reported that her father was spending much of his time in the pub drunk which made Case B feel unwanted. Similarly, her mother responded to her needs in a dismissive fashion, being derogatory towards Case B and forcing her to become isolated. Case B reported that her mother would not want to be seen in public with her further, increasing Case B's isolation.

Difficulties in forming relationships to significant others are another risk factor to offending (Forgays, Forgays & Spielberger, 1997). Case B stated that she never felt close to her family and that she craved attention from



others. Case B stated that she often observed the victim of her index offence and her family being affectionate towards each other, and craved this type of warmth. This indicates that Case B experienced emotional deprivation and was seeking to have her emotional needs met.

### ***Substance use***

Case B stated that when she went to college her contact with school friends reduced and she began to spend time with older people drinking alcohol on a bench outside the houses of her parents and the victim of her index offence. Substance use is regarded as a significant risk factor for offending (Harris et al., 1993) and is relevant to Case B who drank alcohol heavily for a number of years and became dependent upon it while living in the community.

### ***Relationship History***

Sexual promiscuity and unstable intimate relationships are also recognised as risk factors of future violence (Harris et al., 1993). At the age of 16 Case B became pregnant to her then boyfriend. The relationship ended when Case B disclosed her pregnancy to him. Case B had an abortion following the advice of her adoptive parents who told her she would not be able to cope with a child. Case B experienced shame and sadness following her abortion which again suggests she utilised maladaptive coping strategies to manage these feelings. This may have been a contributing factor to her risk of self-harm and the increase in intent to end her life (Klegg, 2005; Chapman et al., 2006).

Being the victim of physical or sexual abuse has been found to increase the risk of violence in female populations (Babcock, Miller, & Siard, 2003), and Case B stated previous intimate partners were abusive. Developing healthy relationships is an area Case B recognised as particularly concerning, and an area where her most significant risk lies. Without addressing healthy relationships through intervention, Case B is likely to

remain a risk to potential victims and fail to understand the impact of SIBs on others.

### **Socially Intrusive Behaviours**

Case B reported her first experience of affection to older females in authority was when she was age eight. The lady was her riding instructor, and Case B recognised that she felt “fond” of her in a “special” way. She reports also having feelings for school teachers and nurses. The victim of her index offence was a teacher in a school Case B did not attend. It is common for stalkers to demonstrate risk behaviours towards people of authority (Meloy, 1998), therefore the risk of future offending was of paramount importance during assessment and intervention. Additionally, Case B’s increased SIBs towards nursing staff is not uncommon in female forensic settings (Mastronardi et al., 2012).

Her use of maladaptive coping strategy of displaying SIBs increased when she learnt of her adoptive mother’s death to cancer in April 2006.

Case B had an ‘Adverse Behaviour Log’ that staff used to record and report incidents of SIBs. These behaviours are those that staff find intimidating, threatening and/or inappropriate. Staff at the hospital had observed an increase in SIBs in the four months prior to intervention. The types of SIBs observed included; memorising and reciting car registration plates, standing at windows and tracking certain staff movements, calling out to staff from the window and becoming giddy and excitable when specific members of staff were on shift. Behaviours also included following staff up and down the ward, whispering in their ears, telling them she ‘loves’ them and buying presents for them. At times Case B would touch staff by stroking their hair. Case B’s SIBs within the hospital appeared offence paralleling given her history.

This highlights a need to address these behaviours to reduce the risk of future offending. People in authority are, to Case B, both unattainable and

also not in a position to give her the level of proximity and emotional closeness she desires which raises question as to the value of SIBs within hospital.

### Forensic History

Case B has a history of harassment and violent offences spanning over ten years. She was first cautioned for harassment at age 15. When intervention began it was not clear whom her offences were against. During intervention she disclosed that she displayed SIBs at the age of 26 towards the victim of her index offence and different members of her community care team – both males and females.

Case B's convictions, as listed in Table 4.1, represent separate offences and indicate the increase in frequency of her SIBs.

**Table 4.1: The nature of offences and the age Case B was when convicted**

<b>Age</b>	<b>Nature of Offence</b>
15	Criminal damage
18	Criminal damage
22	Harassment
25	Harassment and breach of restraining order
26	Harassment and breach of restraining order x2
26	Dangerous Driving; Criminal damage
26	Intentional harassment causing alarm and distress
26	Intentional harassment causing alarm and distress
26	Intentional harassment causing alarm and distress
26	Assault
26	Harassment and breach of restraining order
26	Assaulted a police officer
26	Assaulted a police officer
26	Harassment and criminal damage

### **Index Offence**

Case B was convicted of aggressive SIBs such as harassment and criminal damage in 2005 (age 26). The particulars of the offence are such that Case B is no longer able to access her father's home, due to the proximity of it to her victim.

Case B described an "obsessive attraction" to the victim which began when Case B was 16, the victim 42. The attraction lasted a number of years and Case B's behaviours towards the victim, her family, her property and

possessions increased in severity. In interview Case B disclosed that she felt the attraction was mutual, as the victim would often dress in a way that suggested to Case B she was interested in a sexual friendship. This delusional belief is a characteristic of the Intimacy-Seeker stalker (Mullen et al., 1999). Case B's SIBs began when she followed the victim and observed her areas of interest. For example, Case B bought music cassettes with the victim's favourite music after following her into a music store. She would then leave gifts for the victim outside her house. Case B also displayed difficulties controlling angry feelings as she caused damage to the victim's property; she destroyed the garden, smashed windows, destroyed a wall and broke the mirrors and windows of her car. These threats to the victim's safety mean risk assessment and management of future offending is difficult. Only the broadest definitions of violence include implicit threats, that is, a pattern of fear-inducing behaviour (Kropp et al., 2002) and for this reason the use of the term SIBs includes violent and non-violent SIBs.

Case B stated that despite the fact the victim took out injunctions against her, also obtaining a restraining order against her in 2004 (Case B aged 25), she broke court imposed restrictions on numerous occasions and continued to harass the victim because she was fond of her and "did not want to be forgotten by her". This is of potentially crucial relevance to the risk of re-offending, whereby Case B may attempt to re-establish contact to make sure she had not been forgotten by the victim when in the community. This is likely to perpetuate Case B's SIBs in the community. Case B's persistent offending highlights the obsessional nature of her behaviours, but may also be connected to anger towards the victim for not responding to Case B's needs and not showing her the attention she desired (Davis, Ace & Andra, 2000).

## **Assessment, Analysis and Formulation**

Case B presented as young woman who struggled to manage emotional arousal and presented as elected much of the time. In particular it seemed she found it difficult to manage feelings of anger. The need to address anger to reduce her risk of SIBs and self-harm became evident and is briefly discussed.

### *1. Interview and Observations*

Upon referral, Case B showed a preference to isolate herself which increased her risk of self-harm and she would make little attempt to make difficult situations better. For example, she would not ask for help but instead passively accept distress.

Case B appeared helpless to her current situation but displayed impulsivity in regards to SIBs on the ward. She appeared to struggle to focus her attention when in session and would often get distracted by what was occurring out the window or beyond the door. Problems with attention were also observed in regards to how she would respond to certain questions; this appearing as an avoidance strategy for questions that were emotionally arousing.

It appeared that discussing physical symptoms of pain was Case B's preferred means of exploring situations she found difficult, with emotional recognition skills being less advanced and harder to access.

### *2. Medication*

To develop understanding in terms of mood fluctuations and the development of controlling impulses to self-harm and display SIBs, prescriptions were analysed. Case B was prescribed three regular medications, and has two *pro re nata* (PRN) or 'when required' prescriptions.

Her regular prescription included two anti-psychotic medications to reduce the difficulties caused by her disorganised thinking. The other was a mood stabiliser. Case B took each two to four times a week, as prescribed.

Her PRN medication included a third anti-psychotic and a sedative. In the four months before intervention began she had used PRN medication thirty-eight times.

### *3. Observation Levels*

The frequency of observations is agreed by the MDT, and the longer the latency between observations the more the patient is trusted not to self-harm and is thought to demonstrate skills in managing distress.

Case B was on 60 minute observations in all areas of the hospital.

Case B was frequently (more than once weekly) self-harming by burning her arms before intervention began. It is proposed that over-controlled anger is a consequence of societal norms whereby women are punished for expressing anger and taught to suppress any aggressive impulses (Campbell, 1993). This suggested that over-controlling emotions such as anger and expressing it in a passive manner is problematic for her emotional well-being.

### *4. Incident Record Forms (IR1s)*

IR1s detail any form of self-harm, violent or abusive behaviour and attempts to self-harm known as 'near-misses' which can involve the writing of a suicide note.

Case B was the subject of frequent recorded incidents of self-harm by burning with a cigarette or cigarette lighter. A total of fifty-one incidents of self-harm were recorded in the four months prior to intervention. The risk did not appear to increase and similarly the frequency did not appear

to change significantly. Case B was seen by the practice nurse weekly to dress self-harm wounds.

#### *5. Staff-Report and Continuous Patient Record*

Staff reported that Case B presented as manic at times – being giddy and excited while observing others and struggling to manage her impulses. She was also described as reflective and hard on her herself, placing a lot of guilt on her behaviours and responding to this in an angry way through self-harm.

On the ward Case B was reported as being isolative, spending much of her time alone and struggling to interact with peers despite the length of time she has been in the hospital with a number of the other patients.

Staff also commented on her SIBs as reflected in the 'Adverse Behaviour Log' discussed previously.

#### Risk Assessment

Risk was assessed using specific risk assessment tools as well as clinical judgment. The concept of risk is complex and refers to a number of different factors. The risks of SIBs were assessed in terms of the potential outcome, the risk presented by Case B, the risk to the victim and the seriousness of potential risks (Hart, 2001; Janus & Meehl, 1997). The imminence of the risk to others also needed to be considered. Case B presented a risk to some female staff in the hospital, therefore the risk she presented is contextual; she did not present as a risk to all staff, but to specific individuals who appeared to fulfil her definition of an older female in a position of authority. This meant that her potential risk of violence depended on what ward she was on, what staff were working, what services she received, her social skills, motivation to change, her ability to manage emotional arousal and her engagement in therapeutic interventions (Hart, 2001). A difficulty when assessing risk of stalkers is



that the risks are implicit with little knowledge of the risk being expressed by the individual (Kropp et al., 2002). In addition, Chapter Two suggested that Case B may be over-controlling emotions so this needed to be taken into consideration. Given the complexity of risk assessment two specific risk assessment tools were used and are discussed below.

### *1. Galatean Risk, health and Social care assessment Tool (GRiST)*

This is an online risk assessment tool. It is reflective in nature and explores risk on a number of pre-disposed factors, such as self-harm, social care, neglect and risk to others (Gilbert, Adams & Buckingham, 2011). It is useful for application with Case B as it includes self-harm and emotional distress as distinct risk factors (Gilbert, Adams & Buckingham, 2011) which other risk assessment tools such as the Historical Clinical and Risk Management tool (HCR-20; Webster, Douglas, Eaves & Hart; 1997) do not.

Case B's risks were defined as:

- self-harm = 'medium risk' relating to the superficial nature of burning herself rather than the frequency of the self-harm events.
- suicide = 'low risk' as no current suicide intent disclosed and self-harm not at a life threatening level.
- vulnerability from others = 'high risk' due to history of abuse
- harm to others = 'very high risk' due to historical and current SIBs and risk of reoffending
- neglect = 'low risk' due to being in secure services.

### *2. Historical Clinical and Risk Management tool (HCR-20; Webster, Douglas, Eaves & Hart; 1997)*

This risk assessment was also used to assess risk for violence given Case B's previous SIBs in the community were of a violent nature. It gave further insight into some of the areas discussed in the introduction. Using

the HCR-20 added value to the understanding of Case B as it distinguished (a) the risk of violence and (b) the risk of committing a violent act (Heilbrun, 1997).

Historical risk factors identified as increasing Case B's risk of violence to others included: history of previous violence, relationship instability, lack of previous employment, substance use, early maladjustment, personality disorder and prior supervision failure (breach of restraining order) (Webster et al., 1997).

Clinical risk factors increasing the risk of violence included a lack of insight into her potential risk to others and how they may feel during her offending, impulsivity and her avoidance of previous treatment (Webster et al., 1997).

Future risk factors that increase her risk of violence included; plans lacking feasibility (Case B hopes to return to live with her father, next door to the victim of her index offence), exposure to destabilizers (such as her brother), lack of personal support and emotional arousal.

The HCR-20 identified few protective factors for Case B other than her sense of humour. In order to successfully manage her risk these factors will need to be encouraged.

### **Psychometric Assessment**

In order to develop a baseline measure of Case B's anger and monitor/evaluate change the State Trait Anger Expression Scale (STAXI-2; Spielberger, 1988) was used. The STAXI-2 was administered pre and post intervention and scores are shown in Appendix M.

The STAXI-2 is a 57-item self-report measure of anger. It provides concise measures of the experience, expression and control of anger in

different areas as defined below. It appeared that the implicit nature of stalking is passive and anger is not outwardly displayed via aggression. Because females have lower levels of testosterone than males, females may be more likely to display SIBs than aggression to express and manage angry feelings (Sapolsky, 1991). This means that females would be more likely to present in a passive-aggressive way as they are suppressing, rather than expressing, angry feelings. One of the benefits of the STAXI-2 is that it measures control of angry feelings.

### State Anger

This is defined as the psycho-biological state of anger, marked by subjective feelings that vary from mild irritation to intense rage. It is accompanied by physiological and neurological arousal and fluctuates as a function of perceived injustice and frustration of goal directed behaviour.

At pre-assessment Case B reported experiencing feelings of anger frequently; however, her scores in this region fell within the normal range. Closer inspection suggested that she was more likely to express anger physically than verbally and implied that she experienced few intense angry feelings. This may relate to a lack of understanding of the emotion of anger, and suggests that Case B did not recognise feelings of anger. When considering her offending behaviours, this may relate to Case B's passive-aggressive tendencies.

### Trait Anger

Trait anger is defined as the individual's unique disposition to view a range of situations as frustrating and measures an individual's experience of anger.

From responses given at pre-intervention it appeared that Case B experienced anger within the normal range. While Case B's responses suggested she did not experience a lot of anger, and that she was

indifferent to criticism and negative evaluations from others, it appeared that she had a tendency to be quick tempered and expressed her emotions in an impulsive way.

### Anger Expression

Anger expression measures the extent to which a person expresses their emotional experiences of anger in an outwardly negative and poorly controlled manner or if they hold feelings in and suppress emotions.

Responses were above the normal range for internal expression of anger which suggests that she experienced intense angry feelings but put energy into suppressing them. It is reasonable to suggest that Case B may therefore experience anger but, in an attempt to prevent others from knowing how angry she is, internally manages it and consequentially presents in a passive-aggressive way.

### Anger Control

Anger control is also measured in terms of outward and inward processes. Controlling 'anger-out' refers to the energy an individual puts into monitoring and controlling their expressions of anger. 'Anger control-in' refers to an individual's attempts to relax and calm down as soon as they can. It is their attempt to reduce angry feelings before they increase and get out of control.

At pre-intervention Case B's responses were above the normal range and indicated that she spent energy trying to monitor her anger, putting effort into calming herself down as soon as possible. It may be that this means Case B was not managing her emotions effectively and was withdrawing from others.

### Anger Expression Index (AX Index)

This scale provides an overall estimate of the intensity of an individual's angry feelings. It suggests how likely they are to express their anger by suppressing or expressing it.

Case B's pre-intervention score is within the normal range. This suggests that she was more likely to express anger inwards due to her above normal anger expression-in scores.

### **Formulation**

For the purpose of this Case Study a DBT Formulation (Brodsky & Stanley, 2013), as shown in Figure 4.1, is used to detail current psychological functioning and determine the influencing factors that motivate internal and external drives while also identifying problem behaviours. The DBT formulation is based around difficulties in regulating emotions thus is relevant to Case B's current presentation. Like all formulation, this is evolving to account for change during intervention. The formulation demonstrates diachronicity and ties together past, current and future factors (Hart, Sturmey, Logan & McMurren, 2011).

### Developmental Factors

Considering the factual details of Case B is the first stage in generating a useful and informative formulation (Hart et al., 2011). This stage is based on what Case B sees as her problems, as well as the views of professionals. Case B had a difficult childhood marked by neglect by her birth mother and adoption with a similarly aged boy when she was six years old. She was the victim of sexual, physical and emotional abuse for a number of years, including during intimate relationships. Her adoptive mother recently passed away, and this is also likely to have impacted upon her lack of tolerance to distressing emotions.

These developmental difficulties appear to have shaped Case B into someone who does not disclose personal distress, even if it is of a serious nature. This indicates that Case B had a preference to over-control difficult emotional experiences from a young age.

### Cues

It appears that Case B's history has led her to be hypersensitive to two core beliefs whereby she concludes that she is a 'failure' and 'can't manage'. The belief she is a failure is likely to be the result of a fear of rejection from others and will impact upon how she manages difficult situations. This is in line with the personality traits of females who displayed SIBs in Chapter Two.

On the ward, Case B is unable to tell staff about negative emotional experiences and this is likely to link to a core belief of 'failure' as she feels she should be able to tell staff. Without seeking support and by over-controlling emotional arousal Case B experiences prolonged negative valence. It is clear that her core belief system is that of an individual with very low self-esteem. This links to her current working diagnosis (Teasdale, 1983; Gilbert & Miles, 2000) and self-harm (Bancroft & Marsack, 1977).

Cues perpetuate problem behaviours and are reinforced by them. For example, self-harm is maladaptive and likely to reinforce a belief that Case B cannot manage her emotions. This may then manifest in a belief that she is 'no-good' at managing emotions and is therefore a failure. This is similar to her SIBs in terms of reinforcing that she is unable to make and maintain pro-social and healthy relationships or able to tell others how she feels.

### Responses

From the details above it appears that Case B holds three key assumptions about the world and other people. One is that she needs to over-control

her emotional arousal and presentation to others, to appear elated and happy in order to avoid judgements. It appears Case B feels she needs to do this in order to avoid being judged negatively by others.

Another response to difficult situations is that Case B will display SIBs because she feels that people will notice her when she does. This is evidence of an avoidance of assertiveness and suggests that Case B avoids proximity to others in fear of rejection. By displaying SIBs, if people ignore her advances she is not directly rejected. Similarly, potential rejection is fear inducing for Case B so the SIBs allows her to avoid this negative valence. The other response Case B has is to display SIBs as a reaction to a perceived threat. For example it appears that she is fearful of being forgotten and ignored and it is reasonable that her SIBs therefore left 'reminders' so she would not be forgotten.

### Critical Incidents

Critical incidents reinforce the likelihood of maladaptive coping responses. Case B is likely to respond to the non-reciprocated attention she gives to her victims in a negative way, concluding that she (a) did not make her intentions clear enough, (b) needs to continue to pursue attention in other ways and (c) is not wanted by others.

Further support for this hypothesis is that individuals with BPD have problems controlling intense mood as they are unable to tolerate the distress it causes. Case B, like other individuals with BPD, shows a preference to focus her attention on physiological arousal rather than emotional experience. For Case B, this means that she is more likely to present to nursing staff with physical health concerns rather than emotional distress. As is clear, this process is both avoidant and passive in its response to emotional arousal and suggests that if emotional recognition skills were improved less focus on physical symptoms may occur. Again this links to the findings from Chapter Two that females who display SIBs do so in an attempt to control their own emotional arousal.

As Hawkins, Macatee, Guthrie and Cougle (in press) suggest, individuals with low Distress Tolerance take a passive approach to interpersonal situations in order to avoid experiencing intense emotions or conflict. In terms of Case B this is observed in her SIBs as she threatens others' feelings of safety. The passive response to emotional arousal causes her anger to build as her needs are not met. This in turn causes more anger to be experienced. If she was able to recognise anger sooner, and manage it before it becomes too distressing, less risk may occur. Case B may find she is at less risk of displaying SIBs or self-harming as means of coping if she is able to recognise and manage her emotions (which she defines as 'anger') sooner (Hawkins et al., in press).

### Problem Behaviours

Because of apparent vulnerability Case B demonstrates an inability to regulate her emotions and glamorises over-controlled arousal. In this way she avoids criticism and judgement from others because, to them, she seems happy and elated. This is a problem because her needs are not met and therefore she experiences anger towards others. It appears that by focusing attention on physical illness she is able to gain proximity to staff whom make her feel better but this is self-defeating as at the same time her emotional needs are not being met.

### Protective Factors

A protective factor is something that works in the opposite direction to a risk factor: therefore in certain contexts they reduce risk (Little & Mount, 1999). They are an individual's strengths and resilience and promote psychological well-being and emotional health (Rutter, 1985). Due to Case B's current presentation and lack of external stable and supportive factors, no protective factors were identified other than her sense of humour. It could be that receiving strict boundaries from others, in terms of making her aware of her SIBs, support some form of protective factor



but until these are internalised it would be inappropriate to attribute them to Case B at this time.

As discussed, her detention in hospital goes some way to have the opposite effect from a protective factor as her SIBs have been directed towards staff members who are unable to leave Case B alone; after all, it is their duty to make sure she is safe. Medication may be a protective factor in reducing the risk she presents to the victim of her index offence, but it cannot be said that medication has erased risk as she continues to display SIBs while on a prescription.

### *Formulation Summary*

Interpretation of the STAXI-2 (Spielberger, 1988) proved relevant to Case B's formulation as it showed that she over-controls her anger. It seems that over-controlling her anger increased her risk of displaying SIBs and that Case B believes that if she over-controls emotions and gains attention from others by presenting as positive and elated, she is more likely to gain attention and support. This is a risk as her emotional needs are not being met by using SIBs.

By using a DBT formulation it is clear that Case B does not have the skills to regulate her emotions. She is unable to tolerate distress, which increases her desire to over-control emotions. In turn, she is more likely to display SIBs or self-harm as a means of managing this prolonged emotional experience.

Case B is unable to respond adaptively to interpersonal conflict and displays SIBs to gain proximity to others whom she believes will help her. She fears abandonment, rejection and being forgotten by others. It appears she displays SIBs and repeatedly approaches staff with physical complaints to gain proximity and remind others she is there. She demonstrated this in her index offence by buying gifts for the victim. SIBs

allow her to excuse rejection as it is not directed at her but may involve ignoring the gifts.

Case B may target females in authority because they present as less of a threat to her than males. In previous relationships, Case B has been physically and sexually abused by males, therefore she may view females in authority as 'safe'. As a result, because this group represent 'safety' she may be less likely to share with them her emotional distress as she wants them to like her. Thus, again we understand the value in displaying SIBs as a means of communicating to others. SIBs also mean that Case B avoids direct rejection. It is likely she experiences anger towards her victims because they do not meet her needs. However, because her SIBs are not direct she cannot attribute anger towards the victims and instead internalises it.

Case B also displays SIBs in response to threats such as perceived and actual abuse. In these situations she appears to display SIBs because she needs help but expects others will hurt her. Displaying SIBs therefore protects her from this danger and keeps people at some distance (both physically and emotionally).

As can be seen in Figure 4.1 below, Case B experiences emotions that interfere with her behaviours and increase the risk of her displaying SIBs. It may be that managing her skills deficit and increasing adaptive coping strategies to reduce emotion dysregulation will decrease her SIBs and other maladaptive responses such as self-harm.

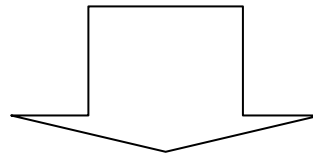
## Developmental History

adopted age  
six

physical, emotional and sexual  
abuse

abusive relationships

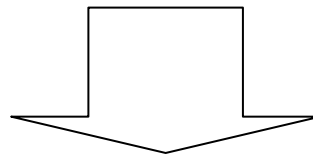
mother's death



## Cues

I can't manage

I am a failure

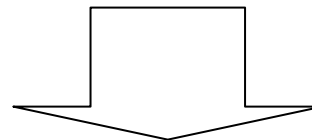


## Responses

I must over-control my real  
emotions to avoid  
judgements/abandonment

People notice me when I force  
them to

If I don't persist people  
will forget about me  
and leave me



## Critical Incidents

abuse (perceived abuse)

non-reciprocated attention

emotional arousal



Problem Behaviours

### Thoughts:

People don't really care  
about me

### Feelings:

Anxious, ashamed and  
Angry

### Problem Behaviours:

Self-harm  
SIB  
Avoidance of others  
Over-control anger  
Substance use

### Thoughts:

I will not get what I want  
from others

### Feelings:

Jealous and Angry

### Problem Behaviours:

Self-harm  
SIB  
Avoidance of others  
Over-control anger  
Substance use

### Thoughts:

If people knew how I really  
felt they would not like me

### Feelings:

Frustrated and ashamed

### Problem Behaviours:

Self-harm  
SIB  
Avoidance of others  
Over-control anger  
Substance use



Protective Factor: sense of humour, medication

**Figure 4.1. DBT Formulation for Case B's psychological functioning**

## **Intervention**

### **Dialectical Behavioural Therapy**

Dialectical Behavioural Therapy (DBT) (Linehan, 1993), was initially developed for female populations, and is the treatment of choice for females with BPD who are suicidal and self-harm as a means of managing emotional distress.

Generally there is a lack of research into the effectiveness of treatment for female populations, particularly in clinical or forensic settings. Estimates of the effectiveness for DBT for in-patients include specific adaptations to the original manual and vary from 20% (Safer, Telch & Agras, 2001) to 89% (Telch, Agras & Linehan, 2001). Overall, figures suggest that the impact of DBT as an in-patient treatment intervention is promising, but specifically exploring the impact with female populations is less clear. Bohus et al., (2004) found that inpatient treatment programmes significantly improve different mental illness characteristics, leading to the generation of an adapted DBT treatment programme for in-patient settings. It is likely that adapted DBT is best suited to Case B given the lack of research into females who display SIBs. Linehan, Armstrong, Suarez, Allmon and Heard (1991) reported significant reductions in anger and parasuicidal behaviours during in-patient stay, in addition to improved social adjustment, when DBT was utilised as the main intervention for females with BPD and Barley et al. (1993) found DBT leads to reductions in self-harming behaviours. Better understanding of the anger experienced by Case B is likely to reduce the difficulties she has in managing the emotion. In turn this may lead to a reduction in her self-harm, and an increase in her social adjustment and ability to form and manage more appropriate social relationships.

Individuals with BPD are prone to problems with anger and demonstrate low distress tolerance to this emotion specifically (Hawkins et al., in

press). Distress tolerance refers to the individual's ability to stay in control of negative emotional states (Simons & Gaher, 2005). How individuals tolerate distress is observed in a number of ways. The common maladaptive coping strategies of individuals with BPD is self-harm and suicide ideation. These responses highlight sensitivity to intense emotional arousal (Anestis, Selby, Fink & Joiner, 2007; Buckner, Keough & Schmidt, 2007; Nock & Mendes, 2008). Case B self-harms as a means of managing distress and is at an increased risk of reoffending if the emotional arousal she experiences towards victims is not addressed.

Linehan (1993) implies that females with BPD have poor emotional control and a general lack of emotion recognition and regulation. Trull, Useda, Conforti and Doan (1997) defined individuals with BPD as aggressive, emotionally labile, and manipulative alluding that BPD intensifies the relationship between emotion management (lack of) and inter-personal skills. Because managing distressing emotions is a difficulty experienced in patients with BPD, having tolerance for the distress caused is a key focus of DBT (Linehan, 1993). Linehan (1993) identified that individuals with BPD poorly regulate emotions and are often invalidated by others, meaning their ability to respond to and recognise the needs of others is also limited. Both these factors appear relevant to Case B whose SIBs and self-harm appear to suggest difficulties in these areas.

### DBT and Case B

Case B received a specifically adapted DBT informed intervention (described below), to allow the work to be completed in a 1:1 setting where emotionally laden areas could be addressed more directly. For example, the use of 'body maps' to prompt Case B to discuss a number of areas of her body affected by anger were regularly used.

A large proportion of the work aimed to reduce Case B's risk to others by developing skills in building and maintaining healthy relationships, another

focus of DBT (Linehan, 1993). In particular, the emphasis on acceptance and validation of behaviour, so she is less inclined to over-control and suppress how she feels was explored.

DBT with Case B involved the completion of emotion diaries between each session developed using the original DBT manual. The skills practised in the diary aimed to help Case B to manage her emotions more effectively. Different skills were addressed in each of the four modules discussed below.

### Engagement

One year of 1:1 DBT skills focussed sessions were offered to Case B. She attended all but two sessions offered, each lasting an hour. Her reasons for refusing sessions were physical ill health. Before intervention began little insight was gained about the reasons for her offending behaviour as Case B had demonstrated difficulty in engaging in sessions that explored SIBs. Case B completed weekly diaries and discussed these within session. The aim of the diary was to encourage her to practice the DBT skills.

Initially, Case B began each session complaining of a physical illness, this was later understood as an avoidance tactic to the content of 'psychology' sessions which she found anxiety provoking. Case B remained motivated throughout the year to address her difficulties, and although she recognised the work was difficult, her attendance and open and honest manner allowed the sessions to be appropriately paced for her learning style. The adaptations of the session, in line with her preference for worksheets, also demonstrated to her that the therapist was adaptive to her needs.

## **Module 1: Mindfulness**

The focus of planned therapy for Case B was to encourage her to become more mindful, gain more control over her emotions, and therefore act in more socially appropriate ways. Engagement in this module was expected to reduce Case B's impulsivity due to focussing her attention. Due to the tendency to over-control emotions, it appeared that the Mindfulness work of DBT assisted Case B in achieving these goals. Mindful Attention skills encouraged Case B to stay in the here and now and not become distracted by recurring thoughts or infatuations with others.

The use of Mind Wise skills were expected to support Case B as these skills balance thoughts and emotions and allow rational decision making to occur, even at times of high emotional arousal (Linehan, 1993). This supported Case B to get what she wants from others without displaying SIBs. In this way DBT has potentially reduced her risk of reoffending.

## **Module 2: Distress Tolerance**

This module built skills in recognising emotions and accepting them. It is a method of challenging negative emotions, by observing them and allowing the individual to control them by being aware they are there (Linehan, 1993). It is goal focused and builds the individual's understanding of the pros and cons of different emotional triggers and experiences.

This module encouraged Case B to address emotionally arousing stimuli, as she became more equipped with skills to challenge negative events, and consider the pros and cons of different goals.

This module also aided Case B's understanding of the processes that occur when faced with difficult situations and encouraged her to control her thoughts and feelings, in order to react in a more appropriate way. Changes in Case B's response to staff saying 'no' indicated that she gained these skills. Additionally, reductions in displaying SIBs towards staff

members and self-harming also indicate she applied Distress Tolerance skills.

### **Module 3: Emotion Regulation**

This module was adapted to account for Case B's apparent difficulties in recognising emotions. As mentioned, some concrete body map work was done during this module to define and distinguish different emotions, with emphasis being placed on anger, as it appeared to drive her offending and self-harm.

Emotional Regulation encouraged Case B to manage her emotions in less maladaptive ways to reduce the risk she presents to herself (self-harm) and others (SIB).

This module in particular aimed to address her STAXI-2 scores and reduce her tendency to over-control anger. It was hoped that a better ability to regulate emotions would follow the educational component of this module.

### **Module 4: Interpersonal Effectiveness**

Interpersonal Effectiveness is the development of assertiveness skills to keep a positive self-esteem (Linehan, 1993). This module provided Case B with the skills required to attend to and manage relationships.

The social skills addressed in this module deal with different problem solving skills which supported Case B to understand how to avoid maladaptive coping strategies. This is of vital importance for Case B as improved social skills reduce her risk of re-offending.

## **Results**

### **Treatment outcome**

Initially, Case B demonstrated difficulties in Mindful Attention being avoidant of emotional laden areas and presenting as elated or distracted. Case B appeared to become elated when finding areas emotionally laden such as her offending behaviours. Case B may have presented in this way



because she believes she is less likely to be rejected by others if she is to appear 'fun'. Although this was less apparent within session, it appeared that on the ward Case B presented as more elated when the staff with whom she was socially inappropriate were working or a significant anniversary such as the death of her mother was approaching.

As sessions progressed, Case B became better able to identify when her attention was less focused on the session content; and therefore demonstrated skills in mindfulness. She also developed her ability to manage her elated mood when discussing emotionally laden areas. This was one of the biggest barriers to progress, however, as she would often become distracted and present in an elated way. Once she developed skills in this area she was better able to focus her attention.

She then showed improvement in her ability to monitor her elated presentation and it was rarely seen within session. As Distress Tolerance skills were explored it became easier to redirect Case B to emotionally laden areas following a shift in attention. Links were made from her past to her current and future risk of re-offending throughout the year. This was so that the content of the sessions remained relevant to risk.

The Emotion Regulation module appeared to challenge many of the beliefs Case B holds about herself. This meant it was challenging for her to tolerate the content of the sessions. However, as she had worked through the two previous modules she was better able to manage these difficulties.

The final module also challenged many of Case B's beliefs about how to interact with others. She developed some assertiveness skills, but it was perhaps beyond the scope of one year of skills focused therapy to effectively address her assertiveness. While Case B demonstrated an improvement in recognition of how her socially intrusive behaviours could have been perceived as inappropriate by the victim, she continued to demonstrate the offence paralleling behaviours towards the staff.

## Psychometric results

In order to explore change, the STAXI-2 (Spielberger, 1988) was re-administered post-intervention. Appendix M shows both these scores.

### *Post-intervention State Anger*

Case B reported experiencing more frequent feelings of anger. Scores remained within the normal range but had increased since pre-intervention suggesting she experiences more intense feelings of anger. As at pre-intervention, Case B remains more likely to express anger in a physical way. Table 4.2 shows the increase on all State Anger scales experienced by Case B at the post-intervention period were significant using the Reliable Change Index (RCI: Jacobson & Traux, 1991) calculation.

Scores may have increased on this scale due to Case B having greater skills in recognising her anger at pre-intervention. DBT intervention aimed to increase her ability to recognise her emotions and adaptations were made to specifically focus on anger for Case B.

### *Post-intervention Trait Anger*

From responses given at post-intervention it appeared that Case B experienced less Trait anger. In line with skills from DBT, it is expected these reductions reflect improvements in regulating anger.

No change on her Trait Reaction score was observed, suggesting she experiences the same sensitivity to criticism and negative evaluation from others. This may be due to her core-belief system that DBT was not able to effectively challenge in twelve months. Table 4.2 shows that no Trait anger changes were significant.

### *Post-intervention Anger Expression*

Case B's post-intervention responses were within the normal range for anger expression. Her scores for anger-expression-out had not changed

from pre-intervention. This may link to a fear of punishment if she is to express her anger and a fear of experiencing feelings of rejection from others. Her anger-expression-in scores had fallen to within normal range, suggesting that she puts less effort into suppressing angry feelings. According to the RCI this change was significant. This is shown in Table 4.2, and is likely to relate to an increase in her ability to regulate anger. Importantly, this reduction suggests that Case B manages her anger in more assertive, and less passive-aggressive, ways and therefore may be less likely to reoffend.

#### *Post-intervention Anger Control*

At post-intervention Case B's responses were within the normal range and indicate that she spends less energy trying to monitor her anger, putting less effort into calming herself down compared to pre-intervention. Using the RCI it was found that her reduction in anger-control-in scores was significant. This could reflect an improvement in emotion recognition skills. Case B's post-intervention responses suggest that she is less passive-aggressive in her response to angry feelings; this may be a result of her greater understanding of the feelings of anger and how to manage them.

#### *Post-intervention Anger Expression Index*

Post-intervention responses suggest an increase in Case B's overall tendency to express anger, however scores remain within the normal range. The increase is likely to relate to less passive-aggressive reactions to anger and more assertively responding to her emotions due to an improved recognition of the anger emotion.

**Table 4.2: Summary of STAXI-2 pre and post scores**

STAXI-2 item	Pre score	Post score	RCI
	(raw scores)	(raw scores)	(* = significant change)
State Anger	16	27	3.54*
State Anger	6	10	2.27*
(feeling angry)			
State Anger	5	10	3.14*
(verbal expression)			
State Anger	5	8	2.65*
(physical expression)			
Trait Anger	20	18	-0.63
Trait Anger	8	7	-0.69
(angry temperament)			
Trait Anger	8	8	No change
(angry reaction)			
Anger Expression Out	13	13	No change
Anger Expression In	28	20	-2.65*
Anger Control Out	26	24	-0.69
Anger Control In	31	23	-3.17*
Anger Expression Index	32	34	0.20

## **Discussion**

### **Presentation**

#### *Fear of Rejection*

Case B demonstrated a reduction in her fear of rejection post-intervention. This may be due to recognising emotions and tolerating arousal with more efficacy. Her presentation on the ward, and within session, became less manic, suggesting that Case B became better able to assertively express her emotions. It also suggests her fear of rejection has reduced. With a reduced fear of rejection Case B may express her emotions to others without displaying SIBs.

#### *Role of Anger*

Case B's anger also appears to have less of a central role at post-intervention. It appears DBT has effectively aided her understanding of the role of anger. With a better assertive-control over her anger, Case B displays less passive-aggressive behaviours and is less likely to display SIBs.

Case B appears better able to recognise that anger is a normal emotion, and as she notices anger sooner, she remains in control of it. Spending less time suppressing angry feelings means that Case B spends less time feeling angry. Case B demonstrates skills in dealing with her anger before it takes control of her. This means she is at less risk of self-harm and displaying SIBs. Indeed, Case B's levels of self-harm had reduced at post-intervention to less than once a month.

### **Theory/practice links**

#### *Diagnosis and DBT*

Case B has a diagnosis of BPD which is characterised by difficulties experiencing, perceiving and controlling anger as well as general mood fluctuations (APA, 2000). It has been observed that women who display violence have an over-controlled personality style (Ogle, Maier-Katkin &

Bernard, 1995). Lieb, Zanarini, Schmahl, Linehan and Bohus (2004) found that DBT can usefully target the distress caused by individuals with BPD who experience anger. Like previous research suggested (Barley et al., 1993; Bohus et al., 2004), a DBT informed intervention reduced self-harm and suicidal ideation for Case B. The intervention was delivered over twelve months with individual sessions exploring all four of DBT's modules being completed. It appeared that developing skills in emotion recognition was most useful to Case B as this supported her to manage physiological arousal.

### *Anger, SIBs and DBT*

Most in-patient stalkers have anger and impulsivity problems (Mullen et al., 1999). For Case B, her anger played a pivotal role in the risk she presented to herself (self-harm), as well as the risks to others through displaying SIBs. No previous literature to date has used DBT to specifically target anger with a female who displays SIBs, however it appears that the impact DBT had on her functioning served to reduce her risk of reoffending. As Linehan (1993) designed, DBT has appeared to improve Case B's ability to recognise her emotions. Developing Distress Tolerance skills has improved Case B's ability to stay in control of her emotions, thus the risk to herself and others is reduced. This is supportive of previous research into the value of adapted DBT (Simons & Gaher, 2005). O'Hearn and Davis (1997), Hill et al. (1976) and Sprecher (1994) found that anger increased the risk of stalking perpetration, so it is therefore suggested that DBT reduced Case B's risk of reoffending.

According to the STAXI-2 (Spielberger, 1988) there were no significant changes to Case B's experience of anger (Trait anger) but her State anger had reduced. This suggests that DBT facilitated her to recognise and manage anger more efficiently. Her anger-control-in scores were also reduced, suggesting she spends less time suppressing angry feelings. This reduces her risk of responding to anger maladaptively.

## **Future directions**

### Continuing Needs

#### *Self-Critical Core Belief*

Case B will continue to benefit from intervention addressing her self-critical Core Belief system. While some shift of this belief in terms of accepting negative emotions was observed, it appears that the pressure and judgements she puts on herself continue to reduce her ability to manage distress. This is observed in continued use of self-harm.

In line with her offending behaviour, it appears that keeping distance from her victim is valuable to Case B and therefore remains a risk area. In the same way, her SIBs on the ward serves her a function. As she avoids 1:1 contact with others she cannot attribute rejection to them.

Additionally, due to her style of offending, and the specific characteristics of her victims, it will be necessary to address offending specifically with Case B if risk of reoffending is to be reduced. Psychometric results support the view that at post-intervention Case B is less over-controlled, and this reduces her risk of re-offending as she communicates in a more assertive style.

#### *Trauma Focused Work*

This intervention did not focus on the sexual, physical or emotional abuse Case B has experienced. It may be useful for Case B to complete trauma-focused therapy in order to effectively manage the emotions and thoughts associated with her abuse. This would further impact upon a formulation of her psychological functioning and the presenting issues demonstrated by Case B.

Early maladjustments, such as the abuse Case B experienced, can increase the risk of future violent offending (Harris et al., 1993; Hodgins, 1994). While trauma work was not specifically addressed during the DBT

intervention, it was suggested that working on emotional recognition and regulation skills would benefit future trauma work. As discussed in her formulation, it may be that Case B views abuse and rejection as the same. She appears to display SIBs in response to the fear and threat they induce. It would therefore be useful to specifically address this area to reduce her SIBs. It would have been ethically irresponsible to expect Case B to manage and tolerate the difficulties experienced by the work of this nature without gaining control and understanding of her emotions. Therefore DBT has been useful in not only addressing her presenting risks and her risk of reoffending, but has also given Case B a platform to usefully employ the skills learnt during DBT in her future therapeutic work.

### *Risk Assessment*

Two commonly used assessment tools that may have added to the understanding of Case B are the Stalking Assessment and Management (SAM; Kropp, Hart & Lyon, 2002) tool and the Stalking Risk Profile (SRP; MacKenzie, McEwan, Pathé, James, Oglaff & Mullen, 2009). However, no specific risk assessment of stalking style behaviours were used during the assessment of Case B. This was because no assessment has been developed specifically for UK samples of stalkers, and the development of specific stalking assessment tools is in its infancy.

There is an on-going complexity with regards to how to manage Case B. Due to the nature of Case B's offending behaviour and the implicit nature of the threats she makes, managing the risk to others is difficult (Kropp et al., 2002). Future work with Case B could address this area more specifically and develop risk management plans in line with the SIBs that have been logged by ward staff. It may be useful to go through the details of her offence and 'adverse behaviour log' to determine the motives of her offending. It could also be useful to examine her SIBs in line with Mullen et al.'s (1999) stalker typology to understand her behaviour better. One difficulty with this approach is the lack of literature of females who



display SIBs. A common approach is to address attachment disorders so this could also be a useful development to understand the role of SIBs for Case B.

#### *Further DBT*

Case B received twelve months of 1:1 DBT skills focussed work. It may be that now Case B is better able to display Mindful Attention skills that she would be able to tolerate a group session. A DBT group could now consolidate her learning and she may learn from other patients to further reduce her risks (Gratz et al., 2006).

#### *Limitations of a Case Study Approach*

This Case Study is a single case design and should not be generalised to female SIB perpetrators. Her diagnosis, formulation and SIBs are likely to be unique and will therefore not reflect a heterogeneous sample. The findings are relevant to the wider female stalker literature but a broader knowledge base is needed to understand females who display SIBs. The post-intervention assessment was taken immediately following the end of intervention so does not provide a useful follow-up assessment of her emotional regulation or reduction in SIBs. Difficulties in relying on the STAXI-2 responses were overcome by taking into account the vast amount of information from other sources and the use of clinical judgement and formulation brings together these different findings.

Appendix N is a copy of the Consent Form used to gain consent.

**Chapter Five:**

**A psychometric critique: the State Trait Anger Expression**

**Inventory 2<sup>nd</sup> Ed. (STAXI-2)**

## **Abstract**

**Objective:** The STAXI-2 was used in Chapter Two and Chapter Four because it claims to measure anger control which is relevant to SIB perpetration. The use of psychometric assessment is fundamental in psychology and interpretations assist formulation of offenders and patients.

**Method:** This critique examines the most widely used assessment of anger, the State Trait Anger Expression Inventory (2<sup>nd</sup> Edition; STAXI-2, Spielberger, 1999). Because the revised version is so heavily based upon on the original STAXI (Spielberger, 1996) this tool is reviewed in advance.

**Results:** The results indicate that the STAXI-2 comprehensively measures the concept of anger and is sophisticated in its ability to do so. The main advantage of the STAXI-2 over the original STAXI and other anger assessments is that this tool has a scale for anger control. It is this scale that has been most relevant throughout this thesis and is a major benefit in forensic practice. Additionally this scale is relevant to the over-controlled presentation often observed in females. One of the limitations of this critique is that studies used to validate the STAXI-2 are limited and have meant the review has relied largely on the original studies by the author. No specific female offender norms have been established. The STAXI-2 is also vulnerable to problems of self-report which are often emphasised in forensic samples who want to minimise the risks they possess in order to progress through treatment.

**Conclusions:** The STAXI-2 scale for anger control effectively measures this concept. However, there is an absence of research attempting to validate the STAXI-2 in female forensic populations and it would be useful for future research to further determine the value of the STAXI-2 within this group.

**KEYWORDS:** STAXI-2, critique, anger, psychometric

## **Introduction**

Assessing risk is a fundamental aspect of any forensic psychologist's role when working with clients. In order to make informed judgements the use of assessment instruments is often employed and this is one area within psychology that is constantly evolving.

This review examines the State Trait Anger Expression Inventory (STAXI) created by Spielberger (1996) and the revised STAXI-2 (Spielberger, 1999). The STAXI-2 was used in chapters two and four because it claims to measure anger control, an important factor in females' use of SIBs. The purpose of the review is to critique the ability of the tools to measure different components of anger including anger control and to explore whether the STAXI-2 is a valid and reliable measurement tool for anger. To do this the critique will examine if the STAXI and STAXI-2; (a) develop an understanding of the concept of anger, (b) assess components of anger and (c) inform practice.

Anger is an important emotional state to understand. In many forensic populations and psychiatric hospital settings anger is the main problem for individuals (Azevedo, Wang, Goulart, Lotufo & Bensenor, 2010); therefore being able to understand the role and impact of anger allows interventions to be targeted to support a reduction in problematic behaviours (Foley, Hartman, Dunn, Smith & Goldberg, 2002). Generally people are aware of the potential dangers of intense anger. Therefore exploring intense anger in forensic populations, and defining this compared to other emotions, allows the individual greater insight into how to manage their emotions, as well as giving the assessor insight into how to best manage the problems anger can cause.

## **Measuring the concept of anger**

In general, the development of anger-measurement scales has focused on modes of expressing anger, other emotions surrounding anger and levels

of anxiety. Normative samples have included children, college students, adults and psychiatric patients (Spielberger, 1996).

The concept of anger usually refers to a negative emotional state that consists of feelings that vary in intensity. Upon recommendations by Biaggio (1980) the State Trait theoretical concept was used to develop psychometric measures of anger. The State-Trait anger concept, validated by Deffenbacher (1992) distinguishes between an individual's experience of anger, and the expression of anger. The State-Trait Anger Scale (STAS; Spielberger, Jacobs, Russell & Crane, 1983) measures anger as an emotional state, as measured by the State anger scale, and anger as a personality trait, known as Trait anger. The subscales provide a specific and precise assessment of anger (Spielberger, 1999) that is advanced compared to other anger measures. The State-Trait Anger Scale (STAS; Spielberger et al., 1983) was constructed to assess the intensity of anger as an emotional state at a particular time, and to measure individual differences in anger proneness as a personality trait. The STAS operationalised State and Trait anger and allowed definitions of the emotional state of anger, and an individual's tendency to find situations as anger provoking respectively. It provided a thorough measure of anger but anger expression was less well understood.

Novaco's (1994) Model of Anger led to the development of The Novaco Anger Scale and Provocation Inventory (NAS-PI; Novaco, 2003). The NAS-PI consists of two different assessments. The Novaco Anger Scale (NAS) has four factors to measure anger: Cognitive, Arousal, Behaviour and Anger Regulation. The Provocation Inventory (PI) is a 25-item provocation scale that measures triggers to angry feelings. The NAS-PI however failed to determine the intensity of anger in different situations which the State-Trait theoretical model holds. The existing research suggests the NAS is a valid and reliable assessment of anger in forensic populations because it distinguishes the risk of violence in offenders groups (Smith, Smith and

Beckner, 1994; Swaffer and Epps, 1999). This is less relevant to female SIB perpetrators as few participants indicated violent behaviours. Additionally, the term SIBs allowed non-forensic patients to be included within this thesis thus suggesting a more general tool such as the STAXI-2, which is diverse and reliable in different populations, more appropriately assessed anger with female SIB perpetrators. Novaco (2003) stated that the NAS was superior to the STAXI at measuring provocation as assessed using the PI scale (Culhane & Morera, 2010). However, given that the NAS and PI scales were both developed by Novaco these outcomes are not surprising. One of the disadvantages is that the STAXI has not been tested in specifically forensic samples. The Novaco Anger Scale has been, and showed good test-retest reliability by other authors in forensic groups (Mills, Kroner, & Forth, 1998). However the factor structure for this assessment is less well supported (Monahan et al., 2001; Jones, Thomas-Peter & Gangstad, 2003). While other anger assessments are perhaps better suited to clinical settings (Hornsveld, Muris & Kraaimaat, 2011) the factor loadings are not consistent and the NAS-PI was found to have only a 60% predictive quality when classifying respondents as aggressive.

Similarly, Novaco (1994) suggested that anger is a predictor of violence. As research on anger progressed, differentiating between the experience of anger and its expression became increasingly important (Spielberger et al., 1983). Despite this, however, few studies have attempted to establish the validity and reliability of anger assessment scales in clinical or forensic populations (Howells, Watt, Hall, & Baldwin, 1997). The STAXI (Spielberger, 1996) assessed State and Trait anger as well as distinguishing between different forms of anger expression (Spielberger et al., 1985). The anger-expression-out scale measures the extent to which a person would express anger towards other people, objects or their environment. Anger can also be expressed internally and the anger-expression-in scale measures how much suppression and holding in of anger is conducted by the individual.

Spielberger (1996) included a third component in this construct of anger in the revised STAXI-2; this is the frequency with which an individual attempts to control the expression of anger and suggests that this tool will usefully assist in our understanding of females who display SIBs. While Spielberger (1999) describes anger expression as maladaptive ways of expressing anger, anger control is defined as the adaptive way of controlling anger. He found that the anger-expression-control items of the original STAXI were ambiguous and measured more anger control characteristics than anger expression. The STAXI-2 is regarded as the most sophisticated assessment of anger, and is said to have strong psychometric properties (Spielberger, 1999). However, there is a significant lack of evidence evaluating the validity and reliability of this revised tool as distinct from the original STAXI.

### **Overview of the STAXI**

The STAXI is a 44-item self-report measure. It measures angry feelings on three different scales: State anger (intensity of angry feelings), Trait anger (disposition to experiencing anger) and Anger Expression. The 44 items are scored on a four-point scale where 1 is 'not at all' and 4 is 'very much so' allowing respondents to define how much each of the items relate to their experience of anger.

While developing the STAXI Spielberger (1996) conducted and reviewed a number of studies that assess anxiety. As physiological concepts, it makes sense that anxiousness and anger correlate because when individuals express anger, they are often punished for this (Spielberger, 1999). It may therefore be that anticipation of punishment for anger results in anxious feelings (Spielberger, 1999).

The reliability of the STAXI has been reported in a range of different populations (Knight, Chisholm, Paulin, & Waal-Manning, 1988) and

indicates the STAXI-2's test-retest reliability is also good despite this not being established to date (Bishop & Quah, 1998). Jacobs, Latham and Latham (1988) found alpha-coefficients ranging from 0.73-0.84 for the internal reliability of the STAXI, and test-retest reliability correlations of 0.64-0.86 over different time periods. Azevado et al. (2010) found internal consistency alphas of 0.84 with Portuguese outpatients and Gormley and McNiel (2010) also found strong internal reliability (Cronbach's alpha coefficient of 0.80) with a population of adult psychiatric inpatients. With positive internal consistency (Fuqua et al., 1991; Spielberger, 1996), test-retest reliability (Jacobs et al., 1988), and a consistent factor structure (Forgays et al., 1997; Fuqua et al., 1991), the STAXI is regarded as an instrument with strong psychometric properties.

The STAXI has shown evidence of high reliability, as well as concurrent validity (Spielberger 1999). Azevado et al. (2010) found the reliabilities of state anger and trait anger scale were 0.94 and 0.88 respectively. Hawkins et al. (2012) also found good internal consistency-coefficient alphas from 0.70-0.86 with male and female university students and after a month internal consistency was still strong (coefficients ranging from 0.85-0.89).

### **Overview of the STAXI-2**

This revised tool has 57 items rather than the original 44-item STAXI, with 42 of these remaining unchanged and scoring of the test is based upon the same four-point scale. The main difference to the original STAXI is the addition of an anger control scale which was developed to give a better measure of anger. Other than the treatment manual, there is a lack of evidence to suggest the STAXI-2 scales actually measure anger in a more sophisticated way. This is made up of two subscales; anger controlled outwardly (monitored and passive aggressiveness), and anger controlled inwardly (calming down as soon as possible). Because the validity, reliability and evidence base for the STAXI-2 is based upon research used



to develop the original STAXI there remains limited research of the application of the STAXI-2 within diverse demographic populations (Reyes, Meininger, Liehe, Chan & Mueller, 2003). Changes to specific questions in the original STAXI were made using factor loadings to improve the clarity of ambiguous questions. The items in the STAXI-2 reduce floor effects of the original STAXI by removing ambiguous items and generating more concurrent constructs.

Despite the use of the STAXI-2 in forensic and clinical practice (Foley et al., 2002) to date no study has specifically examined the validity and reliability of the revised tool. This is probably due to the similarity between the original STAXI and the STAXI-2 as the Trait and Anger Expression scales are unchanged and most of the validity and reliability of the original STAXI is based upon these scales. It may also represent the use of patient respondents in the original study by Spielberger (1999). Because of a lack of future research replicating these findings conclusions are drawn with caution. Hawkins et al. (2012) support the use of the STAXI-2 because it has distinct scales for anger control and anger expression.

### Normative Data

In order to accurately interpret the STAXI-2 normative data is essential. The STAXI-2 is normed with American male and female populations limiting its generalisability to other cultures. It is advantageous however that separate norms for males and females exist as this allows better quality during the interpretation of endorsed responses. The STAXI-2 has also been normed with a sample of 274 psychiatric in-patients, 103 of which were female and 171 males which adds relevance to the use of the STAXI-2 within a female patient population. A difficulty with this normative data is that it is derived using small sample sizes.

### Interpretation

Interpretation of the STAXI-2 is based on percentile scores; those that fall within the 25th and 75th percentiles are 'normal'. Spielberger (1999) suggests that high scores suggest anger becomes problematic to general functioning. It is therefore reasonable to suggest that high anger control and expression scores indicate difficulties in communicating with others.

### **Reliability**

#### **State Anger**

The State Anger scales measure the respondents' current subjective feelings of anger at the exact moment they are completing the assessment. State anger is split into three components: anger as an emotional state, physical anger and verbal anger. While State Anger covers feelings of mild irritation, which most people report, it also includes intense rage. Hawthorne et al. (2006) found that the State Anger subscales have floor effects, particularly for normal adults, which means the cut-off points to score 'high' scores on this scale are elevated in comparison to the other scales. These higher cut-offs may take into account the normality of experiencing anger, and the need for problematic levels of subjective anger to be distinct from emotional awareness and therefore this is an advantage of using the STAXI-2 (Hawthorne et al., 2006). Increasing the cut-off scores suggests the STAXI-2 accurately measures levels of problematic anger, rather than just the extent to which the emotion is experienced.

#### **Trait Anger**

Trait Anger is the individual's disposition to perceive situations as provoking. It assesses the tendency to respond with an increase in State Anger; Spielberger (1996) found that individuals high in Trait Anger also experience an increase in State Anger.

Convergent validity has most commonly been assessed using the Trait Anger scales (Hawthorne et al., 2006). This may be a reason that the

Trait Anger scale is generally recommended for use as a screening variable (Deffenbacher et al., 1996; Sharkin, 1996; Spielberger, 1996, 1999). Deffenbacher et al. (1996) compared Trait Anger scores for two groups of undergraduate students. One group were high on Trait Anger, and had previously expressed an interest in receiving therapeutic support for anger difficulties. They scored above the 75<sup>th</sup> percentile on Trait Anger compared to the other group of students who made no request for therapeutic assistance; this group scored below the 25<sup>th</sup> percentile on the Trait Anger scales. The group requesting support and scoring high on Trait Anger were therefore proposed by Deffenbacher et al. (1996) to represent a forensic group of individuals referred to anger management intervention. This correlation is questionable given the population in their sample did not ask for help with anger problems and were not referred for anger management by a court system. Additionally, the study by Deffenbacher et al. (1996) relied solely on the participants' admission of anger problems, not a characteristic observed in offender populations (Foley et al., 2002).

Foley et al. (2002) state that many court-ordered individuals underreport feelings of anger. They explored the concurrent and discriminate validity of the original STAXI with court-ordered adult males and found that it was no better than chance at predicting violence (Foley et al., 2002). This highlights the problems of self-report tools and suggests the STAXI needs to be considered together with other validity scales to be useful with forensic populations. Foley et al. (2002) suggested that because their populations' demographic varied considerably, a limitation of the initial validation study by Deffenbacher et al. (1996) is that they may have failed to adequately account for such difference as their undergraduate sample were less diverse. There has been more detailed support of the NAS-PI (Novaco, 2003) application and ability to account for variability. Novaco (2003) concluded that the NAS was superior to the STAXI at

measuring provocation as assessed using the PI scale (Culhane & Morera, 2010).

### Anger Expression

The Anger-expression scale assesses how individuals respond to angry feelings. Spielberger (1996) postulates that anger can be expressed either outwardly or suppressed and directed inwardly. When expressed outwardly verbal or physical aggression is observed (Spielberger, Reheiser & Sydeman, 1995). When expressed inwardly anger is suppressed (Spielberger et al., 1983). Outward expressions of anger are associated with violent behaviour, whereas anger suppression is related to anxiety and passive-aggressiveness (Spielberger & Sydeman, 1994). Although these two forms of anger expression were initially viewed as the extremes of anger expression, they are not mutually exclusive. For example someone who suppresses anger may eventually express if consistently triggered.

Control of the expression of angry feelings is also measured on the STAXI Anger-expression scale. This is how frequently individuals control the expression of their anger (Forgays et al., 1997). It seems that accurately measuring anger control is generally problematic. The accuracy of the items in this scale has been questioned due to Unverzagt and Schill (1989) finding the original STAXI did not accurately define high and low aggression despite measuring high and low angry feelings. No other anger assessment has a specific scale to measure anger expression and the STAXI-2 did not change as a measure of anger expression.

### Anger Control

This scale is unique to the STAXI-2 and was developed using seven of the eight items of the original STAXI included in the Anger Expression scale. One item was removed and a less ambiguous item was added to replace it (Spielberger, 1999). The purpose of this scale is to assess how often suppressed angry feelings are reduced. The validity of this scale is taken

from previous validation studies exploring the Trait scale, as anger control is a trait measure. This scale attempted to resolve the difficulties of distinguishing an absence of anger, and the suppression of angry feelings. Inward anger control (calming down as soon as possible) is assessed using eight newly developed items with the best psychometric properties, least redundancy and relevant content (Spielberger, 1998). Anger control-out, energy monitoring anger is assessed using items from the original STAXI.

The STAXI-2 is normed for populations of 16 years old and above, males and females and for normal individuals and patients. In developing the scale Spielberger (1999) found that females had significantly higher Anger Control scores compared to males, suggesting they are more likely to appear passive-aggressive. This scale therefore adds significant value to using the STAXI-2 to understanding anger, particularly with females. Ogle et al. (1995) argue that men and women express and control anger differently due to societal influences. They suggest that the negative view of anger expression increases females' propensity to internally control angry feelings. The STAXI-2, the only assessment tool to specifically explore anger control, is therefore advantageous in work with females.

## **Validity**

### **Content Validity**

Content validity refers to whether a test measures all aspects of the construct it is designed to measure. The STAXI and STAXI-2 were developed to distinguish between different experiences of anger using Spielberger's state and trait concepts. The addition of the anger control scale in the STAXI-2 further develops the tools content validity and relevance within forensic populations.

### **Face Validity**

Face validity refers to whether a test measures what it claims to measure and the wording of the items of the STAXI-2 suggest it does. A common problem with any self-assessment tools is transparency. That is, participants can easily ascertain the purpose of the STAXI-2 assessment and, if motivated to respond in a way that will minimise their reported anger, find it relatively easy to do so. Two recent reviews of self-report measures used with various offender groups (Aleixo & Hollin, 1996; Tierney & McCabe, 2001) revealed the potential for socially desirable responding. Similarly, a screening instrument for psychopathy was recently reported to be vulnerable to response distortions such as positive impression management, despite the inclusion of a validity scale designed to detect "fake good" response sets (Edens, Buffington, Tomicic & Riley, 2001). This is one indication that the STAXI-2 should not be used in isolation which is true for all psychometric tools (Jacobson & Miller, 1997).

Of note specifically for female offenders who struggle to label emotions (Bland, Williams, Scharer & Manning, 2004), Mayne and Ambrose (1999) recognise that low scores from clinical and forensic populations may relate to difficulties labelling the physiological arousal they experience. This means that respondents may mislabel, or fail to correctly label anger, and consequently under-report their angry feelings. Whether or not individuals are therefore deliberately under-reporting their anger, the accuracy of how anger is measured using self-report tools is limited. Other tools have attempted to measure anger in regard to physiological arousal specifically. The Anger Discomfort Scale (ADS; Sharkin & Gelso, 1991) was also found to be limited to focusing on the physiological experiences of anger and anxiety, again a limitation of self-report tools requiring respondents to understand their emotions.

### Construct Validity

When tests claim to measure the same construct, the construct validity is being assumed. Minimisation and denial are not an issue the STAXI-2 is

able to overcome, as just like all self-report psychometric assessments it requires subjective experiences of states to be recorded (Paulhus & Reid, 1991; Bannatyne Gacono, & Greene, 1999). However the STAXI-2 does not have a validity scale to assess for deliberate malingering, exaggeration or patterned response styles. It would be useful to assess the self-report limitations of the STAXI-2 in forensic and clinical settings. Given that the evaluation of anger and violence potential are critical to many forensic evaluations, an easily administered, valid method for assessing aspects of aggression would be of inestimable value when working with offenders (McEwan et al., 2009). What authors are unable to do is suggest a better self-report anger measure than the STAXI-2.

Foley et al. (2002) explored the use of the original STAXI as a screening tool and found that only 51% of a forensic sample assessed for anger management intervention met the criteria as recommended by Spielberger (1988). They concluded that the sensitivity of the STAXI was problematic with offender groups. Huss, Leak and Davis (1993) compared scores on the NAS and STAXI to the Buss-Durke Hostility Inventory (BDHI; Buss & Durkee, 1957). The BDHI has been used widely, and its reliability and factor structure have been validated repeatedly (Biaggio, 1980), however, it still does not measure specific anger states or behaviours. This is the most recent anger assessment and the continued difficulty in accurately measuring angry behaviours remains challenging. Huss et al. (1993) concluded the NAS had good construct validity. When the PI scales of the NAS-PI were compared, better validity was found within a forensic sample suggesting the NAS-PI may be better at defining anger than the STAXI in forensic populations (Unverzagt & Schill, 1989).

In their study with male offenders, McEwan et al. (2009) concluded that the newer STAXI-2 was vulnerable to social desirability response bias with forensic clients, and recommend that where the STAXI-2 is used as a basis for treatment recommendations and decision making, it should be

administered and interpreted in conjunction with a recognized measure of such bias to improve validity. McEwan et al. (2009) used the STAXI-2 with a male offender group and found it was highly vulnerable to socially desirable responding. They suggested using a specific assessment tool to reduce bias, such as the Paulhus Deception Scales (PDS; Paulhus, 1998) which has scales to assess impression management.

One of the benefits of the STAXI-2 is that norms for males and females are provided (Spielberger & Reheiser, 1995). Responses showed that Trait Anger for male and female adults correlated to the three hostility measures suggesting anger was experienced similarly by males and females with alpha coefficients of 0.66-0.73 with the BDHI and from 0.27-0.59 with the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967). While developing the tool Spielberger found that males had higher anger-expression-out scores, and females had higher anger-control scores. This suggests that males were more likely to express their anger, while females suppress and over-control it. Additionally, psychiatric patients had higher scores than normal respondents, this suggests that in particular, psychiatric females attempt to suppress anger frequently and have less control over their anger (Spielberger & Reheiser, 1995). Fuqua et al. (1991) concluded in their study that understanding male and female anger when completing the STAXI is superior to other anger assessments. To date no study has taken this further and completed the STAXI-2 with male and females to further understand the factor loadings for each gender.

### Concurrent Validity

The STAXI-2 has been used extensively in research on anger management interventions and is found to measure the same 'construct' as other anger assessments (e.g., Deffenbacher, Story, Stark, Hogg, & Brandon, 1987; Deffenbacher & Stark, 1992; Chemtob Novaco, Hamada, & Gross, 1997) because it provides both a baseline and post-treatment level of each of the



different factors. Research therefore assumes that the STAXI-2 is able to define individuals with problematic anger, and those whose anger is not a concern. There is a lack of research evaluating the effectiveness of the STAXI-2 compared to other assessments in this way. If the STAXI-2 is to have solid psychometric properties, it should identify severe anger that requires intervention (Jacobs et al., 1988). As mentioned, because the Trait Anger scale is unchanged, it appears the STAXI-2 has not received specific validation.

The STAXI-2 was designed to be completed and interpreted by psychologists and other trained professionals. Having said that, the manual provides scorers and interpreters with t-score tables specific to gender, age and community or psychiatric populations. This means scoring the STAXI-2 is relatively quick and simple to do. Summation of raw scores and converting to t-scores, the manual states, can be completed by individuals with minimum training, but interpretation should only be done by a trained professional. One of the benefits of the STAXI-2 over other anger assessments is the relative ease in which it can be scored (Hornsveld et al., 2011).

### Predictive Validity

Predictive validity is the extent to which a measure is able to predict outcomes in the future outcome and is relevant to risk management of forensic clients. Research in this area for the STAXI and STAXI-2 is lacking and refers to medical outcomes only (Markovitz, Matthews, Wing, Kuller & Meilahn, 1991). Further research is needed in this area.

### **In Practice**

One of the other benefits of the STAXI-2 is that it is relatively quick and easy to administer, and although training is advised, according to the manual those without Chartership can administer the assessment. Interpretation is advised to be carried out by a trained professional, and

given the transparency and social desirability problems that can arise when completing a self-report assessment perhaps it is preferable for trained professionals to also administer the tool to allow consistency and analysis of responses from interview stage. This is a benefit to other anger assessments that contain more items and are too long to be translated into other languages such as the NAS-PI (Hornsveld et al., 2011).

The State-Trait concept is complex, and because of this many offenders or patients are unable to complete the STAXI-2 without assistance. The wording of the questions often requires explanations as the phrases are difficult for most respondents to comprehend (Moral de la Rubia, Gonzalez Ramirez & Landero Hernandez, 2010). Indeed for some studies using the STAXI-2 participants with low reading comprehension were excluded from the research (Moral de la Rubia et al., 2010). Difficulties understanding the questions clearly impacts upon the accuracy of the responses gained. This is also a similar problem to anger assessments based on other anger models as the assessments need to be read to respondents with a low IQ. However, it can also be advantageous as it is used in interview rather than self-report only and information can be extrapolated while completing the assessment with the client.

While one of the argued benefits of the NAS-PI is that it is easier to complete by mentally-disordered offenders because the items are rated using a three-point scale, compared to the STAXI-2's four-point scale, this appears to be one of its most significant flaws. The lack of options for each item appears to limit the factor loadings of the items and brings into question the validity of the NAS-PI (Hornsveld et al., 2011).

### **Conclusion**

This critique has explored the value of the STAXI-2 anger assessment. The original STAXI has good psychometric properties but research to validate the STAXI-2 specifically is limited. Additional research is needed to evaluate the use of the STAXI-2. The additional Anger Control scale and the revised ambiguous items appear to support Spielberger's (1998) claim that the STAXI-2 is the most valid and reliable assessment of anger. This justifies the use of the STAXI-2 throughout this thesis. The original 44-item STAXI has strong psychometric properties and is therefore regarded as a useful screening tool for anger and pre and post intervention assessment. The Trait scale, unchanged in the STAXI-2, appears the most commonly used screening tool because of its strong psychometric properties. Using the State-Trait theory, the STAXI-2 is multi-faceted in its approach to assessing anger and is therefore more strongly regarded compared to other anger assessments. The scales show good convergent and discriminant validity (Deffenbacher et al., 1996), internal consistency (Fuqua et al., 1991; Spielberger, 1996) and test-retest reliability (Jacobs et al., 1988). Forgays et al. (1997) also demonstrated a reliable factor structure distinguishing the STAXI from other anger assessments such as the NAS-PI. What is surprising is the lack of research using diverse demographic populations to assess the value of the STAXI. It appears that developing an anger assessment that can be used cross-cultural remains necessary as in general they are not adapted for use across different demographics.

While it may be advantageous to use anger assessments specifically in forensic settings, such as the NAS-PI, the STAXI-2 remains the most widely used anger assessment tool. Deffenbacher et al. (1996) demonstrated that the STAXI had good psychometric properties in a non-clinical and non-forensic setting. The population used to define the assessment tool is therefore vulnerable to a number of factors that an offender or patient population may possess. This is a limitation across all self-report tools and is one of socially desirable responding. In many

cases it is expected that an offender may perceive it to be in their best interests to under-report emotional arousal. In turn this means that their responses are vulnerable to response bias (Foley et al., 2002). Similarly, it has been found that patient and offender groups generally struggle to define and label their emotions, meaning that unintentionally, their responses may not accurately reflect actual angry experiences (Bland et al., 2004). These factors reduce the accuracy in which the STAXI-2 measures anger in clinical and forensic populations, and limits its value as both a screening tool and pre and post assessment measure in these groups.

The high concurrent validity from factor loadings of the STAXI is encouraging for their continued use. What is dubious is that both Spielberger and Novaco have been founders in the development of anger assessments, with few others influencing the field. The concepts held by Spielberger and Novaco are therefore likely to provide strong concurrent validity given the theoretical framework upon their work. Reliability of the STAXI has been supported in clinical populations, and the knowledge of females' inclination to over-control anger (Ogle et al., 1995) support the use of the STAXI-2. It appears the STAXI-2 is the most relevant psychometric assessment of anger for this population in particular. Again, there is an absence of research in the validation of the STAXI-2 with females in particular (Forgays et al., 1997), but other assessments do not measure anger distinctly so the features of females' anger are less well understood.

## **Chapter Six: Discussion**

## **Thesis Aims**

This thesis aimed to investigate the topic of stalking in a female population. In order to understand the use of stalking-like behaviours the term Socially Intrusive Behaviours (SIBs) rather than stalking was used throughout. This allowed the thesis to include females who have not been convicted of stalking, but demonstrated and reported displaying SIBs. The definition of SIBs appeared relevant as findings from the main chapters of this thesis supported existing stalking literature. As stalking research expands and specific treatment centres develop, the need to understand the psychological characteristics of perpetrators of SIBs is increasingly important. This thesis has used methods of Thematic Analysis (Chapter Two), systematic review (Chapter Three), case study design (Chapter Four) and a psychometric critique (Chapter Five) to construct a discussion around what factors increase the risk of females displaying SIBs and how to treat perpetrators.

The following research questions were explored:

Chapter Two:

- What is the psychological functioning of females who display SIBs?
- Do females who display SIBs have insecure attachment styles?
- Do females who display SIBs over-control their anger?
- Do females who display SIBs have BPD traits?
- Into what stalker typology do female forensic patients who display SIBs fit?

Chapter Three:

- Is DBT an effective intervention in female only populations?

Chapter Four:

- What risk factors does a female who demonstrates SIBs have?

Is DBT effective at reducing maladaptive coping strategies of SIBs?

Chapter Five:

How effective is the STAXI-2 at measuring the concept of anger?

Is the STAXI-2 a valid and reliable psychometric tool?

Summary findings of each chapter are now discussed followed by a discussion of the findings within the existing literature.

## **Summary Findings**

### **Chapter Two**

The aim of this exploratory research was to gain insight into the psychological functioning of females who display SIBs by comparing those who demonstrate SIBs to those who do not. The results supported the hypotheses that females who display SIBs have personality traits associated with BPD, form insecure attachments to others and over-control their anger. In particular they were avoidant and anxious appearing to feel safe when in control of how close they became to others. Females who display SIBs were also found to match traits of the Intimacy Seeker, Rejected and Incompetent Suitor stalker types (Mullen et al., 1999). More specifically, the variables that differentiated the females who displayed SIBs and those who did not appeared following the Thematic Analysis. Results of the Thematic Analysis showed that females who display SIBs do so as a maladaptive coping strategy to perceived threats from the victim and in an attempt to control negative emotions. The results also showed that females who display SIBs over-control their presentation and attempt to control others. The findings also qualitatively found that SIBs help females to over-control their anger which was supported when STAXI-2 scores were examined. Additionally it was found that perpetrators view SIBs as benefitting them by allowing the perpetrator to control the level of

closeness and contact achieved with their victim. SIBs also benefit the perpetrator as the actions mean the perpetrator can gain information without having to ask directly, they can exact revenge and they reduce negative feelings. The results were discussed in light of the potential treatment provision for females who display SIBs. Given the lack of existing research however, these recommendations were tentative and may have more reliably provided insight into the most risky characteristics that should be further explored.

### **Chapter Three**

This chapter provided a review of the effectiveness of DBT, investigating ten different RCT studies of females with Borderline Personality Disorder, Eating Disorder and Substance Dependence. Overall the findings were that DBT was superior to control and alternative treatment conditions in reducing maladaptive behaviours such as self-harm, substance misuse and binge/purge eating observed by reductions of these behaviours at follow-up. However, the four studies that used an adapted version of DBT for ED and SD found that DBT was effective when adaptations were made and reported post-intervention change most clearly. It may be that in a female population adapted DBT is most effective. For the majority of studies the sample size was small with variable follow-up periods. The use of only RCT studies suggested methodological sophistication. Due to the number of maladaptive coping responses effectively addressed via DBT it was proposed that this therapeutic intervention could also address SIBs within female patient populations.

### **Chapter Four**

Chapter Four linked the preceding chapters and explored the efficacy of DBT with an adult female who had an index offence involving SIBs. Like Chapter Two, the case study revealed that insecure attachment, Intimacy Seeker typology (Mullen et al., 1999) and over-controlled emotional experiences were characteristics of a female who displayed SIBs. As is



highlighted throughout the case study, the over-controlled presentation and suppression of anger appeared to be functional and provided justification for SIB perpetration. The STAXI-2 was used to measure anger before and after DBT. Results and interpretation found that at post-DBT anger control had improved and the frequency of SIBs had reduced. This chapter showed that the concepts explored in Chapter Two and Chapter Three could be linked; SIBs are maladaptive coping strategies than can be addressed via DBT in a single case study. This method also exposed risk factors relevant to a female who displays SIBs and therefore puts forward further areas worthy of consideration in the future.

## **Chapter Five**

The critique of the STAXI-2 provided an overview of the tool and its predecessor the original STAXI (Spielberger, 1996) of which most of the STAXI-2 items are based. This chapter highlighted that the main value of the revised STAXI-2 is that it measures anger-control; this being the reason it was used in Chapters Two and Four. Validity and reliability of the tool was explored and problems including self-report were acknowledged alongside the benefits of the STAXI-2.

## **Theoretical and Practical Applications**

The findings of this thesis are now discussed in relation to the existing literature and the growing provision for female patients who display SIBs. The relevance of the findings to the research and real world are explored.

Chapters Two and Four identified that qualitative methodological approaches are a useful way to understand the psychological functioning of females who display SIBs. Although not usually generalisable, the results of the Thematic Analysis support larger scale quantitative research completed previously and suggest that many of the traits found in the female patient population relate to other female stalker groups. The

conclusions of these chapters were that females who demonstrate SIBs most often fit the Incompetent Suitor stalker typology (Mullen et al., 1999), over-control emotional arousal and display dismissive-avoidant attachment styles (although this was not formally tested in Chapter Four). The results of these chapters identified that SIBs relate to a desire for closeness with the victim and reflect attempts by the perpetrator to feel safe. However, it seemed that underlying most of the females' use of SIBs was a desire to manipulate their own emotional arousal, rather than the actions, reactions and feelings of others (their victims).

Most previous literature has suggested that females who display SIBs will have insecure attachment (Guerro, 1998) which the population herein did. However, the non-SIB group also endorsed the same attachment style. Therefore, it appears that attachment theory does little to underpin the differences between the different types of female patient stalkers. When considered with the results of the Thematic Analysis, we understand more of the potential relationship between female patient attachment and SIBs. It could be that further exploration of this would support Meloy and Boyd's (2003) claim that emotions such as jealousy are attachment driven and increase the risk of stalking.

The results from Chapter Two that SIBs are motivated by a desire to manipulate the perpetrators own emotions were considered in regards to risk assessment and management. The relevance of the STAXI-2 was observed throughout this thesis given the findings in all the main chapters that females who display SIBs struggle to regulate emotional arousal. It appears that SIBs relate to the perpetrators attempts to over-control their own emotional experiences to reduce negative emotional valence. In particular, it appears that those who demonstrate SIBs attempt to present in a positive, non-threatening way, in order to gain proximity to their victim, be 'liked' and avoid negative appraisal from others. This may be particularly relevant in hospital settings whereby behaviours and progress

are constantly monitored; but this did not appear significant as only two participants (participants 8 and 10) displayed SIBs towards mental health professionals. It seems that SIBs are a method of controlling how close others can get, which consequentially means most interactions occur on the perpetrator's terms. Again, this appears to relate to how the perpetrator feels and is not emphasised by how the victim reacts. This is difficult in a secure hospital given the staff have a responsibility to initiate contact and provide care. It may be for this reason that stalking has previously been observed more frequently within mental health settings than any other (Mastronardi et al, 2013). However, the findings of the current study did not find SIBs to be displayed more towards mental health professionals which suggests the results of the Thematic Analysis, rather than the demographic information, account for the risk of SIBs from in-patient females.

It was observed that the Incompetent Suitor stalkers often desired a relationship with someone who is unobtainable - such as a professional. This could be a sign that the risk of experiencing SIBs within patient treatment centres may increase. When professionals demonstrate the positive qualities desired within a relationship, such as empathy and continued support, the risk of females targeting SIBs towards them may increase. In support of this was the conclusion from the Thematic Analysis that feeling safe with others was a motivating factor for female patients to commence SIBs and it appears that this may be the reasons why Mastronardi et al. (2013) found higher rates of females displaying SIBs in clinical and forensic populations. Findings such as these support the view that stalking is a maladaptive response to social isolation (Meloy, 1996, 1998). Females in forensic services appear to respond to social isolation by seeking closeness to professionals. The closeness to others allows the perpetrator to feel safe but also increases feelings of vulnerability because they are unable to control the actions of others and fear abandonment. It seems the fear of rejection is exaggerated because they perceive

professional support as affection. In turn, this increases the risk of displaying SIBs as female patients attempt to over-control intense emotions because intense arousal is uncomfortable. It seemed that intense positive emotions such as 'love' were also viewed negatively by the SIB-P group so they too were over-controlled to prevent the perpetrator experiencing negative arousal.

Chapter Three examined the effectiveness of DBT for a range of maladaptive coping strategies such as self-harm, binge/purge eating and substance misuse. Since DBT has been effectively adapted to meet the needs of BPD, ED and SD populations it is possible that it could be adapted to meet the needs of SIB perpetrators. As SIBs were found to be a maladaptive coping strategy also, it was suggested that if the emotional arousal within this group could also be addressed by DBT treatment interventions could target this area. It is likely that a useful treatment intervention such as DBT could address the emotional-management difficulties, interpersonal relationship complications and maladaptive coping responses observed in female patients who display SIBs.

Chapter Four confirmed that the use of DBT effectively supported a female to manage her anger more assertively and as a consequence her SIBs reduced. It was relevant within this latter chapter to use a psychometric assessment to measure change. The STAXI-2 was chosen because it was used in Chapter Two and in some studies examined in Chapter Three). While Chapter Five critiqued the STAXI-2, other psychometrics also used in previous chapters could have been used and tools less susceptible to social desirability could have been critiqued. Because an emphasis of this thesis was on the emotional arousal and over-controlled presentation of females who display SIBs the STAXI-2 which measures anger control was prioritised. The results of Chapter Five were that despite the STAXI-2 not specifically being tested within female only samples the tool provides a

valid and reliable measure of anger, and in particular the additional anger-control scales offers insight into individuals' management of anger.

In all the methods discussed it appears that the use of SIBs is aimed at meeting the needs of the perpetrator but does not fully satisfy all their needs. This appears to be an area worthy of further research and could be one reason why it is so difficult to record actual prevalence rates of stalking. An interesting question arises; what might a perpetrator do to make sure their needs are met? Perpetrators may murder their victim or move on from victim-to-victim if sufficient closeness is not achieved, or they may stop displaying SIBs or change tactics to satisfy their needs. The potential increase in risk highlights the need to better understand the perpetrators of SIBs.

### **Treatment Implications**

How the findings of this thesis can be applied within future research and treatment provision is now discussed in line with the aforementioned potential effectiveness of DBT for females who display SIBs.

Mullen, Pathé and Purcell (2001) recognise that mental health professionals have the knowledge and skills to make valuable contributions to the treatment and management of stalkers. In their treatment clinic they treat any mental health problems first then base clinical treatment on a range of different factors such as victim empathy, interpersonal and social skills and denial and minimisation. Their treatment model appears to rely on the motivation components of the stalkers' behaviours as classified by Mullen et al. (1999). It is not surprising that Mullen based her treatment clinic upon her own stalker typology framework but the therapeutic model does not appear to account for the findings of this thesis; that emotional arousal underlies the use of SIBs in female in-patients. It is likely that Mullen et al. (2001) did not have a large

proportion of female stalkers in their clinic, but regardless, it seems that future treatment for female stalkers should consider the benefits of addressing the perpetrators needs for emotion regulation skills training. Little is known about the needs of community SIB perpetrators; further research within this population would be useful

Over-controlling anger was also observed to influence the SIBs perpetrated by female patients. Chapter Two and Chapter Four indicated that the risk of females in secure services displaying SIBs increases when they over-control their emotions and in particular their anger. Chapter Two found that DBT which aims to regulate emotional arousal and target maladaptive coping strategies could address the use of SIBs. It was found that for a female patient who displayed SIBs and over-controlled her anger DBT effectively reduced her perpetration and increased her ability to assertively manage anger. Therefore, it could be that intervention aimed at anger management may benefit this perpetrator group.

This thesis used the STAXI-2 to measure anger, one difficulty when relying on the STAXI-2 as a measure of emotional control is that offender populations have been found to generally struggle to label and manage emotions (Bland et al., 2004). It could therefore be that the rates of self-reported anger are higher in forensic populations due to a lack of emotional awareness. This suggests that a treatment intervention that accounts for difficulties in emotion recognition will benefit this group. It could be that initial treatment stages that support SIB perpetrators to recognise emotions would encourage them to address different emotional arousal states at a later stage of therapy.

DBT was found to be effective in Chapter Three for the treatment of females with various presenting problems. The use of DBT to increase recognition and regulation of emotions with a female who displayed SIBs

was also found to be useful in reducing her future risk of perpetration in Chapter Four. Exploring the effectiveness of DBT at reducing risk of SIB perpetration in larger groups is an area worthy of future research as it was beyond the scope of this thesis. A benefit of this approach would be that group treatment could be offered which would be more cost effective than the 1:1 methods employed currently in the National Stalker Clinic (NSC website).

In the UK the Probation Trust (National Offender Management Service, 2011) is expanding its knowledge of females with personality disorders and the results of this thesis could inform service provision. The Probation Trust propose that by 2015 females with personality disorder will have treatment pathways based upon formulation and complete planned interventions. Where females who display SIBs are identified in secure hospitals, this thesis suggests that a group based programme could reduce the risk of recidivism. The treatment pathway for the Probation Trust includes females without a conviction which is also relevant to this thesis. The term SIBs would allow probation to target these problematic behaviours with a group of high risk females. This is especially relevant given Mastronardi et al.'s (2013) finding that females in clinical and forensic settings are more likely to display SIBs. Chapter Three demonstrated the effectiveness of DBT within female populations thus this thesis provides evidence that DBT interventions could successfully reduce the risk of recidivism for females meeting the Probation Trust criteria. A benefit of DBT is that it is a long term treatment (12 months) and usually, when working with personality traits, treatment is long term and therefore services developing treatment would need to do little to change the format of the already established and effective DBT programme.

Another requirement for the Probation Trust is that treatment is psychologically informed. This could be advanced from the current

approach of relying on psychological literature to provide an evidence based treatment model to training staff in a psychological approach. Training staff in DBT would provide a psychologically informed service suitable to manage a range of maladaptive and high risk offender characteristics. Although discussed in this thesis as a gender-specific treatment intervention DBT is not and those trained in DBT would therefore be able to deliver the intervention to a range of clients within the service which would also be an advantageous cost- effective strategy for the Probation Trust. Roberts and Noller (1998) noted that gender-specific treatment is not necessary and implied that male and female stalkers could be treated together. This seems problematic given that male stalkers usually victimise women and would be encouraged, through attending therapy, to become close to females. Therefore, while it is beyond the scope of this thesis to support Robert and Noller's claim, further research could aim to develop a rationale to defend this view.

As treatment for SIBs becomes more recognised, a problem that needs to be addressed is the view of professional victims of stalking. This is likely to be increasingly relevant to the staff of the National Treatment Clinic and has been observed previously in clinical settings (Anderson & West, 2011). It seems bizarre that professionals view colleagues as incompetent when they become the victim of SIBs given the risk factors evident in perpetrators of SIBs (Chapters Two and Four) (Anderson & West, 2011). The hypersensitivity females who display SIBs have to rejection appears to make them exceptionally vulnerable to rejection thus increase their negative reaction to decisions based upon their treatment pathways. It appears the current view is that professional victims of stalking have failed to establish and maintain healthy professional boundaries (Anderson & West, 2011) which must be challenged. Disappointingly, it is likely that until more qualitative methodology is used to determine risk factors and psychological profiles of females who display SIBs this view will remain. It



would be interesting for future research to explore the extent to which others are viewed as providing safety in female SIB-P groups.

### **Limitations**

To the author's knowledge this is the first thesis to explore females who display SIBs in a qualitative way and contributed to previous literature by using a qualitative approach to explore existing quantitative findings. The results supported the existing literature and added insight into the female in-patient perpetrator group. It is however also important to acknowledge the limitations within this thesis and these will now be discussed.

### **Chapter Two**

Within Chapter Two it is important to recognise the limitations of the small sample sizes in the group of females who display SIBs and the group who do not. With bigger participant numbers a mixed methodology could have been used to quantitatively compare the MCMI-III and STAXI-2 responses between the two participant groups but this was not feasible as the required statistical power for such a comparison was not achieved. Additionally, with more participants more themes may have emerged but given time constraints the analysis would not have been completed to such a high standard.

In Chapter Two participants were female patients in a low secure hospital so the findings cannot be applied more generally to SIB perpetrators. The findings of this chapter supported previous literature and suggest that similarities between the female in-patient SIB perpetrators and the general female stalker were observed. To overcome the problems identified, future research should consider a larger scale thematic analysis with females who display SIBs from a range of different settings. This thesis did not explore a risk of violence with female SIB perpetrators but it may be possible to explore this now potential mediating factors have been

identified. Additionally, this thesis did not explore 'cyber-stalking' which is becoming a more common crime; this is an area worthy of future research (Alexy, et al., 2005).

### **Chapter Three**

Chapter Three could not evaluate the effectiveness of a treatment intervention with females who display SIBs as there is no current literature addressing this area. This was clearly a limitation of this chapter in regards to the thesis, however the adaptations of DBT for different maladaptive coping strategies were considered relevant with the female SIB population. Similarly, because DBT addresses emotional dysregulation and this observed as a risk factor for SIB use it was viewed as highly relevant to the thesis.

Within Chapter Three, the limited time and resources available for data-analysis did not allow for non-English papers to be translated and this may have introduced bias into the findings. Similarly, publication bias, whereby only research papers which have been peer reviewed and published were included was a factor within this chapter. This review did not include a meta-analysis, however, because the included studies had such variable follow-up periods this may have introduced further bias. However, it was expected that because the included studies were RCTs that the systematic review involved the most sophisticated existing literature. A difficulty with the inclusion criteria meant no specific treatment modules of DBT could be defined as 'most useful' at targeting maladaptive coping responses and similarly no standardised psychometric assessments were used pre and post within different groups. To overcome this problem, future research could consider the use of consistent psychometric tools and explore change throughout the DBT programme rather than only at pre and post intervention.

## **Chapter Four**

There are a number of limitations in relation to Chapter Four, the first being that this was a single case study and therefore the findings cannot be applied to the general female SIB population. This chapter came later in the thesis to demonstrate if the findings of the larger scale research and the review of the effectiveness of DBT could be brought together. Secondly, it is difficult to determine whether the success of a reduction in SIBs (and self-harm) was down to DBT alone as nursing interventions and medication were concurrent with psychological intervention. Additionally, the follow-up period was very short so recidivism of SIBs could not be determined and the impact of DBT in the long term is unknown.

Research suggests that personality may interfere with a patient's ability to respond to treatment (Bonta & Andrews, 2007) which suggests issues related to responsivity may have impacted on Case B's engagement in treatment. This was considered during Chapter Four as the characteristics of the patient's personality were addressed via DBT intervention. Similarly, offending characteristics were addressed which are also viewed as important factors to maximise learning (Bonta & Andrews, 2007; Howells, Krishman & Daffern, 2007).

Another limitation in this chapter was that no specific stalking risk assessment tool was used. As noted previously, it would be useful to develop and utilise an established uniform assessment screening tool for risk of offending. The SAM or the SRP may have added knowledge to the profile and psychological function of Case B and may also have been useful in Chapter Two. However, they were not used because the development of the tools originated in Canada and little is known of their relevance to UK populations. The development of a UK based stalker risk assessment tool would be especially valid and reliable if more research explored the population in a qualitative way to understand their motives and specific risk factors. Difficulties of not having a specific SIB risk assessment tool

were overcome by using Case B's 'adverse behaviour log' clinical judgement and MDT discussions.

## **Chapter Five**

Chapter Five critiqued the STAXI-2 and found it to be a valid and reliable measure of anger. However, specific standardisation for females who display SIBs is clearly missing. While the use of the STAXI-2 was valuable throughout the thesis, given the measure of anger control, the assessment only measures anger and it would have been useful to explore more risk factors within the population. Therefore, the STAXI-2 should be used in conjunction with other specific risk assessment tools such as the SAM or SRP in future research. It would be useful to have more stalking risk assessment tools available that acknowledge the use of SIBs. As discussed throughout Chapter Five the STAXI-2 is vulnerable to self-report and socially desirable responding, particularly in a forensic sample. This was unavoidable given the nature of this thesis but it could be that other anger scales, which are less open to malingering, could have been used to inform interpretation. However, as noted in the discussion, it is observed that in general forensic samples struggle to determine emotions; therefore a change in psychometric assessment may not have added value to the assessment of risk until emotion recognition skills are developed via treatment.

## **Conclusion**

There has been growing recognition of the risk of the crime of stalking in the UK in recent years; it is now recognised in Law and treatment is provided in the world's first stalker clinic in London. Because of the various definitions of stalking that appear to summarise the same types of behaviours the use of the term SIBs was used throughout this thesis. In general more research of females who display SIBs is needed and it would be useful if more qualitative studies with various populations were

conducted. Given that the results of this thesis supported previous stalking literature it seems the definition of SIBs provided a consensus on the types of behaviours included in these earlier studies.

Within the sample used in Chapter Two it seemed SIBs were not used to manipulate others but to control the perpetrator's own feelings. This appears to be a new and interesting conclusion within the stalking literature and has practical implications for the management of SIB perpetrators and also the definition of stalking. Future research should consider the priority perpetrators give to using SIBs to manipulate their own emotional arousal for the better rather than attempting to manipulate their victim.

This thesis has suggested that DBT could usefully target SIBs as viewed as maladaptive coping responses. It would also be useful to understand what specific components of DBT may work for SIB perpetrators. The findings were that females display SIBs because the behaviours are beneficial and increase feelings of safety. Females appear to display SIBs when responding to perceived threats from the victim and do so in an over-controlled way. DBT appeared to address presenting problems with a female who used SIBs within the community and hospital environments and is proposed as a possible treatment for this population. Further exploration of this is needed. The available evidence on which this thesis is based was limited and suggests that females' SIBs are yet to be afforded the same degree of seriousness as male perpetrators. This thesis has gone some way to progress our knowledge and understanding within the female SIB perpetrator population.

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**Appendix A: Systematic Review for Peer Review**

**A Systematic Review of the Effectiveness of Dialectical Behavioural Therapy with  
Female Populations; Exploration of Randomised Control Trials**

**Nicola Wylie\* post graduate research student**

**Shihning Chou, PhD**

**Simon Duff, PhD**

University of Nottingham

\*Corresponding author: Nicola Wylie can be contacted via email to [lwxnw1@exmail.nottingham.ac.uk](mailto:lwxnw1@exmail.nottingham.ac.uk), telephone on +44 115 846 7898, fax on +44 115 846 66225 or written to via Room B22, YANG Fujia Building, Jubilee Campus, Wollaton Road, Nottingham, NG8 1BB, UK.

## **Abstract**

**Objective:** Dialectical Behavioural Therapy (DBT) is used in the treatment of Borderline Personality Disorder (BPD), Eating Disorders (ED) and Substance Dependence (SD). This review evaluated the effectiveness of DBT with female populations only. The objective was to determine if DBT is an effective treatment for females with a diagnosis of BPD, ED or SD.

**Method:** Systematic searches were completed using five online databases (EMBASE, PsycINFO, Medline, Cochrane, Campbell Collaboration). Only Randomised Control Trials (RCTs) were included as this methodology is considered the most sophisticated in research. Initially 15,382 references were identified, of which 451 duplicates were removed and 15,168 were rejected based on title. At the second stage screening, 214 abstracts were evaluated and 193 references were rejected using strict inclusion and exclusion criteria. In total, 21 full references were assessed using pre-defined quality assessment and data extraction pro-forma.

**Results:** Overall, DBT was found to be effective in reducing maladaptive coping behaviours. Studies included small samples, varying lengths of DBT intervention and the follow-up periods were generally short. A positive effect of DBT compared to Treatment As Usual or Waiting List was found. Additionally, when compared to community treatment and Comprehensive Validation Therapy, DBT was superior. Results indicated that as follow-up increased, non-significant between-group differences were found.

**Conclusions:** Future research should compare DBT with alternative therapies, serve long-term follow-up and deliver DBT for twelve months as proposed in the original treatment manual.

**Keywords:** Dialectical Behavioral Therapy, DBT, Female, Systematic Review, RCT.



## **Introduction**

According to national statistics more women than men are treated for mental health difficulties annually (The NHS Information Centre, 2011a). Despite this, there is a lack of research into the effectiveness of treatment for female populations, particularly in clinical or forensic settings. Dialectical Behavioural Therapy (DBT; Linehan, 1993) was initially developed for females, and was evaluated as an outpatient treatment program for chronically suicidal females meeting the criteria for Borderline Personality Disorder (BPD). There are currently a number of adaptations to the treatment programme, in order to meet the needs of different patient groups in specific settings. In particular, adaptations for Eating Disorders, Substance Dependence and in and out patients settings have been established (Miller, Ramey, Linehan, Wetzler, & Leigh, 1997).

The original DBT Manual defines four modules that are designed to help individuals in different emotional regulation areas, designed to be delivered over 12 months (Linehan, Bohus, & Lynch, 2007). The modules aim to address all major deficits found within BPD despite recognising that individuals may not possess all difficulties. The DBT manual clearly defines the criteria for adhering to DBT treatment delivery. The target population often involves highly impulsive individuals with significant levels of self-harm and suicidal ideation (Brown, Comtois, & Linehan, 2002). Because of the life threatening nature of self-harm and suicide, the maladaptive coping behaviours are a prominent treatment targets of DBT (Linehan, 1993).

The first stages of DBT aim to encourage motivation both to remain in treatment and gain control over maladaptive coping strategies. Patients are then encouraged to explore their emotional experiences and work through previous trauma before beginning weekly 1:1 and group therapy. DBT involves developing skills in problem solving, exploring different coping strategies and attending psycho-educational components of therapy. The four key components of the 1:1 and group therapy are to encourage individuals to build mindful attention skills, accept emotional distress (Gratz, Rosenthal, Tull, Lejuez, & Gunderson, 2006), develop interpersonal effectiveness and assertiveness skills (Kremers, Spinhoven, van der Does & van Dyck, 2006), and regulate emotions. Interpersonal relationship skills develop between the patient and the therapist to support change and achieve goals (Linehan, 1993). These goals can include reducing self destructive behaviours such as substance use, self-harm or binge

eating. Later in treatment, issues less pertinent to life or death are dealt with. DBT also supports the therapists through the treatment modules via supervision.

Individuals with ED share many high risk characteristics with BPD diagnosis (Dulit, Fyer, Haas, Sullivan & Frances, 1990). Studies have found that suicide is one of the leading causes of death in patients with Anorexia Nervosa (Herzog et al., 2000), and that most patients with ED engage in high risk behaviours. There is growing research to explore the effectiveness of DBT within female populations with ED (Safer, Telch, Agras, 2001; Telch, Agras & Linehan, 2001).

Previous research has found that many of the patients included in studies for BPD also meet the criteria for SD (Zanarini, Gunderson, Frankenburg & Chauncey, 1989; Kosten, Kosten & Rounsaville, 1989; Koenigsberg, Kaplan, Gilmore & Cooper, 1985; Nace, Davis & Gaspari, 1991). Patients with BPD and SD have been found to be more disturbed and present with more psychiatric problems (Kosten et al., 1989). Dulit et al. (1990) found that although comorbidity was high between these groups, when SD was removed as a criteria for inclusion in their study the number of participants dropped. This suggests that BPD and SD should be examined independently.

To the author's knowledge, there are no previous reviews of the effectiveness of DBT with female populations only. A previously published systematic review evaluated the effectiveness of DBT with a mixed BPD inpatient population (Bloom, Woodward, Susmaras & Pantalone, 2012). There is, therefore, an identified gap in knowledge and justification for the current review in order to place current evidence in the context of available interventions specific for females. This paper is presented considering the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff & Altman, 2009).

#### Existing DBT Review

Bloom et al. (2012) evaluated eleven studies, none of which were RCTs. They used only three online databases; PsychINFO, PubMed and Google, the latter having little scientific regard. Search terms were also limited and included "short term treatment" which is not a characteristic specific to DBT. The aim of Bloom et al.'s (2012) review was to explore the effectiveness of DBT within voluntary inpatient settings who display BPD characteristics and are receiving treatment for BPD. They excluded forensic hospital samples, patients in prison

and residential treatment programmes due to considering these populations not ‘voluntary’. They included only published papers that had been peer reviewed and reported outcome data. A serious methodological compromise of this review is that only two of their included studies reported a comparison group to the DBT group. All four modules of DBT were reported in each included study, but the duration and frequency of the group skill training sessions varied from weekly 90 minute sessions, to daily sessions of 45 minutes across studies. Furthermore, the duration of DBT varied from two weeks to three months. In total, nine different treatment outcomes were assessed. Six of eight studies reported reductions in self-harm and depressive episodes, two of three reported reductions in dissociative episodes and anxiety. Of all the studies that explored anger and hostility, DBT reduced symptoms in one study, but this did not have a comparison group. Violence was reportedly reduced in both studies that examined this in patients and global adjustment also improved. DBT had a positive impact on increasing patients’ self-esteem in one study. Of the treatment outcome results reported follow-up was only defined in one study making conclusions difficult to draw. However, they concluded that DBT “may” be effective at reducing maladaptive coping behaviours and symptoms of BPD in inpatient populations highlighting the need to review the existing literature in a more sophisticated way.

## **Method**

### ***Scoping***

Bloom et al. (2012) highlight that most studies had a majority female population and because most patients receiving DBT are female (Linehan, 1993) the current review is the first to specifically explore the effectiveness of DBT with females. Table 1 details the PICO criteria used to determine studies to include and exclude in this review.

### ***Inclusion/Exclusion Criteria***

#### **Studies**

Specific inclusion and exclusion criteria were developed after an extensive scoping search. In order to present the highest quality research, only Randomised Controlled Trials (RCT) studies were included.

#### **Participants**

Studies that included adult females (aged 18 and over) were eligible for inclusion. Participants must have had a formal diagnosis of BPD, SD or ED. If no instrument was used to make a formal diagnosis the paper was excluded.

### Interventions

Any DBT interventions (adapted or otherwise) which addressed maladaptive coping responses and emotional dysregulation were included if compared to a control.

The intervention had to include DBT but could also include adaptations of DBT specific to problematic risk behaviours such as binge/purge eating patterns and substance misuse. Given the growing research in DBT, all lengths of DBT were eligible. This review was not specific to the full DBT programme as 20 weeks of DBT has been found to be effective (Bohus, Haaf, Simms et al., 2004). Included studies had to involve a comparator group which could include naturalistic conditions such as other forms of therapy, alternative therapeutic interventions or waiting lists.

### Outcome measures

Outcome behaviours were specific to the DBT intervention and emotional regulation skills given to the participants. These included self-harm, parasuicidal behaviours, suicidal ideation and behaviours specific to EDs, such as binge and purge episodes, and SD such as drug or alcohol use.

Studies that included self-report of maladaptive coping behaviours were considered eligible. Self-report was included due to the lack of research that solely used official recordings, but may also be unavoidable in outpatient studies due to the lack of supervision of such behaviours. The risks of how self-report may increase bias or distort results is not ignored and is discussed later in this review.

### ***Sources of Literature***

Five bibliographic electronic databases (PsychINFO; MEDLINE; EMBASE; Cochrane Library and the Campbell Collaboration) were searched initially on 8/2/12 and again on 16/8/12.

Authors were contacted where necessary. Reference lists of studies were hand searched. Other methods were also utilised to increase the likelihood of finding relevant articles and

possible 'grey' literature, these included using the thesis portals, international DBT websites, the British Psychological Society website and that of The Royal College of Psychiatry.

### ***Search methods for identification of studies***

Search Syntax details are provided in Appendix AA. The search terms used for PsychINFO; MEDLINE; EMBASE; Cochrane Library and the Campbell Collaboration are presented below:

(in-patient) OR (patient) OR (female) OR (women) OR (client) OR (offender) OR (hospital)  
OR (out-patient) OR (incarcerated)

AND

(DBT) OR (Dialectical Behavioural Therapy) OR (Dialectical Behaviour Therapy) OR  
(intervention) OR (treatment) OR (therapy) OR (behavior)

AND

(Personality disorder) OR (Borderline Personality Disorder) OR (BPD) or (personality) OR  
(disorder) OR (Eating Disorder) OR (Substance Dependence) OR (substance misuse)

AND

(offending behaviour) OR (self-harm) OR (parasuicidal) OR (suicide) OR (emotional  
regulation) OR (eating) OR (binge) OR (purge) OR (substance)

### **Data Collection and analysis**

#### ***Sorting Process***

Two reviewers independently assessed each reference identified by the search to check its eligibility. The sorting process is illustrated in Figure 1.

Initial searches identified 15,382 potentially relevant papers. However, 451 duplicates were removed and 14,717 irrelevant papers were rejected based on title. The remaining 241 study

abstracts were reviewed, and applying the PICO criteria to these, a further 193 papers were rejected. The remaining 21 papers were screened using the Inclusion and Exclusion criteria, quality assessment and data extraction pro-forma. Eight of these papers were rejected for not meeting the PICO criteria. Five were excluded for mixing the results of their male and female participants. One did not have a comparator to DBT, one did not formally diagnose the participants and the other was a review paper.

Three of the included papers explored the same drug dependent population over different follow-up periods, and similarly two of the BPD papers explored the same population over a four month and twelve month follow-up. In order not to miss important information regarding the populations, data collection, and treatment delivery included in these studies, all relevant papers are included in this review.

Details of included and excluded studies are shown in Table 2 and Table 3 respectively.

### ***Quality assessment***

Included studies (n=10) were assessed for quality using the Quality assessment forms provided in Appendix BB. This included applying the quality assessment criteria to the papers exploring extended follow-up periods. Table 4 is a summary table of the biases observed in the included studies.

Studies received a score of two if they fully met the criteria, a score of one if they partially met the criteria, or a score of zero if they did not meet the criteria or it was unclear if the criteria were met. This scoring system was then used to sum scores and yield a percentage – with studies providing less than 65% being rejected.

Searches, quality assessment and data extraction were peer reviewed by a blinded third party. At least 20% of included studies were independently assessed to increase the validity and reliability of this review.

### ***Data extraction and management***

Data extraction was carried out by two reviewers independently using pre-specified forms for the studies that met the quality assessment Criteria. Data regarding population specific information including mean age (years), number of participants at start and follow-up (dropout rates also examined), methodological processes, variables measured at baseline and follow-up and the type of statistical tests used was extracted. The data extraction form is provided in

Appendix CC. Table 5 shows the range of information gathering tools used by the included studies to measure outcomes

### ***Assessment of risk of bias***

Two review authors independently assessed the risk of bias of the eligible studies. Bias is minimised in the current review because only RCTs are included.

Publication bias, where non-significant results do not get published, clearly impact upon the favourable treatment effects discussed in this review (Rosenthal & Dimatteo, 2001).

### ***Measures of treatment effect***

Only Koons et al. (2001) and Telch et al. (2001) reported significant within group effect sizes for pre-post DBT intervention using Cohen's (1988) criteria.

Koons et al. (2001) explored the effectiveness of DBT with BPD patients and found DBP reduced depression, anger and dissociative experiences. Using the Hamilton Depression Rating Scale (Hamilton, 1960) an effect size (ES) 1.12 was found, The Beck Depression Inventory (Beck, Steer & Brown, 1996) showed ES 0.96. The ES from the Spielberger Anger Expression Scale (Spielberger, Jabocs, Russell & Crane, 1985) was 1.04 for anger in (suppressed anger) and 1.16 for anger out (expressed anger) with  $p < 0.01$ . An ES 1.13 was found for the Dissociative Experiences Scale (Bernstein & Putnam, 1986).

Telch, Agras and Linehan (2001) found significant ES using the Emotional Disorders Scale (Fairburn & Cooper, 1993) for weight concern (ES 0.82;  $p < 0.05$ ), body shape concern (ES 0.80;  $p < 0.05$ ) and eating concern (ES 1.11;  $p < 0.00$ ) with an ED population. Telch et al. (2001) also found significant ES pre and post DBT using the Binge Eating Scale (Gormally et al., 1982) to measure episodes of binge/purge behaviours. On this scale the ES of the reduction was 1.6 ( $p < 0.01$ ).

### **Main Findings**

Linehan et al. (1999), Linehan et al. (2002) and van den Bosch et al. (2005) explored the effectiveness of DBT intervention on females with SD. Telch et al. (2001) and Safer et al. (2001) evaluated the effectiveness of DBT on females with ED. All other studies evaluated

DBT with females with BPD (Linehan et al., 1993; Linehan et al., 1994; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006; Linehan et al., 2008).

All studies involved a control group as specified by the Inclusion Criteria. These were Treatment As Usual (TAU) (n=5), Waiting List (n=2), and alternative therapeutic intervention (n=3).

Overall studies concluded that DBT was superior to control and alternative treatment conditions in reducing maladaptive behaviours. This means that overall in RCTs DBT is effective at reducing self-harm (Linehan et al., 1993; Linehan et al., 1994; van den Bosch et al., 2005; Linehan et al., 2006), suicidal ideation (Linehan et al., 1993; Linehan et al., 1999; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006), drug misuse (Linehan et al., 1999; Linehan et al., 2002; Linehan et al., 1999; van den Bosch et al., 2005), anger (Linehan et al., 1993; Koons et al., 2001; Linehan et al., 1994), hospital admission days (Linehan et al., 1993), binge/purge episodes (Safer et al., 2001; Telch et al., 2001), depression (Linehan et al., 1994; Koons et al., 2001), hopelessness (Koons et al., 2001) and interpersonal functioning (Linehan et al., 1994).

## **Discussion**

RCTs are regarded as methodologically superior to most other study designs and are regarded as the best way to establish if a post-treatment outcome is due to treatment (Sibbald & Roland, 1998). Research has suggested that RCT methodology reduces expectations that treatment has been effective and therefore results show a 'truer' treatment effect. Moher, Schulz, Altman, Lepage (2001) suggest that non-RCTs yield an exaggeration of treatment effects of up to 40% which was supported by a later study of CBT intervention (Tarrier & Wykes, 2004).

## **Borderline Personality Disorder**

There were mixed results across studies for six RCTs that investigated different forms of DBT with BPD populations (Linehan et al., 1993; Linehan et al., 1994; Koons et al., 2001; van den Bosch et al., 2005; Linehan et al., 2006; Linehan et al., 2008). Generally parasuicidal and self-harm behaviours were reduced at follow-up in DBT groups (Linehan et al., 1993; Koons et al., 2001; Linehan et al., 2006). Linehan et al. (1993) found that at six and twelve month follow-up self-harm, anger and social functioning had improved in the DBT condition compared to TAU. However the differences were not significant at 24 months. Linehan et al. (1993)



supported that DBT reduced self-harm and suicidal intent but found this was not significant with one year follow-up.

Additionally, Linehan et al. (1994) found between group differences for suicidal risk, including depression and hopelessness, were significantly better than TAU at six months but not significantly different at 12 month follow-up, which may suggest that shorter follow-up periods show better outcomes. Linehan et al. (1993) also found that DBT significantly reduced self-harm at 12 months, but not 24 months. Although not directly measured by Linehan et al. (1994) the DBT group showed improvements in social functioning and anger control, but the TAU group did too so the specific components of DBT that were effective are undefined.

A positive impact of DBT on suicidal ideation was generally observed (Koons et al., 2001; Linehan et al., 2006; Linehan et al., 2008). The major finding from Linehan et al. (2006) was that fewer female DBT completers attempted suicide compared to a Community Treatment By Expert (CTBE) control. Koons et al. (2008) found that DBT compared to TAU demonstrated significant improvements in self-harm, anger and dissociation. However, the criteria of self-harm behaviours were less strict than in the previously discussed studies which may account for no between group differences being found.

Linehan et al. (2008) also support the overall effectiveness of DBT with placebo or Olanzapine treatment in reducing self-harm and other common BPD characteristics such as irritability with females. They found both DBT plus placebo and DBT plus olanzapine groups reduced aggression, irritability and self-harm over time which suggests that DBT is useful in reducing these maladaptive behaviours.

van den Bosch et al. (2005) also supported the effectiveness of DBT for female BPD patients' impulsive drug and alcohol misuse. They reported that after 12 months, DBT had significantly better positive treatment effects compared to TAU for alcohol consumption, self-harm and impulsivity. This is important as impulsivity and problems with immediate gratification are thought to be key problems for people with substance misuse problems too (van den Bosch et al., 2005).

### **Substance Dependence**

Two studies specifically evaluated the effectiveness of DBT with females who had SD and BPD (Linehan et al., 1999; Linehan et al., 2002). These studies applied an adapted version of DBT to target SD. Overall the findings supported the effectiveness of DBT within this population. The Home Office reports that drug misuse interventions were expected to prevent around 680,000 crimes in 2011 suggesting that effective DBT for drug dependence could have a key role in the reduction of crime within this population (NHS Information Centre, 2011b).

The earliest of these studies (Linehan et al., 1999) found that for a number of different substances DBT successfully enhanced participants' Social Adjustment and Global Adjustment scores and reduced drug use. However, parasuicidal behaviours after 16 month follow-up did not differ between groups but had reduced in both TAU and DBT conditions. This suggests that DBT had a positive impact of the emotional vulnerability of participants and supported them in managing emotional arousal and developing more positive alternatives.

Similarly, Linehan et al. (2002) found that DBT compared to Comprehensive Validation Therapy and 12 Steps Intervention was more effective after eight months at reducing opiate use. Although initially the control group showed positive treatment effects, these were not maintained after eight months, unlike in the DBT group. At 12 months, results were also positive for DBT however at 16 month follow-up there were no between group differences. The study reported by Linehan et al. (2002) may be prone to bias for two reasons. Firstly the sample size was small (n=24). Secondly, most drop-outs were from the same therapist so drop-out may have reflected the therapist's style rather than the effectiveness of DBT.

### **Eating Disorders**

Telch, et al. (2001) and Safer et al. (2001) examined the effectiveness of DBT adapted for ED and concluded that DBT is better than no treatment in reducing binge and purge episodes and concern over weight (Telch et al., 2001; Safer et al., 2001). Overall, Telch, et al. (2001) and Safer et al. (2001) supported the use of DBT in reducing binge and purge behaviours at 20 and 21 week follow-up. Caution is drawn to these conclusions however as the follow-up was less than six months in both studies. Participants in the DBT condition demonstrated fewer concerns over eating and their anger also reduced (Telch et al., 2001) which again draws question to the specific elements of DBT that were most effective for specific problematic behaviours.

Safer et al. (2001) found that DBT was more helpful than no treatment in supporting abstinence from binge/purge behaviours, with 28% of the DBT group achieving abstinence, while no waiting list participants managed this. However, at 20 week follow-up 35% of the DBT group met DSM-IV (APA, 2000) criteria for Bulimia Nervosa, questioning the longer term effects of DBT within this population. The impact of DBT for this female population is difficult to conclude without further RCTs.

## **Methodological Considerations**

### **Search Strategy**

Time limitations meant it was not possible to translate non-English papers.

It appears this review is the only female focused review of DBT, allowing for new perspectives of this intervention to be considered.

### **Quality assessment**

The quality assessment used during this review was heavily based on those from the Solutions for Public Health's Critical Appraisals Skills Programme (CASP; 2006 ) This added value to the quality of papers included in this review due to the specific medical and epidemiological background of its creators. For quality assessment the peer review inter-rater agreement was 0.78 suggesting substantial agreement (Gwet, 2012).

## **Included studies**

### **Follow-Up**

Four of the studies follow-up periods were six months or less and therefore considered to be at a high risk of bias (Safer et al., 2001; Telch et al., 2001; Koons et al., 2001; Linehan et al., 2008). Positive treatment effects could have been due to retention of DBT skills by the participants not application of skills. Given this review is exploring the effects of intervention on maladaptive behaviours and emotional regulation difficulties, it would be more effective if studies' follow-up periods had been of at least one year. This would have more reliably shown the application of taught skills from the participants, and allowed participants to have been exposed to emotionally arousing situations likely to increase their risk of employing these maladaptive behaviours.

### **Losses to follow-up**

Losses to follow-up were given particular attention in this review due to the risk participants may pose to themselves (self-harm and suicide, SD and problematic eating) if not given an efficacious treatment in RCTs.

Only the two studies evaluating DBT with females with ED recruited participants (n=64) through newspaper advertisement and interview. All other participants (n=320) were recruited via referral from community treatment centres or clinics.

Due to the varying length of studies, and some follow-up measures being conducted after 12 months of treatment end, dropout rates were almost unavoidable. This is expected in studies where the follow-up is so long, due to lack of contact with outpatients. Of the included studies only Linehan et al. (1994), Linehan et al. (1999), van den Bosch et al. (2005) and Linehan et al. (2006) accounted for dropouts in their analysis. However others (Linehan et al., 1993; Safer et al., 2001; Telch et al., 2001; Koons et al., 2001; Linehan et al., 2002) only included participants who completed treatment in their analysis. Due to the small number of participants included in their studies square root transformations were completed to account for varying numbers of participants and a lack of normal distribution. This will have therefore skewed reported results.

Dropout rates were examined for each study. Rates ranged from one (Safer et al., 2001) to 17 (Linehan et al., 1993). Considering the different conditions, it appeared that for most, DBT was better at motivating individuals to remain in treatment than the control condition. Conversely, Linehan et al. (2002) found that dropouts only occurred in the DBT condition and concluded that DBT was poor at maintaining engagement. They did not report the reasons for drop-out but it may have been that factors relating to the participants SD or physical health lead to attrition.

#### Treatment delivery and duration

Quality assessment found that all included studies followed the DBT manual, however the number of sessions offered, and the duration of DBT varied greatly and this may have biased findings. Only five studies delivered DBT for the full 12 months (Linehan et al., 1994; Linehan et al., 1999; Linehan et al., 2002; van den Bosch et al., 2005; Linehan et al., 2006), this most consistently being demonstrated for the drug dependent populations. Koons et al. (2001) reduced the length of sessions as not to interrupt the everyday function of the medical centre in which DBT was delivered. Telch, et al. (2001) and Safer et al. (2001) used an

adapted version of DBT and followed the manual for this intervention. This limited DBT to 20 weekly sessions rather than the original 52 session programme. This variation is likely to lead to different conclusions being drawn about the drop-out rates of participants and whether motivation to engage can be compared between studies. However, due to the claim from all studies that all modules of DBT were delivered, it appears that participants from all groups (SD, ED and BPD) were willing to engage in all modules. Indeed Linehan et al. (2008) identified that further exploration of what modules specifically support certain groups and disorders would be useful in future research. Additionally, Linehan et al. (2008) suppose that given their findings that DBT reduced some but not all irritability measures within a SD population, clarity of the impact of different modules would be particularly useful.

Across all included studies staff were trained at varying levels and this might have biased the results in terms of the quality of DBT being delivered. In the Linehan et al. (2002) and Linehan et al. (2006) studies staff received eight months or 45 hours of training respectively to ensure they possessed adequate DBT skills. Linehan et al., (1993), Linehan et al., (1994), Linehan et al., (1999), Telch et al., (2001) and Koons et al., (2001) identified that staff were trained in delivering DBT. However Safer et al. (2001), van den Bosch et al. (2005) and Linehan et al. (2008) were unclear in their reports.

All included studies assessed the effectiveness of DBT in outpatient treatment settings. The value of DBT within forensic settings could not be assessed within the current review as no RCTs applying this framework with females have been conducted. This highlights the need for further research in this area.

### Measures and definitions

All included studies involved validated tools to measure baseline and outcome behaviours specific to their populations. This meant however that no standardised assessment battery was specifically implemented. Due to the range of tools used between each study it was difficult to conclude which were most applicable to the populations. The range of tools used across included studies is shown in Table 5. Safer et al. (2001) and Telch et al. (2001), who both explored ED, used the most similar assessment tools. This suggests that uniform assessment screening would be useful to further understand the treatment effects observed following DBT intervention.

A benefit of studies involving self-report of harmful behaviours was that they also used 'days admitted to hospital' criteria to support the participants own disclosures. There is, however, no guarantee that this validated the self-report, or accounted for all episodes of self-harm, drug misuse or binge/purge behaviour. A benefit of the substance misuse studies was that urinalysis was used to test for drug misuse, supporting any self-report.

Similarly studies varied on their use of different phrases such as 'parasuicidal behaviours' or 'self-harm' and 'binge/purge' where episodes varied in length, severity and risk to life.

### Generalisability

The sample sizes of the included studies ranged from 20-101 participants, with the mean age across studies of participants being 34.7 years. In general, all participants were aged between 20-40 years; however the study by Telch et al. (2001) had a mean age of 50 years for its participants which may reduce the generalisability of their findings to younger populations. This is relevant as the scoping search highlighted a need to better understand the possible benefits of DBT with juvenile populations.

This review included eight studies from the USA (Linehan et al., 1994; Linehan et al., 1999; Koons et al., 2001; Safer et al., 2001; Telch et al., 2001; Linehan et al., 2002; Linehan et al., 2006; Linehan et al., 2008) one from Germany (Linehan et al., 1993) and another from the Netherlands (van den Bosch et al., 2005). This reduces the generalisability of findings to UK samples, however the inclusion criteria used in each study appears to suggest that UK females meeting the criteria for BPD, SD or ED would not differ greatly from the populations previously used. It is however worth considering the need to complete an RCT of DBT within a UK sample of females who are given this treatment as part of their community or inpatient treatment. Additionally, DBT is a manualised programme thought to be applicable across cultures; therefore the findings of studies included in this review are expected to be generalisable to UK populations.

### Review limitations

To the authors' knowledge this is the first female focused systematic review of DBT, allowing for new perspectives of this intervention to be considered. The quality assessment used during this review was heavily based on those from the Solutions for Public Health's CASP (2006).

This added value to the quality of papers included in this review due to the specific medical and epidemiological background of its creators.

However, due to time limitations it was not possible to follow-up authors who did not respond to requests for further information. Additionally, it was not possible to translate non-English papers, which may have introduced some geographical bias to the studies included in this review and should be considered for future reviews.

Another limitation of this review is it did not examine the effectiveness of 'standardised' DBT as specific adaptations were made to the ED and SD populations. While efforts were made to maintain adherence to the original DBT manual the specific modules of DBT that are most effective in managing maladaptive coping strategies are not clear.

In this review only two studies used control conditions that were 'other treatment' specific, with others relying on waiting list or TAU conditions. These limit the findings of this review in two ways; firstly, treatment change cannot be attributed specifically to DBT and therefore limits conclusions to DBT was better than no treatment. Secondly, control conditions could have varied greatly between studies, with some control participants receiving treatment, while others did not. This means the control groups are less comparable. Indeed it could be said that over time DBT is effective in supporting patients to decrease maladaptive behaviours, but not in other areas of general satisfaction with life.

## **Conclusions**

In conclusion, the results of the RCTs specific to the treatment of female patients demonstrated that DBT is more effective than TAU, Waiting List and alternative treatments in motivating patients to remain in treatment. DBT was found to be effective in reducing maladaptive functioning across multiple domains. DBT led to decreased suicidal and self-harm behaviours and reduced impulsive behaviours (including drug misuse, binge/purge eating, impulsivity and aggression). Caution is however drawn to these conclusions given the findings in relation to the short follow-up periods employed. It was observed that with time, DBT was not found to be significantly better than control groups in most of the aforementioned behaviours. Additionally, it could be that one year of DBT is not sufficiently long enough to maintain treatment changes after twelve months. This review has highlighted that due to the life-threatening nature of many of the behaviours addressed by DBT, it may be

necessary, in order to reduce risk of eventual death, to offer more than one year of DBT (Linehan et al., 1991).

While this review has not been able to suppose what specific tools of DBT are effective in the treatment or management of maladaptive behaviours, adaptations were found to support females with ED and SD. Prioritising what modules are most effective would be a useful next step in research. Determining priorities for different target populations will provide value to future studies of DBT. Some research has begun to explore this area. Koons et al. (2006) found that the skills training section of DBT was effective solely as an intervention for BPD patients.

In general the sample sizes of included studies is small. This bias could be addressed in future research by including larger sample sizes so results can be generalised, and larger effect sizes determined.

Recommendations for future DBT studies:

- Compare DBT to a treatment alternative
- Conduct RCTs for DBT in UK populations
- More research into ED, SD and juvenile populations
- When populations are similar, studies should employ the same measurement tools to allow standardisation



### *Acknowledgements*

The authors acknowledge all whom were involved in the editing or collaboration of this review. A special thanks to Jamie Walton for peer reviewing the articles at the quality assessment and data extraction stages.

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Table 1: PICO inclusion and exclusion criteria for the first stage screening of a systematic review of the effectiveness of DBT with females with BPD, ED and SD

	<b>Inclusion</b>	<b>Exclusion</b>
<b>Population</b>	Female Female adults (18 years and older) with a Formal Diagnosis of Borderline Personality Disorder, SD or ED	Male Juvenile No formal diagnosis of Borderline Personality Disorder, SD or ED
<b>Intervention</b>	DBT Patient setting delivery	Not DBT
<b>Comparator</b>	Different ‘treatment as usual’ type No treatment Waiting list	No comparator
<b>Outcome</b>	Emotional regulation: official records and/or self-report of self-harm, binge/purge or substance misuse.	
<b>Study Design</b>	Randomised Control Trial	Case-Study Quasi-Experimental Cohort

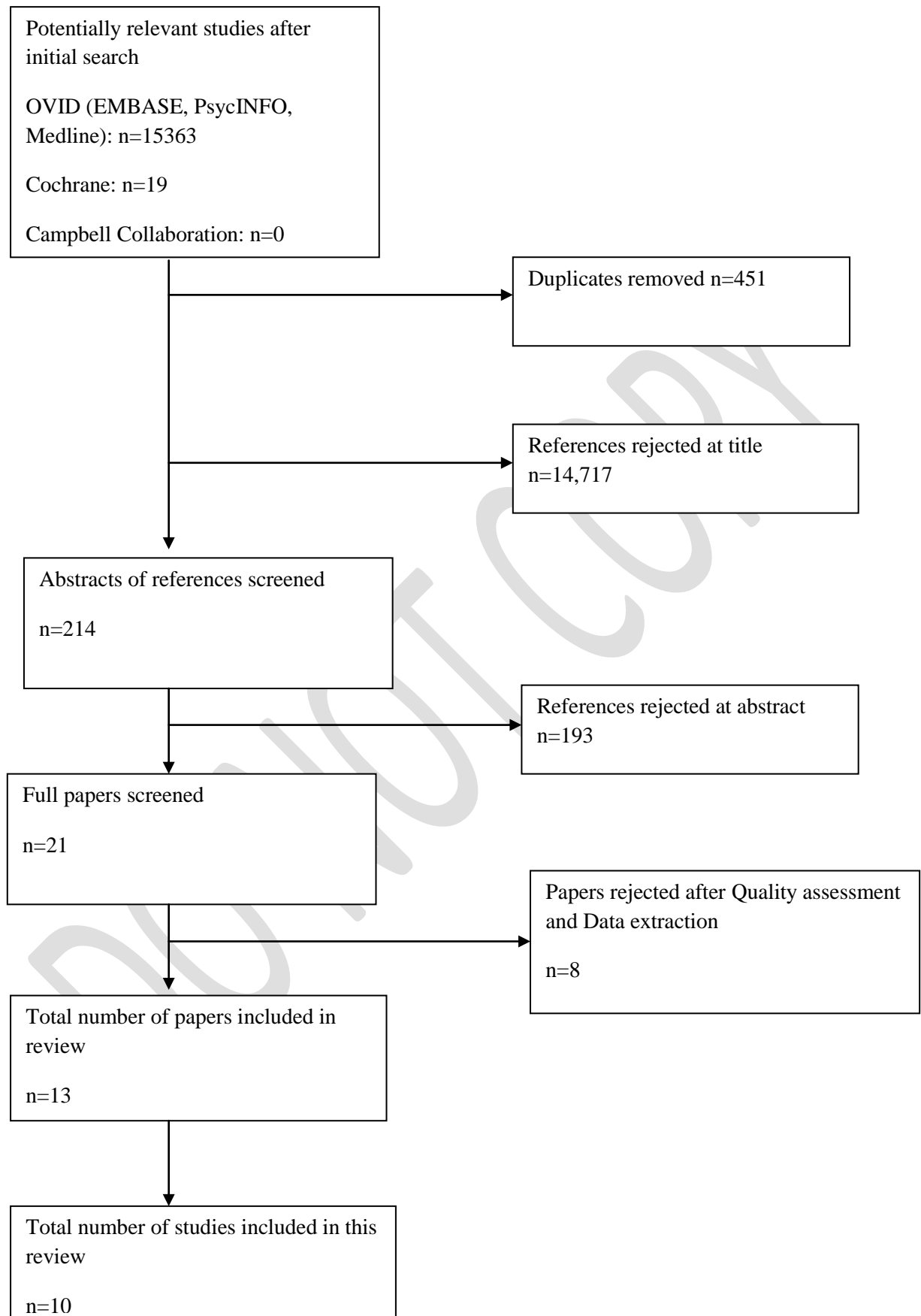


Figure 1 the sorting process conducted to narrow search terms to included studies

Table 2: Demographics of included studies and summary conclusions assessing maladaptive coping responses								
Authors	Sample trait	Sample size	Age range	Comparator	Follow-up period	Treatment duration	Measures	Summary Conclusions
Linehan, McDavid, Brown, Sayrs and Gallop (2008)	BPD	24	28-46	Medication	5 months	20 weeks	Aggression Irritability Depression Suicide	DBT reduced aggression, irritability, depression and self-harm.
Linehan, Heard and Armstrong (1993) & Linehan, Armstrong, Suarez, Allmon and Heard (1991)	BPD	39	18-44	TAU	24 months	52 weeks	Self-harm Hospital days Treatment Anger Social Functioning Anxiousness Employment	At one year DBT superior compared to TAU for anger, self-harm and hospitalisation; however effects not seen at two year follow-up. DBT not more effective for anxiety or employment features
Linehan, Tutek, Heard and Armstrong (1994)	BPD	26	18-34	TAU	12 months	12 months	Self-Harm Anger Social Functioning	DBT reduced self-harm, suicide, depression and anxiety and improved social functioning
Koons et al. (2001)	BPD	20	21-46	TAU	6 months	6 months	Self-harm Suicide Depression	DBT reduced suicide intent, hopelessness, depression, and anger

							Anxiety Hopelessness Dissociation Hospital Visits	
Linehan et al. (2006)	BPD	101	18-45	CTBE	24 months	12 months	Suicide ideation Reasons for living Depression Hospital treatment	DBT reduced suicidal risk
van den Bosch, Koeter, Stijnen, Verheul, and van den Brink, (2005) & Van den Bosch, Verhuel, Schippers and van den Brink (2002) & Verheul et al. (2003)	Substances	58	27-41	TAU	11 months	12 months	Substance use Impulsivity Self-Harm	DBT reduced alcohol misuse, self-harm and impulsivity
Linehan et al. (2002)	SD	24	28-43	CVT and 12-Step intervention	12 months	16 months	Substance use Self-harm Social Functioning	DBT maintained reductions that were observed in both groups after 12 months

							Symptoms	
Linehan et al. (1999)	SD	28	24-37	TAU	16 months	12 months	Substance use Self-harm Anger Anxiety	DBT reduced substance misuse and suicidal ideation and increased social functioning at follow-up
Safer, Telch, Agras (2001)	ED	31	18-54	Waiting List	20 weeks	20 weeks	Number of binge/purge episodes Mood Depression Self-esteem	DBT reduced binge/purge behaviours at follow-up
Telch, Agras and Linehan (2001)	ED	33	40-59	Waiting List	6 months	20 weeks	Number of binge/purge episodes Weight Self Esteem Depression mood	Significantly less behaviours associated with ED expect for depression and mood

Table 3: Characteristics of excluded studies and reasons for exclusion			
Authors	Sample	Study design	Reason for exclusion
Lynch, Morse, Mendelson and Robins (2003)	Males and Females	RCT	Included males (mixed results)
Soler et al. (2005)	Males and Females	Double-Blind Placebo Controlled	Included males (mixed results)
Safer and Joyce (2011)	Males and Females	RCT	Included males (mixed results)
Safer, Robinson and Jo (2010)	Males and Females	RCT	Included males (mixed results)
Feigenbaum et al., (2012)	Males and Females	RCT	Included males (mixed results)
Harned, Jackson, Comtis and Linehan (2010)	Females	RCT	No Comparator
Hill, Cragihead and Safer (2011)	Female	RCT	No formal diagnosis
Neacsiu, Rizvi and Linehan (2010)	Females	Review	Review not RCT

Table 4: Table to show the risk of bias and direction of bias from included studies						
Study	Summary of Limitations					
	Small sample size	Drop-outs not included in analysis	Short follow-up	Variation from 12 months DBT delivery	Staff skills training unclear	Possible cohort effects
Linehan et al. (2008)	●		●	●	●	
Linehan et al. (1993) & Linehan et al. (1991)				●	●	
Linehan et al. (1994)	●	●			●	
Koons et al. (2001)	●		●	●	●	
Linehan et al. (2006)		●				
van den Bosch et al. (2005) & van den Bosch et al. (2002) & Verheul et al. (2003)		●			●	
Linehan et al. (2002)	●					
Linehan et al. (1999)	●	●			●	
Safer et al. (2001)	●		●	●	●	
Telch et al. (2001)	●		●	●	●	●



Table 5: Statistical details of included studies for DBT with females with BPD

Authors	Sample trait	Outcome measure	Intervention scores		Effect size
			Pre	Post	
Linehan, McDavid, Brown, Sayrs and Gallop (2008)	BPD	Overt Aggression Scale – Modified (OAS-M; Sorgie, Ratey, Knoedler, Markert, Reichman, 1991)			
		Aggression	6.0	2	-0.56
		Irritability	6.5	4.5	-0.72
		Suicidality	50	12.5	0.85
		Self harm	33.3	12.5	1.48
		Hamilton Rating Scale for Depression (Hamilton, 1960)	19.3	15.4	-0.20
Linehan, Heard and Armstrong (1993) & Linehan, Armstrong, Suarez, Allmon and Heard (1991)	BPD	Parasuicide History Interview (Linehan, Wagner, Cox, 1987)	Not reported		Not reported
		Self-harm		0.11	
		Treatment History Interview (Linehan & Heard, 1987)			
		Hospital days		0	
		State-Trait Anger Scale (Spielberger, Jacobs, Russell & Crane, 1983)			
		Anger		32.99	
		Social Adjustment Scale-Interview (Weissman & Paykel, 1974)			
		Global Assessment Scale		57.41	
		Anxiousness		1.98	
		Employment Performance		1.42	

Linehan, Tutek, Heard and Armstrong (1994)	BPD	State-Trait Anger Expression Inventory -2 (Spielberger, 1999)	36.77	32.15	0.56
		Global Assessment Scale (Endicott, Spitzer, Fleiss, Cohen, 1976)	37.73	51.42	1.36
		Social Adjustment Scale – Longitudinal interval follow-up (Keller, Lavori, Friedman, Nielsen, Endicott, McDonald-Scott, Andreasen, 1987)	4.14	3.31	1.14
Koons et al. (2001)	BPD	Parasuicide History Interview (Linehan, Heard & Wagner, 1994)	5.1	0.4	0.35
		Hamilton Depression Rating Scale (Hamilton, 1960)	29.7	17.1	1.12**
		Beck Depression Inventory (Beck, Steer & Brown, 1996)	22.8	13.4	0.96*
		Hamilton Anxiety Rating Scale (Hamilton, 1959)	18.4	19.1	-0.31
		Speilberger Anger Expression Scale (Spielberger, Jabocs, Russell & Crane, 1985)			
		Anger-In	22.9	17.3	1.04**
		Anger-Out	18.2	14.5	1.16**
Linehan et al. (2006)	BPD		22.3	13.2	1.13**
		The Suicide attempt self-injury Interview (Linehan, Comtois, Brown, Heard & Wagner, in press)	51.7	29.8	0.47
		The Reasons for Living Inventory (Linehan, Goodstein, Neilson & Chiles, 1983)	2.8	3.3	
		The Hamilton Rating Scale for Depression (Hamilton, 1960)	20.2	14	

		Hospital admissions	58.8	29.4	
Van den Bosch et al. (2005) & Van den Bosch, Verhuel, Schippers and van den brink (2002) & Verheul et al. (2003)	SD	BPD Severity Index (Arntz, van den Hoorn, Cornelis, Verheul, van den Bosch, de Bie, 2003) Impulsive behaviour Parasuicidal behaviour Alcohol use Soft drug use Hard drug use Lifetime Parasuicide Count (Comtois & Linehan, 1999)	1.76 0.55 3.78 2.00 1.96 48.9	1.08 0.23 2.55 1.55 0.90 10.9	Not reported
Linehan et al. (2002)	SD	Urinalysis (probability)	0.68	0.35	Not reported
Linehan et al. (1999)	SD	Urinalysis (clean) Parasuicide History Interview (Linehan, Heard & Wagner, 1994) The State Trait Anger Expression Inventory (Spielberger, 1999)	0.43 Not reported Not reported	0.50 2.25 62	Not reported
Safer, Telch, Agras (2001)	ED	Negative Mood Regulation Scale (Catanzaro & Mearns, 1990) Beck Depression Inventory (Beck, Steer & Brown, 1996) Emotional Eating Scale (Arnou, Kenardy & Agras, 1995) Multidimensional Personality Scale (Tellegen & Waller,	81.3 22.9 7.7 15.4	96.1 13.4 5.2 16.4	Not reported

		1994)			
		Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)	56.3	51	
		Rosenberg Self-Esteem Scale (Rosenberg, 1965)	23.5	26.4	
Telch, Agras and Linehan (2001)	ED	Negative Mood Regulation Scale (Catanzaro & Mearns, 1990)	99.8	110.1	-.36
		Emotional Disorders Scale (Fairburn & Cooper, 1993)			
		Weight concerns	3.4	2.2	0.82*
		Shape concerns	3.7	2.3	0.80*
		Eating concerns	1.6	0.4	1.11***
		Restraint	1.6	1.4	0.33
		Binge Eating Scale (Gormally, Black, Daston & Rardin, 1982)	28.8	15.7	1.6**
		Rosenberg Self-Esteem Scale (Rosenberg, 1965)	26	29.4	0.04
		Beck Depression Inventory (Beck, Steer & Brown, 1996)	12.8	9.9	0.31
		Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)			
		Positive	25.8	30	0.13
		Negative	23.6	17.9	0.35

## **Appendix AA: Search Syntax**

### **OVID platform (EMBASE, PsychINFO, MEDLINE)**

1. (((((((in-patient or patient or female or women or client or offender or hospital or out-patient) and DBT) or Dialectical Behavioural Therapy or Dialectical Behaviour Therapy or intervention or treatment) and Personality Disorder) or Borderline or personality) and offending behaviour) or self-harm or parasuicidal or emotional regulation).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
2. (RCT or Randomised or Randomized).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
3. (offending behaviour or self-harm or parasuicidal or emotional regulation).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
4. (((DBT or Dialectical Behavioural Therapy or Dialectical Behaviour Therapy or intervention or treatment) and Personality Disorder) or personality or Disorder).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
5. (Personality Disorder or personality or Disorder).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
6. (in-patient or patient or female or women or client or offender or hospital or out-patient).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
7. 2 and 3 and 4 and 5 and 6

## **Cochrane Library (trials) Search Syntax**

1. (in-patient OR patient OR female OR women OR client OR offender OR hospital OR out-patient) AND (DBT OR Dialectical Behavioural Therapy OR Dialectical Behaviour Therapy OR intervention OR treatment) AND (Personality Disorder OR personality OR Disorder) AND (offending behaviour OR self-harm OR parasuicidal OR emotional regulation OR eating OR drug OR substance) AND (RCT OR Randomised OR Randomized) and (in-patient OR patient OR female OR women OR client OR offender OR hospital OR out-patient) AND (DBT OR Dialectical Behavioural Therapy OR Dialectical Behaviour Therapy OR intervention OR treatment) AND (Personality Disorder OR personality OR Disorder) AND (offending behaviour OR self-harm OR parasuicidal OR emotional regulation OR eating OR drug OR substance) AND (RCT OR Randomised OR Randomized) :ti,ab,kw in Trials
2. (Dialect\*):ti,ab,kw and (female OR women):ti,ab,kw and (emotion OR eat\* OR substanc\*):ti,ab,kw
3. Dialect\* AND patient in Trials

### **Appendix BB.**

#### **Quality assessment Criteria: Experimental studies**

##### **RCT**

**First Author:**

**Title:**

**Date:**

**Date quality assessment completed:**

**Study reference:**

**In or Out patient?**

QUESTION	CRITERION MET?				COMMENT
	Y (2)	P (1)	N (0)	UC	
Was the population specific to adult female patients with PD diagnosis?					
Was DBT clearly defined?					

Was the measurable behaviour clear?					
Was follow-up used to measure a beneficial effect of intervention?					
Is this the best way to answer the research question?					
Were control and comparison groups clearly defined?					
Were measurement tools valid and/or reliable?					

### Is it worth continuing?

<b>Sampling and Selection Bias</b>					
Was true randomisation employed?					
Was allocation concealment required?					
Were participants allocated to groups appropriately?					
Were the two groups similar at entry? (age, ethnicity)					
Do the participants represent the general female population of in-patients with personality disorder?					
Did the study deal with confounding factors?					
Were enough participants included?					
<b>Performance Bias</b>					
Were participants exposed to other treatment that could account for the outcome measure?					
Were participants blinded?					
Did all participants receive the intervention they were supposed to?					
Was intervention consistent for all participants?					
<b>Detection Bias</b>					
Were assessors trained to					

measure outcome assessments?					
Were the same questions asked to all participants?					
Were the same official measures applied to all participants to provide standardisation?					
If completed outside the UK, are findings thought to be applicable to female patients in the UK?					
Was the outcome measurement valid?					
Were objective measures rather than subjective measures used?					
Were outcome measures applied equally by assessors?					
<b>Attrition Bias</b>					
Were both groups followed up?					
Were the number of participants who dropped out reported?					
Is there report of how many individuals were asked to participate and refused?					
Was follow-up long enough?					
Was loss at follow-up avoided?					
Is loss at follow-up accounted for or indicated?					
<b>Statistical Analysis</b>					
Is there missing data?					
Is intention to treat missing data in analysis explained or accounted for?					
Is the effect size large enough?					
Is the effect size precise?					
Have appropriate tests been applied?					

**Total score (%):**

**Include (if over 65%):** Yes

No



**Reason if excluded:**

**Appendix CC.**

**Data Extraction**

**First Author:**

**Title:**

**Source (year/volume/page):**

**Country of origin:**

**Type of Media (SR/Published/Primary):**

**Date data extraction completed:**

**Data extraction completed by:**

**Study reference:**

**In or Out patient?**

**Specific Information**

Verify study meets PICO criteria	P I C O
Describe target population	
Inclusion Criteria (PIO) (if not specified= 'not reported')	
Exclusion Criteria (reported?)	
Recruitment Procedures (participation rates)	

**Characteristics of population before measure**

Total Number	
Age: range age	
Diagnosis (primary/dual diagnosis)	
Status (patient)	

Number of Participants in each condition	
A	
B	
C	
D	
Were Intervention group and Control/Comparator comparable?	

### Intervention

DBT, DBT and additional areas	
Name of Intervention	
A	
B	
C	
D	
Number of conditions Include Control	
Content of intervention	
A	
B	
C	
D	
Intervention Setting (Hospital security level)	

Duration of Intervention (number of sessions AND length of session) A  B  C  D	
Delivery Style of intervention (1:1, group, both) A  B  C  D	
Discipline of staff delivering intervention (psychologist, therapist, counsellor, nurse etc.) A  B  C  D	
Have staff received specialist training?	
Were mediating variables considered/investigated?	

### Outcomes

What was measured at Baseline? a.  b.  c.  d.  e.  f.  g.  h.
--

What was measured post-intervention (follow-up)?	
a.	
b.	
c.	
d.	
e.	
f.	
g.	
h.	
Who carried out the measurement?	
What was the measurement tool?	
Are the tools valid?	
How was validity of the tools established? (piloting/Factor analysis?)	
How was the validity of self-report measurement maximised?	
What was the time interval between pre and post intervention measures?	
Are measures appropriate for population?	
Were attempts made to reduce bias?	
Drop-out rates recorded?	
Reasons for drop-out recorded?	

### Analysis

What statistical analysis was used?	
Do the techniques used adjust for confounding variables?	

How was missing data dealt with?	
What were the numbers (or %) at follow-up? A  B  C  D	

### Results

Incidents recorded using official documents (mean, sd, %, follow-up) A  B  C  D	
Quantative results (effect size)	
Qualitative results	
Cost of intervention	
Implications of findings	

# **A Systematic Review of the effectiveness of Dialectical Behavioural Therapy with female populations; exploration of Randomised Control Trials**



Nicola Wylie, Shihning Chou and Simon Duff  
Email: [lwxnw1@exmail.nottingham.ac.uk](mailto:lwxnw1@exmail.nottingham.ac.uk)

## **Introduction and Aim**

The fundamental question is whether Dialectical Behavioural Therapy (DBT) is an effective treatment for female patient populations. Modules of DBT are expected to reduce the risk of socially intrusive behaviours, and reduce maladaptive coping strategies such as self-harm. No previous review has attempted to evaluate DBT in this way, but given the application of DBT to predominantly female populations with Borderline Personality Disorder, Eating Disorder and Substance Dependent groups this review added value to exploring the population specifically. DBT, as developed for females with BPD has been specifically adapted for female in-patients (Bohus et al., 2000). It is hoped that following this review, improvements to the current application of DBT for females could be considered.

## **Method**

**Population:** Adult females with a Formal Diagnosis of Borderline Personality Disorder, substance dependence or eating disorder

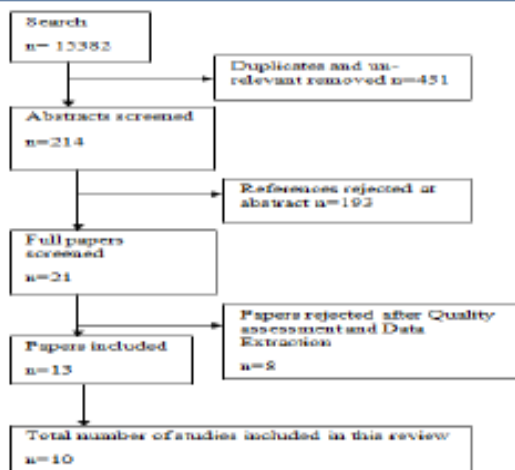
**Intervention:** DBT

**Comparator:** No treatment, different treatment

**Outcome:** maladaptive behaviours associated with each disorder (e.g self-harm, binge/purge eating and substance misuse)

**Study Design:** Randomised Control Trials

**Sources:** EMBASE, PsycINFO, Medline, Cochrane, Campbell Collaboration)



## **Results and Discussion**

Overall DBT was found to be effective and superior compared to controls in reducing maladaptive coping behaviours. Studies included small samples, varying lengths of DBT intervention and follow-up periods were generally short. However, results indicated that as follow-up increased, non-significant between-group differences were found. Future research should compare DBT with alternative therapies and serve long-term follow-up.

REFERENCES: Bohus, M., Haaf, B., Stugimayr, C., Pohl, U., Boehme, R., and Linehan, M. (2000). Evaluation of inpatient Dialectical-Behavioral Therapy for Borderline Personality Disorder - a prospective study. *Behaviour Research and Therapy*. 38, 875-887.

Title of Study: Do females display socially intrusive behaviours?

Name of Researcher(s): Nicola Wylie

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

**What is the purpose of the study?**

The purpose of the study is to explore what influences how people form, maintain and end relationships. It will ask questions about how you communicate with people, and what you might do at the end of a relationship.

It will be part of a doctoral research project and included in a Thesis.

**Why have I been invited?**

You are being invited to take part because you are a female who is currently in a low-secure hospital. You will be able to give information about interactions with others that are unknown at present. We are inviting twenty participants like you to take part.

**Do I have to take part?**

No, you do not need to take part. Refusing to take part or withdrawing at a later date will not impact on your treatment in hospital. It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This would not affect your legal rights.

**What will happen to me if I take part?**

Taking part will involve completing an interview questionnaire. This will be completed with you by the researcher. It will take between forty and sixty minutes.

This study also involves archival psychometric data – you do not need to do anything in regards to this information. You previously completed a questionnaire about anger, and another about different aspects of your personality. The responses you gave on these questionnaires will be used to further explore the responses given during the interview. The responses you gave to questionnaires previously will be collected.

If you agree to take part the first thing to do is sign the Consent form, it is at the end of this information sheet. The researcher will agree with you a time to complete the questionnaire. This interview will be voice-recorded – but you will remain anonymous as your name will not be used during the interview. The interviews will be transcribed (written up) and during this process any identifiable information, like your name, will be removed from the transcript. Once the interview has been anonymously transcribed, the recording will be immediately deleted.

It also involves gathering archival database information from psychometric assessments you have already completed – you do not need to complete these again – but results will be gathered by the researcher.

### **Expenses and payments**

Participants will not be paid to participate in the study.

### **What are the possible disadvantages and risks of taking part?**

It is not expected that taking part will cause any harm. You may find some of the questions difficult – and this in turn may cause you to have a heightened sense of alertness to other people. The researcher will offer support and reassurance at the end of the interview, and offer a de-brief to reduce this occurring. Ward Staff can also be alerted if you feel you need extra support following the interview.

Taking part will not affect your current placement, or impact upon any activities that you currently enjoy, such as those on your Occupational Therapy programme.

### **What are the possible benefits of taking part?**

We cannot promise the study will help you but the information we get from this study may help in the future. Once information has been collected and results have been explored the study should provide information about what happens when people find our behaviour upsetting. Another benefit is that interventions could be developed to help us understand our own behaviours better. This research will give a greater understanding into the types of behaviours perceived as socially intrusive – so you could benefit by understanding how your behaviours are perceived in this way.

### **What if there is a problem?**

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you can do this by contacting the Hospital Director or your Ward Manager.

There is also an Advocate on site should you require her support at any time.



### **Will my taking part in the study be kept confidential?**

We will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, some parts of your hospital records and the data collected for the study will be looked at by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant.

All information which is collected about you during the course of the research will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database. Any information about you which leaves the hospital will have your name and address removed (anonymised) and a unique code will be used so that you cannot be recognised from it.

Research data will be kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team will have access to your personal data.

Although what you say in the interview is confidential, should you disclose anything to us which we feel puts you or anyone else at any risk, we may feel it necessary to report this to the appropriate persons.

Once the researcher has written up the interview anonymously the recording will be deleted immediately.

### **What will happen if I don't want to carry on with the study?**

Your participation is voluntary and you are free to withdraw without giving any reason, and without your legal rights being affected. If you want to withdraw before the study you can and no further action will be taken. After the interview is completed you have ten days to withdraw.

If you wish to withdraw after completing the interview, please do so within ten days of completing the interview as your responses will not have been anonymously transcribed within this time period. After this time it will not be possible to withdraw your data. This is because analysis of the data will have begun by this time and it will not be possible to extract your data analysis from the other anonymous data collected.

If your participation is withdrawn due to you lacking Capacity to consent to engage, the data collected and transcribed may still be used in the study. Because data will be anonymous after it is transcribed, it will not be possible to remove your data and it will be used in the data analysis. If no data has been collected and transcribed – you will not be expected to participate in the study following loss of capacity.

### **Involvement of the General Practitioner/Family doctor (GP)**

Your GP will not be notified of your participation in the study.

### **What will happen to the results of the research study**

The results will be written up as part of a research chapter in a Forensic Psychology Doctorate Dissertation. This will be written under the standards of the University of Nottingham and will be published in a peer reviewed journal in late 2013. For the purposes of the research you will be allocated a number, so your name will not be used in the write up of the study. You will not be identified in any of the published material.

You are able to request a copy of the results and findings from the study.

### **Who is organising and funding the research?**

This research is being organised by the University of Nottingham and is being funded by the University of Nottingham.

### **Who has reviewed the study?**

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by University of Nottingham, NRES Research Ethics Committee and the Research Ethics Committee – Leicester.

Additionally, the researcher has gained approval from your Commissioner to approach you and invite you to engage. They have agreed that you are a suitable candidate for this research project. Your Multi-Disciplinary Team (MDT) have also been approached, and agree you are a suitable participant for the study and that you will not be put in danger during the interview process.

### **Further information and contact details**

For further information please contact the researcher by asking ward staff for 1:1 time with her.

If you would like to speak to someone who knows about this study and is an independent advisor, please contact Phil Coombes from the psychology department by asking ward staff to speak to him.

The Chief Investigator, Simon Duff, can also be contacted for additional information or support about the study on 0115 846 7898.

Thank you for reading this Information Sheet.

### Appendix D: Consent Form

**Title of Study: Do females display socially intrusive behaviours?**

**REC ref:12109**

**Name of Researcher: Nicola Wylie**

**Participant Number:**

**Please initial box**

1. I confirm that I have read and understand the information sheet version number ...3...dated.....7/2/13..... for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw within ten days of completing my interview, without giving any reason, and without my medical care or legal rights being affected. I understand that should I withdraw after the ten day window then the information collected so far cannot be erased and that this information may still be used in the project analysis. ☐
3. I understand that relevant sections of my medical notes and data collected in the study may be looked at by authorised individuals from the University of Nottingham, the research group and regulatory authorities where it is relevant to my taking part in this study. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☐
4. I understand that I will take part in an interview that will last forty to sixty minutes. The interview will be recorded and that anonymous direct quotes from the interview may be used in the study reports. ☐
5. I understand that after the interview archival database information that I completed when I was first admitted to the Hospital will be collected for two questionnaires. ☐
6. I agree to take part in the above study. ☐

---

Name of Participant

---

Date

---

Signature

---

Name of Person taking consent

---

Date

---

Signature

3 copies: 1 for participant, 1 for the project notes and 1 for the medical notes



**Part A: Socially Intrusive Behaviours**

Behaviour	Never (0)	Once (1)	Monthly (2)	Weekly (3)	Daily (4)	<b>Why?</b>  <b>What did you want to achieve?</b>  <b>What do you think they might have thought or felt about it?</b>
Monitored (watched) someone						
Intimidated, been hostile, degrading, humiliating or offensive towards someone?  Any IR1s?						
Leave gifts						
Send messages on Internet chat rooms or Facebook or through the post  Were these ever threatening?						

Following around						
Invading property (house/car)						
Damage or steal anything?						
Covertly obtaining information (by asking other people about them)						
Used a weapon to scare or hurt someone						
Spread rumours						
Involve yourself in activities they were doing (gym class)						
Threaten to hurt self						
Threaten verbally						
Threaten to hurt others they know						
Threaten to physically hurt them						
Threaten them face- face						

Threaten them with sex						
Threatened to use weapons						
Persistently phone them						
Engage them in face to face conversations						
Kidnap/physically restrain them						
Wait for them						
Abuse them – verbally						
Abuse them – physically						
Abuse them - sexually,						
Go to places you thought they might be (home/school/public place/gym) uninvited						

**Part B: Stalker Type**

Were you in an intimate relationship with this person?

Did you hope your actions would lead to a relationship with that person?

Was your aim to seek revenge?

Had you been hurt by someone/them previously?

Did/do you believe they were your true love?

Did they have any unique qualities you admired?

Did you want to frighten or distress someone?

Did you give them any signs to suggest you would be involved in their life?

Did you want to study and observe other people in general?

Did you think they were interested in being a relationship with you?

**Part C: Relationship Styles Questionnaire (RSQ; Griffin & Bartholomew, 1994)**

Question	Not at all like me  (1)	A little like me  (2)	Somewhat like me  (3)	A lot like me  (4)	Very much like me  (5)	<b>Explore:</b>  <b>What makes you feel that way/answer that way?</b>
1. I find it difficult to depend on other people.						
2. It is very important to me to feel independent.						
3. I find it easy to get emotionally close to others.						
4. I want to merge completely with another person.						
5. I worry that I will be hurt if I allow myself to become too close to others.						
6. I am comfortable without close emotional relationships.						
7. I am not sure that I can always depend on others						



to be there when I need them.						
8. I want to be completely emotionally intimate with others.						
9. I worry about being alone.						
10. I am comfortable depending on other people.						
11. I often worry that romantic partners don't really love me.						
12. I find it difficult to trust others completely.						
13. I worry about others getting too close to me.						
14. I want emotionally close relationships.						
15. I am comfortable having other people						

depend on me.						
16. I worry that others don't value me as much as I value them.						
17. People are never there when you need them.						
18. My desire to merge completely sometimes scares people away.						
19. It is very important to me to feel self-sufficient.						
20. I am nervous when anyone gets too close to me.						
21. I often worry that romantic partners won't want to stay with me.						
22. I prefer not to have other people depend on me.						
23. I worry about being abandoned.						
24. I am somewhat						

uncomfortable being close to others.						
25. I find that others are reluctant to get as close as I would like.						
26. I prefer not to depend on others.						
27. I know that others will be there when I need them.						
28. I worry about having others not accept me.						
29. Romantic partners often want me to be closer than I feel comfortable being.						
30. I find it relatively easy to get close to others.						

## **Appendix F: Study Debrief**

Title of Study: Do females display socially intrusive behaviours?

Name of Researcher(s): Nicola Wylie

This study was concerned with different types of behaviours that can be viewed by others as socially intrusive. Previous studies have suggested that the behaviours discussed during the interview can make others feel vulnerable, but little is known about how frequent they are displayed by females. The purpose of this research was to explore what types of socially intrusive behaviours females display.

### **How was this tested?**

In this study, you were asked a number of questions relating to different types of behaviours, how you bond with others in relationships and why you chose to act in the way that you did. This included asking you what you felt about the other person, how you viewed the relationship to the other person, and what you think they might have thought or felt about the behaviours you displayed. All participants were asked the same questions in the same order, and every interview was tape recorded.

Additionally the results you gave on your admission assessment STAXI-2 and MCMI-III psychometrics were gathered. This is because it is expected that anger plays a role in how we express ourselves to others, and that our personality characteristics will also influence how we interact with others, and how we view our own behaviours.

### **What happens now?**

You do not need to do anything. The researcher will write up the results of all participants' interviews and this will be published as part of Doctorate in Forensic Psychology thesis.

You might have found that some of the areas discussed during the interview caused you some distress. This was not the intention of the interview, but because some behaviours are related to harm you might find your attention shifts to these questions in the next few hours. If this happens, please gain some reassurance and support by:

Talking to the care assistants and nurses on the ward or anyone from your clinical team

- Speaking to Phil from Psychology
- Gaining support from a close friend or family member who you trust

The research is also contactable either by approach when in the hospital, or via email: [nicola.wylie@nottingham.ac.uk](mailto:nicola.wylie@nottingham.ac.uk)

The research supervision, Simon Duff is also contactable for support following interview if you feel distressed. He can be contacted via emailing: [simon.duff@nottingham.ac.uk](mailto:simon.duff@nottingham.ac.uk)

You may also want to contact an external service such as:

- The Samaritans - you can phone them on 08457 90 90 90 for support 24 hours a day

## **Appendix G: Supporting Evidence for defined themes**

### **Superordinate Theme A: Threat Response**

#### **Negative valence**

Participant 1 (190): *"just to show them how bad I felt"*

Participant 3 (57): *"I got annoyed at him for shouting at me, but it didn't stop me wanting to see him."*

Participant 3 (93): *"It made me angry that I was always seen as a pathetic girl and I wanted to be respected"*

Participant 3 (122): *"I was frustrated at him though because he wouldn't just ask me to go with him and he never invited me out with him. It was annoying."*

Participant 3 (184): *"I'd be more likely to hurt them because I would be annoyed a them for ending things."*

Participant 3 (203): *"I just get frustrated 'cause people don't care to listen to my point of view."*

Participant 3 (207): *"Even though I was angry I wanted them to listen and like me."*

Participant 3 (213): *"It's frustrating cos it makes me think people don't actually care about me. Yeh. It is annoying but it get's their attention."*

Participant 3 (277): *"He was always angry at me and it made me feel angry too but I never wanted him to know I was angry. I wanted him to keep loving me. It was after we had kids that he got angry. But I was struggling and it was frustrating that he didn't help."*

Participant 3 (284): *"Sometimes my anger took over and I would I hit him. But most of the time I tried to control it so he would be nice to me."*

Participant 3 (296): *"Once I had had a drink it was like I could let my anger out."*

Participant 3 (324): *"I was quite depressed as well"*

Participant 3 (330): *"It was sad and it wound me up but I tried to not let him see I was frustrated 'cause of the kids"*

Participant 3 (381): *"When I was angry with him I wanted him to feel bad."*

Participant 3 (415): *"it makes me feel guilty when people do things for me – but I don't know why 'cause I do a lot for other people"*

Participant 3 (430): *"I don't know just maybe if you get jealous of who they are hanging around with."*

Interviewer: What would happen if you got jealous?

Participant 3 (433): *"I drop sarcastic comments. It helps me overcome my jealousy".*

Negative emotions such as jealousy experienced.

Participant 7 (129): *"It was annoying having to go because I didn't enjoy it"*

Participant 7 (199): *"Panic – I'd think she didn't like me anymore...probably get in touch with other people and find out what was going on. I'd panic."*

Participant 8 (104): *"it is normally that I confided in him like 'i feel really suicidal, I feel I am going to do something today' and we would talk it through, he would calm the situation down, he listened and talk things through*

Interviewer: "how often would that [SIB] happen?"

Participant 8 (109): *"depends how many bad days I had"* indicating a frequency of negative emotions.

Participant 8 (132): *"I threatened to not speak to my care coordinator again if he sectioned me."*

Participant 8 (135): *"I was angry at him as he said he was going to have to section me"*

Participant 8 (139): *"Because I was angry."*

Participant 8 (165): *"I just needed him to make me feel more powerful, less weak."*

Showing that negative emotions were not addressed assertively.

Participant 9 (358): *"it depends how much I like the person really. If I like them a lot then it makes me more nervous that they get close"* nervousness experienced.

Participant 10 (164): *"It is better in text or email 'cause you can think about what you are writing and go back to it but on the phone or in 1:1 you might say something that's un to ward"* demonstrating a desire to hold on to negative feelings rather than express them.

Participant 10 (506): *"I think I was annoyed at her."*

Participant 10 (535): *"I felt annoyed and irrational"* feelings of anger.

Participant 10 (727): *"She was threatening me...It was horrible...It is that which makes me feel safe – stopping interactions"* felt threatened by others.

### **non-SIB:**

Participant 5 (71): *"I drank alcohol so I was angry and people were looking for me."*

Participant 6 (162): *"Ahh I was a bit angry but I know it's not their fault they have a lot to do – I'll ask again another time"*

### **Other people are generally bad**

Participant 2 (8): *"just how they acted – they were pricks to be honest – I would make sure I was safe by looking over my shoulder."*

Participant 2 (207): *"depending on people in the past hasn't really worked out for me – if things are going to happen they will happen – I've been let down before so just don't expect things now."*

Participant 2 (246): *"I don't know, to get close to anybody you are gonna get hurt at some point. I only let a few people in."*

Participant 2 (297): *"I can't think of anyone in particular. My friends let me down, my dad did when he killed himself – I was close to them – it makes me suspicious of people getting close – especially my dad. I suppose he had the power to hurt me."*

Participant 4 (169): *"I worry that I will be hurt if I allow myself to become too close to others...I don't want to get close cause I've been hurt before."*

Participant 4 (196): *"I just find it hard to trust people –people have let me down."*

Participant 4 (241): *"I put a barrier up because I don't want people to get close."*

Participant 4 (255): *"I find it difficult to get close because of trust."*

Participant 5 (183): *"they just use you and abuse you - I agree a lot – they just use and abuse you."*



Participant 5 (238): *"I try not to as they might let you down. Say somewhat like me. You find people let you down so I put a barrier up to protect myself and not give too much away."*

Participant 6 (202): *"I'm not very good getting close as I'm not used to it. A group of my friends raped me. It made it hard"*

Interviewer: "I find it difficult to trust others completely."

Participant 6 (233): *"yeh a five. I've been let down before that's why..."I feel like they are going to hurt me in some way."*

Interviewer: "I am nervous when anyone gets too close to me."

Participant 6 (261): *"yeh...they might have an ulterior motive"*

Interviewer: "I find it relatively easy to get close to others."

Participant 6 (298): *"no, not at all, I don't trust them"*

### **Superordinate Theme B: Safety**

#### **Other people give me safety**

Participant 1 (108): *"ehhmm when something bad is happening. I want to find out more information"*

Participant 3 (425): *"it's good that you can get close to somebody and feel loved and safe"*

Participant 3 (7): *"I was observing and modelling their behaviour because of how I used to be – I sometimes felt intimidated – trying to make sure I was ok, and staff were ok, and other patients were ok."*

Participant 8 (21): *"when I was spending time with them I felt safe"*

Participant 8 (175): *"he was really good – he understood, he helped me deal with everything. He spent time with me, doing his job, making me safe...yeah it was positive for me at that point."*

#### **I'm ok on my own**

Interviewer: "I am comfortable without close emotional relationships."

Participant 2 (235): "that's very much like me - I wouldn't mind life like that at all- I could be on my own all the time with no one pestering me."

Participant 6 (225): *"I like my own company...would be ok on my own with my own company."*

### **Superordinate Theme C: Benefit Me**

#### **Reduce negative feelings**

Interviewer: "have you ever threatened to physically hurt someone?"

Participant 3 (201): *"loads of people, and I don't want that to sound as bad as it does but just in the past when I've been younger and up to now – police officers, patients, peers in the community"*

Interviewer: "would you do it because you wanted them to like you more?"

Participant 3 (206): *"yeah if I'm honest...I just wanted to be liked and felt that I had to be a bit of a 'tough cookie' if you like, always had to do things to please people – I have to do that now, not with violence obviously – just act like a clown – go along with things that I don't want to."*

Participant 7 (295): *"I'd still be looking for someone to sort my head out"*

Participant 8: *"it is normally that I confided in him like 'I feel really suicidal, I feel I am going to do something today' and we would talk it through, he would calm the situation down, he listened and talk things through."*

Participant 9 (12): *"If I am aware they have a history of attacking me or other people then I will be aware and watch them out of the corner of my eye...I get quite agitated"*

Participant 10 (66): *"yeah I like giving gifts I think it gives me a sense of meaning."*

Participant 10 (508): *"In some way I despise her for sectioning me"*

#### **Closeness**

Participant 1 (169): *"just spend time with them"*

Interviewer: "Have you ever ended up going to places that you thought someone might be so you could see them and spend time with them?"

Participant 3 (310): *"yeah I have done – but I don't recall where or when. It was a training place I think – we did IT work there and eh, there was a lad I liked. I used to not like going, we got paid but id skip it, and when, well, this person went that I liked so I*

*went so I could see him. We got together – it was good – I guess we owe the training place for that.”*

Participant 7 (16): *“I wanted them to notice me...it started things off”*

Participant 7 (65): *“like a lost puppy...cause I want to be with her...I just want to be close”*

Participant 7 (144): *“I’m trying to make her feel good by being open and honest”*

Participant 7 (212): *“grab her attention...I wanted her to look at me”*

Participant 7 (251): *“So I can see them [victim]”*

Participant 8 (8): when referring to monitoring or watching others she stated *“just to keep an eye on where they going and to gain their attention...I just wanted to see where they would be, to spend time with them”*

Participant 8 (175): *“he was really good – he understood, he helped me deal with everything. He spent time with me, doing his job, making me safe...yeah it was positive for me at that point”*

Participant 8 (314): *“I’m just frightened that I’ll get close to people and they will turn me away – suppose you feel distance towards others people to feel safe.”*

Participant 8 (328): *“I prefer to have distance in the relationship”*

Participant 9 (76): *“If it’s a girlfriend or someone special to you it’s nice for them to have things to remember you by...they know you have been thinking about them”.*

Participant 9 (200): *“I was having an argument with my partner and she wanted to leave but the argument wasn’t over so I just put my arm out in front of the door. She then said I had locked her in her room”*

Participant 10 (116): *“I will completely ignore the situation because I don’t want to aggravate it”*

### **Revenge**

Participant 1 (29): *“because people have done it to me”*

Participant 1 (240): *"to hurt them the way they hurt me"*

Participant 1 (249): *"yeah it's just a build up of anger. You want to do the same to that person as to what they did to you"*

Participant 1 (339): *"probably horrible. But they deserved it as well I wanted them to feel like they made me feel"*

Interviewer: "Was your aim to seek revenge on the other person? Had they ever hurt you?"

Participant 3 (535). *"yes my ex – he had hurt me a lot"*

Interviewer: "did you execute the revenge?"

Participant 3 (355). *"um. I. Once out of pure revenge I turned round and said [son] wasn't his baby. I hadn't been with anyone else and deep down I knew he was the dad I just said it to hurt him"*

Interviewer: "have you ever threatened someone physically? Bruising or hitting?"

Participant 3 (293): *"yeah when I had a drink. When he had a drink he would hit me, it would wind me up. I only hit him a couple of times and I know that's bad enough but he hit me loads – he gave me a black eye, he broke one of my ribs."*

Participant 3 (381): *"When I was angry with him I wanted him to feel bad."*

Participant 8 (240): "I was annoyed, he knew I was because I refused to talk to him."

Participant 9 (42): *"I think the person was quite fearful but that wasn't my intention I was trying to be rational...I wanted to move wards...So it's come up in my favour in the end"*

Participant 10 (130): *"In the past I have left unacceptable messages...irrational... crude...absurd...I believe I can use words to effect people. I'd say in a way I use words and write messages to get a response"*

#### **non-SIB:**

Participant 5 (43): *"I was being wound up so I threatened them to stop. I was angry. I was angry at them and what they had done to me."*

Interviewer: "have you ever been intimidating or hostile to other people, wanted to maybe threat or humiliate somebody?"

Participant 6 (35): *"when I was younger yeh , to like, people I thought were gonna threaten me....yeah...I wanted to hurt them – it was the people who hurt me – family and friends."*

### **Gain information**

Participant 1 (12): *"I just like to suss them out"* showing the value of gathering information.

Participant 1 (279): *"by watching them and learning their reactions to things"* showing her desire to gain information to benefit her by allowing her the opportunity to learn.

Participant 3 (104): *"yeah if I've wanted to find out 'what's he like, or what's she like'*

Participant 10 (7): *"I'm a learner and I like to have lots of knowledge and I tend to, as I person I learn by watching"*.

Participant 10 (16): *"their clothes, their hair, the way they dress, the way they talk, background information about them, the way they walk. I am nosey. I can't really give an explanation because I think it's human nature"* Another example of gathering information to benefit her as she gets to know her victim.

Participant 10 (293): *"I had a picture of her, because I took a picture of her picture on the wall and I put it on my laptop. I said I really find her beautiful. She told a member of staff and I was asked why. Since then I found out quite a bit of information about the member of staff that were a bit hit and miss."*

Participant 10 (300): *"well what sports she likes, her personality and I think I might know where she lives- you know in an area for example. Like [Place (1)] or [Place (2)] so I have an idea of where she shops"*

Interviewer: *"what made you want to gather all that information?"*

Participant 10 (304): *"I don't know really – nothing to do with my mental illness I think it is just inherent... if you like someone that is what you do."*

### **non-SIB:**

Participant 2 (5): *"When I was at school I used to watch the kids that would bully me."*

Participant 2 (346): *"I have to get to know someone quite well before I start to get close – like what are they like, how they are, what their personality is like, stuff like that – try to suss them out...maybe watch them – see how they are – usually just people I want to be friends with."*

Participant 6 (5): *"I used to be quite bad at it – staring at them, trying to work them out before I got to know them... to work out if they are going to hurt me or not"*

Participant 6 (23): *"sometimes patients new ones and ones I know – if they annoy me or if they are attention seeking –just to see if they are going to hurt me."*

### **Superordinate Theme D: Over-Controlled presentation**

#### **My feelings**

Participant 1 (300): *"I loved him but I still do"*

Participant 1 (347): *"anger had built up in me"*

Participant 1 (409): *"if you love someone you always love them"*

Participant 1 (427): *"yeah my true love. I love everything about him"*

Participant 1 (450): *"I don't know if he loves him the way I love him"*

Participant 3 (56): *"I just thought that when you love people you do things that you want people to notice."*

Participant 3 (12): *"Yeh, my girlfriend – I stare at her, I don't know why, I guess I'm just besotted"*

Participant 3 (284): *"Sometimes my anger took over and I would I hit him. But most of the time I tried to control it so he would be nice to me."*

Participant 7 (36): *"I still do it now 'cause I love her"*

Participant 7 (51): *"so people know how I feel"*

Participant 7 (407): *"I love her and I want to be with her and I want to be stuck together that would be perfect – we are in love"*

Participant 9 (167): *"And she was my first love so it was a very bad first experience of love and lead to my first hospital admission. It was a very bad first experience of love to have. I took it all personally. I was vulnerable"*

Participant 9 (176): *"I feel vulnerable"*

### **Other people's actions**

Participant 1 (508): *"People are difficult to get on with and I find it difficult to get on with most people anyway and I just think id like to be able to get close to people, but they make it too difficult."*

Participant 1 (582): *"there is nothing I can do to reduce the risk of being abandoned"*

Participant 1 (587): *"everybody pushes me away. I just think other people push me away and I just think they should want to be close."*

Participant 3 (498): *"there is nothing I can do [no prevent being abandoned]"*.

Participant 3 (321): *"I didn't know where I stood not one minute from the next really"*

Participant 3 (288): *"I wanted him to feel like I did, but I don't know if he did."*

Participant 7 (104): *"annoying"*

Me: annoying – why is that annoying?

Participant 7 (106): *"it feels like I can't do anything without her having to know what I'm doing or where I am going"*

Interviewer: "Have you ever involved yourself in activities that people that you know or like have been involved in because you wanted to spend time with them?"

Participant 7 (127): *"yeah"*

Interviewer: "have they ever been things you weren't really into?"

Participant 7 (129): *"yeh – like creative writing every week"*

Interviewer: "again, what did you want to get out of that?"

Participant 7 (132): *"to spend time with her"*

Interviewer: "what was it like for her do you think?"

Participant 7 (134): *"good – it stopped her following me around"*

Participant 9 (104): *"she was a bit out of order with me aswell"*

Participant 9 (123): *"we just automatically connect...I sit down and she comes to me. I don't need to follow her around"*

Participant 9 (161): *"she wasn't being honest with me...she was basically using me...she was just awful to me...I was in love with her....I was vulnerable"*

Participant 9 (220): *"I don't know if she did have feelings briefly but I don't think she did. I think it was a game from day one."*

Participant 9 (291): *"She would call me up and be close to me...sometime she did want the emotional stuff, on her terms, but I never knew where I stood 'cause it wasn't all the time...[I felt] used."*

Participant 9 (362): *"yeah sometimes because they can just decide really quickly they don't want to be with me anymore."*

### **My actions**

Participant 1 (315): *"I would try to, but be too stunned to sometimes"*

Participant 3 (18): *"I can't not do it – when you love someone you want to be around them all the time and see them, constantly look at them."*

Participant 7 (9): *"It's a habit, I just do it."*

Participant 9 (115): *"she realised that it wasn't me, the way I was behaving and the problems I already had"*

Participant 10 (52): *"In my culture...everyone knows everyone's business...like it is there are the time"*

Participant 10 (176): *"Also, I haven't been well mentally, but also part of me is just nosey"*

Participant 10 (181): *"So I suppose to some extent my obsessions...I get attached very quickly...What I have learnt in life is let other people be"*

Participant 10 (192): *"I get Bipolar and I push the highs"*

Participant 10 (218): *"I was obsessed with him"*

Participant 10 (239): *"I had been inappropriate with things. I didn't stalk. In my previous open acute psychiatric ward I was pushing boundaries. I was taking pictures of people. I wouldn't normally do things like that. I was following staff around and I was very unwell. My insight was poor."*

Participant 10 (245): *"sexual attraction. Because when you are high your emotions are mind blowing in a negative way because you are burnt out. You are dehydrated, you cant*



*eat or sleep. It is such an intense burn out period but at the same time you are as light as feather."*

Participant 10 (288): *"I would ask other people about them. Haha. There was a professional who I developed a crush on and I think it just went a little bit out of control."*

Participant 10 (530): *"It was a fantasy in my mind- the relationship was."*

Participant 10 (519): *"When you are fond of someone each relationship has similar emotions but they are different because the other person is different. The emotions are the same but the people are different that is it."*

## **Appendix H: STAXI-2 Results for each participant**

### **SIB-P Group**

#### *Participant 1*

Her State anger score was above the normal range and suggest she experiences intense angry feelings. Both verbal and physical State scores were within the normal range suggesting that she is not expressing her intense feelings in a way that corresponds to the intensity of her angry feelings. All Trait anger scores were within the normal range which again may suggest she is not able to label or recognise angry situations as they do not support her State scores. Both anger-expression scores were above the normal range suggesting that she suppressing angry feelings and when she does express them, she does so when they are over-whelming and in an aggressive way. Her anger-control-out score was within the normal range and her anger-control-in score was above the normal range suggesting she puts effort into calming down as soon as possible – influencing how non-assertive she may be. This may indicate that she is likely to let others know she is angry, but not to the extent that she experiences anger. This may link to her use of SIBs to communicate with others but in a passive-aggressive rather than assertive way.

#### *Participant 3*

Her State anger scores were all above normal range except physical which was within the normal range; this suggests she is most likely to express anger in a verbal way. All Trait anger scores were above normal range suggesting she experiences a lot of anger and is quick tempered as well as sensitive to perceived provocation. Anger expression scores were also both above the normal range suggesting passive-aggressive tendencies while anger is suppressed. Anger-control-out was below the normal range and anger-control-in was within the normal range. This suggests she does not attempt to control her intense angry feelings and may mean she is more at risk of verbal outbursts or threatening behaviour when anger is intense as suggested by State and Trait scores.

#### *Participant 7*

All State scores were within the normal range except the verbal scale which was high. This suggests that she is most likely to express anger in a verbal way. Trait anger and Trait anger-temperament were also within the normal range. The Trait reaction scale was below normal which suggests she may not experience a lot of anger and be unclear as how to manage it. Anger-expression-out was below normal and anger-expression-in was above normal. This, like other SIB-P group members suggests she experiences intense feelings of anger and spends energy trying to suppress them rather than act in an aggressive way. Her anger-control-out score was also high with anger-control-in scores

within normal range. This suggests that she spends energy trying to calm angry feelings and that she may experience more anger than was identified in the State and Trait scales due to poor anger recognition skills. She has a high Anger Index which also suggests that she suppresses intense angry feelings and may react to anger in passive aggressive way – increasing her risk of using SIBs.

#### *Participant 8*

All State anger scores were within the normal range. Trait anger was below the normal range and her angry temperament was within normal range. Angry reaction scores within the Trait scale were also below normal range suggesting a below normal experience of anger. This may indicate that she is unable to recognise anger. Anger-expression-out scores were also below the normal range, anger-expression-in scores were within the normal range. Anger Control scores were above normal. This suggests that she spends a lot of energy monitoring angry feelings and trying to calm down. As other scores have been within or below normal, this again suggests a poor ability to recognise anger that may indicate passive-aggressive tendencies and offending behaviour. It may be that she uses SIB in a passive-aggressive way as identified by the Thematic Analysis.

#### *Participant 9*

Scores for the State scales were above the normal range suggesting she experiences anger but verbal and physical scores were within normal range suggesting she does not express her intense emotional experience effectively. Her Trait anger scores were also within the normal range suggesting she does not experience a lot of anger. Her anger-expression-out score was within the normal range however anger-expression-in score was above normal range. This suggests that she puts a lot of energy into suppressing angry feelings and may mean that she experiences more anger than her State and Trait responses suggest. Her anger-control-out scores were also above the normal range suggesting she spends a lot of energy monitoring her anger and could be considered passive and withdrawn from others. Her anger-control-in score was within normal range suggesting she assertively calms down as soon as she can however this may be due to a lack of anger recognition given her high anger control in scores.

#### *Participant 10*

Scores were high on all State anger suggesting intense angry feelings experienced most of the time and that are either expressed in a verbal or physical way. Trait anger scales were also in the above normal range suggesting she experiences a lot of anger, is quick tempered and sensitive in her reaction to anger provocation. Both anger-expression-in and out scales were also above the normal range suggesting she expresses anger both

outwardly in an aggressive manner and also suppresses the feelings. In terms of anger control her scores were within the normal range for anger-control-in but below the normal range for anger-control-out. This suggests that she is more likely to express anger than control it and does little to make the angry feelings pass. Her Anger Index was also above the normal range which when considered in relation to anger expression - scores indicate a lot of angry behaviours. Due to the high anger expression scores and low anger control scores it could be said that she is likely to act in a passive-aggressive way as she does not try to control angry feelings

### ***SIB-P group summary***

Overall the SIB-P group generally experience a lot of anger which was intense; State anger scores were high or above normal range for most in this group (Participants 1, 3, 5, 9, 10). On the Trait anger scale the SIB-P group's responses were more varied. Overall it seems that the SIB-P group may recognise anger only when it is extreme this accounting for low and normal scores on the Trait scale but high and above normal scores on the State scale. In order to manage their feelings of anger the SIB-P group either scored above normal range or below normal range on the anger-expression-out scale. This suggests that the SIB-P are likely to express their anger outwardly when anger is intense, again linking to the other STAXI-2 scales. Anger-control-in was above normal for all but one of the SIB-P group suggesting that this group have a tendency to over-control and suppress angry feelings. This is likely to be why their use of SIB is utilised as they are unable to assertively express their emotions and instead suppress them. Anger Control scores were either above normal or below normal for the majority of the SIB-P group suggesting that this group respond to anger only when it is intense and otherwise manage it in a passive-aggressive way. Anger-control-in was particularly high for Participant 8 whose anger expression scores were within normal range - this demonstrates that she appears to struggle with intense anger spending lots of energy monitoring angry feelings in a passive-aggressive way.

### ***non-SIB group***

#### ***Participant 2***

Her State anger score was below normal range and verbal and physical state anger scores were within normal range. This suggests that she does not experience intense angry feelings, and when she does experience anger she expresses it within reasonable means. Her Trait anger score was also within normal range. Trait-temperament scores were however high suggesting she is quick tempered and impulsive when expressing angry feelings. Her Reaction on this scale was below normal suggesting she is not sensitive to perceived provocation and that she is able to express quickly angry feelings; anger

expression out scores were high and support this. Anger-expression-in was within normal range suggesting she does not manage anger by suppressing the angry feelings. Both anger control scores were below normal supporting the view that she may express anger quickly.

#### *Participant 4*

State anger was below normal range and suggest that she does not experience intense anger, or feel angry much of the time. Her verbal and physical expression of anger scores were within normal range suggesting when she does feel angry she expresses it appropriately. Trait anger scores were also low and suggest that she does not experience a lot of anger. Anger expression scores were again low as was anger control out. However anger-control-in was above normal range suggesting that when she feels angry she spends great energy reducing the feelings as quickly as she can – this indicates a lack of assertiveness when feeling angry but other responses indicate this does not happen often and the feelings fade quickly.

#### *Participant 5*

All State scores were above normal except the physical scale which suggests that she experiences intense feelings of anger and is most likely to express anger in a verbal way. Trait anger scores were within normal range however anger temperament was high suggesting that she is quick tempered. Anger-expression-out was low and in was normal suggesting she is able to express anger appropriately. Anger control scores were below normal range. Overall her responses suggest she experiences intense feelings of anger and is quick tempered and is most likely to respond to these feelings by suppressing angry feelings. This may suggest she is passive-aggressive.

#### *Participant 6*

All State anger scores were with normal range and suggest she experiences the feelings of anger at a normal level. All Trait anger scores were also within normal range and suggest she does not experience anger often. Anger-expression-out was below normal range and anger-expression-in was above normal which suggest she suppresses feelings of anger when they occur. Both anger control scores were within normal range which suggests that anger is experienced within normal range and controlled appropriately however she has a tendency to suppress the emotion rather than express it outwardly with, similarly to Participant 4 may result in periods of non-assertiveness.

#### ***non-SIB group summary***

The non-SIB group showed low or normal State anger scores except Participant 5 who reported intense anger and feeling angry a lot of the time. Trait anger was generally normal for this group, with angry temperament scores and experiencing a quick temper being more varied. On this scale Participants 2 and 5 scored above normal range while Participants 4 and 6 were within normal range. Other than Case 4 who reported below normal trait-reaction scores the non-SIB group scored within normal range on this scale. The anger-expression-out scores were below normal range for all group members except Participant 2 who scored above normal. Anger-expression-in scores were within normal range suggesting that when experiencing anger the non-SIB group express it internally as most others do, but struggle to express it outwardly. This may relate to difficulties defining anger and knowing how to manage it when it is not intense. While Participant 4 experienced above normal anger control scores, she experienced below normal anger expression scores supporting the view that poor anger recognition may explain the variability within this group. Anger Control was again variable within this group suggesting that those who do not display SIBs are more individual than those who do.

**Appendix I: Table to show the number of patients from the SIB-P and non-SIB group who endorsed MCMI-III disorders**

MCMI-III Classification	SIB-P group Members endorsing trait	non-SIB group Members endorsing trait
DYSTHIMIA	2	2
DEPRESSIVE	6	4
DRUG DEPENDENCE	3	1
MASOCHISTIC	6	4
BORDERLINE	3	2
ANXIETY	6	4
NARCISSISTIC	1	
HISTRIONIC	1	
DEPENDENT	2	3
MAJOR DEPRESSION	2	2
DELUSIONAL	2	3
AVOIDANT	6	2
SCHIZOTYPAL	1	2
SCHIZOID	1	1
PTSD	1	4
PARANOID	2	2
NEGATIVITY		1
SOMATOFORM		1
ALCOHOL DEPENDENCE	1	1
ANTISOCIAL	1	
BIPOLAR		1

**MCMI-III Disorders endorsed by non-SIB group only**

*Post Traumatic Stress Disorder*

This scale was endorsed by the non-SIB Group. This is defined as a Clinical scale that measures responses indicative of a previous traumatic experience. Flashbacks, avoidance, anxiety and continued distress associated with the trauma and experienced after the event has passed are measured on this scale (MCMI-III; Millon, Millon, Davis & Grossman, 2009).

*Dependent*

This scale was endorsed by the non-SIB group. This scale, a Clinical Personality Pattern scale is defined by feelings of incompetence when functioning independently. Low self-esteem and feelings of inadequacy are common on this scale and are seen in an agreeable and submissive interaction style with others (MCMI-III; Millon, Millon, Davis & Grossman, 2009).

*Delusional*

This scale was endorsed by the non-SIB Group. This Clinical scale is defined by feelings of paranoia observed by irrational thoughts which may be grandiose, jealous or persecutory in nature. Delusions do not need to be bizarre and can involve situations that occur in real life. Additionally, the mood the individual experiences will be consistent with the content of their delusions (MCMI-III; Millon, Millon, Davis & Grossman, 2009).



## **Appendix J: Search Syntax**

### **OVID platform (EMBASE, PsychINFO, MEDLINE)**

8. (((((((in-patient or patient or female or women or client or offender or hospital or out-patient) and DBT) or Dialectical Behavioural Therapy or Dialectical Behaviour Therapy or intervention or treatment) and Personality Disorder) or Borderline or personality) and offending behaviour) or self-harm or parasuicidal or emotional regulation).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
9. (RCT or Randomised or Randomized).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
10. (offending behaviour or self-harm or parasuicidal or emotional regulation).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
11. (((DBT or Dialectical Behavioural Therapy or Dialectical Behaviour Therapy or intervention or treatment) and Personality Disorder) or personality or Disorder).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
12. (Personality Disorder or personality or Disorder).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
13. (in-patient or patient or female or women or client or offender or hospital or out-patient).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword]
14. 2 and 3 and 4 and 5 and 6

### **Cochrane Library (trials) Search Syntax**

4. (in-patient OR patient OR female OR women OR client OR offender OR hospital OR out-patient) AND (DBT OR Dialectical Behavioural Therapy OR Dialectical Behaviour Therapy OR intervention OR treatment) AND (Personality Disorder OR personality OR Disorder) AND (offending behaviour OR self-harm OR parasuicidal OR emotional regulation OR eating OR drug OR substance) AND (RCT OR Randomised OR Randomized) and (in-patient OR patient OR female OR women OR client OR offender OR hospital OR out-patient) AND (DBT OR Dialectical Behavioural Therapy OR Dialectical Behaviour Therapy OR intervention OR treatment) AND (Personality Disorder OR personality OR Disorder) AND (offending behaviour OR self-harm OR parasuicidal OR emotional regulation OR eating OR drug OR substance) AND (RCT OR Randomised OR Randomized) :ti,ab,kw in Trials
5. (Dialect\*):ti,ab,kw and (female OR women):ti,ab,kw and (emotion OR eat\* OR substanc\*):ti,ab,kw
6. Dialect\* AND patient in Trials

## **Appendix K: Quality Assessment Form**

**First Author:**

**Title:**

**Date:**

**Date quality assessment completed:**

**Study reference:**

**In or Out patient?**

QUESTION	CRITERION MET?				COMMENT
	Y (2)	P (1)	N (0)	UC	
Was the population specific to adult female patients with PD diagnosis?					
Was DBT clearly defined?					
Was the measurable behaviour clear?					
Was follow-up used to measure a beneficial effect of intervention?					
Is this the best way to answer the research question?					
Were control and comparison groups clearly defined?					
Were measurement tools valid and/or reliable?					

**Is it worth continuing?**

<b>Sampling and Selection Bias</b>					
Was true randomisation employed?					
Was allocation concealment required?					
Were participants allocated to groups appropriately?					
Were the two groups similar at entry? (age, ethnicity)					

Do the participants represent the general female population of in-patients with personality disorder?					
Did the study deal with confounding factors?					
Were enough participants included?					
<b>Performance Bias</b>					
Were participants exposed to other treatment that could account for the outcome measure?					
Were participants blinded?					
Did all participants receive the intervention they were supposed to?					
Was intervention consistent for all participants?					
<b>Detection Bias</b>					
Were assessors trained to measure outcome assessments?					
Were the same questions asked to all participants?					
Were the same official measures applied to all participants to provide standardisation?					
If completed outside the UK, are findings thought to be applicable to female patients in the UK?					
Was the outcome measurement valid?					
Were objective measures rather than subjective measures used?					
Were outcome measures applied equally by assessors?					
<b>Attrition Bias</b>					
Were both groups followed up?					
Were the number of					

participants who dropped out reported?					
Is there report of how many individuals were asked to participate and refused?					
Was follow-up long enough?					
Was loss at follow-up avoided?					
Is loss at follow-up accounted for or indicated?					
<b>Statistical Analysis</b>					
Is there missing data?					
Is intention to treat missing data in analysis explained or accounted for?					
Is the effect size large enough?					
Is the effect size precise?					
Have appropriate tests been applied?					

**Total score (%):**

**Include (if over 65%):** Yes

No

**Reason if excluded:**

## Appendix L: Data Extraction form for Systematic Review

**First Author:**

**Title:**

**Source (year/volume/page):**

**Country of origin:**

**Type of Media (SR/Published/Primary):**

**Date data extraction completed:**

**Data extraction completed by:**

**Study reference:**

## In or Out patient?

Specific Information	
Verify study meets PICO criteria	<p>P</p> <p>I</p> <p>C</p> <p>O</p>
Describe target population	
Inclusion Criteria (PIO) (if not specified= 'not reported')	
Exclusion Criteria	







D
<p>Intervention Setting</p> <p>(Hospital security level)</p>
<p>Duration of Intervention</p> <p>(number of sessions AND length of session)</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p>
<p>Delivery Style of intervention</p> <p>(1:1, group, both)</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p>

<p>Discipline of staff delivering intervention</p> <p>(psychologist, therapist, councillor, nurse etc.)</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p>
<p>Have staff received specialist training?</p>
<p>Were mediating variables considered/investigated?</p>
<p style="text-align: center;"><b>Outcomes</b></p>
<p>What was measured at Baseline?</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p> <p>e.</p>

<p>f.</p> <p>g.</p> <p>h.</p>
<p>What was measured post-intervention (follow-up)?</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p> <p>e.</p> <p>f.</p> <p>g.</p> <p>h.</p>
<p>Who carried out the measurement?</p>
<p>What was the measurement tool?</p>
<p>Are the tools valid?</p>
<p>How was validity of the tools</p>

established?  (piloting/Factor analysis?)
How was the validity of self- report measurement maximised?
What was the time interval between pre and post intervention measures?
Are measures appropriate for population?
Were attempts made to reduce bias?
Drop-out rates recorded?
Reasons for drop- out recorded?
<b>Analysis</b>
What statistical analysis was used?
Do the techniques used adjust for confounding variables?
How was missing data dealt with?

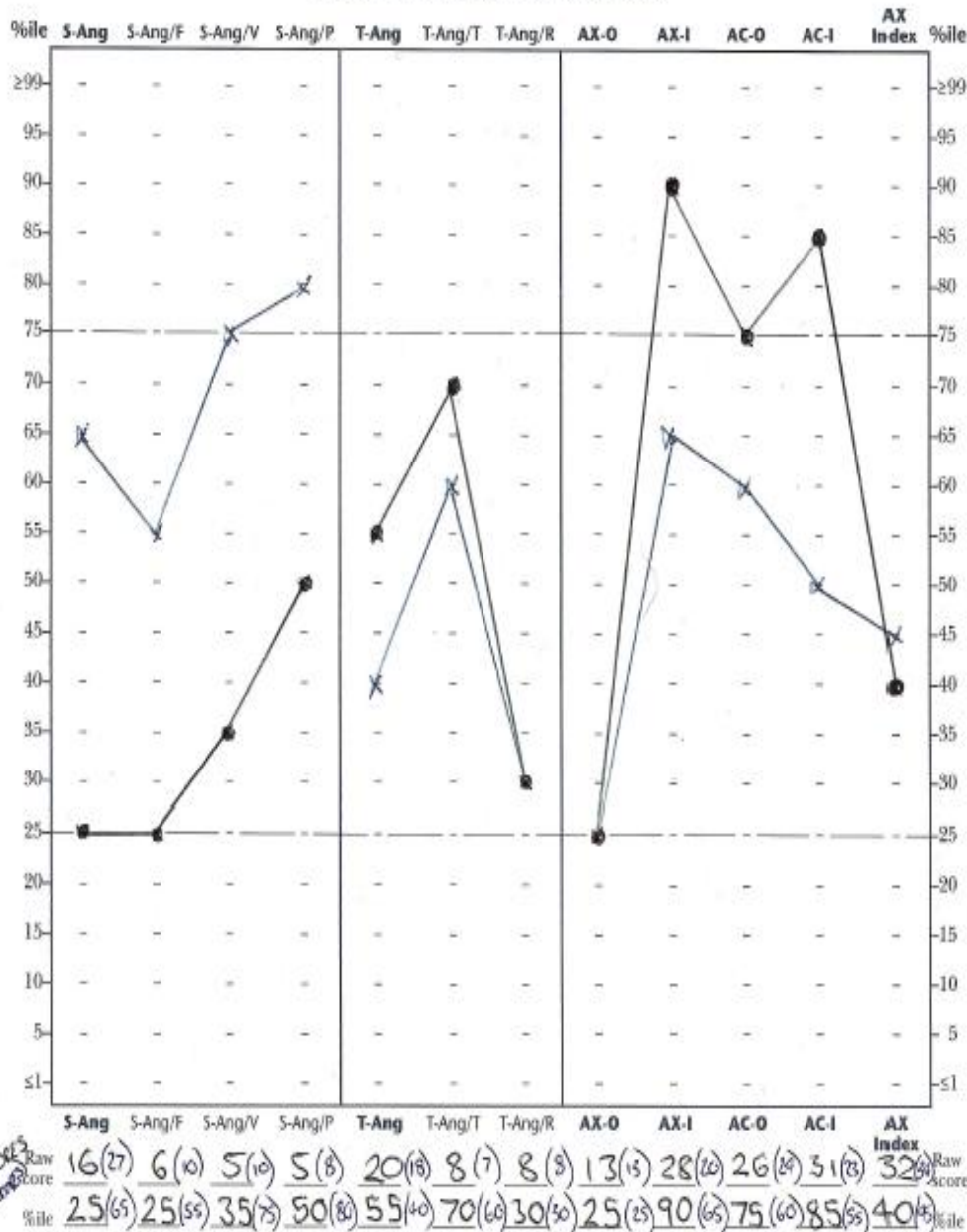
<p>What were the numbers (or %) at follow-up?</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p>
<p style="text-align: center;"><b>Results</b></p>
<p>Incidents recorded using official documents</p> <p>(mean, sd, %, follow-up)</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p>
<p>Quantative results</p> <p>(effect size)</p>
<p>Qualitative results</p>
<p>Cost of intervention</p>
<p>Implications of findings</p>

## Appendix M: STAXI-2 Pre and Post Scores for Case B

### STAXI-2 Profile Form

Name/ID No. Case B Gender: F ☒ M ☐ Age 34 Today's Date 3/10/11  
 Education College Marital Status Single Occupation Patient Post Date: 5/10/12 X

#### Profile of STAXI-2 Percentiles



For normative information, refer to Appendix A in the STAXI-2 Professional Manual.

Tables used in Appendix A: 8

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## **Appendix N: Consent Form for Case B**

**Institute of Work, Health & Organisations**  
<http://www.nottingham.ac.uk/iwho>



### **CONSENT FORM**

#### **Nature of Study: Case Study in D.Foren.Psych**

**Name of Researcher(s):** Nicola Wylie

**Please initial**

1. I confirm that I understand the nature of my involvement in a Case Study project and I have had the opportunity to ask questions. ☒ SE
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. ☒ SE
3. I understand that relevant sections of my medical notes and data collected in the study may be looked at by authorised individuals from the University of Nottingham, the research group and regulatory authorities where it is relevant to my taking part in this study. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☒ SE
4. I understand that the interviews will be anonymous and that direct quotes from the may be used in the study reports. ☒ SE
5. I agree to take part in the above study. ☒ SE

____ Case B ____	____ 3/10/11 ____	____ SE [X] ____
<b>Name of Participant</b>	<b>Date</b>	<b>Signature</b>
____ N Wylie ____	____ 3/10/11 ____	____ [Signature] ____
<b>Name of Person taking consent</b>	<b>Date</b>	<b>Signature</b>

2 copies: 1 for participant, 1 for the project notes

**Please note Case B's signature is such that her surname is easily eligible – for this reason an X has been placed over this version of the Consent Form**