The Effects of a Dialectical Behavioural Therapy-informed Intensive Outpatient Programme on Emotional Regulation

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Declaration

I, Caroline Serebro, declare that this research report is my own work. It is being submitted for the degree of Master of Medicine in the branch of Psychiatry at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

Signed: ----------

01 March 2021

Date: ----------

Abstract

The Effects of a DBT-informed Intensive Outpatient Programme on Emotional Regulation

Objective: The aim of this study was to evaluate the efficacy of Tara Hospital's Dialectical Behavioural Therapy (DBT)-Informed Intensive Outpatient Programme (IOP) on clinical variables linked to emotional regulation.

Methods: Pre and post intervention questionnaire data from eight consecutive IOPs were analysed to assess changes in participants' capacities for emotional regulation and related psychological constructs of self-esteem, interpersonal conflict, and impulsivity, as well as for clinical features of anxiety and depression. Demographic and clinical information were also collected to characterise the sample and identify predictors of IOP completion. Participants in the IOP represented a mixed-diagnostic sample.

Results: Participants who were older, had a higher level of education and had not completed a previous DBT programme were more likely to complete the programme as were participants with a diagnosis of Attention Deficit Hyperactivity Disorder. There were no other differences between the completer and non-completer groups, including the pre intervention scores. For those participants who completed the programme and had complete data sets, there was a significant reduction in depressive symptoms as well as improvement in overall emotional regulation capacity.

Conclusions: Results support the use of a DBT-informed IOP for patients from a mixed-diagnostic sample with emotional regulation difficulties. Younger patients, with lower levels of education, and who have not completed a previous DBT programme may benefit from increased support to ensure IOP completion.

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Dedication

I would like to thank Paul Serebro and Lauren Sweidan for their assistance throughout this project.

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Abbreviations

ADHD – Attention-Deficit/Hyperactivity Disorder

BD – Bipolar Disorder

BIS – Barratt Impulsiveness Scale

BPD – Borderline Personality Disorder

DBT – Dialectical Behaviour Therapy

DERS – Differences in Emotional Regulation Scale

GAD – Generalised Anxiety Disorder

HADS – Hospital Anxiety and Depression Scale

IIP – 32 – Inventory of Interpersonal Problems - 32

IOP – Intensive Outpatient Programme

MDD – Major Depressive Disorder

MBT – Mentalization Based Therapy

MDT – Multidisciplinary Team

OPD – Outpatient Department

RSES – Rosenberg Self-Esteem Scale

TAU – Treatment as Usual

USA – United States of America

Appendices

Chapter One: Introduction

1.1 Overview and research rationale

Emotional regulation can be defined as an awareness and acceptance of emotions together with the ability to control impulsive reactions to these affective states (Cisler and Olatunji, 2010; Gratz and Roemer, 2004). In contrast, emotional dysregulation includes a tendency for emotions to spiral out of control, change rapidly, gain expression in intense and unmodified forms, and/or overwhelm both coping and reasoning (Bradley et al., 2011). Deficits in the ability to regulate intense, negative, and/or shifting emotional states may manifest in difficulties with impulsivity (the disposition to act without thinking; (Fossati et al., 2013) as well as problems with self-esteem - a person's evaluation of their own worth and thus how good they feel about themselves (Leary, 1999). Emotional dysregulation also typically leads to difficulties in interpersonal interactions because intense emotions of jealousy or anger, for instance, impact negatively on friendships as well as collegial and romantic relationships (Linehan, 2015).

Individuals who cannot effectively manage their emotional responses to everyday events experience longer and more severe periods of distress than individuals who are better able to regulate their emotions (Aldao et al., 2010). These prolonged periods of distress may evolve into diagnosable psychiatric conditions.

Various therapeutic approaches have been developed to help overcome emotional dysregulation. One of the most common and frequently utilised interventions is dialectical behaviour therapy (DBT) (Aldao et al., 2010). DBT aims to teach specific behavioural skills that are aimed to replace maladaptive with adaptive skills (Rudge et al., 2017). A major focus is emphasis on mindfulness which is a multifaceted construct which includes "nonreactive observation and description, and activity with awareness without judgment" (Mochrie et al., 2019, p.3).

In addition to the Standard DBT developed by Linehan and colleagues, various DBT-informed Intensive Outpatient Programmes (IOPs) have also been implemented and studied for use with groups of mixed diagnostic sample participants who experience pronounced distress and obvious emotional regulation difficulties (e.g., Gratz et al., 2006; Ritschel et al., 2012).

Since mid-2013, Tara, the H. Moross Centre, a state psychiatric hospital in Sandton, Johannesburg, has offered a DBT-informed IOP, which was developed by experienced psychologists in the adult outpatient department (hereafter Tara OPD psychology team). The programme was started for patients with significant emotional regulation difficulties. At the start and end of each programme, participants were requested to fill out various questionnaires assessing broad aspects of emotional dysregulation in order to assess the efficacy of the intervention viz. the Barratt Impulsiveness Scale (BIS-11); the Hospital Anxiety and Depression Scale (HADS); the Inventory of Interpersonal Problems (IIP-32); the Rosenberg Self Esteem Scale (RSES); and the Difficulties in Emotion Regulation Scale (DERS) (see Methods section for further information about the scales). To date, however, these data have not been analysed, and the efficacy of the IOP in improving emotional regulation has not been established.

1.2 Aims and objectives

The broad aim of the study was to investigate the effect of Tara Hospital's DBT-informed IOP on various aspects of emotional regulation in the eight groups that ran between April 2013 and August 2015. The three main objectives were:

1. To capture relevant demographic and clinical data to characterise the study sample;
2. To identify factors that predicted drop out from the programme; and
3. To compare the participants' pre- and post-intervention scores from various questionnaires assessing different aspects of emotional regulation

1.3 Hypothesis and predictions

It is hypothesised that completion of a DBT-informed IOP would result in an overall improved capacity for emotional regulation. Specifically, it was predicted that participants who completed the intervention programme would show decreased impulsivity (as measured by the BIS-11); decreased anxiety (as measured by the HADS); decreased depression (as measured by the HADS); decreased interpersonal conflict (as measured by the IIP-32); improved self-esteem (as measured by the RSES); and improved emotional regulation (as measured by the DERS).

Chapter Two: Literature review

2.1 Emotional Regulation

Regulation of our emotions is fundamental to good mental health (Gross and Munoz., 1995). Emotional regulation occurs both consciously and unconsciously (Rottenburg and Gross, 2007). Learning how to regulate emotions starts in infancy, continues throughout development, and is influenced by biological (e.g., emotional sensitivity, inherent regulation abilities, speed of return to baseline emotional arousal after being triggered) and environmental factors (e.g., attachment, learning opportunities, trauma) (Crowell et al., 2009). The ability to regulate our emotions in the face of rapidly changing experiences and circumstances is a prerequisite for successful functioning, yet is often one of life's biggest challenges (Gross, 1998).

Emotional regulation examines how individuals influence, manage, experience, and express their emotions. Emotionally-regulated adults are those who are aware of their emotions, are able to interpret the meaning of their emotions and can manage how that emotion is expressed independent of the context. These individuals tend to manage and cope with life's demands better than those who struggle to self-regulate.

Emotionally-regulated individuals display the ability to stop inappropriate impulsive behaviours and conduct themselves in an appropriate manner. This behaviour and conduct is in keeping with their own expectations and frames of reference and remains stable even when experiencing negative feelings and thoughts.

The ability to regulate our emotions is essential for optimal functioning of the three overlapping domains of mental health (Gross and Munoz., 1995). These include the domains of work, relationships and inner life. In order to be productive at work as well as adhere to rules and certain etiquette in the workplace, individuals require the capacity to regulate emotions. This capacity is also required to sustain relationships. These include friendships as well as intimate relationships. Gross and Munoz also discuss a third domain. The inner life domain speaks about an individuals' ability to

regulate emotions while having a “sense of comfort with oneself” (Gross and Munoz., 1995, p.155). Aldao and colleagues highlights the same need for “successful” emotional regulation and how it is linked to the promotion of physical and mental health, sound relationships and advancement in the workplace (Aldao et al., 2010, p.218).

In the article by Aldao and colleagues (2010), they examine successful/adaptive emotional regulations versus unsuccessful/maladaptive emotional regulations strategies. The study is a meta-analysis of 114 studies conducted between 1985 and 2008. The sample size is large and can hence give a fairly reasonable estimate of effect which would not have been possible with a smaller sample. The methodology appears sound and is generalizable to various contexts. The limitations are of those which one would anticipate with a meta -analysis, such as publication bias. The authors may have only reported studies that supported their hypothesis and there is no guarantee regarding the quality of the studies incorporated into the meta-analysis. Another important limitation is that most of the studies included were based on self -report questionnaires which are subjective and open to interpretation by the patient.

2.2 Emotional Dysregulation

Unsuccessful regulation of emotions is known as emotional dysregulation. This implies that the strategies employed to manage emotions have failed and ultimately culminates in “more of the very emotion that the individual is trying to regulate” (Jazaieri et al., 2013, p. 587). The emotional response to distress tends to persist for longer and with greater intensity (Aldao et al., 2010). “A failure to regulate intense, negative and shifting emotional states causes emotional dysregulation” (Bradley et al., 2011, p. 685).

Bradley et al (2011) , considers emotional dysregulation and the concept of negative affect. They propose that the inability to regulate one emotions may result in mental illness. They also highlight the interaction between a person’s temperament , their genetics and early life experiences and that it can impact on the development of unsuccessful emotional regulation. The study comprised assessment of various self-report scales which are subjective, and the sample was homogeneous in that the

majority of participants were African-American and from a low income bracket. This limits the ability for the study to be generalizable however the discussion and findings are interesting and can certainly serve as a basis for other studies with a larger more heterogeneous sample.

Disturbances in the capacity to regulate emotions optimally may result in maladaptive behaviours and perceptions. These include disturbances that may manifest in difficulties with interpersonal interactions, impulsivity, as well as low self-esteem.

2.2.1 Interpersonal problems

Interpersonal problems are defined as a person's having chaotic and intense relationships marked with difficulties. They may cause psychological problems, possibly because the quality of human interpersonal relationships is a main determinant of psychological wellbeing (McEvoy et al., 2013).

Models of psychopathology suggest that interpersonal problems are implicated in the formation and maintenance of mental illness. Interpersonal problems may manifest as major depression, generalized anxiety and even eating disorders (McEvoy et al., 2013). Individuals with emotional dysregulation may often have distorted views of others and "maladaptive interpersonal schemas" which may impact on patterns of relating to others (DiMaggio et al., 2013, p.628).

2.2.2 Impulsivity

Emotional dysregulation has been linked to a variety of impulsive behaviours. Certain groups of individuals, especially those with high levels of emotional dysregulation, may be "more likely to engage in irresponsible behaviours in an attempt to alleviate or distract themselves from certain emotional states" (Weiss et al., 2012, p.456).

Impulsivity may additionally interfere with one's ability to be aware of one's emotional state and may lead to an inability to harness appropriate coping strategies (Fossati et al., 2013).

2.2.3 Low self-esteem

Low self-esteem can be a causative factor in depression, anxiety disorders, eating disorders, social anxiety and even risk-taking behaviours (Mann et al., 2004). Low self-esteem can cause unstable positive and negative affect as well as high reactivity to daily interpersonal stress (Ziegler-Hill, 2006).

2.3 Psychiatric manifestations of emotional dysregulation

Emotional regulation deficits may contribute to the development of psychiatric conditions (Gratz and Roemer, 2004) including major depressive disorder (MDD) (Nolen-Hoeksema et al., 2008), bipolar disorder (BD) (Bayes et al., 2016), generalized anxiety disorder (GAD) (Mennin et al., 2007), eating disorders (Bydlowski et al., 2005), posttraumatic stress disorder (Cloitre, 2002), borderline personality disorder (BPD) (Fossati et al., 2014) and attention-deficit/hyperactivity disorder (ADHD) (Retz et al., 2012).

2.3.1 Major depressive disorder

Emotional regulation strategies, especially ones used to cope with negative emotions, appear to be strongly linked to depressive disorders (Compare et al., 2014, p.3). MDD is a prevalent disorder of emotional dysregulation that impacts on all aspects of an individual's quality of life. Studies show that emotional dysregulation is one of the contributing components in the "development and maintenance of depression" (Compare et al., 2014, p.4).

2.3.2 Bipolar disorder (BD)

According to Bayes, when compared with healthy individuals, patients with BD tend to display greater difficulty regulating their emotions even when their moods are euthymic. They tend to be more impulsive and employ poor coping strategies in order to regulate their emotions. In BD, the affect tends to be less reactive to external stressors and is rather triggered by an internal cue. (Bayes et al., 2016)

2.3.3 Anxiety disorders

Emotional regulation plays an important regulatory role in anxiety disorders. Evidence suggests that maladaptive emotional regulation strategies are characteristic of people with anxiety disorders especially generalized anxiety disorder. The strategies employed and the capacity to regulate emotions is instrumental in determining onset and maintenance of anxiety disorders (Cisler and Olatunji, 2012).

2.3.4 Eating disorders

An association between eating disorder symptoms and the use of maladaptive emotional regulation strategies is suggested (Oldershaw et al., 2015).

Alexithymia is defined as “difficulty identifying, naming and experiencing emotions” (Krentzman et al., 2015, p.2). It is associated with negative emotions and addictive behaviours including eating disorders. Emotional dysregulation is an inability to balance emotions and respond appropriately to external environmental triggers. Successful emotional regulation seeks to overcome alexithymia and factors that stop people from effectively regulating emotions.

According to Bydlowski eating disorders are “an impairment of emotional processing” (Bydlowski et al.,2005, p. 321). Anorexic patients struggle to differentiate between bodily sensations and internal emotions. It is therefore implied that eating disorder patients struggle with alexithymia. In the Bydlowski study, their participants showed

evidence of unsuccessful emotional processing. These unsuccessful processing attempts cause “intense, often uncontrolled affective reactions” (Bydlowski et al., 2005, p.326).

2.3.5 Complex trauma

Complex trauma is trauma that occurs “repeatedly and cumulatively, usually over a period of time and within specific relationships and contexts” (Courtois, 2004, p.412). Individuals that are exposed to trauma for an extended period of time and during particular developmental periods may go on to manifest a constellation of psychological problems. These include depression, anxiety, poor self-esteem, impulsivity, interpersonal problems and somatisation. These manifestations fall under the umbrella of the symptoms of complex trauma. The presenting conditions are difficult to treat and the presentation of symptoms may vary depending on the age of the individual or the developmental stage of life in which the trauma occurred. Other factors that may influence the presenting symptoms include the relationship of the perpetrator of the trauma to the victim, the complexity of the trauma and the seriousness and duration of the traumatic exposure (Courtois, 2004).

Adult survivors of childhood trauma often engage in highly risky behaviour and often find themselves in dangerous situations. They also show an impaired ability to regulate their emotions. These characteristics of “emotional lability, relational instability, impulsivity and an unstable sense of self” (Courtois, 2004, p. 415) resemble the same characteristics that define individuals with borderline personality disorder (BPD) but at the same time these manifestations of behaviour are in fact an adaptation to severe abuse and attachment problems in both childhood and adulthood (Courtois, 2004).

2.3.6 Borderline personality disorder (BPD)

Borderline personality disorder is often regarded as the prototype of a disorder that is characterised by emotional dysregulation. This emotional dysregulation can be considered a consequence of an interaction between individual emotional vulnerability and an invalidating environment (Haynos and Fruzzetti, 2011). According to Swales et

al. (2000), individuals with BPD often present with multiple areas of dysregulation. These areas include (1) affective dysregulation that encompasses marked reactivity of mood and at times inappropriate intense anger; (2) behavioural dysregulation which involves impulsivity in at least two areas that are self-damaging; (3) interpersonal dysregulation which reflects the individuals' fear of real or imagined abandonment; (4) self-dysregulation, which presents as an unstable sense of self, and (5) cognitive dysregulation and its manifestation as either paranoia or dissociative symptoms.

Several theorists have hinted that emotional dysregulation is the primary problem underlying the features of BPD. Looking at it from this perspective, it would imply that impulsive behaviour is a consequence of the individuals' attempt to deal with negative emotional states (Fossati et al., 2014).

Two of the core features of BPD are impulsivity and emotional dysregulation (Fossati et al., 2014). Research indicates that emotional dysregulation and impulsivity are among the BPD features that are most stable over time and that emerge as the best predictors at follow-up of overall BPD psychopathology as well as self-harm, identity difficulties, and interpersonal problems (Fossati et al., 2013).

2.3.7 Attention-Deficit/Hyperactivity Disorder (ADHD)

Significant emotional dysregulation, which is a core feature of adult ADHD was described in the Utah theory by Paul H. Wender in 1995. Wender described 3 domains of emotional dysregulation. These included "temper control, affective lability and emotional over-reactivity/stress intolerance" (Retz et., 2012, p. 1242). The Utah model described deficient emotional control as a central feature of ADHD which is caused by a "disturbed two-stage process that comprises emotional impulsivity and subsequent emotional self-regulation" (Retz et al. 2012, p. 1242). Based on this, it is understandable that patients with ADHD may present with significant emotional dysregulation that clinically appears as "impatience, quickness to anger, low frustration tolerance and irritability". (Retz et al., 2012, p. 1242).

2.4 Treatments for emotional dysregulation

There is a dearth of literature on the actual treatment of emotional dysregulation per se.

There is however a significant amount of research and work that has been done in the treatment of BPD. According to Lieb et al. (2004) approximately 97% of patients with BPD "receive outpatient care" (p. 455), during their lifetime with between 9- 40% also frequent users of inpatient care. Despite draining much of the available psychosocial treatment options and pharmacotherapy, these patients also display severe impairment in employment, quality of life, social interactions and overall functioning, hence the need for evidence-based solutions of how to manage their illness, of which emotional dysregulation is a major component. Outpatient programmes in the United States of America (USA) tend to focus on schizophrenia and bipolar disorders and may not have met the needs of those with BPD and other individuals with illnesses that manifest with emotional dysregulation (Lieb et al., 2004, p. 455).There are currently various psychological treatments options available that address emotional dysregulation either as part of BPD or as part of a multitude of other mental illnesses. These include psychodynamic, supportive and cognitive approaches. The American Psychiatric Association recommends psychotherapy as the primary or core evidence-based treatment for BPD and other disorders that present with emotional dysregulation (Oldham et al., 2001). The guideline (2001) does not suggest a specific form of psychotherapy but two forms, DBT and psychodynamic therapies were reported in randomised clinical trials to have shown efficacy.

2.4.1 Psychodynamic-based therapy

One promising treatment is psychodynamically based and incorporates an object relations approach and is known as transference-informed psychotherapy. A paper by Clarkin et al. (2007) compared transference-informed psychotherapy, DBT and supportive therapy. All types of therapy showed some significant "relation to positive change" (p. 926). This highlights that most structured treatments for BPD and emotional dysregulation are equal with respect to broad changes in this type of patient.

Equivalence or similar outcomes were demonstrated in a year-long DBT programme versus general psychiatric management in McMain et al. (2009). In this paper, general psychiatric management encompassed individual psychodynamic psychotherapy, psycho education, helping relationships, here-and-now focus, validation, empathy and emotion focus. Similar treatment outcomes were reported for both interventions in the study which could be explained by the supportive-containing structures both interventions provided to participants.

2.4.2 Mentalization-based therapy

Mentalization-based therapy (MBT) is a type of psychodynamic treatment “rooted” in attachment and cognitive theory (Bateman and Fonagy, 2009, p.1355). It aims to strengthen an individuals’ capacity to understand their own and others’ mental states in attachment contexts so that their own difficulties with emotional dysregulation, impulsivity and interpersonal functioning can be addressed (Bateman and Fonagy, 2009). Bateman and Fonagy (2009) reported that specialist treatment such as MBT showed superior outcomes to routine care as it is delivered in a structured, protocol-driven manner by well-trained and more experienced practitioners. The authors compared MBT to a structured clinical management intervention. This structured clinical management intervention comprised individual and group therapy and a psychiatric consultation every third month. It was based on a counseling model closest to a supportive psychotherapeutic approach. Again, the outcomes were positive for both forms of intervention. This suggests that a structured, integrated psychological treatment for these individuals is beneficial.

2.4.3 Dialectical behaviour therapy

Dialectical behaviour therapy (DBT) was initially developed by Marsha Linehan as a manualised cognitive behaviour therapy for chronically suicidal patients diagnosed with BPD (Linehan, 2015). DBT emphasises the importance of the dialectic of both self-acceptance and change (Ritschel et al., 2012), and seeks to address difficulties with emotional regulation, impulsivity, problematic interpersonal relationships, and poor self-image by providing group skills training (Linehan, 2015). The manualized

outpatient DBT (hereafter “Standard DBT”) includes weekly outpatient groups for a few hours per week over the course of one year and individual therapy and telephonic contact with therapists in between group sessions (Swales et al., 2000; Linehan, 2015).

This standard form of DBT evolved into a treatment for multi-disordered individuals. It has been adapted to treat other disorders that have underlying emotional dysregulation. DBT has also been modified for use in various inpatient, partial inpatient and outpatient settings. Standard DBT based on Linehan’s biosocial model suggests that individuals with BPD have a dysfunction with their emotional regulation system. This system comprises a set of “interdependent systems involving cognition, behaviour, interpersonal relations and self-identity” (Feigenbaum, 2007, p.54).

2.5 Adaptations of DBT in the treatment of other psychopathologies

DBT has been adapted to treat other psychiatric conditions that manifest symptoms of emotional dysregulation. These include binge-eating disorder (Telch et al., 2001) Attention-Deficit /Hyperactivity Disorder (ADHD) (Hesslinger et al., 2002), substance use disorders (van den Bosch, 2002), chronic depression in older adults (Lynch et al., 2003), and in crisis settings (Feigenbaum, 2007; Linehan, 2015; McQuillan et al., 2005).

2.5.1 DBT in substance use disorders

In a research paper by van den Bosch and colleagues (2002) the use of DBT in individuals with BPD with or without comorbid substance use disorders was examined. Standard DBT was shown to as effective for substance abusing individuals as it is for a non- substance abusing group. Van den Bosch found that individuals who participated in the modified DBT group, similar to the one used in 1999 by Linehan, showed a greater reduction in drug abuse pathology throughout the treatment year and at follow up period (16 months later) compared to individuals in the treatment as usual (TAU) group (van den Bosch et al., 2002).

2.5.2 DBT in eating disorders

Telch et al. (2001) looked at a group-based DBT programme for women with binge eating disorder. Following treatment 89% of the participants were abstinent from binges compared with 12.5 % of the control participants. The participants that received DBT showed improvements in bingeing, body image, eating concerns and anger.

2.5.3 DBT in mood disorders

2.5.3.1 Major depressive disorder

Lynch et al. (2003) investigated the use of DBT in elderly, depressed patients. They implemented a DBT skills therapy group over 28 weeks. Of note is that 71% of patients in the DBT and medication group were in remission post treatment versus 47% who were treated with medication only. After six months 75% of individuals were in remission. Elices et al. (2017) found that the use of DBT based interventions had a positive impact on participants' wellbeing and were effective in decreasing depressive symptoms.

2.5.4 DBT in ADHD

A DBT skills training programme was implemented for adults with ADHD. There was a significant reduction in ADHD and depressive symptoms following completion of the programme (Hesslinger et al., 2002).

2.6 Intensive outpatient programmes

Intensive outpatient programmes (IOPs) were introduced in the USA in the 1940s. During the last 20 years IOPs have increased in popularity, as they are cost effective, provide increased structure and support versus typical outpatient programmes. Most of the therapy is delivered in a group format hence services can be delivered to a relatively large number of individuals without putting a strain on resources (Ritschel et al., 2012). IOPs promote an individual's capacity to function in the community while

experiencing a more intense level of structure and support (Smith et al., 2001). IOPs are also described as effective and affordable therapies that treat individuals with severe and persistent mental illness (Blackford and Love, 2011). McQuillan et al. (2005) suggested that successful IOPs had particular characteristics. These included a defined structure, clear focus, attention to compliance, a sound theoretical background but with a shorter duration and higher intensity.

Whereas DBT was initially developed as a 1-year long outpatient psychosocial intervention for individuals with BPD, DBT interventions have since been modified and adapted to treat a variety of disorders. All the symptoms of emotional dysregulation are good targets for DBT-informed IOPs. DBT emphasises the need for acceptance and change. DBT delivered via the IOP allows the therapists the "ability to move more fluidly between two distinct sets of skills therefore allowing flexibility in meeting the needs of a heterogeneous treatment group" (Ritschel et al., 2012, p.222). These IOPs have been developed to encourage participants to function as outpatients in the community by providing intensive psychotherapy and structured group interventions (Smith et al., 2001), and typically have the advantage of being more cost effective than lengthy full-time inpatient hospital stays. IOPs, in contrast to Standard DBT programmes, are typically more supportive, provide greater flexibility, and generally involve patients receiving an increased number of hours of intervention per week but over a shorter time period (McQuillan et al., 2005).

Blackford and Love (2011) looked at DBT IOPs in community mental health settings. They described how individuals with severe persistent mental illness, having multiple diagnoses, and who required many different services in order to maintain a reasonable level of functioning could be serviced by such a programme. They also highlighted that in centres where these individuals lived and worked there was limited state funding and reduced resources. The authors suggest that group therapy in the form of IOPs provides a solution to these challenges. They also suggested that the group intervention should be manual based and the facilitators would require little training in order to run the programme. A DBT-informed IOP would fit these criteria.

Lothes and colleagues (2014) examined IOPs that included individuals with severe mood and anxiety disorders with comorbid personality disorders. They found that

individuals who went on to complete long term (several months - 18 months) programmes had long lasting functional improvements and used fewer inpatient services.

A drawback of IOPs may include a higher rate of dropout from programmes. Due the intensive nature, at times meetings and groups can happen multiple times per week, this level of commitment may be difficult to commit to especially with group participants who work and have families. Also, the level of homework required may be excessive as demonstrated by Blackford and Love (2011) in their study.

2.7 Programme dropout

A broad range of variables is thought to predispose individuals to dropout from groups. De Panfilis and colleagues (2012), although not specifically looking at IOPs in their study and taking into account that their study may have had a different profile of dropout, suggested that sociodemographic variables such as younger age, lower education level and occupational status; personality and psychological variables such as lack of empathy, impulsivity, anxiety, avoidance, schizoid and narcissistic traits and certain clinical variables such as baseline mental illness and previous treatment history and comorbid substance abuse would be some factors that may influence an individual's decision to drop out from any psychotherapy group.

The study focused on early dropout (less than 3 months) in a group of individuals with BPD seeking treatment in general psychiatric services. In their study, 33% of participants dropped out. The results of their study indicate that certain factors were associated with early dropout. Surprisingly none of the suggested sociodemographic variables were found to be predictors of dropout. Instead, they found that a history of a least one previous suicide attempt and the diagnosis of a narcissistic personality disorder predicted early dropout. They also found that having a comorbid eating disorder and avoidant personality disorder reduced the incidence of dropout. The authors emphasised that therapist variables and the therapeutic relationship were not measured and are important considerations when examining predictors of dropout.

Gratz et al. (2006) also reported a 33 % dropout from their IOP.

In a paper by Perroud et al. (2010) dropout in an intensive DBT IOP was examined. The length of the programme was four weeks. They collected data from multiple groups who underwent the same programme over a 10-year period. Their aim was to “detect clinical and demographic predictors of dropout”. Their results showed that a decreased level of education, higher number of previous inpatient hospitalisations, those receiving a disability grant and those scoring higher on antisocial traits were more likely to dropout. However, in a multivariate model, adjusted for age and gender, only a low level of education was a significant predictor of dropout. The authors go on to suggest that in line with other research findings, better occupational status, social class and higher level of education predicted continuation of therapy.

Chapter Three: Methods

3.1 Introduction

The aim of the study was to characterise and assess the efficacy of the Tara Hospital DBT-informed IOP which ran between April 2013 and August 2015, and to determine predictors of dropout from the treatment programme. The methodology chapter describes the study procedure, the group participants, the DBT-informed IOP, the questionnaires used to assess changes in clinical variables over the course of the programme, and the data analysis.

3.2 Study Background

3.2.1 DBT-informed IOP

The Tara OPD DBT-informed IOP was designed by experienced clinical psychologists based on DBT principles taken from the DBT Skills Training Manual (Linehan, 1993). Sample size and duration of the IOP was determined by the group numbers and the period over which the psychologists collected data.

3.2.2 Group participants

Potential participants were referred from within Tara Hospital, from other public and private institutions, or by private mental health care practitioners, primarily by psychiatrists. Two to four members of the Tara OPD psychology team interviewed potential participants to determine their suitability for the programme. There were clear inclusion and exclusion criteria that the psychologists used to screen the potential participants prior to entry into the group. Their inclusion criteria included having participants that had significant difficulties with affect dysregulation and resultant interpersonal difficulties. All participants had to be of 18 years of age or older. Many had personality disorder traits and/or a personality disorder/s (excluding antisocial personality disorder). Having traits or a personality disorder was not an inclusion

criterion. Potential participants were carefully screened to assess their commitment to undertaking the programme and to attending all sessions, and to gauge whether they had sufficient available support (e.g., family, friends, or an individual psychologist) to help them to stay committed to attending the entire programme. All group participants who had participated in the groups during the period of April 2013 to August 2015 and who had filled in forms, made up the study group.

Referred participants who did not meet the above criteria, or who fulfilled any of the following exclusion criteria, were referred elsewhere for more appropriate intervention: actively suicidal with a plan; in need of an inpatient admission; about to experience a major impending life event (e.g. change of job, possible emigration, or holiday/event) that would disrupt the group process; possessing very poor insight into their condition; actively psychotic; and/or assessed as having an antisocial personality disorder or significant traits.

Participant data included in this review thus includes data from all the participants who had taken part in the eight DBT-informed IOPs which ran between April 2013 and August 2015, and who had given written informed consent for the questionnaire data collected and their patient file information to be used in retrospective record reviews (n=59; no participant declined the use of their data in retrospective record reviews). The study sample thus was not selected based on a specific psychiatric diagnosis and represents a mixed-diagnostic sample. Medication and other forms of intervention (e.g., concurrent individual therapy; psychiatric consults) were uncontrolled.

3.2.3 Intervention Programme

The programme's duration ranged between eight and 12 weeks (depending on logistical constraints, such as staff availability and the requisite number of suitable patients to start a group). Around six to nine participants were included in each programme. During the first six weeks of the programme, participants attended the IOP for three days a week, in the late afternoon/early evening, resulting in 11 hours in total per week. On two of these days (Mondays and Wednesdays), participants took part in initial one-hour long "check-in" sessions, during which they reported back to the group and the group therapists on events that had occurred since the last group and were

helped to contain difficult experiences or emotions. After a short break, participants engaged in a two-and-a-half hour DBT Skills Training session, run by two intern clinical psychologists and at times also a community service clinical psychologist. On the Tuesday, participants first partook in a one-hour occupational therapy group, run by one occupational therapist, which emphasised group team building and the use of DBT skills in a practical manner. This was followed by a one-and-a-half hour long Interpersonal Group which was psychodynamically-informed and non-directive but made use of DBT language to help participants better understand group dynamics and their involvement therein. This group was run by either two permanent OPD psychologists, or one permanent OPD psychologist and a community service clinical psychologist. For the remaining two to six weeks of the programme, participants attended the Tuesday Occupational Therapy and Interpersonal Group sessions only. This meant they attended once a week only.

Experienced psychologists, who had a good understanding of group therapy and DBT, trained and supervised all junior staff members on a weekly basis to ensure consistent implementation of the designed programme.

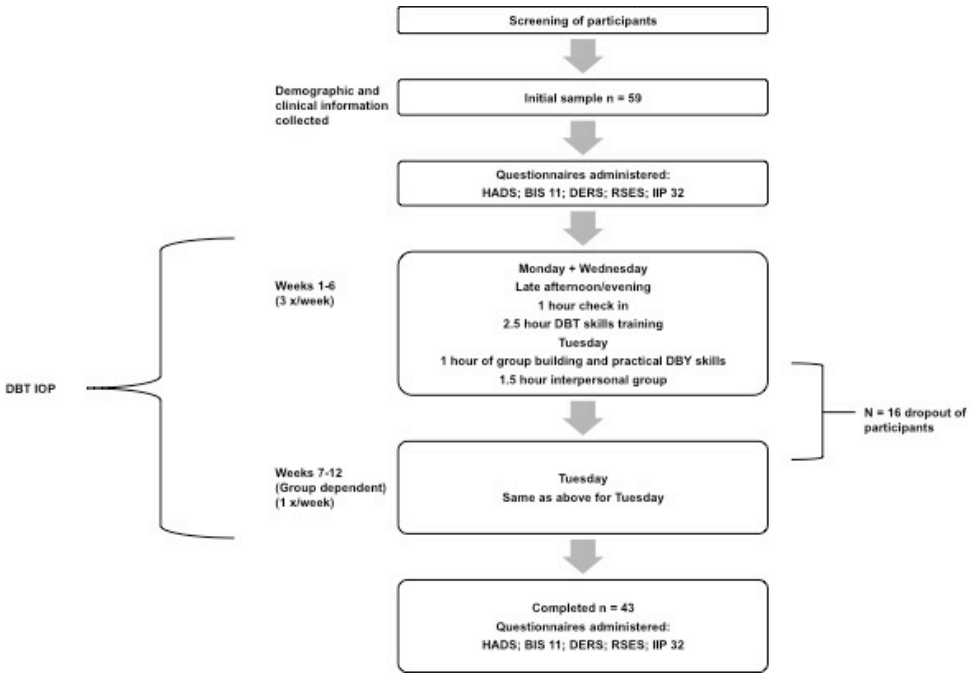

Figure 1: Flow diagram of participant progress through phases of the DBT IOP and collection of questionnaires

3.2.4 Questionnaires

Five self-report questionnaires designed to measure broad aspects of emotional regulation were administered to participants at the start and end of each programme. The questionnaires included the Barratt Impulsiveness Scale (BIS-11); the Hospital Anxiety and Depression Scale (HADS); the Inventory of Interpersonal Problems (IIP-32); the Rosenberg Self Esteem Scale (RSES); and the Difficulties in Emotion Regulation Scale (DERS) (see below for further information about the questionnaires). Unfortunately, none of the questionnaires used in this study have been normed in South Africa. They are, however, measures that are commonly used in international studies to assess the efficacy of interventions for affect dysregulation (Soler et al., 2009).

3.2.4.1 The Hospital Anxiety and Depression Scale (HADS)

The HADS is a 14-item self-report questionnaire incorporating anxiety and depression subscales (Zigmond and Snaith, 1983). Of the 14 items included, seven load on the anxiety subscale while the other seven load on the depression subscale. Each item is measured on a four-point scale (each question has four different answer options) and then scored from zero to three, with zero indicating the least anxious/depressed response and three indicting greater severity of symptoms. Total scores for each subscale range from zero to 21 and are categorised as: normal (0–7), mild (8–10), moderate (11–14) or severe (15–21) (Whelan-Goodison, 2009). Numerous studies have demonstrated the HADS's good concurrent validity and internal consistency (Bjelland et al., 2002).

3.2.4.2 The Barratt Impulsiveness Scale (BIS-11)

The BIS-11 is a 30-item self-report instrument that assesses the personality/behavioural construct of impulsiveness (Stanford et al., 2009). It is arguably

the most administered self-report measure specifically designed to assess impulsiveness in both research and clinical settings (Stanford et al., 2009). The BIS-11 comprises 30 items describing common impulsive or non-impulsive behaviours and preferences that are scored on a four-point scale with one corresponding to “Rarely/Never” and four to “Almost Always/Always”. The BIS-11 comprises three second order subscales: attentional, motor and non-planning (Stanford et al., 2009). These second order subscales are comprised of various first order factors that contribute to each subscale. The attentional subscale includes items on attention and cognitive instability. The motor subscale includes motor and perseverance measures. Lastly, the non-planning subscale highlights self-control and cognitive complexity. The BIS-11 displays satisfactory internal consistency and retest reliability (Vasconcelos et al., 2012). The cut off for the normal range is 72.

3.2.4.3The Rosenberg Self Esteem Scale (RSES)

The RSES is one of the most widely used measures of global self-esteem in social science research (Sinclair et al., 2010). The tool comprises 10 items, five of which are positively and five negatively worded. Four response categories are used (“Strongly Disagree”, “Disagree”, “Agree”, “Strongly Agree”) and the total RSES is scored on a metric ranging from 10 (poor self-esteem) to 40 (excellent self-esteem). The RSES also has two subscales, each composed of two items: the self-competence (SC) subscale and the self-liking (SL) subscale. SC is described as ‘‘feeling you are confident, capable and efficacious’’ and SL is seen as ‘‘feeling you are good, socially relevant and maintain group harmony’’ (Schmitt and Allik, 2005). The RSES and its two subscales have demonstrated good internal consistency and construct validity (Sinclair et al., 2010).

3.2.4.4 The Difficulties in Emotion Regulation Scale (DERS)

The DERS is a 36-item measure developed to assess clinically relevant difficulties in emotional regulation, specifically in areas related to the “awareness of and understanding of emotions; [the] acceptance of emotions; the ability to engage in goal-directed behaviour, and refrain from impulsive behaviour, when experiencing negative

emotions; and access to emotion regulation strategies perceived as effective" (Gratz & Roemer, 2004, p. 43). Items are scores on a five-point Likert scale, where one is "Almost Never", two is "Sometimes", three is "About Half the Time", four is "Most of the Time", and five is "Almost Always" (Gratz and Roemer, 2004). The DERS provides a total overall score as well as scores for six subscales, encompassing different aspects of emotional regulation. These subscales are: "Nonacceptance of Emotional Responses" (nonacceptance), "Difficulties Engaging in Goal-Directed Behaviour" (goals), "Impulse Control Difficulties" (impulse), "Lack of Emotional Awareness" (awareness), Limited Access to Emotion Regulation Strategies (strategies), strength and "Lack of Emotional Clarity" (clarity) (Gratz and Roemer, 2004). Higher total and subscale scores indicate greater difficulties with emotion regulation (Gratz and Roemer, 2004).

According to Fowler and colleagues (2014), the DERS demonstrates good internal consistency, test-retest reliability, and construct validity.

3.2.4.5 The Inventory of Interpersonal Problems 32 (IIP-32)

The IIP-32 is a 32-item measure with eight subscales reflecting different types of interpersonal problems. These subscales include problems relating to competition (hard to be assertive versus too aggressive), socialising problems (hard to be sociable versus too open), issues with nurturance (hard to be supportive versus too caring) and independence challenges (hard to be involved versus too dependent). The IIP-32 total and subscale scores demonstrate adequate internal consistency in outpatients and in non-clinical settings (Barkham et al., 1996). Cronbach's alphas for each scale show acceptable to excellent reliability. Limited validity data are available (Vanheule et al., 2006)

3.3 Study Design

This study comprised a retrospective review of questionnaire data collected by the Tara OPD psychology team for participants taking part in eight of their DBT-informed IOPs between April 2013 and August 2015. The type of study design was thus a

retrospective file review. Participants' files were reviewed to collect demographic and clinical information.

3.4 Setting

The study was conducted in the adult OPD at Tara, the H. Moross Centre, a 140-bed tertiary psychiatric hospital located in Sandton, Johannesburg, South Africa. Tara Hospital provides inpatient and outpatient psychiatric services to members of the surrounding communities and is also a University of the Witwatersrand training and research site. The hospital staff includes a variety of mental health care practitioners who work in multidisciplinary teams comprising psychiatrists, psychiatric registrars, clinical psychologists, community service psychologists, intern clinical psychologists, social workers, occupational therapists, nurses, and dieticians.

3.5 Data collection

Demographic and clinical information were collected from each participant's file including: gender; age; relationship status; population group; home language; living arrangements; previous participation in a DBT course/programme; psychiatric diagnoses; number of previous inpatient admissions; and psychiatric medications. Whether a participant completed the programme or dropped out was also recorded. Scores from pre- and post-intervention questionnaires were recorded as well. The inclusion of population group was important as it gave us an indication of the majority of participants population group origins and this could then be applied to the ability of this particular group to be generalizable in our current South African population.

3.6 Data analysis

Data analysis was carried out using SAS version 9.4 for Windows. The 5% significance level was used.

3.6.1 Predictors of dropout

The X^2 test was used to assess the relationship between course completion status and categorical demographic and clinical variables. Fisher's exact test was used for 2 x 2 tables or where the requirements for the X^2 test could not be met. The strength of the associations was measured by Cramer's V and the phi coefficient respectively. The following scale of interpretation was used: 0.50 and above indicated a high/strong association, 0.30 to 0.49 a moderate association, 0.10 to 0.29 a weak association and below 0.10, little if any association. The relationship between course completion status and age was assessed by the independent samples t-test. The strength of the association was measured by the Cohen's d. The following scale of interpretation was used: 0.80 and above suggested a large effect, 0.50 to 0.79 a moderate effect, 0.20 to 0.49 a small effect and below 0.20, a near zero effect.

3.6.2 Comparison of pre- and post-intervention scores on questionnaires

The significance in change in score for each scale (or subscale) from the pre to post evaluation was evaluated by modelling the change in score (post-pre), controlling for the pre score and group, using a General Linear Model.

3.7 Ethics

Only data that were accompanied by the participant's written informed consent for use in retrospective reviews was used. Ethics clearance was obtained from the Wits Medical Ethics Committee (M150959) and the Tara Hospital Research Committee prior to commencement of the study.

Chapter Four: Results

In the Results chapter, firstly the demographic and clinical characteristics of the patients who took part in the DBT-informed IOPs are reported. Next, dropout rate and predictors of dropout are reviewed. Changes in questionnaire scores between the start and end of the programme were analysed.

4.1 Participant demographics

The median age of the sample was 40 years (range 21 – 68 years). The participants were mostly female (78%) and mostly single (66%). Most of the participants were white (83%) and spoke English as their first language (81%). Many of the participants were unemployed (46%) yet the majority had a matric (59%). The demographics of the sample are recorded in Table 1.

Table 1: Demographics of the participants (n = 59) who took part in the eight DBT-informed IOPs between April 2013 and August 2015.

Demographic characteristic		**% (n)**
Gender	Female	78 (46)
	Males	22 (13)
Relationship Status	Single	66.1 (39)
	In a relationship	33.9 (20)
Living arrangements	Renting	55.9 (33)
	Living with family	28.8 (17)
	Living in own property	15.3 (9)
Population Group	White	83.1 (49)
	Black	8.5 (5)
	Coloured	8.5 (5)
	Indian	0 (0)
Language	1st language English	81.4 (48)
	2nd language English	18.6 (11)
Employment	Unemployed	45.8 (27)
	Employed	40.7 (24)
	Self-employed	6.8 (4)
	Student	6.8 (4)
Highest Level of Education	< Matric	8.5 (5)
	Matric	59.3 (35)
	Undergraduate	27.1 (16)
	Postgraduate	5.1 (3)

4.2 Participant clinical characteristics

Almost a quarter of the participants (n = 14) had previously completed a DBT course, and 81% (n = 48) had previously had an inpatient admission. On entry into the DBT-informed IOP, nearly all participants were under the treatment of a psychiatrist (97%; n = 57) and seeing a psychologist (92%; n = 54) as well. Most of the referrals to the group programme was done by psychiatrists.

Ninety-two percent (n = 54) of the participants were taking some form of psychotropic medication (see Figure 2) including antidepressants (81.5%), mood stabilisers (77.8%), antipsychotics (46.3%), anxiolytics (22.2%) and depot antipsychotic preparations (3.7%). A portion of the participants (38.9%) were taking other medications for various medical conditions e.g., levothyroxine for hypothyroidism.

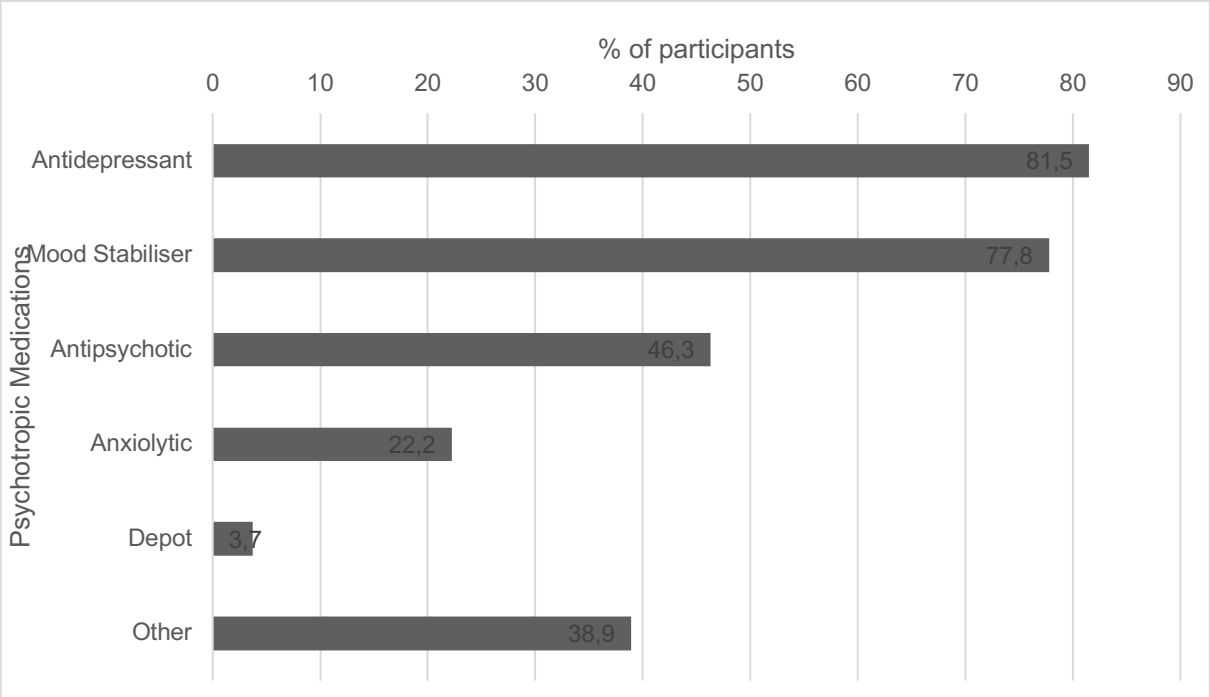

Figure 2**:** Participant (n = 59) psychotropic medication use. Percentages sum to more than 100% as the participants were on more than one class of psychotropic medication:

- Antidepressant = fluoxetine, sertraline, or citalopram;
- Mood stabiliser = lamotrogine, sodium valproate;
- Antipsychotic = risperidone, olanzapine;
- Anxiolytic = alprazolam, clonazepam;
- Depot antipsychotic= flupenthixol, zuclopenthixol

The most common diagnoses seen in the sample are summarised in Figure 3, with personality disorders (88%; n = 52) and mood disorders (81%; n = 48) being the most represented.

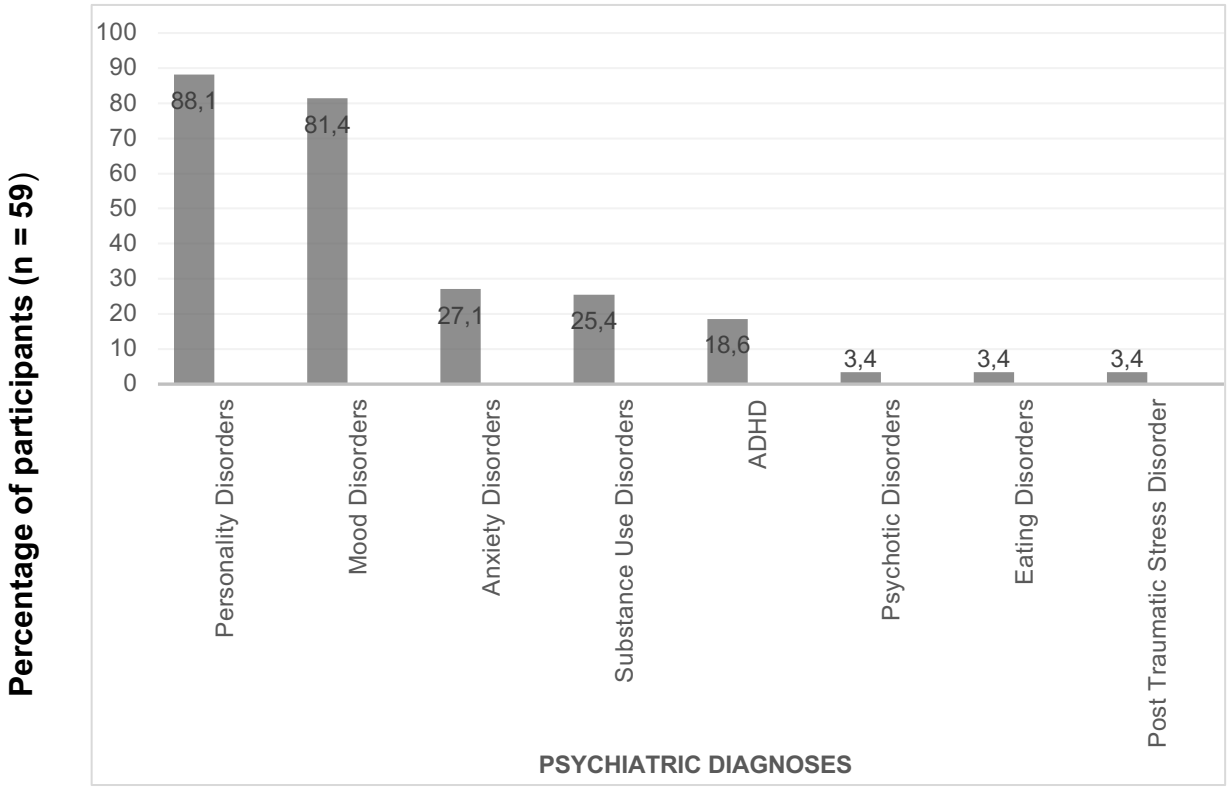

Figure 3: Psychiatric diagnoses of sample participants. ADHD = Attention-Deficit/ Hyperactivity Disorder.

4.3 Dropout rate and predictors of dropout

Of the 59 participants who started the DBT-informed IOP at Tara Hospital, 43 (72.9%) completed the programme. The median age of the non-completion group (29.5; interquartile range 26-40 years) was lower than that of the group who completed the course (40; interquartile range 33-47 years) (Wilcoxon rank sum test: p=0.031). The effect size was small (r=0.29).

There was a significant association between highest level of education and completion status (Fisher's exact test: p=0.0077; phi coefficient=0.39). The non-completion group had a higher proportion of participants with matric and a lower proportion with undergraduate education, compared to the group who completed the course. There was a significant, but weak, association between previous DBT exposure and completion status (Fisher's exact test: p=0.040; phi coefficient=0.29): with participants who had previously participated in a DBT programme less likely to complete the current DBT informed IOP (a total of 44% of the non-completion group had participated in a

DBT programme previously, compared to 16% in the group who completed the course). Finally, there was a significant, but weak association between being diagnosed with ADHD and completion status (Fisher's exact test: p=0.026; phi coefficient=0.29). None of the participants (0%) in the non-completion group had ADHD, compared to 26% in the group who completed the course. With the exception of the above findings, none of the other demographic, clinical, or questionnaire ratings predicted dropout.

4.4 Treatment outcomes

A comparison of pre- and post-intervention scores on the administered questionnaires of the 43 participants who completed the DBT-informed IOP was performed. Post intervention scores were not available for four of the participants (questionnaires not completed/ lost), and some pre interventions scores were unavailable for three other participants (questionnaires not completed/ lost). Depending on the questionnaire, the sample size for the pre- and post-intervention comparison was 37 or 38. A p-value of <0.05 was considered significant. The results of these analyses are summarised in Table 2.

Questionnaire	Pre-intervention		Post-intervention		Mean (95% CI) for change, controlling for group	p-value
	mean	SD	mean	SD		
Hospital Depression and Anxiety Scale (HADS) (n = 37)						
Depression	10.9	4.4	7.2	3.7	-8 (-13 to -3)	**0.0018**
Anxiety	15.0	4.1	11.9	4.0	-4 (-8 to 1)	0.14
Difficulties in Emotional Regulation Scale (DERS) (n = 38)						
TOTAL	122.8	23.7	100.8	26.7	-34 (-60 to – 8)	**0.015**
Non acceptance	21.3	6.6	16.5	6.7	-6 (-13 to 2)	0.15
Goals	18.8	4.6	16.6	4.6	-2 (-7 to 3)	0.42
Impulsivity	20.5	6.0	16.2	6.1	-8 (-15 to -2)	**0.024**
Awareness	18.7	4.8	16.8	5.2	-7 (-13 to -1)	**0.024**
Strategies	27.3	6.3	21.4	6.8	-10 (-17 to -2)	**0.016**
Clarity	16.2	3.6	13.4	3.9	-1 (-7 to 4)	0.62
Barratt Impulsiveness Scale (BIS-11) (n = 37)						
TOTAL	78.4	11.1	73.5	11.1	-7 (-16 to 2)	0.12
Attentional	21.6	3.9	19.6	3.3	-3 (-7 to 1)	0.14
Motor	27.7	4.8	25.9	4.7	-4 (-8 to 1)	0.12
Non planning	29.1	4.8	27.9	5.6	0 (-5 to 5)	0.87
Inventory of Interpersonal Problems 32 (IIP-32) (n = 37)						
TOTAL	63.5	19.0	54.2	18.1	-5 (-26 to 17)	0.67
How sociable	7.2	3.4	6.3	2.5	-2 (-6 to 2)	0.29
How assertive	7.7	4.0	6.8	2.9	-1 (-5 to 3)	0.64
Too aggressive	8.5	3.8	7.1	3.8	-1 (-4 to 3)	0.73
Too open	7.6	3.3	7.2	3.0	-2 (-4 to 1)	0.23
Too caring	6.1	4.1	4.9	3.5	-1 (-4 to 6)	0.51
How supportive	9.1	3.4	8.0	3.6	-1 (-4 to 6)	0.23
How involved	8.0	3.3	6.8	3.1	-1 (-4 to 3)	0.73
Too dependent	9.6	3.5	8.5	4.0	0 (-5 to 5)	0.90
Rosenberg Self Esteem Scale (RSES) (n = 38)						
TOTAL	18.8	5.8	15.9	6.5	0 (-5 to 5)	0.89
Self competence	7.7	3.3	6.1	3.1	-1 (-4 to 2)	0.45
Self liking	11.2	3.1	9.8	3.9	1 (-3 to 4)	0.71

Table 2: Means, standard deviations with pre-and post-intervention measures. Significant values are given in bold.

4.4.1 Hospital Anxiety and Depression Scale (HADS)

There was a significant improvement in depressive symptoms after completing the DBT-informed IOP (Table 2), with mean post intervention scores on the HADS Depression subscale reducing to 7,2. The score decreased by an average of eight points (95% CI: -13 to -3). Figure 4 shows how the scores decreased from a mean score of 10.9 to 7.2. The score at pre intervention suggested mild to moderate depressive symptoms in the participant sample which decreased to normal levels post intervention. (Whelan-Goodison, 2009). On the HADS anxiety subscale, there was a reduction in the mean score from 15.0 to 11.9, but this was not statistically significant, and the scores pre- and post-intervention remained within the clinically elevated range.

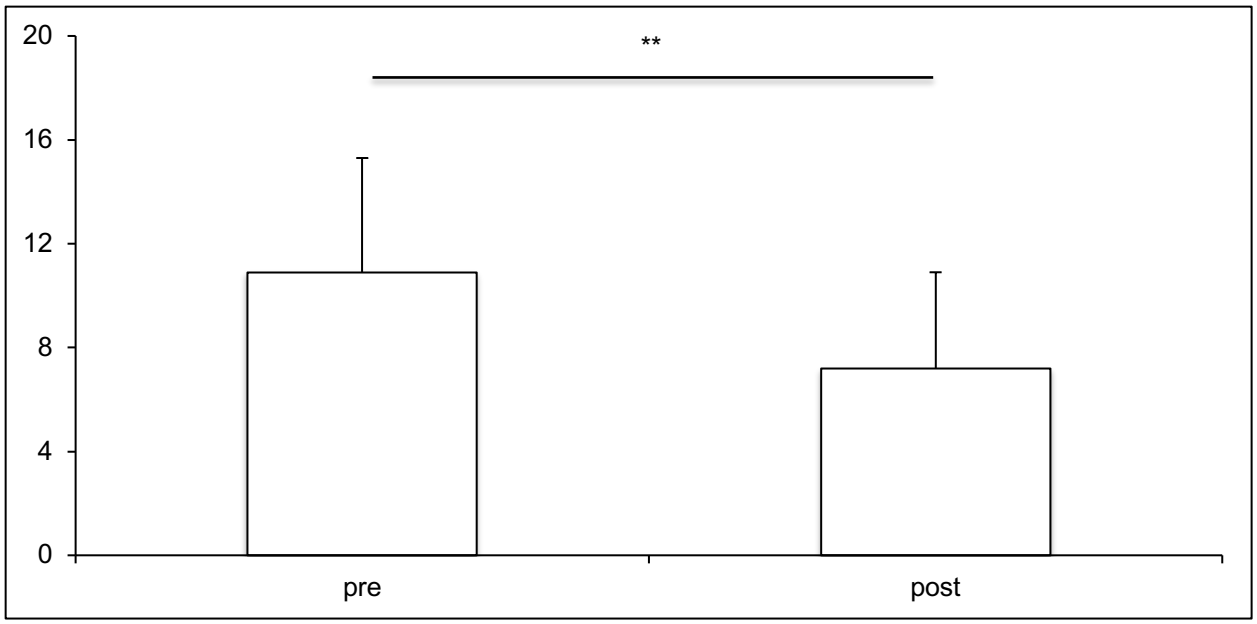

Figure 4**:** Graph showing pre- and post-intervention Hospital Anxiety and Depression Scale (HADS) - Depression subscale scores (** p=0.0018)

4.4.2 Difficulties in Emotion Regulation Scale (DERS)

The second significant change was seen in the overall DERS score as well as in three of the subscales. Participants also showed significant improvement in their ability to regulate their emotions (DERS Total Score; p=0.015; Figure 5), and specifically in the following facets of emotional regulation: better access to different strategies to regulate feelings (STRATEGIES Subscale; p=0.016; Figure 6), better impulse control (IMPULSE Subscale; p= 0.024; Figure 7) and improved emotional awareness (AWARENESS Subscale; p=0.024; Figure 8). Whilst overall levels of emotional dysregulation remained above levels reported for community samples, access to more effective emotion regulation strategies and impulse control improved to within normal limits.

There were changes noted in all the subscales in a positive way, however all except non acceptance, goals and clarity, were statistically significant. Non-acceptance resulted in a shift from 21.3 to 16.5. Goals shifted from 18.8 to 16.6. Impulsivity moved from 20.5 to 16.2. Awareness decreased from 18.7 to 16.8. Strategies also showed improvement from 27.3 to 21.4 and lastly clarity shifted from 16.2. to 13.4.

The DERS subscales scores that provided the reference ranges for the community norms were taken from the initial validation of the DERS scale undertaken by Gratz and Roemer in 2004. Their sample was drawn from undergraduate psychology students at the University of Massachusetts, Boston, United States of America.

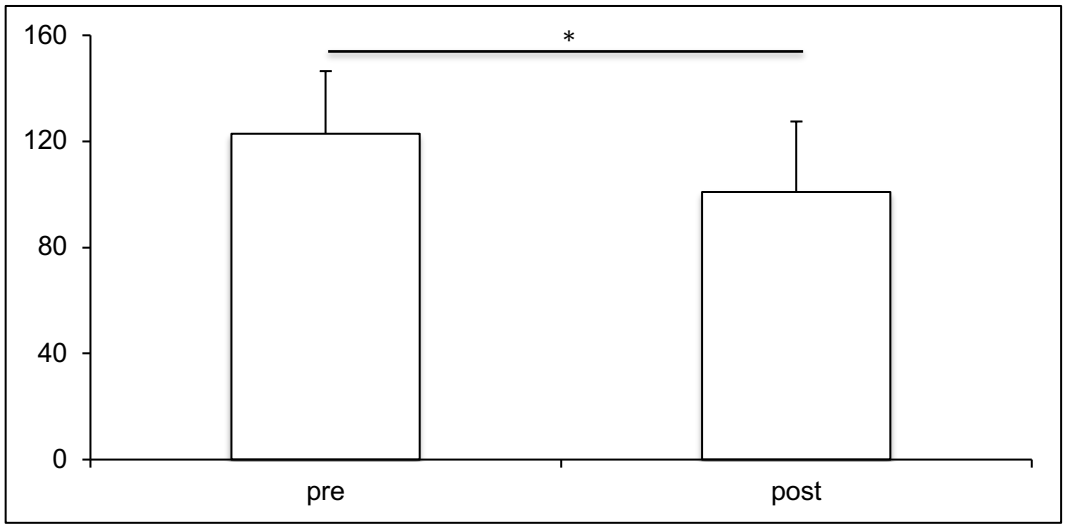

Figure 5: Graph showing Difficulties in Emotion Regulation Total (DERS) score pre- and post-intervention (*p=0.015)

The DERS Total score decreased by an average of 34 points (95% CI: -60 to -8). Scores in the DERS Total subscale went from 122.8 to 100.8 and resulted in a statistically significant change in overall emotional regulation scores (p=0.015).

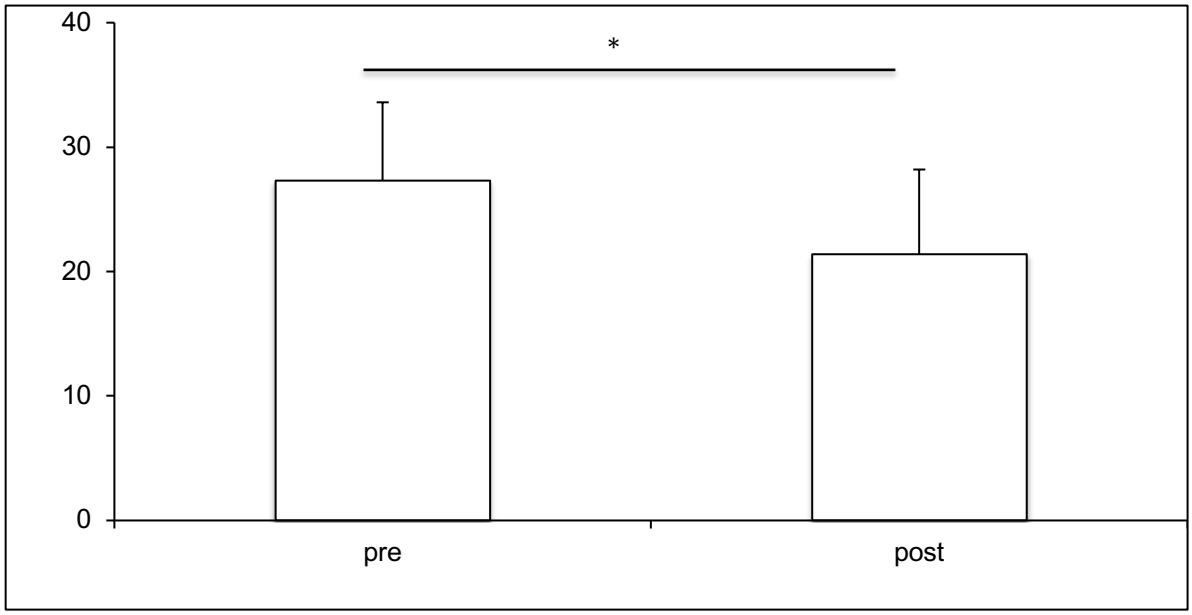

Figure 6: Graph showing Difficulties in Emotion Regulation- Limited Access to Emotion Regulation Strategies (STRATEGIES) Subscale score pre- and post-intervention

DERS Limited Access to Emotion Regulation Strategies subscale decreased by an average of 10 points (95% CI: -17 to -2). In the DBT IOP sample the scores from pre to post intervention decreased from 27.3 to 21.4 (p-value = 0.016). The Tara hospital sample showed a statistically significant decrease in the score on this subscale. The community norm for this subscale is 10.61 in females and 10.74 in males. (Gratz and Roemer, 2004).

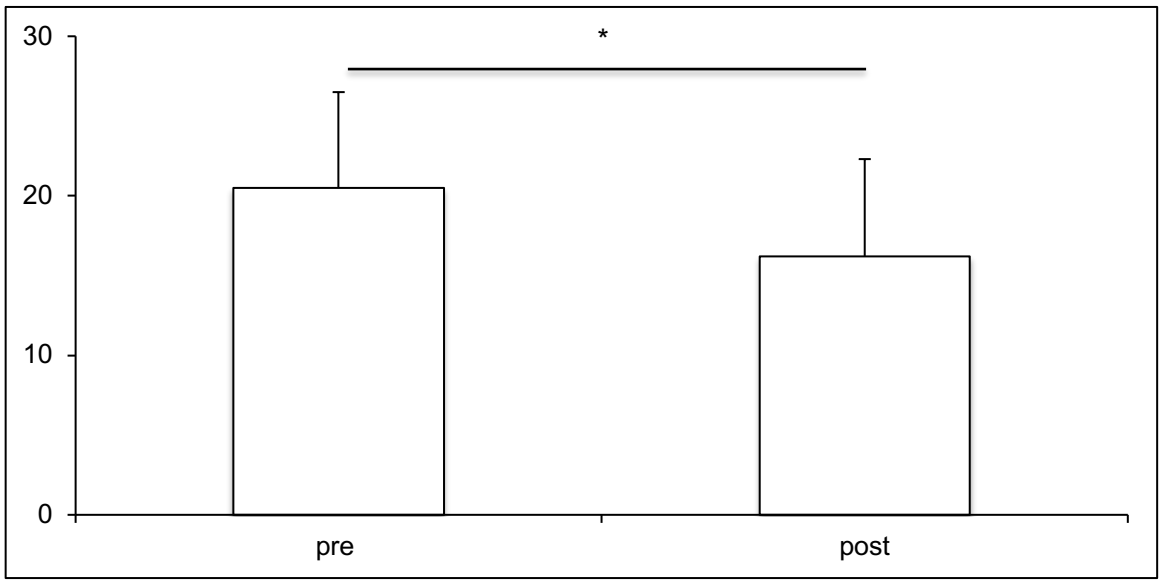

Figure 7**:** Graph showing Difficulties in Emotion Regulation (DERS) Impulse Control Difficulties (IMPULSE) Subscale score pre- and post-intervention

On the DERS Impulse Control Difficulties subscale the score decreased by an average of 8 points (95% CI: -15 to -2). The scores on this subscale decreased from 20.5 to 16.2 (p-value = 0.024). According to the pre intervention scores, the sample was above the community norm at the outset but the scores on the impulse subscale improved to within the community norm when looking at the post intervention scores. The community norm for females was 14.34 and 16.26 in males. (Gratz and Roemer, 2004).

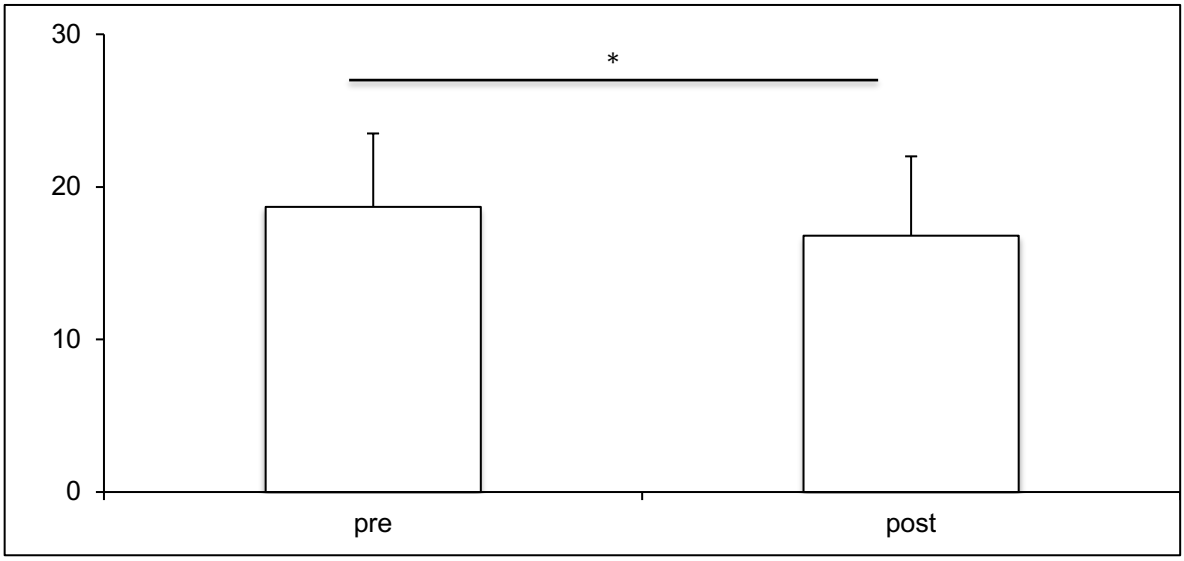

Figure 8: Graph showing Difficulties in Emotion Regulation (DERS) Lack of Emotional Awareness (AWARENESS) Subscale score pre- and post-intervention

The DERS Lack of Emotional Awareness subscale showed a decrease in score by an average of 7 points (95% CI: -13 to -1). The scores here went from 18.7 pre intervention to 16.8 post intervention (p-value = 0.024). The community norm in females was 16.16 and 16.23 in males.

4.4.3 The Barratt Impulsiveness Scale (BIS-11)

On reviewing the data from the BIS-11, there was an improvement from a total score of 78.4 to 73.5 following the intervention. They suggest that total scores of 72 or more are indicative of highly impulsive individuals. All the second order subscales also showed a decrease in scores from pre to post intervention. The DBT-informed IOP did however show some improvement in lowering the overall score, the scores on the various subscales and hence the degree of impulsivity in various domains. Changes noted in the BIS-11 were not statistically significant.

4.4.4 The Inventory of Interpersonal Problems (IIP-32)

A review of the scores revealed a downward trend across all the scales from pre to post testing. The total score ranged from zero to 128. Scores ranged from zero (no problems) to 16 (extreme problems) in the various subscales. The scores correlate with a “level of distress” in various domains that encompass interpersonal relations. The higher the score, the greater the degree of distress. The results reveal that the DBT IOP reduced scores correlating to distress within various interpersonal domains. None of the changes noted in the IIP-32 were statistically significant.

4.4.5 Rosenberg Self Esteem Scale (RSES)

The total self-esteem score ranges from zero to 30. In this sample the total score decreased from 18.8 at the start to 15.9 at the end of the intervention. The self-competence subscale ranges from zero to 15. The scores on this subscale dropped from 7.7 to 6.1 following the intervention. The second subscale, the self-liking scale scores dropped from 11.2 to 9.8. The subscale also ranges from zero to 15. The changes seen in the RSES were not statistically significant.

Chapter Five: Discussion and conclusion

5.1 Summary and interpretation of main results

The primary goal of this study was to determine if a DBT-informed IOP had a positive or negative impact on a mixed sample of participants' emotional regulation. Of interest, but not an aim of the study, was to assess if the selection of the five domains (mood and anxiety symptoms, impulsivity, interpersonal difficulty, self-esteem and overall emotional dysregulation) were useful in addressing the problems experienced by this group of participants and if these domains could be later generalised and used to inform further DBT IOPs in the future. Two further goals were to describe the demographic and clinical characteristics of the participants in order to assist with streamlining and selection of DBT IOP participants and in doing so try to ensure the success of future groups and to try and identify predictors of dropout from the intervention.

In this mixed diagnostic sample, the DBT-informed IOP showed improvement across all areas that were measured by the chosen questionnaires. Changes in HADS depression scale were found to be statistically significant. Upon completion of the IOP, the HADS depression scale mean score of participants was actually below the clinical norm.

There was also a statistically significant change seen in the total DERS score. More specifically, following the intervention, participants appeared more able to access strategies to regulate difficult emotions, they appeared to display less impulsivity and they displayed better overall emotional awareness. The DERS subscales of awareness, impulsivity and strategies also showed a statistically significant reduction.

Of note is that participant mean scores were above norms in all the questionnaires. This indicates that all individuals did all indeed struggle with emotional regulation and associated difficulties (as measured by the various questionnaires) hence the screening and selection done by the psychologists was thorough and appropriate.

One aim of the study was to determine predictors of dropout. In this study the rate of dropout was 27%. This is slightly lower than the percentages reported in another international study (Gratz et al., 2006). Possible reasons for the lower dropout rate include a very thorough screening of participants as well as very high levels of support offered for struggling participants. Predictors of dropout from this study included younger age, lower level of education (Perroud et al., 2010), previous DBT and not having a diagnosis of ADHD. Having undertaken previous DBT groups as a predictor of future dropout suggests that perhaps the participants who had presented earlier and had already undergone some sort of intervention had more severe pathology (as evidenced by their increased baseline scores pre intervention), and hence required multiple interventions. Due to the severity of their pathology, this may have impacted on their capacity to remain in the group. This highlights the need for those individuals at risk to receive more attention as many of the participants struggled with complex severe mental illness.

Patients with a lower level of education may have struggled with the content of the group. They may have experienced some difficulty understanding and applying the content, but it could also be their income, resource accessibility and level of support that may have impacted on the inability of certain participants to stay in the group.

The diagnosis of ADHD was not made at the time of inclusion into the programme. Participants had either previously been given the diagnosis or it was given by the referring clinician. There was never an objective measurement of symptoms nor a definitive diagnosis of ADHD undertaken at the time of the interview for inclusion into the programme.

An interesting observation is the fairly high percentage of patients being treated with antipsychotic medication, despite only 3.4% of participants having been diagnosed with a psychotic illness. The use of this class of medication could be explained by its use in the treatment of micropsychotic symptoms in BPD, but also for behavioural control, mood regulation and containment of impulsivity, which is prominent in this group of patients. Additionally, the use of mood stabilisers is frequently used at 77.8% and the medication was most likely used for containment of dysregulated affect, seen regularly in this patient population. According to Olabi (2010), various pharmacological

interventions (antidepressants, mood stabilisers and antipsychotics), are often used for symptomatic treatment in BPD.

Of interest is that in many cases, no clear diagnoses of BPD were made but rather an umbrella term of “personality disorders” was used. This may be due to the stigma associated with the BPD label and the anxiety evoked in labelling patients as having BPD. It also may suggest the clinician's anxiety in attempting to treat BPD. If a condition is labelled as a mood disorder or even ADHD, it may be easier to justify use of psychotropic medication and may decrease anxiety experienced by the clinician when treating the patients with diagnoses that are challenging to manage.

The group was considered successful as it was highly structured and focused on specific DBT skills training which has been proven to be effective in other DBT-informed IOPs internationally (McQuillan et al., 2005; Smith et al., 2001). The treating team also encouraged use of the DBT skills in in everyday situations, which in turn reinforced the newly acquired emotional regulation strategies (Feigenbaum, 2007). The IOP may have also reduced the social isolation felt by many participants. This was most likely due to the sense of community and belonging felt by the members who participated in a well-coordinated, highly structured group. This factor also possibly accounts for the improvement in the depression scale.

These results suggest that the Tara DBT–informed IOP shows promise as an intervention strategy for a mixed diagnostic sample.

5.2 Limitations

The first limitation was the small sample size. The study initially had 59 participants but due to dropout only data from 37-38 participants was used. This impacted on the statistical analysis and hence was not of a significant power.

It would have been useful to have follow-up at six, 12 and 18 months following the intervention. It would have been important to know if the changes in the questionnaire

scores actually translated into functional improvements such as less hospitalisation and decreased self-harm.

The mixed diagnostic sample essentially mimics the typical clinical setting of patients seen at Tara Hospital. It had predominantly white, female, English speaking participants who held a matriculation certificate. The fact that the group is so diagnostically diverse may make it difficult to interpret specific findings. It may also make it difficult to generalise our findings to other South African settings. Of note is that none of the questionnaires have been normed on a South African population.

Of concern are the results from the Rosenberg Self Esteem Scale. It is a psychometrically sound measure of self-esteem; however, it may be limited in its capacity to consider all facets of self-esteem and hence the low scores that were seen in the study. It is also a self-report questionnaire so it may not give us a truly objective or valid measurement of the individual's self-esteem. It may prove useful to consider another more objective measure of self-esteem in future studies and see if the outcome on self-esteem scores is similar.

According to literature, DBT is an effective intervention in the treatment of BPD, eating disorders (bulimia nervosa), ADHD, major depressive disorder, suicidality and is helpful with patients in psychological crisis. However, there appear to be certain requirements that aid in running a successful group. One of these requirements include using a manual-based approach (i.e., one that has been trialed and used previously and set out fairly rigidly with a set structure) (Feigenbaum, 2007). Our DBT-informed IOP was derived from various resources as opposed to one resource with a sound theoretical background. According to Swenson et al. (2002), lack of adherence to a treatment programme as specified by Linehan (1993), as in "modifications to the programme and extensions to populations not previously involved" can impact on efficacy and overall outcome of the group. This lack of adherence to a specific treatment programme may have impacted on the intervention's overall success. Another factor may also include the therapeutic alliance set up between the group leaders and participants. A good therapeutic alliance is a useful predictor of therapy outcome (Di Maggio et al. 2013) however this study was unable to determine the efficacy of the therapeutic alliance between participants and the therapists.

5.3 Conclusion

DBT works for emotional dysregulation facets including depression, anxiety, impulsivity and interpersonal issues. However, if one evaluates the results, it does not appear to be as effective in the management of self-esteem issues in this particular patient population. In conclusion it was felt that the Tara Hospital DBT-informed IOP was successful at reducing some symptoms associated with emotion dysregulation and depression in a mixed diagnostic sample.

In terms of future studies, it may be beneficial to reproduce the same study in a different South African setting. This appears to be the first study of its kind undertaken on a South African population. It would also be beneficial to do follow up studies to see if the changes persisted following completion of the IOP.

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APPENDIX A:

Data Capture Sheet

Participant #	Group:

Demographic Data

Age

18 –25 years	26 – 30 years	30 – 40 years	40 – 50 years	50< years

Gender

Female	Male

Relationship Status

Single	Married	Divorced	Widowed	Living with Partner

Ethnicity

Black	White	Asian	Coloured

Home Language

English	Afrikaans	Sesotho	Setswana	isiXhosa	isiZulu

Living Arrangements

Rent	Own	Family

Clinical Data

Previous Participation in DBT Programme

Yes	No

Other Interactions

Psychotherapy	NA	AA	Other

Current Psychiatric Diagnosis

Mood	Anxiety	Personality	Psychotic	Substance Use	Eating

Inpatient Admissions

Yes	No	# if Yes

Current Psychiatric Medication

Yes			No		
Antidepressant	Anxiolytics	Antipsychotics	Mood Stabilisers	Depot Preparation	Other

Did participant complete the DBT IOP?

Yes	No	If No, why?

Scale Data

Scales Administered

Name of Scale	Pre-Treatment Score	Post-Treatment Score
HADS		
BIS-11		
RSES		
DERS		
IIP-32		

APPENDIX B:

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Tara, The H. Moross Centre
Department of Psychology
Tel: 011 535 3067 Fax: 011 535 3026

ADULT INFORMED CONSENT FOR PSYCHOLOGICAL SERVICES

I, ... (full name), hereby consent to (mark applicable boxes):

Psychotherapy (including individual, couples, family, and/or group)	☐
Psychological assessment (including emotional, personality, cognitive and/or neurocognitive)	☐
Clinical information to be discussed with the treating team at the hospital	☐
Clinical information to be discussed with senior professionals for consultation purposes	☐
Sessions to be audio- or video-recorded by the treating psychologist for discussion with senior professionals for ongoing training purposes	☐
Clinical information to be used in retrospective research or record review, provided that my confidentiality and anonymity are assured	☐
My treating professional contacting the following people for collateral information / in case of emergency	☐

Name	Relationship	Contact details
.....	.....	.....
.....	.....	.....
.....	.....	.....

Complete if psychological services are rendered by a student or intern psychologist

I am aware that I am being seen by a student / intern psychologist (delete whichever is not applicable) and that:

The student or intern will regularly discuss my case with a supervising psychologist; and I have the right to confer with the supervising psychologist about the psychological services received	☐

By signing this informed consent document I am indicating that:

1. I understand the nature of the psychological services offered to me;
2. I am aware that confidentiality will be broken if I am a risk to myself or others or if required by law;
3. I agree to the interventions / practices marked above.

.....	.....	.....
Patient name	Patient signature	Date
.....	.....	.....
Witness name	Witness signature	Date

All users of psychological services are protected in terms of regulations set by the Health Professions Council of South Africa:
http://www.hpcsa.co.za/downloads/conduct_ethics/rules/generic_ethical_rules/booklet_3_patients_rights_charter.pdf

APPENDIX C:

Hospital Anxiety and Depression Scale (HADS)

Tick the box beside the reply that is closest to how you have been feeling in the past week.
Don't take too long over you replies: your immediate is best.

D	A		D	A	
		I feel tense or 'wound up':			**I feel as if I am slowed down:**
	3	Most of the time	3		Nearly all the time
	2	A lot of the time	2		Very often
	1	From time to time, occasionally	1		Sometimes
	0	Not at all	0		Not at all
		I still enjoy the things I used to enjoy:			**I get a sort of frightened feeling like 'butterflies' in the stomach:**
0		Definitely as much		0	Not at all
1		Not quite so much		1	Occasionally
2		Only a little		2	Quite Often
3		Hardly at all		3	Very Often
		I get a sort of frightened feeling as if something awful is about to happen:			**I have lost interest in my appearance:**
	3	Very definitely and quite badly	3		Definitely
	2	Yes, but not too badly	2		I don't take as much care as I should
	1	A little, but it doesn't worry me	1		I may not take quite as much care
	0	Not at all	0		I take just as much care as ever
		I can laugh and see the funny side of things:			**I feel restless as I have to be on the move:**
0		As much as I always could		3	Very much indeed
1		Not quite so much now		2	Quite a lot
2		Definitely not so much now		1	Not very much
3		Not at all		0	Not at all
		Worrying thoughts go through my mind:			**I look forward with enjoyment to things:**
	3	A great deal of the time	0		As much as I ever did
	2	A lot of the time	1		Rather less than I used to
	1	From time to time, but not too often	2		Definitely less than I used to
	0	Only occasionally	3		Hardly at all
		I feel cheerful:			**I get sudden feelings of panic:**
3		Not at all		3	Very often indeed
2		Not often		2	Quite often
1		Sometimes		1	Not very often
0		Most of the time		0	Not at all
		I can sit at ease and feel relaxed:			**I can enjoy a good book or radio or TV program:**
	0	Definitely	0		Often
	1	Usually	1		Sometimes
	2	Not Often	2		Not often
	3	Not at all	3		Very seldom

Please check you have answered all the questions

Scoring:
Total score: Depression (D) _____ Anxiety (A) _____
0-7 = Normal
8-10 = Borderline abnormal (borderline case)
11-21 = Abnormal (case)

APPENDIX D:

BIS-11

Name: ..... Date: .....

People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and put an X in the appropriate column on the right side of the page. Do not spend too much time on any statement. Answer quickly and honestly.

	Rarely / Never	Occasionally	Often	Almost Always / Always
1 I plan tasks carefully.	1	2	3	4
2 I do things without thinking.	1	2	3	4
3 I make up my mind quickly.	1	2	3	4
4 I am happy-go-lucky.	1	2	3	4
5 I don't "pay attention."	1	2	3	4
6 I have "racing" thoughts.	1	2	3	4
7 I plan trips well ahead of time.	1	2	3	4
8 I am self controlled.	1	2	3	4
9 I concentrate easily.	1	2	3	4
10 I save regularly.	1	2	3	4
11 I "squirm" at plays or lectures.	1	2	3	4
12 I am a careful thinker.	1	2	3	4
13 I plan for job security.	1	2	3	4
14 I say things without thinking.	1	2	3	4
15 I like to think about complex problems.	1	2	3	4
16 I change jobs.	1	2	3	4
17 I act "on impulse."	1	2	3	4
18 I get easily bored when solving thought problems.	1	2	3	4
19 I act on the spur of the moment.	1	2	3	4
20 I am a steady thinker.	1	2	3	4
21 I change residences.	1	2	3	4
22 I buy things on impulse.	1	2	3	4
23 I can only think about one thing at a time.	1	2	3	4
24 I change hobbies.	1	2	3	4
25 I spend or charge more than I earn.	1	2	3	4
26 I often have extraneous thoughts when thinking.	1	2	3	4
27 I am more interested in the present than the future.	1	2	3	4
28 I am restless at the theatre or lectures.	1	2	3	4
29 I like puzzles.	1	2	3	4
30 I am future oriented.	1	2	3	4

1

APPENDIX E:

IIP-32

Here is a list of problems that people report in relating to other people. Please read the list below, and for each item, consider whether that problem has been a problem for you with respect to any significant person in your life. Then select the number that describes how distressing that problem has been, and write that number to the left of the item on the line provided.

_____

Not at all	A little bit	Moderately	Quite a bit	Extremely
0	1	2	3	4

Example:

_____ 00. It is hard for me to talk to my relatives.

If you think that this is moderately hard to do, you would put a 2 in the space to the left of the item.

____ 1. It is hard for me to take instructions from people who have authority over me.

____ 2. It is hard for me to be supportive of another person's goals in life

____ 3. It is hard for me to show affection to people.

____ 4. It is hard for me to express my feelings to other people directly

____ 5. It is hard for me to be assertive with another person

____ 6. It is hard for me to argue with another person

____ 7. It is hard for me to let myself feel angry at somebody I like

____ 8. It is hard for me to stay out of other people's business

____ 9. I manipulate other people too much to get what I want

____ 10. It is hard for me to put somebody else's needs before my own

____ 11. It is hard for me to feel close to other people.

____ 12. It is hard for me to open up and tell my feelings to another person.

____ 13. It is hard to be self-confident when I am with other people

____ 14. It is hard for me to feel angry at other people

____ 15. It is hard for me to set limits on other people.

____ 16. I feel too responsible for solving other people's problems.

____ 17. I am too independent.

____ 18. It is hard for me to really care about other people's problems

____ 19. It is hard for me to get along with people.

____ 20. It is hard for me to ask other people to get together socially with me

____ 21. It is hard for me to be another person's boss.

____ 22. I am too gullible

____ 23. I try to please other people too much.

____ 24. I open up to people too much

____ 25. I try to control other people too much.

____ 26. I fight with other people too much.

____ 27. I keep other people at a distance too much

____ 28. I am too afraid of other people

____ 29. I am too easily persuaded by other people

____ 30. It is hard for me to be firm when I need to be.

____ 31.I put other people's needs before my own too much.

____ 32. I want to be noticed too much

APPENDIX F:

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

APPENDIX G:

Participant ID: Date: Assessment #:

Difficulties in Emotion Regulation Scale (DERS)

Please indicate how often the following statements apply to you by writing the appropriate number from the scale below on the line beside each item.

1	2	3	4	5
almost never (0-10%)	sometimes (11-35%)	about half the time (36-65%)	most of the time (66-90%)	almost always (91-100%)

_____ 1) I am clear about my feelings.

_____ 2) I pay attention to how I feel.

_____ 3) I experience my emotions as overwhelming and out of control.

_____ 4) I have no idea how I am feeling.

_____ 5) I have difficulty making sense out of my feelings.

_____ 6) I am attentive to my feelings.

_____ 7) I know exactly how I am feeling.

_____ 8) I care about what I am feeling.

_____ 9) I am confused about how I feel.

_____ 10) When I'm upset, I acknowledge my emotions.

_____ 11) When I'm upset, I become angry with myself for feeling that way.

_____ 12) When I'm upset, I become embarrassed for feeling that way.

_____ 13) When I'm upset, I have difficulty getting work done.

_____ 14) When I'm upset, I become out of control.

_____ 15) When I'm upset, I believe that I will remain that way for a long time.

_____ 16) When I'm upset, I believe that I will end up feeling very depressed.

_____ 17) When I'm upset, I believe that my feelings are valid and important.

_____ 18) When I'm upset, I have difficulty focusing on other things.

_____ 19) When I'm upset, I feel out of control.

_____ 20) When I'm upset, I can still get things done.

_____ 21) When I'm upset, I feel ashamed at myself for feeling that way.

:

Participant ID: Date: Assessment #:

1	2	3	4	5
almost never (0-10%)	sometimes (11-35%)	about half the time (36-65%)	most of the time (66-90%)	almost always (91-100%)

_____ 22) When I'm upset, I know that I can find a way to eventually feel better.

_____ 23) When I'm upset, I feel like I am weak.

_____ 24) When I'm upset, I feel like I can remain in control of my behaviors.

_____ 25) When I'm upset, I feel guilty for feeling that way.

_____ 26) When I'm upset, I have difficulty concentrating.

_____ 27) When I'm upset, I have difficulty controlling my behaviors.

_____ 28) When I'm upset, I believe there is nothing I can do to make myself feel better.

_____ 29) When I'm upset, I become irritated at myself for feeling that way.

_____ 30) When I'm upset, I start to feel very bad about myself.

_____ 31) When I'm upset, I believe that wallowing in it is all I can do.

_____ 32) When I'm upset, I lose control over my behavior.

_____ 33) When I'm upset, I have difficulty thinking about anything else.

_____ 34) When I'm upset I take time to figure out what I'm really feeling.

_____ 35) When I'm upset, it takes me a long time to feel better.

_____ 36) When I'm upset, my emotions feel overwhelming.

SUBSCALE SCORING:**

1. Nonacceptance of emotional responses (NONACCEPT): 11, 12, 21, 23, 25, 29
2. Difficulty engaging in Goal-directed behavior (GOALS): 13, 18, 20R, 26, 33
3. Impulse control difficulties (IMPULSE): 3, 14, 19, 24R, 27, 32
4. Lack of emotional awareness (AWARENESS): 2R, 6R, 8R, 10R, 17R, 34R
5. Limited access to emotion regulation strategies (STRATEGIES): 15, 16, 22R, 28, 30, 31, 35, 36
6. Lack of emotional clarity (CLARITY): 1R, 4, 5, 7R, 9

Total score: sum of all subscales

**"R" indicates reverse scored item

APPENDIX H:

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

To: Dr Otieno

CEO Tara Hospital

15 July 2015

Dear Dr Otieno

Re: Approval Request to conduct Research

I hereby request permission for the following researcher, Dr Caroline Serebro to conduct research at Tara. The title of her research is," **The Effect of a 'Dialectical Behaviour Therapy'-Informed Intensive Outpatient Group Intervention on Individuals with Emotional Regulation Difficulties"**.

The study is towards her MMed(Psych) at the University of Witwaterstrand.

Attached is the proposal. She requires our permission in order to apply Ethics approval. She is aware that research may only commence once we have received documentation indicating her Ethics Approval.

Yours sincerely

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Date: 21/7/2015

Dr Jow'hara Chundra

Chairperson - Tara research Committee

Recommended/Not Recommended

.....

Dr Thebe Madigoe

Clinical Head

Date: 29/7/15

Approved/Not Approved

.....

Dr Florence Otieno

CEO

Date: 29/7/15

As amended
Research may only commence upon receiving Ethics approval and Presenting it to this office

APPENDIX I:

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Tara, The H. Moross Centre

Department of Psychology

Tel: 011 535 3067 Fax: 011 535 3026

Welcome to your first day of your 8 week DBT program. Before we begin with our group, let me briefly outline the course structure for you.

The 8 week DBT outpatient program is an intensive, short term program designed to support, and help you gain greater insight into your feelings, thoughts and actions whilst also learning new ways of coping with your often intensive and overwhelming emotions.

During the first 6 weeks, you will be required to attend the Tara course three times a week, on Mondays, Tuesdays and Wednesdays, from 3pm till about 6.30/7pm. During this time, you will attend Interpersonal groups, DBT groups, DBT in Action Groups, Occupational Therapy and Pharmacological Groups. Once you have completed the first 6 weeks, you will continue with a once weekly group - DBT in Action - for another 2 weeks. This group will take place on a Tuesday from 4.30pm till 6 pm.

Group members who have successfully completed the DBT program and who are willing to commit to further treatment will be considered for the follow up DBT program, which is a year long. This program consists of weekly DBT in actions groups as well as telephonic consultations, which are available to you twice weekly.

As part of the program we are asking you to fill out several questionnaires at the beginning of the course as well as at the end of the program. The various questionnaires are designed to help us gain a better understanding of your capacity to regulate emotions and manage relationships. It will also give us insight into your degree of impulsivity, your level of dissociation, your self-esteem and your mood. Furthermore, the questionnaires will enable us to assess the quality of our program. We may use the data for research purposes and your anonymity is guaranteed. However, should you be uncomfortable in taking part in the research please indicate this in your informed consent form.