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A comparison of self-harming behaviours in two prevalent groups of psychiatric outpatients

by

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Dedication

To my daughter, Lisa, whose love and support motivates me to be the best mother and person that I can be.

Abstract

Self-harming behaviours and suicidality are a serious problem in psychiatric patients with major depressive disorder (MDD) and borderline personality disorder (BPD). Suicidal behaviours are sometimes seen as manipulative and attention-seeking in BPD patients, and are therefore not considered as dangerous as the same behaviours in MDD patients. The Suicidal Feelings and Self-Harm Questionnaire, which examines suicidal intent, was administered to all new outpatients at the Psychiatric Treatment Clinic in the Department of Psychiatry at the University of Alberta Hospital in Edmonton, Canada. Thirty-seven percent of the MDD patients, 78% of the BPD patients, and 77% of patients with comorbid MDD and BPD reported a history of self-harm. Suicidal intent was measured by asking the patients whether they expected to die as a result of their self-harm. There was no statistically significant difference between the diagnostic groups in this regard. This suggests that BPD patients are no less serious about their intent to die than those with MDD.

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List of Abbreviations

5-HIAA	5 - Hydroxyindoleacetic Acid
ANOVA	Analysis of Variance
BPD	Borderline Personality Disorder
CI	Confidence Interval
DHS	Deliberate Self-harm
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision
HASS-I	Harkavy Asnis Suicide Survey
MDD	Major Depressive Disorder
NSSI	Non-suicidal Self-injury
OR	Odds Ratio
PD	Personality Disorder
PREU	Psychotherapy Research and Evaluation Unit
PTC	Psychiatric Treatment Clinic
PYLL	Potential Years of Life Lost
SD	Standard Deviation
SFSQ	Suicidal Feelings & Self-harm Questionnaire
SIS	Suicidal Intent Scale
SPSS	Statistical package for the Social Sciences
SSI	Scale for Suicidal Ideation
UAH	University of Alberta Hospital

Chapter 1

Introduction

Self-harm is a problem that carries a heavy burden for the health care system. Research into the topic has provided many important insights about self-harming behaviour and those who engage in it, yet many aspects of it are still poorly understood. This is an important area for research since up to 15% of self-harmers will eventually commit suicide (Buglass & Duffy, 1978) and a better understanding of the underlying factors may help prevent some of these deaths. Major depressive disorder (MDD) and borderline personality disorder (BPD) are associated with high rates of suicide (up to 15% in MDD and up to 9.5% in BPD; Blair-West et al, 1997; Lönnqvist, 2000; Nemeroff et al., 2001; Nierenberg et al., 2001; Oquendo et al., 2004; Peruzzi & Bongar, 1999; Soloff et al., 2000) but BPD patients engage in self-harm more frequently. This thesis will attempt to provide further knowledge about the intention behind these behaviours in psychiatric outpatients with either MDD or BPD or both disorders.

1. Suicide

1.1. Demographics of suicide

Suicide was the ninth leading cause of death in Canada and the eighth in Alberta in 2005, based on the number of deaths (Statistics Canada, 2009). The overall suicide rate in Canada in 2005 was 11.6 per 100,000, and 3743 people committed suicide, representing 1.6% of all deaths that year. In Alberta the

number of suicides was 412 (2.1%). In terms of potential years of life lost (PYLL), suicide ranks third after cancer and heart disease (Statistics Canada, 1997). The high PYLL rank is due to the fact that suicides commonly occur in young people, and PYLL measures "the relative impact of premature death on the society" (Oleckno, 2002, p. 80). The number of suicides is possibly underestimated as it is based on cause of death ruling, and suicide is often difficult to identify with certainty as a cause of death. For example, if the suicide was committed through a motor vehicle accident, it is nearly impossible to determine that the death was intentional.

Numerous demographic risk factors for suicide have been identified and are widely recognized. Age plays an important role in suicide statistics. In Canada in 2005 the age group that had the highest rate of suicide was 45-49 with a rate of 18.2 per 100 000. The rate in men of this age was 28.8 while the highest rate for women was in the age group 50-54 at 9.8 (Statistics Canada, 2010). While the age distribution of suicide victims has remained fairly constant in the Western world, there has been a rise in the suicide rate of those between the ages of 15 and 24 over recent decades. In many countries the highest rate is in those over 75 years of age (Cantor, 2000).

The prevalence of suicide is higher in males than in females although women are more likely to attempt suicide. The comparatively high suicide completion rate in males can most likely be attributed to the difference in the methods used by men and women; men are reported to use more lethal and violent methods such as firearms (Cantor, 2000; Langlois & Morrison, 2002). Males are

also considered to be more prone to violence and less willing to seek help, and these characteristics may contribute to their suicide attempts being more definitive and successful (Cantor, 2000).

Men committed 2857 suicides in Canada during 2005 (76.3% of all suicides), and suicide ranked seventh as a cause of death for males. In Alberta, men committed 304 suicides (73.8%), and it ranked sixth as a cause of death. Suicide was not among the ten leading causes of death of women either nationally or provincially (Statistics Canada, 2009).

Marital status is associated with suicide; specifically, being separated or divorced appears to be highly correlated with suicide. A research team in Finland found that separation among other stressful life events occurred at a higher rate in the months preceding suicide (Heikkinen et al., 1992). They noted that this is a factor especially in younger men. On the other hand, the lowest rate of suicide is observed in those who are married (Cantor, 2000).

The list of psychiatric risk factors for suicide is extensive. Depression and other affective disorders, schizophrenia, hopelessness, anxiety, alcohol abuse or dependence, personality disorders (especially BPD), childhood abuse, impulsivity, suicidal ideation, and a history of past attempts are all acknowledged risk factors (Appleby, 2000; Berk, 2007; Cochrane-Brink et al., 2000). Comorbidity of two or more mental health disorders further increases this risk (Appleby, 2000).

It is known that over 40% of patients who complete suicide have had some contact with mental health professionals at some time in their lives, and the first twenty-eight days after discharge from hospitalization due to a suicide attempt are

especially important in prevention as this is a period of heightened suicide risk (Appleby, 2000; O'Connor et al., 2004).

Past self-harm and suicide attempts are well-established risk factors for successful suicide (Appleby, 2000; Black et al., 2004; Cochrane-Brink et al., 2000; O'Connor et al. 2004; Welch, 2001). It has been estimated that up to 15% of individuals who have a history of self-harming behaviour eventually commit suicide (Buglass & Duffy, 1978). According to Gunderson and Ridolfi (2001), self-mutilation without suicidal intent doubles the risk of suicide, thus indicating that it is the act, not the intent behind it that puts a person at risk. De Moore and Robertson (1996) followed patients for eighteen years following deliberate self-harm and found that 6.7% of them completed suicide within that time. While a history of self-harm is a good predictor of suicide, it must be noted that most individuals who have engaged in self-harming behaviours do not commit suicide (Black, et al., 2004).

Other risk factors, such as being in a crisis, worry about finances, legal problems, and lack of social support are also important predictors. Brown et al. (2000) studied a group of psychiatric outpatients and found similar risk factors as previous inpatient studies. Suicidal ideation, MDD, bipolar disorders, being unemployed, previous suicide attempts, prior psychiatric hospitalization, and increasing age emerged as unique markers for suicide.

While demographic and clinical risk factors are an important part of identifying patients who are at risk of suicide, they only predict future behaviour at a group level and provide little information about an individual. Additionally, it

is important to evaluate protective factors in order to gain an understanding of the potential for future self-harm. These include resilience, ability to tolerate frustration, coping skills, access to social support, peer affiliation, positive values and reasons for living, as well as one's ability to seek and access help (Appleby, 1997; Health Canada, 2002). While risk factors are not a direct way to identify suicidal individuals, Murphy (1983) states that clinical descriptive studies of risk factors provide important information for clinicians even if they do not improve the opportunity for accurate prediction of suicide.

1.2. Assessment of suicide risk

O'Connor et al. (2004) have argued that prevention of suicide is more likely if detection of suicide risk is improved. Accurate suicide risk assessment improves the effectiveness of suicide prevention, and training mental health professionals to conduct these assessments is important (Appleby, 1997). O'Connor et al. (2004) also encourage clinicians to explore their own views about suicide in order to be aware how it affects their practices with suicidal patients. It is recommended that mental health professionals also consider protective factors for patients, such as social support from others, availability of mental health services, and willingness to seek help since these factors have a substantial impact on the overall risk of an individual and can play a role in preventing suicide deaths (Appleby, 2000; Bryan & Rudd, 2006; O'Connor et al., 2004).

During treatment it is essential for the clinician to remember that suicide risk is not static and should continue be evaluated throughout the course of treatment (Lambert, 2003; Jobes, 2008). It is also important to note that the risk of

suicide is not a factor that is simply present or absent in a given person, but rather, it exists on a continuum in various degrees (Raue et al., 2006). Appleby (1997) notes that "the risk factor approach treats suicide as an event when in reality it is the end-point of a sequence of events" (p.194) and stresses the importance of follow-up assessment, especially after hospitalization.

Joiner et al. (1999) attempted to provide a framework for assessing suicide risk in psychiatric outpatients. They posit seven domains of suicide risk: "previous suicidal behavior; the nature of current suicidal symptoms; precipitant stressors; general symptomatic presentation, including the presence of hopelessness; impulsivity and self-control; other predispositions; and protective factors." (p. 447). They state that the most important aspect of suicide risk assessment is previous history of suicide attempts as well as current ideation, and these two domains need to be the focus of the assessment.

Beck et al. (1979) developed the Scale for Suicide Ideation (SSI) to assess current ideation. They suggest that "since suicide ideation logically precedes a suicide attempt or completed suicide, it seems appropriate to focus on the intensity, pervasiveness, and characteristics of the ideation and wish in order to assess current suicidal intention and potentially to predict later suicide." (p. 344). They specify that suicidal intent is a psychological phenomenon which can be measured while suicide risk refers to a predictive statement about the probability of suicide taking place in the future. They found that the SSI had a moderately high correlation with clinical ratings of suicide risk as well as with self-reports of self-harm.

While there is no one clinical or research measure of suicide risk that can reliably predict suicide, these measures are useful when administered in conjunction with a clinical risk assessment (Cochrane-Brink et al., 2000; O'Connor et al., 2004). They can be helpful and cost-effective in identifying those individuals who require a more thorough clinical assessment. Bürk et al. (1985) add that in order for suicide risk scales to have clinical value, they should be balanced in regard to their sensitivity and specificity. They concur that well-constructed scales are useful in identifying patients who are at risk of future suicide.

Cochrane-Brink et al. (2000) evaluated a number of clinical rating scales of suicidal risk and found that the mode of administration had a large effect on whether patients agreed to participate in the study, with a higher rate of participation for the verbally administered measures. The Beck Scale for Suicidal Ideation emerged as the best pre-existing assessment although the scales examined seemed to overestimate the risk of suicide.

O'Connor et al. (2004) aimed to "provide clinicians with a standardized conceptual map for the assessment of suicide risk" (p. 352). They encourage a reflective practice style to promote openness in the patient. An important part of this is the clinician's self-reflection about his or her own thoughts and feelings about suicide. A good therapeutic alliance is essential in suicide risk assessment. They agree with Jobes et al. (2008) that a patient's risk status is not static, and therefore continuous assessment is important. Eliciting details of past parasuicide is an important component of this assessment since "a history of suicidal

behaviour, especially a previous attempt, is strongly predictive of current risk in a person who is experiencing significant distress." (p. 355). They remind the clinician that even ambivalent attempts that appear to have had a low level of intention are predictive and should not be dismissed. They list a number of "at risk" mental states and these include hopelessness, despair, agitation, shame, guilt, and psychosis. Their recommendation is for the clinician to pay close attention to the patient's body language to observe these states.

Since one of the best predictors of suicide is one's history of suicidal behaviour, it is essential to assess various aspects of these events, such as the number of attempts, their medical severity, and the patient's intent at the time of the attempt (Oquendo et al., 2003). When assessing past suicidal behaviours, it is important to elicit detailed descriptions of the events. Even ambivalent attempts are predictive of future suicidal acts. Jobes et al. (2008) suggest that "adequate assessment of suicide risk should be a thorough, extensive, and multifaceted activity" (p. 406). They stress the importance of asking about various aspects of the patient's suicidal thoughts, such as a history of previous self-harm, the presence of an actual plan for harming themselves, and whether they have access to the means of carrying out the plan. It is important to use objective measures in addition to the clinical interview, e.g., measurements of depression and hopelessness. In order for the risk assessment to be complete it should be conducted in a way that balances both risk and protective factors (Appleby, 1997) and uses nonverbal cues and facial expressions in addition to the patient's verbal

report of their suicidal feelings, as these are less likely to be consciously modified by the patient (Archinard et al., 2000).

2. Self-harm

Intentional self-harm has been found to be strongly associated with suicide and has therefore been studied extensively. Interpretation of this research is complicated by the variability of the terminology used by researchers and clinicians.

"Parasuicide" is a term used widely and is defined as "a non-fatal act in which an individual deliberately causes self-injury or ingests a substance in excess of any prescribed or generally recognized therapeutic dosage" (Kreitmann, 1977, p. 3). Kreitman et al. (1970) initially suggested this term as an alternate to "attempted suicide" due to the fact that they believed the majority of patients considered suicide attempters had no or little intention of killing themselves. "Deliberate self-harm" (DHS) refers to self-destructive behavior that results in bodily damage and is equivalent to self-mutilation. It is potentially fatal but not motivated by a wish to die (Black, 2004; Fliege et al., 2009). "Non-suicidal self-injury" (NSSI) is defined as "the deliberate destruction or alteration of body tissue without conscious suicidal intent that results in significant tissue damage or scarring" by Armey & Crowther (2008), p. 9. Other writers use terms such as suicide attempt, self-injury, suicidal behaviour, self-harming behaviour, etc., and the definitions for these terms are varied and sometimes vague.

We have chosen to use the term (deliberate) "self-harm" as it is self-explanatory and encompasses all types of behaviours that have the potential to cause harm to oneself. Since our goal was to study whether patients in certain diagnostic groups differed in terms of their suicidal intent associated with self-harm, we wished to choose a term that does not imply any specific intent. A number of motivations for self-harm, apart from a wish to die, have been proposed by researchers and clinicians. In some cases these behaviours may be used in an effort to escape or avoid painful feelings and thoughts (Welch et al., 2008), or to solicit caring from others (Gunderson and Ridolfi, 2001). In the following review of literature, the terminology used by the authors will be utilized.

2.1. Prevalence of self-harm

Using routinely collected administrative data, it is difficult to reliably estimate the prevalence of self-harming behaviours that are not classified as suicide attempts since many people who engage in these behaviours never report it, or in cases causing little bodily harm no medical attention is sought. Thus the true prevalence of these behaviours is largely unknown. It has been estimated that there are approximately twenty-five nonfatal suicide attempts for every completed one (Prinstein, 2008).

The lifetime prevalence of suicide attempts in the general population has been estimated to range from 1.1% to 4.4%, with the majority of the attempts occurring in women (Mościcki, 1997; Bebbington et al., 2009). Dyck et al. (1988) reported that 3.6% of people surveyed in Edmonton, Canada had "attempted

suicide" at least once at some time in their lives. The peak prevalence of suicide attempts in both sexes is prior to age 30 (Hankoff, 1982).

Young et al. (2007) studied a population-based sample of 1258 between the ages of 18 and 20. The sample had a lifetime rate of 7.1% of past parasuicide (8.4% in females, 5.8% in males) and the reasons for parasuicide most frequently were relief of anger (51.7%), wanting to forget about something (37.1%), relief of anxiety (27.0%), and to kill oneself (21.3%). Nineteen percent of the sample stated they did not know why they had engaged in parasuicide. The researchers also asked why the person stopped the behavior, and the most common reason to stop was that the person realized the damage it would cause to self and others, or the futility of the act.

2.2. Risk factors for self-harm

A plethora of risk factors for parasuicide have been identified by various authors, and as is the case with suicide, there are protective factors that may inhibit one from acting on their parasuicidal impulses. In a 2009 systematic review, Fliege et al. found empirical support for age as a risk factor, with parasuicide being most common in adolescents and young adults. A gender difference was found in adolescents, with females being more likely to engage in self-harm, but not in adults. Sexual abuse, anxiety, depression, and aggressiveness all emerged as risk factors. The relationship between childhood abuse and suicide attempts appears to be more robust in women (Bebbington et al., 2009). Impulsivity, hopelessness, pessimism, perception that there is no reason for living, and substance abuse also appear to be risk factors for parasuicide (Oquendo et. al.,

2003). Colman et al. (2004) conducted a multivariate study of a large number of potential predictors for repeat parasuicide and identified a history of parasuicide, depression, or schizophrenia and poor physical health as significant factors.

Dyck et al. (1988) studied a random sample of 3258 households in Edmonton, Canada and found that participants who had a psychiatric disorder reported a rate of suicide attempts that was 2.6 times higher than those who had no psychiatric illness. "The greatest relative risks were associated with schizophrenia (23.1), mania (21.0), and panic disorder (17.4)" (p. 67). About half of those with a history of suicide attempts had also experienced at least one episode of MDD or alcohol dependence. Dyck and colleagues also reported that "having thoughts and feelings about wanting to die and committing suicide were strongly associated with having made a suicide attempt in both males and females" (p. 64). The lifetime prevalence rate of suicide attempts differed in men and women with men reporting suicide attempts at the rate of 1.8% compared to 5.5% in women, however, female rates decreased with age, and the authors suggest that this may be due to changes in women's social roles and expectations, and an increased level of stress in younger women compared to older generations. They concluded that people who are young, divorced or single, of female gender, or unemployed are more likely to engage in suicide attempts.

Some evidence has also been found that neurobiological predictors, such as low levels of 5-hydroxyindoleacetic acid (5-HIAA) in the cerebrospinal fluid may play a role in parasuicide (Gunderson & Ridolfi, 2001; Oquendo et al., 2003).

3. Major Depressive Disorder

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) (American Psychiatric Association, 2000) lists nine possible symptoms for major depressive disorder (MDD), and the diagnosis is given if five of these are present concurrently for a period at least two weeks. The criteria are: depressed mood, diminished interest or pleasure in activities, significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate, and "recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide" (p. 356). MDD is further classified as being either first episode or recurrent. The risk of recurrence of MDD increases with each episode. MDD diagnoses are also categorized by the degree of severity as mild, moderate, or severe with or without psychotic elements, or as being in partial or complete remission.

3.1. Prevalence of MDD

Estimates of the lifetime prevalence of MDD in the general population vary across studies, but it has been established that women are at higher risk than men. According to the DSM-IV-TR, the lifetime risk of MDD for women is 10% to 25%, and from 5% to 12% for men. The lifetime rate of suicide in MDD patients is estimated to be approximately 15% (Blair-West et al, 1997; Lönnqvist, 2000; Nemeroff et al., 2001; Nierenberg et al., 2001; Oquendo et al., 2004; Peruzzi & Bongar, 1999).

The lifetime prevalence rate of MDD in Edmonton was 8.6%, and this rate is comparable to results from centres in other developed countries. The rate for women was 11.4% and for men 5.9%, which is similar to gender differences in other western countries (Spaner et al., 1994). Two-thirds (66.6%) of the 344 people reporting a history of MDD had at some time experienced thoughts of death or suicidal thoughts.

3.2. Risk factors for MDD

A number of well documented risk factors exist for MDD. Genetic factors play a role, as a family history of depression is common (Boyd & Wiseman, 1982; Health Canada, 2002). Adverse childhood experiences pose a risk of depression, as do recent negative life events, such as a loss of a relationship. Stress due to financial difficulties, employment, and other factors, is a precursor of MDD for some people, although this seems to be the case for initial episodes more so than recurrent ones (Health Canada, 2002). Chronic medical conditions (e.g., cardiovascular disease, cancer, and HIV) are highly associated with MDD.

MDD has a high risk of recurrence, thus a previous episode of major depression is a risk factor. More than half of the individuals who have experienced an episode of MDD will have a future occurrence (Health Canada, 2002).

4. Borderline Personality Disorder

Historically the term borderline personality disorder (BPD) referred to a condition situated between neurosis and psychosis. In the 1960's BPD became

differentiated from schizophrenia, and Kernberg coined the term "borderline personality organization" (Stone, 1993). The DSM later classified this syndrome as an actual personality disorder.

The diagnosis of BPD is assigned when the patient meets a minimum of five of the nine possible criteria outlined in DSM-IV-TR. These criteria are as follows: frantic efforts to avoid abandonment (real or imagined), a pattern of unstable relationships, identity disturbance, impulsivity, recurrent suicidal behaviour or threats, affective instability, feelings of emptiness, intense anger, and transient stress-related paranoia. Individuals with BPD "display recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior," (p. 707) and these behaviors are often the precipitating factor for seeking treatment. The person with BPD exhibits a "pervasive pattern of instability of interpersonal relationships, self-image, and affects, and a marked impulsivity that begins by early adulthood and is present in a variety of contexts" (p. 706). BPD falls in the so-called cluster B of personality disorders, also referred to as the dramatic, emotional, or erratic disorders in the DSM-IV-TR. The other personality disorders in this cluster are antisocial personality disorder, histrionic personality disorder, and narcissistic personality disorder.

Mortality through suicide in BPD patients is estimated to be nearly as high as in MDD at 7.8% (Linehan et al., 2000) to 9.5% (Soloff et al., 2000). Despite this high rate, BPD patients are often viewed as being difficult and manipulative, and their suicidal gestures and behaviours are frequently dismissed as being attention-seeking and aimed at eliciting care-giving from significant others as well

as from mental health professionals. Manipulative suicidal gestures are common in BPD patients and can be seen as attempts to stop the pain (Welch et al., 2008). Gunderson and Ridolfi (2001) sum up this somewhat dismissive attitude with their claim that "recurrent suicidal threats, gestures, or behaviors or self-mutilation is the borderline patient's 'behavioral specialty'" (p. 61). The current study was an attempt to learn more about this issue.

4.1. Prevalence of BPD

The prevalence of BPD differs greatly in males and females with about 75% of BPD patients being women. The lifetime prevalence of BPD in the general population is approximately 2%, while up to 10% of psychiatric outpatients and 20% of inpatients are considered to have this disorder (DSM-IV-TR, 2000).

4.2. Risk factors for BPD

In the United States, BPD is seen mostly in females, but that is not the case worldwide, e.g., in Scandinavia. BPD symptoms appear to be most prominent at younger ages, and it is common that BPD patients gain greater stability in their interpersonal relationships, and there is a tapering of other BPD symptoms, by the age of thirty or forty (DSM-IV-TR). Zanarini et al. (2006) followed a BPD sample for ten years and found that 88% of their sample achieved remission within that time frame.

Adverse childhood experiences are highly correlated with the diagnosis of BDP (Afifi et al., 2008), and this history of abuse may increase the BPD patient's risk for suicide attempts (Soloff et al., 2002).

5. Self-harm in MDD and BPD

While self-harm is common in both MDD and BPD, the clinical view is that these behaviours are qualitatively different in the two diagnostic groups (Soloff, et al, 2000). While suicidal behavior appears to be more common in BPD patients (Yen, et al, 2004), as remarked above, clinicians often consider self-harm in these patients to be less serious and more manipulative than those of MDD patients.

Self-harm in patients with MDD and BPD has been studied widely. The studies vary greatly in terminology, measures, and samples, making it difficult to draw conclusions. Many studies have shown that patients with cluster B personality traits and the associated disorders (especially BPD) make more frequent suicidal gestures, which complicates the study of actual suicide attempts. Cluster B diagnoses, which are antisocial, borderline, histrionic, and narcissistic personality disorder, are among the three most common diagnoses in cases of completed suicides, especially in males (Lambert, 2003).

While manipulative threats may be common in BPD and may not be considered serious, it is important to explore what motivates these threats. Gunderson and Ridolfi (2001) believe that suicide attempts of BPD patients are often ambivalent in terms of the actual intent to die.

Sinclair et al. (2005) conducted a case-control study of suicide in 127 depressed patients. They concluded that a history of deliberate self-harm was a significant risk factor for suicide in the depressed patients (OR = 6.96; 95% CI 3.41 – 14.19). Andover et al. (2005) studied the relationship between self-mutilation and depressive symptoms in a nonclinical sample. While they found

that self-mutilators reported higher levels of both depressive and borderline symptoms, once they controlled for borderline symptomatology, the difference between self-mutilators and controls was non-significant.

Blasco-Fontinella et al. (2009) assessed 446 suicide attempters on the severity of their personality disorder (PD) and found that those with severe PD had a history of more frequent attempts. They concluded that young females with severe PD are at the highest risk of repeating their suicide attempts.

Yen et al. (2009) examined a number of personality factors in a mostly personality disordered sample of 701 treatment-seeking participants and concluded that negative affectivity emerged as a more robust predictor of suicide attempts when compared to disinhibition or impulsivity, and Cluster B personality disorders with negative affectivity and disinhibition are risk factors for suicide. However, they acknowledge that since the sample was limited to treatment-seeking persons with personality disorders, and in some cases comorbid MDD, the findings need to be replicated in other populations.

Paris et al. (1989) followed a group of one hundred BPD patients for fifteen years and compared them to fourteen BPD patients who committed suicide. They found that the only significant difference between the groups was the number of previous suicide attempts, with those who completed suicide having had more such attempts. Rietdijk et al. (2001) followed 38 female outpatients diagnosed with BPD and a history of self-damaging acts and suicidal behaviours for six months and found that the patients' survival and coping beliefs as measured by the Reasons for Living Inventory were associated with these behaviours.

Balestrieri et al. (2006) studied a clinical sample with a range of psychiatric diagnoses and found that a history of suicidal ideation without any past attempts was more common in patients with mood disorders than those with BPD. The opposite was true for suicide attempts, i.e., with BPD patients being more likely to have a history of attempts. Lambert (2003) concluded after reviewing recent literature on the risk of lethal suicide attempts that the risk in BPD is at least as high as in MDD. He also suggests that as symptoms of BPD tend to improve with age, so does the risk of suicide in BPD. Black et al. (2004) reviewed studies of suicidal behavior in BPD and concluded that comorbidity of BPD and MDD increases both the number and severity of suicide attempts. They assert that "Clinicians must avoid the mistake of thinking that a pattern of repeated attempts indicates little desire to die" (p. 226).

Brodsky et al. (2006) conducted a study comparing depressed suicide attempters with and without comorbid BPD. It is not clear what the setting for the recruitment was in their study, but the subjects do not seem to be inpatients. This group found that while the BPD group had made more suicide attempts, the lethality of the attempts was similar in the two groups. They asked the participants who had made multiple attempts about their intent associated with their first one, the most lethal one, and the most recent one. For the most recent attempt, the level of intent was lower in the depressed participants with comorbid BPD than those with depression only. Horesh et al. (2003) compared suicidal behaviour of BPD and MDD adolescent inpatients and found that the MDD youth reported a significantly higher level of intent.

Soloff et al. (2000) studied suicide attempts in 158 psychiatric inpatients with either MDD or BPD, or both, and compared them based on their Suicide Intent Scale scores regarding past suicide attempts, among other variables. They found that the inpatients with comorbid MDD and BPD had made suicide attempts more frequently than those with either one of the disorders alone. However, they found no statistically significant difference in the level of intent of the suicide attempts in depressed and borderline patients. They cautioned about generalizing these results to outpatients, bringing attention to the fact that BPD patients who have engaged in less serious self-harming acts "may, in fact, be denied admission to hospitals because their suicidal behaviours do not reflect high degrees of lethal intent or objective planning or do not result in medical damage" (p. 607).

6. Rationale for present study

While a wealth of research literature is available on self-harm in MDD and BPD separately, few studies have compared the two populations, and many of the studies to date have been conducted with inpatients. Two studies have compared suicidal intent in MDD and BPD inpatients (Horesh et al., 2003; Soloff et al., 2000), but extensive literature searches did not find any studies that compare these two diagnostic groups of psychiatric outpatients in regard the intent behind their self-harm.

The current study addressed the intent of self-harming behaviour in psychiatric outpatients with MDD or BPD to determine whether the degree of

intent differs in these two outpatient populations. We hypothesized that these two diagnostic groups would be different in this regard.

Chapter 2

Methods

1. Setting

The data for this study were collected from the patient files at the Psychiatric Treatment Clinic (PTC) at the University of Alberta Hospital (UAH) in Edmonton, Canada. The PTC is an outpatient walk-in clinic for patients experiencing a psychiatric crisis which does not require Emergency Room services. The clinic is open to the general public 17 years of age or older. The PTC accepts referrals from a variety of sources, such as general practitioners, psychologist, psychiatrists, etc., but a referral is not necessary (Table 1). The PTC provides assessment and treatment to adults 18 years of age and older. The age and sex distributions of the patients assessed at the PTC during 2005 - 2009 are shown in Table 2. For example, two-thirds of the patients presenting for intake in 2009 were under age 40. The male to female ratio was approximately one to one during that year.

Patients who present at the clinic for assessment and/or treatment are seen by a mental health therapist, and a thorough mental health assessment and history are completed during the initial visit. At this time the patients are also seen by a staff psychiatrist for a brief consultation. The PTC has a multi-disciplinary team of experienced therapists with backgrounds in psychology, psychiatric nursing, or social work. The therapists provide treatment for a variety of mental health issues including depression and personality disorders. The clinic provides a variety of

treatment modalities including medication management, group therapy, and individual therapy.

The PTC serves a large patient volume. Approximately 1400 - 1600 intake assessments are performed each year. About 17% of intake assessments each year are conducted with patients who have been assessed and/or treated at the PTC previously. The patients presenting for intake at the PTC suffer from a variety of mental health problems, which are diagnosed according to the DSM-IV-TR. Patients can be assigned multiple diagnoses on both Axis I (clinical disorders) and Axis II (personality disorders). Mood disorders are diagnosed in approximately half of the cases. Anxiety disorders and substance-related disorders are also common in this patient population. About one-fifth of the patients receive a diagnosis of BPD annually.

The annual diagnostic breakdown of these patients during 2004 – 2008 is presented in Table 3. The table contains up to three diagnoses per patient on Axis I and Axis II. For example, 98% of the patients assessed in 2009 received an Axis I diagnosis. Almost half of the patients (49.7%) received at least two Axis I diagnoses, and 12.8% received three. That same year, 58.9% of the patients were diagnosed with at least one personality disorder, but only 1.2% had two personality disorders.

The intake process requires the patients to be available for a half day either in the morning (0830 – 1200) or afternoon (1230 – 1600). While the clinic is open to the general public older than 18, potential patients are encouraged to call the clinic first to learn about the operation of the PTC as well as to determine whether

they are appropriate for assessment and treatment at the PTC. A therapist is on call for handling these enquiries at all times, and each therapist rotates through the schedule. During the phone calls the therapists acquire relevant details about the presenting problem, and if the patient appears appropriate for intake, they explain how the PTC works. This includes a brief description of the intake procedure, treatments offered, and when the patient should present for intake. The therapist on call also screens walk-in patients who have not called the clinic prior to presenting, and the purpose of the screening is similar to the telephone contact. Individuals who are looking for third party assessments for legal or other purposes are an example of patients who might be referred elsewhere, as are also those who are intoxicated or already actively involved in mental health treatment in other services.

The maximum number of intakes performed during each half day is either three or six depending on the number of therapists on the roster. The patients presenting for intake are prioritized based on urgency when there are too many patients to be seen in any given assessment slot. The prioritization is performed by the on-call therapist. Once a patient is registered for a full assessment, they are seen by a therapist for approximately 45 minutes. The intake interview covers the patient's mental health history with a focus on the current problem. The therapist also acquires information about the patient's family of origin and current relationships, stressors, etc. Based on the interview, the therapist then formulates a diagnostic profile and a potential treatment plan. At the end of the assessment day, the therapist presents each case to the rounds psychiatrist who then has a brief

session with the patient in the presence of the therapist, and this is when the treatment plan is discussed with the patient. The treatment may involve therapy and/or medication management at the PTC, or a referral to another mental health resource either in the Department of Psychiatry at the University of Alberta Hospital or elsewhere in the community. The psychiatrist also collaborates with the therapist to assign the diagnoses. The assessment is written up on a standard form by the therapist (Appendix A). The form covers the most important areas that potentially contribute to the patient's mental health status.

The Department of Psychiatry has a Psychodynamic Research and Evaluation Unit (PREU) which monitors activities in the various outpatient programs in the department in addition to carrying out psychotherapy research. The current study was initiated by the PREU. A number of approaches were attempted until the present study design was selected as the most feasible one to learn about the characteristics of self-harm in the PTC patient population.

Current suicidality and past self-harm are among the areas assessed by the therapists during intake. The PREU initially attempted to gather data from the therapists' reports, but it became apparent that the variation in the therapist reporting was too great to rely on these data alone. Due to time constraints during the intake assessment, the therapists would, in most cases, only record the presence or absence of current ideation or a past event without providing details about the type of behaviour, the mind-set of the patient, or the desired goal of the act.

Once this attempt to study the history of patients' self-harm proved to be problematic, an attempt was made to conduct face-to-face interviews with patients who had a history of parasuicide and were willing to participate. The therapists identified these patients during the intake assessment and explained the study to them. While the six patients who participated in this study were very open about their behaviours and feelings, the recruitment rate was too slow to complete the study in a reasonable time-frame.

At that point we turned again to the PTC records for data collection. The intake assessment at the PTC includes a comprehensive battery of questionnaires completed by the patients at the time of their first visit to the clinic (Appendix B). These questionnaires are in place to collect demographic information, as well as preliminary information about the patient's various psychiatric and physical symptoms and concerns.

2. Suicidal Feelings & Self-harm Questionnaire

At the request of the PREU, the PTC recently added what will be referred to here as the Suicidal Feelings & Self-harm Questionnaire (SFSQ; Figure 1) to the intake questionnaires. The writer, with assistance from the PREU, developed the questionnaire with input from the clinical staff and psychiatrists in order to collect uniform data about patients' current suicidality and history of self-harm. The SFSQ was also designed to potentially identify patients who may be at risk of suicide or self-harm at the time of the intake assessment.

The first five questions focus on the level of suicidal ideation in the two weeks prior to the presentation at the PTC. The questions were drawn directly form the Harkavy Asnis Suicide Survey (HASS-I; Harkavy Friedman and Asnis, 1989; Figure 2). The original questionnaire consists of 21 statements asking the patient to rate each item on a 5-point scale (0-4) based on the frequency that the item applies to the individual during the previous two weeks. We selected five questions that are indicative of patients' thoughts and feelings regarding their passive and active wish to live or die. We adapted the scale in such a way as to require a "yes" or "no" answer rather than a rating. Some of the questions were used exactly as they appear on the HASS-I (indicated by * in Figure 2), and others were rephrased (indicated by # in Figure 2). Cochrane-Brink et al. (2000) found that patients who were interviewed about a previous episode of self-harm and then asked to complete a battery of questionnaires were more likely to participate in the interview than to complete the self-report scales. They attributed this reluctance to answer questionnaires to the level of distress the patients were experiencing. However, they concluded that clinical scales are an important component of risk assessment since they are not subject to clinicians' subjectivity in the ratings.

The questions in the second half are based on the Suicide Intent Scale (SIS; Beck et al., 1974; Figure 3). Since past self-harming behaviour has been identified as an important risk factor for suicide, it is important to explore it in some detail as a part of a suicide risk assessment. Beck and his colleagues defined intent as "the seriousness or intensity of the wish of a patient to terminate his life," and

claim that it is “a compromise between the wish to live and the wish to die” (p. 43). The SIS was developed to assess this particular aspect of the overall suicide risk.

The SIS consists of three sections. The first one focuses on the circumstances and factual aspects related to the suicide attempt, and is based on behaviours that are observable. The second part relies on the patient’s self-report of thoughts and feelings as they remember them at the time of the attempt. The third section is not scored but contains information that is clinically useful by asking the patient about their current feelings, the role of alcohol and drugs in the attempt, and the number of previous attempts.

The interrater reliability for the measure is r = .95, and the internal consistency is r = .82. The SIS is typically administered in an interview format with a trained clinician rating each of the fifteen items on a 3-point (0-2) scale based on the patient’s verbal answers.

The questions in the SFSQ were selected to assess the circumstances of the episode of self-harm and the subjective severity of the act. Since the patients complete the questionnaire on their own rather than providing the information in an interview, we simplified the rating task by asking them to select “yes” or “no” instead of rating on a 3-point scale. The questions which were selected and adapted for use in the SFSQ are indicated with * in Figure 3.

With the SFSQ, the patients are first asked whether they have ever intentionally harmed themselves, and if so, how many times (Figure 1). Patients who report having engaged in self-harm are asked to continue to answer the rest

of the questions in reference to the "most serious time" they hurt themselves. The meaning of the "most serious time" was left to the interpretation of the respondent.

The first of the follow-up questions asks the patient to specify in what type of self-harm they engaged at that time. There are three categories from which to select, with an option to describe behaviours in their own words if none of the categories given is suitable. We also ask whether the event resulted in the patient receiving medical attention. The purpose of this question is to examine the medical seriousness of the self-harm.

We asked two questions in order to assess the circumstances at the time of the self-harm: whether anyone was near the patient at the time, and whether he or she contacted someone afterwards. These questions were included in an attempt to examine the possibility that the event took place as a means of communication or cry for help. The patient's subjective opinion about the act is addressed with two questions: whether the patient had planned to harm him- or herself and whether he or she expected to die, the latter being of central importance to this study. The last question addresses the patient's attitude toward life and death at the time of the self-harm.

3. Sample size estimate

The sample size estimate for this study was based on the formula for sample size calculation for a closed cohort study (Newman, 2001), with an alpha of 0.05 (two-sided) and a beta of 0.20, that is, a power of 80%. We analyzed a pilot

sample of data from the PTC to estimate risk rates in MDD and BPD patients as well as the ratio of patients in the two groups. We chose the question "Did you expect to die as a result of harming yourself?" to evaluate how serious the self-harming event was according to the patient. In that there is no literature stating a clinically relevant risk difference, we somewhat arbitrarily chose 20%. Based on these estimates, the required sample size was 102 MDD patients and 58 BPD patients with a history of self-harm to test whether there is a significant difference in the patients' expectations based on the chi-square test.

4. Research question

The relative rarity of suicides in the general population makes studying this topic difficult. It would require a long follow-up period and a very large sample to study suicide prospectively. Therefore most researchers have used retrospective methods in studying this area (Beck, 1979). Since self-harm appears to be predictive of suicide, this study focused on the intent of past self-harming behaviours in psychiatric outpatients. The attempt was to distinguish whether there was a difference in the intent of patient diagnoses with either MDD or BPD, or both concurrently.

The second part of the SFSQ was the main source of data used to study our research questions about the prevalence and seriousness of self-harm in the psychiatric outpatient population assessed at the PTC. The question chosen to be analyzed to test our main hypothesis was "Did you expect to die as a result of harming yourself?" If the BPD patients were less serious about their intent to die

as a result of their self-harm, it could be expected that they would be less likely to endorse this question.

5. Data collection and analyses

The chart of each patient assessed was reviewed by the writer, and the answers to the questionnaire were recorded in a Statistical Package for the Social Sciences (SPSS) database. The PREU collects demographic and diagnostic information for all intake assessments on a routine basis and these data are recorded in an Excel spreadsheet. The demographic information and diagnoses of the patients included in this study were imported into the SPSS database. Five hundred charts were examined a second time to assess data accuracy and the error rate in data entry was determined to be less than 1%.

The data were analyzed using SPSS versions 15.0, 17.0, and 18.0. Chi-square tests were used to compare categorical data. These included diagnostic and demographic information, and all SFSQ questions with binary answers (Yes/No) and multiple categories. Spearman rank correlations and odds ratios were calculated to assess independence between the questions on the SFSQ. Continuous dependent variables (age and the summary score of the SFSQ questions) were analyzed using analysis of variance (ANOVA), and the categorical dependent variable “expecting to die” with logistic regression.

Figure 1
Suicidal Feelings & Self-harm Questionnaire (SFSQ)

Suicidal Feelings

Please check the answer that fits best.

During the past two weeks have you…

	YES	NO
1. had ideas about killing yourself?	☐	☐
2. thought that the world would be better off without you?	☐	☐
3. wished you were dead?	☐	☐
4. felt like life is not worth living?	☐	☐
5. had a plan to kill yourself?	☐	☐

Self Harm

	Yes	No
6. Have you **ever** intentionally harmed yourself?	☐	☐
7. How many times have you intentionally harmed yourself?	_____	

If you have ever intentionally harmed yourself, please answer the following questions.
If more than once, think of the **most serious time**.

8. What did you do to harm yourself that time?	Cut, stabbed, or slashed yourself.	☐
	Overdosed on prescribed, over-the-counter, or street drugs.	☐
	Swallowed poisonous chemicals.	☐
	Other (please specify) _____	☐

	Yes	No
9. Did you receive medical attention as a result of harming yourself?	☐	☐
10. Was anybody near you (e.g., in the same house) or expected to arrive when you harmed yourself?	☐	☐
11. After you harmed yourself, did you contact someone to tell them what you just did?	☐	☐
12. Had you planned to harm yourself for some time (e.g., saving pills, etc.)?	☐	☐
13. Did you expect to die as a result of harming yourself?	☐	☐

14. What was your attitude toward life and death at the time?	I did not want to die.	☐
	I did not care whether I lived or died.	☐
	I wanted to die.	☐

Figure 2
HASS-I questionnaire
Adapted from Harkavy Friedman & Asnis, 1989

HASS-I

INSTRUCTIONS
Please circle the number that fits best.
These questions just pertain to the past 2 weeks. Here, the numbers you circle have the following meaning:
0 = Never
1 = Once
2 = 1-2 times per week
3 = 3-4 times per week
4 = Daily
Please answer all questions. Thank you for your cooperation.

HOW OFTEN HAVE YOU:		Never	Once	1-2 times/wk	3-4 times/wk	Daily
1.	thought that you would be better off dead?	0	1	2	3	4
2.	dreamed about death?	0	1	2	3	4
* 3.	had ideas about killing yourself?	0	1	2	3	4
* 4.	thought that the world would be better off without you?	0	1	2	3	4
5.	thought about death and dying?	0	1	2	3	4
6.	smoked marijuana?	0	1	2	3	4
7.	been in high places and felt like jumping?	0	1	2	3	4
8.	thought about ways to kill yourself?	0	1	2	3	4
9.	taken drugs other than marijuana or prescription drugs?	0	1	2	3	4
10	gotten so discouraged that you thought about ending your life?	0	1	2	3	4
11.	felt like running into traffic?	0	1	2	3	4
# 12	had a plan of how you would kill yourself?	0	1	2	3	4
* 13.	wished you were dead?	0	1	2	3	4
# 14.	felt that life was not worth living?	0	1	2	3	4
15.	drunk alcoholic beverages?	0	1	2	3	4
16.	thought about killing yourself but did not try to do it?	0	1	2	3	4
17.	tried to kill yourself?	0	1	2	3	4
18.	dreamed about killing yourself?	0	1	2	3	4
19.	talked to someone about killing yourself?	0	1	2	3	4
20.	had a plan to kill yourself, started to do it and then stopped at the last minute?	0	1	2	3	4
21.	smoked cigarettes?	0	1	2	3	4

Figure 3

Suicidal Intent Scale
Adapted from Beck et al. (1974)

Circumstances Related to Suicide Attempt
*1. Isolation 0. Somebody present 1. Somebody nearby or in contact (as by phone) 2. No one nearby or in contact
2. Timing ( ) Does not apply 0. Timed so that intervention is probable 1. Timed so that intervention is not likely 2. Timed so that intervention is highly unlikely
3. Precautions Against Discovery and/or Intervention 0. No precautions 1. Passive precautions, such as avoiding others but doing nothing to prevent their intervention (alone in a room with unlocked door) 2. Active precautions (locked door)
*4. Acting to Gain Help During/After Attempt ( ) Does not apply 0. Notified potential helper regarding attempt 1. Contacted but did not specifically notify potential helper regarding attempt 2. Did not contact or notify potential helper
5. Final Acts in Anticipation of Death 0. None 1. Patient thought about making or made some arrangements in anticipation of death 2. Definite plans made (changes in will, giving gifts, taking out insurance)
*6. Degree of Planning for Suicide Attempt 0. No preparations 1. Minimal to moderate preparation 2. Extensive preparation
7. Suicide note 0. Absence of note 1. Note written, but torn up or note thought about 2. Presence of note

Figure 3 continued

8. Overt Communication of Intent Before Act
   0. None
   1. Equivocal communication
   2. Unequivocal communication

9. Purpose of Attempt
   0. Mainly to change or manipulate environment
   1. Components of "0" and "2"
   2. Mainly to remove self from environment

Self Report

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*10. Expectations Regarding Fatality of Act
   0. Patient thought that death was unlikely
   1. Patient thought that death was possible but not probable
   2. Patient thought that death was probable or certain

11. Conceptions of Method's lethality
   0. Patient did less to himself than he thought would be lethal, or patient didn't think about it
   1. Patient wasn't sure or thought what he did might be lethal
   2. Act exceeded or equaled what patient thought was lethal

12. Seriousness of attempt
   0. Patient did not consider act to be a serious attempt to end his life
   1. Patient was uncertain whether act was a serious attempt to end his life
   2. Patient considered act to be a serious attempt to end his life

*13. Ambivalence Toward Living
   0. Patient did not want to die
   1. Patient did not care whether he lived or died
   2. Patient wanted to die

14. Conception of Reversibility
   0. Patient thought that death would be unlikely if he received medical attention
   1. Patient was uncertain whether death would be averted by medical attention
   2. Patient was certain of death even if he received medical attention

15. Degree of Premeditation
   0. None - impulsive
   1. Suicide contemplated for three hours or less prior to attempt
   2. Suicide contemplated for more than three hours prior to attempt

Figure 3 continued

Not Scored

16. Reaction to Attempt
    a. Sorry made attempt
    b. Accepts both attempt and fact he's still alive
    c. Regrets he's still alive

17. Visualization of Death
    a. Viewed as life-after-death or reunion with decedents
    b. Viewed as never-ending sleep or darkness
    c. Not visualized or thought about

*18. Number of previous attempts
    a. None
    b. One or two
    c. Three or more

19. Consumption of Alcohol at Time of Attempt
    ( ) Does not apply
    a. Enough alcohol was ingested so patient was confused and didn't know what he was doing at time of attempt
    b. Alcohol was drunk to get up enough nerve to make attempt
    c. Alcohol was taken to potentiate drugs ingested or other method used

20. Use of drugs at Time of Attempt
    ( ) Does not apply
    a. Patient under the effect of a drug, so he didn't know what he was doing at time of attempt or not aware of full implications of attempt
    b. Drug used to free patient of inhibition so attempt could be made
    c. Drug used to potentiate and supplement method used

Table 1

Referral sources of patients presenting for intake in the PTC during 2005 - 2008

Referral Source	2005 (n = 1513) %	2006 (n = 1602) %	2007 (n = 1578) %	2008 (n = 1513) %	2009 (n = 1414) %
Self/friend/relative	31.5	35.5	37.1	36.6	37.5
Psychiatrist	5.6	3.9	2.9	2.9	3.1
Psychologist	5.8	4.8	4.6	6.0	5.3
General practitioner	37.9	34.5	33.0	29.4	28.3
Emergency department (UAH)	6.4	8.9	9.3	10.4	9.8
Other	12.8	12.4	13.2	14.8	16.0

Table 2

Age and gender of patients presenting for intake in the PTC during 2005 - 2008

	2005 (n = 1513) %	2006 (n = 1602) %	2007 (n = 1578) %	2008 (n = 1513) %	2009 (n = 1414) %
Age					
13-19	5.6	6.2	6.5	6.0	7.8
20-29	35.9	36.5	37.4	37.6	35.8
30-39	24.9	23.4	25.0	25.4	23.5
40-49	19.0	20.1	18.5	16.7	20.2
50-59	11.5	10.4	8.6	11.0	9.6
60-69	2.4	2.9	3.3	3.2	3.0
70-79	0.7	0.5	0.6	0.1	0.1
80+	0	0	0.1	0	0
Sex					
Male	43.5	43.5	45.1	43.8	47.5
Female	56.5	56.5	54.9	56.2	52.5

Table 3
Distribution of admission diagnoses of patients presenting for intake at the PTC during 2005-2009

Diagnosis	2005 (n = 1513) %	2006 (n = 1602) %	2007 (n = 1578) %	2008 (n = 1602) %	2009 (n = 1414) %
Axis Ia					
Adjustment disorders	7.2	7.1	8.8	9.7	8.5
Anxiety disorders	12.0	13.5	14.6	14.1	15.7
Mood disorders	55.5	52.1	49.2	46.4	43.8
Substance-related disorders	9.5	11.4	10.0	10.1	13.0
Other disorders	14.1	14.9	15.9	18.4	17.0
Total	98.3	99.0	98.5	98.7	98.0
Axis Ib					
Adjustment disorders	1.5	1.4	2.2	2.3	2.5
Anxiety disorders	8.3	8.6	10.4	9.4	10.7
Mood disorders	13.0	12.2	12.2	12.0	10.7
Substance-related disorders	12.8	13.3	12.1	13.8	15.0
Other disorders	9.1	7.7	8.4	8.8	10.8
Total	44.7	43.2	45.3	46.3	49.7
Axis Ic					
Adjustment disorders	0.3	0.4	0.2	0.3	0.4
Anxiety disorders	1.7	1.9	2.5	1.6	1.9
Mood disorders	1.8	2.6	2.0	2.6	2.4
Substance-related disorders	4.6	3.0	3.4	5.2	5.8
Other disorders	3.0	1.3	1.9	2.1	2.3
Total	11.4	9.2	10.0	11.8	12.8

Table 3 continued

Diagnosis	2005 (n = 1513) %	2006 (n = 1602) %	2007 (n = 1578) %	2008 (n = 1602) %	2009 (n = 1414) %
Axis IIa					
Borderline PD	19.6	19.1	21.4	19.3	21.8
Other PDs	41.7	43.1	42.2	38.5	37.1
Total	61.3	62.2	63.6	57.8	58.9
Axis IIb					
Borderline PD	0.5	0.9	0.4	0.2	0.7
Other PDs	1.4	1.9	1.3	0.4	0.5
Total	1.9	2.8	1.7	0.6	1.2
Axis IIc					
Borderline PD	0	0	0	0	0
Other PDs	0.1	0	0	0	0
Total	0.1	0	0	0	0

Chapter 3

Results

1. Sample

Data collection spanned a full year from February 1, 2009 to January 31, 2010. There were 1467 intake assessments conducted by the PTC therapists during the data collection period. Twenty-two patients were reassessed after being discharged during the year; only the responses from the first intake assessment of these patients were included, bringing the total sample to 1445 patients.

The response rate was excellent, as 1420 of the 1445 patients (98%) answered the questionnaire at least partially. The questions about recent suicidal feelings were answered by 86.3% of patients. However, only 54.0% of the patients who reported a history of self-harming behaviour answered all the questions about the most serious episode of self-harm in a way that could be used in the analyses. For example, the numeric response rate for the actual number of self-harm events was 47.5%, yet another 18.9% of the subjects provided a qualitative answer.

The sample consisted of 760 (52.6%) women and 685 men. We assigned the patients to four groups based on the diagnoses they received after the intake assessment (Table 4). The MDD group included all patients who were diagnosed with MDD alone or in combination with any other diagnoses except BPD; the BPD group received a diagnosis of BPD with or without any other diagnoses except MDD; the patients in the comorbid MDD and BPD group received both

MDD and BPD diagnoses with or without other diagnoses, and the "Other" group included all patients with any other diagnosis except MDD or BPD. MDD and BPD may not have been the main diagnosis for the patients in the respective groups, as up to three diagnoses were collected on each axis. The diagnoses in the "Other" group consisted of a variety of DSM-IV-TR disorders. Mood disorders other than MDD (dysthymia, bipolar disorder), anxiety disorders, adjustment disorders, and substance-related disorders were the most frequent diagnoses on Axis I, while Personality Disorder Not Otherwise Specified was the most frequently assigned diagnosis on Axis II.

The MDD group consisted of 337 patients (203 females, 134 males), which represented 23.3% of the total sample (26.7% of the females, and 19.6% of the males). Two hundred and nineteen patients were assigned to the BPD group, representing 15.2% of the sample, with 168 women (22.1%) and 51 men (7.4%). The comorbid group had 103 (7.1%) subjects, consisting of 81 women (10.7%) and 22 men (3.2%). The largest group was the "Other" category, with 786 patients, representing 54.4% of the total sample [308 women (40.5% of all the women) and 478 men (69.8%)].

The mean age of the total sample was 34.0 years, with a standard deviation of 11.9 and range of 17 to 73 (Table 5). The mean ages for the diagnostic groups were as follows: MDD 37.5, BPD 29.8, comorbid 32.9, and "Other" 33.8. An ANOVA conducted between the groups found a statistically significant age difference ($p < .001$). Pairwise post-hoc comparisons (Tukey HSD) indicated that

the MDD group was significantly older than any of the other groups, while the comorbid group only differed from the MDD group.

2. Analyses of questionnaire responses

The SFSQ questions were first analyzed question-by-question. The results are presented by question number in the order that they appear on the questionnaire (Figure 1).

Questions 1 - 5: Suicidal Feelings

We analyzed the first part of the questionnaire, which addressed suicidal ideation in the two weeks prior to the intake assessment, to explore how much the subjects had thought about self-harm during that period (Table 6). We included all 1445 subjects in these analyses; that is, MDD, BPD, comorbid MDD and BPD, and "Other." All five questions showed a statistically significant difference across the four diagnostic groups ($p < .001$). The "Other" category showed the lowest rate of endorsing each question, while the BPD and comorbid groups exhibited the highest levels of suicidal feelings.

Question 6: "Have you ever intentionally harmed yourself?"

Of the 1445 subjects, 1406 (97.3%) answered the question "have you ever intentionally harmed yourself," of whom 624 (44.4%) responded affirmatively (Table 7). The BPD and comorbid groups exhibited the highest lifetime rates of self-harm (78.1% and 76.5%, respectively), while the MDD and "Other" groups had rates that were similar (36.7% and 33.9%, respectively). The overall chi-

square statistic comparing the proportions of subjects with a history of self-harm across the four groups was statistically significant ($p < .001$).

From this point forward, the "Other" category has been excluded from further analyses, as the primary purpose of the study was to examine relationships between MDD, BPD, and comorbid MDD and BPD patient groups. Thus, the sample from now on comprises 659 individuals (Table 5).

Table 8 shows the odds ratios (OR) comparing lifetime prevalence of self-harm for the three diagnostic categories. The OR for self-harm of the BPD patients as compared to the MDD group was 6.17 (95% CI 4.16 - 9.14). In other words, BPD patients in this study were approximately six times more likely to have engaged in self-harm in the past. The OR for self-harm between the comorbid and MDD patients was 5.61 (95% CI 3.37 - 9.33). The BPD and comorbid groups had an OR of 0.91; in other words these two groups had almost identical odds of having a history of self-harm.

Question 7: "How many times have you intentionally harmed yourself?"

The subjects who reported a history of self-harm were asked how many times during their lives they had engaged in such behaviour (Table 9). Fifty-one patients did not provide an answer to this question (15 MDD, 24 BPD, and 12 comorbid), and a further 87 patients gave a qualitative rather than numeric answer, such as "countless times," "a few times," "too many times to count," "a lot," and "many." Another 60 patients gave an estimate or a range of numbers as an answer. For those patients who assigned a range of numbers, the mean was entered in the database. For example, if the patient answered "5 - 10 times," the

answer was coded as 7.5. Some patients gave an estimate, such as "10+" or "more than 20," and in these cases the numeric part of the answer, i.e., "10" or "20" was entered. The database contained 228 answers that could be used to calculate the mean number of occurrences. The overall mean for the three groups was 6.07 (SD 13.2). The mean number of self-harm episodes for the MDD group was 2.69 (SD 2.51), for BPD it was 9.82 (SD 19.1), and for the comorbid patients it was 3.99 (SD 3.82). The groups were statistically different in this regard ($p < .001$), with the BPD group having engaged in self-harm a significantly higher number of times than the other two groups. The other two groups were not statistically different from each other.

Question 8: "What did you do to harm yourself that time?"

For this question, the patients were given four categories of self-harming behaviours from which to choose (Table 10). One hundred and thirty-one patients selected at least two types of self-harm, and four patients supplied no answer at all. The most common method of self-harm for both the MDD and BPD patients was overdosing on prescribed or over-the-counter medications, or street drugs (38.1% and 24.6% respectively), while the comorbid group reported that cutting, stabbing, or slashing was the behaviour engaged in most frequently (28.6%). The difference between the three groups was statistically significant ($p = .007$). Few patients reported having swallowed poisonous chemicals, with the overall rate being 1.4%, and no statistical difference between the diagnostic categories ($p = .397$).

The patients were given an opportunity to report other types of self-harm, and 35 patients selected this option, with all diagnostic groups being represented fairly equally. The patients were asked to describe what they had done, and the most frequent answers were hitting or punching oneself, attempting to hang oneself, carbon monoxide poisoning, driving dangerously, stepping into traffic and burning oneself.

Question 9: "Did you receive medical attention as a result of harming yourself?"

This question was asked in order to have some indication of how medically serious the self-harm was (Table 11): BPD patients were more likely to have received medical attention (61.1%) than MDD (46.6%) or comorbid MDD and BPD patients (56.1%), although this difference did not quite reach statistical significance ($p = .052$). This finding could indicate that BPD patients' self-harm is medically as serious as MDD patients' act, or alternatively that they may be more likely to seek medical attention.

Question 10: Was anybody near you or expected to arrive?" and question 11: " After you harmed yourself, did you contact someone?"

These questions were intended to assess whether the patient was possibly using self-harm as a means to gain caring or support from others (Table 11). There was no significant difference between the groups in terms of harming themselves in the vicinity of others ($p = .865$), and the mean rate for all groups was 55.4%. However, the BPD patients were significantly more likely to contact someone after the act of self-harm (43.5%) in comparison to the MDD (27.7%)

and comorbid (33.8%) patients (p = .026). This might indicate some level of manipulation or attention-seeking in the BPD sample.

Question 12: "Had you planned to harm yourself for some time?"

We asked this question to gain some understanding of whether the self-harm was impulsive or not (Table 11). The results for this question were surprising in that the BPD patients as a group reported the greatest rate of planning ahead (36.7%), while the rates for MDD (23.5%) and comorbid (29.3) patients were relatively low. However, the difference did not quite reach statistical significance (p = .058).

Question 13: "Did you expect to die as a result of harming yourself?"

We singled out this question as the primary means of answering the research question about the patients' perceived severity or level of intent regarding their self-harming behaviour (Table 11). It was expected that if the BPD group was less serious about their intent, they would endorse this question less frequently. However, the groups were not even remotely statistically different from each other (p = .550). In fact, the rate of planning in the BPD group was slightly higher than in the MDD group (48.7% vs. 42.7%). The comorbid group reported planning at a rate of 50.0%. Recall that the sample size calculation was based on this question. Thus, there was greater than 80% power to detect a difference among the diagnostic groups.

Question 14: "What was your attitude toward life and death at the time?"

An attempt was made to capture the patients' motivation for harming themselves by asking what their attitude toward life and death was at the time of

the event (Table 12). They were instructed to select an answer from three options: "I did not want to die," "I did not care whether I lived or died," and "I wanted to die." The sample as a whole reported a considerable level of ambivalence by selecting the answer "I did not care whether I lived or died" in 43.1% of cases. The BPD group endorsed this idea at a rate of 35.8%, while the MDD and comorbid groups did so in 50.0% and 48.1% cases, respectively. Another indication of possible ambivalence, which had not been anticipated, was that 17.6% of the patients endorsed multiple answers to this question. This may have been due to the fact that they were unsure of what their attitude was at the time, or perhaps they failed to focus on a single episode of self-harm.

Summary scores of questions 9 - 14

We assigned an overall score of suicidal intent to each patient based on their answers to the six questions about the details of the self-harm. The scoring is presented in Figure 4. Scores were assigned such that the answer indicating more severity of suicidal intent was given a score of "1." For example, for question 10 (Was anybody near you?), "no" was scored as "1" and "yes" as "0." It can be assumed that if the subject engaged in self-harm in the vicinity of others, they expected to be rescued. The patients who selected multiple answers to question 14 were coded as having a missing value for this variable. Since only one response was given to question 14, the possible range of the summary score was 0 - 7. Average scores were calculated for each subject by dividing their total score by the number of questions they answered. The group means are shown in Table 13. The means for diagnostic categories were compared using ANOVA, and no

significant difference between the diagnostic groups was found ($p = .524$). All groups scored in the mid-range with an overall mean of 0.63 ($SD = 0.23$).

Correlations among the suicide intent questions

Spearman rank correlations were calculated among the SFSQ items in order to determine how much overlap existed among the questions. Table 14 shows the correlation matrix between questions 9 - 14 across the three diagnostic groups combined. The correlations were also calculated within each diagnostic category; the coefficients were similar across the groups and to the overall correlations. Therefore, only the results pertaining to the whole sample are reported.

A number of the coefficients were statistically significant ($p < .01$), but none of the correlations was larger than 0.4. Question 9 (Did you receive medical attention as a result of harming yourself?) was significantly correlated with all of the other questions included in these analyses, but none of the coefficients exceeded .280. The largest coefficient (.387) was found between questions 13 (Did you expect to die as a result of harming yourself?) and 14 (What was your attitude toward life and death at the time?). The relationship between these two questions is not surprising due to the similarity of their content.

The variables included in these correlations were categorical (dichotomous except for question 14 which includes three categories). Odds ratios were also calculated as they are more easily interpreted as epidemiological measures of association when dealing with dichotomous variables. Odds ratios could not be calculated for question 14 due to its trichotomous nature. The odds ratios are presented in Table 14 above the diagonal. For example, the odds ratio for

questions 9 and 10 of 3.2 indicates a certain amount of redundancy in the questions, something that may not be apparent from the correlation coefficient of .267.

The Spearman rank correlation coefficients and odds ratios showed a consistent pattern for the direction of the correlation and statistical significance among the items. Based on the coefficients and odds ratios, it appears that there is a degree of overlap among the questions on the SFSQ.

Logistic regression analyses

Logistic regression analyses were performed with expecting to die as a result of self-harm (Question 13) as the independent variable. First, diagnostic category, age, gender, and questions 8 - 12 and 14 were analyzed separately as independent variables (univariate analyses). Those subjects who selected multiple answers to the questions about the method they used and their attitude toward life and death were excluded from these analyses. The method of self-harm, requiring medical attention, having planned prior to the episode, the subject's attitude toward life and death (that is, questions 8, 9, 12, and 14), and age were all significantly correlated with the dependent variable (see Table 15 for p-values). Importantly, diagnostic category did not reach statistical significance.

The statistically significant variables from the univariate analyses were then entered into a logistic regression model simultaneously, again with expecting to die as the dependent variable. Diagnostic category was also included in the model, although it was not statistically significant ($p = .551$) on its own, since it is the main characteristic of interest in this study (Table 16). Gender was included in the

multivariate analysis in order to examine it as a potential confounder. The method of self-harm, requiring medical attention, having a plan prior to self-harm, the subjects' attitude toward life and death, and age emerged as significant factors in the multivariate model (see Table 16 for p-values). Diagnostic category was not significantly associated with expecting to die when adjusted for the other variables in the model. The finding regarding the diagnostic group in relation to expecting to die is consistent with the result of the chi-square test reported earlier (Table 11) and supports the hypothesis that MDD and BPD patients are similar in terms of expecting to die as a result of self-harm.

It is noteworthy that while the magnitude of some of the odds ratios produced by the logistic regression is large (e.g., taking poison versus cutting; OR 14.8), the 95% confidence intervals in those cases are very wide (e.g., 1.1 - 195.4), even though the sample size is relatively large. The differences in the univariate and multivariate odds ratios for the method of self-harm and one's attitude toward life and death indicate that these variables are confounded by the other variables in the model.

Diagnostic category was not statistically significant as a part of this model, in particular, and the odds ratios did not change between the univariate and multivariate analyses, except for the comparison between MDD and BPD, and the increment was only 0.1. This indicates that diagnostic category is not confounded by the other variables entered in the logistic regression model, thus supporting the main finding that diagnosis is not a statistically significant factor in terms of expecting to die as a result of self-harm.

Figure 4

Scoring of suicide intent questions of SFSQ for summary score

		Yes	No
9. Did you receive medical attention as a result of harming yourself?		1	0
10. Was anybody near you (e.g., in the same house) or expected to arrive when you harmed yourself?		0	1
11. After you harmed yourself, did you contact someone to tell them what you just did?		0	1
12. Had you planned to harm yourself for some time (e.g., saving pills, etc.)?		1	0
13. Did you expect to die as a result of harming yourself?		1	0
14. What was your attitude toward life and death at the time?	I did not want to die.	0	
	I did not care whether I lived or died.	1	
	I wanted to die.	2	

Table 4

Gender distribution by diagnostic category

	Both		Male		Female	
Diagnostic category	n	%	n	%	n	%
MDD	337	23.3	134	19.6	203	26.7
BPD	219	15.2	51	7.4	168	22.1
Comorbid MDD and BPD	103	7.1	22	3.2	81	10.7
Other	786	54.4	478	69.8	308	40.5
Total	1445	100.0	685	100.0	760	100.0

Table 5

Mean age by diagnostic category

		Age		
Diagnostic category	n	Mean	SD	Range
MDD	337	37.5	12.4	18 - 68
BPD	219	29.8	9.6	18 - 60
Comorbid MDD and BPD	103	32.9	10.1	17 - 64
Other	786	33.8	12.0	17 - 73
Total	1445	34.0	11.9	17 - 73

Table 6

Responses to the suicidal ideation questions by diagnostic category (total sample)

	MDD		BPD		Comorbid		Other		
Question	n [a]	% [b]	n	%	n	%	n	%	p-value [c]
During the past two weeks have you…									
1. had ideas about killing yourself?	312	52.6	205	64.9	101	62.4	730	36.6	< .001
2. thought that the world would be better off without you?	310	57.1	210	71.9	97	72.2	724	38.1	< .001
3. wished you were dead?	304	62.8	208	68.3	97	78.4	733	41.5	< .001
4. felt like life is not worth living?	313	73.5	212	77.4	99	85.9	736	50.1	< .001
5. had a plan to kill yourself?	297	22.9	204	31.4	97	36.1	715	16.2	< .001

[a] number of patients who answered the question
[b] proportion of patients who endorsed the question
[c] p-value comparing all four diagnostic categories using the chi-square test

Table 7

Lifetime prevalence rate (%) of self-harm by diagnostic category (Question 6)

Diagnostic category	n[a]	%
MDD	327	36.7
BPD	215	78.1
Comorbid MDD and BPD	102	76.5
Other	762	33.9
Total	1406	44.4

[a] number of subjects; 39 patients did not answer this question

Table 8

Odds ratios for life-time prevalence of self-harm comparing diagnostic categories (Question 6)

Comparison	OR[a]	95% CI
BPD - MDD	6.17	4.16 - 9.14
Comorbid MDD and BPD - MDD	5.61	3.37 - 9.33
Comorbid MDD and BPD - BPD	0.91	0.52 - 1.60

[a] OR odds ratio

Table 9

Mean number of self-harming events by diagnostic category (Question 7)

Diagnostic Category	n[a]	Mean	SD	Range
MDD	87	2.69	2.51	1 - 12
BPD	101	9.82	18.92	1 - 100
Comorbid MDD and BPD	41	3.99	3.82	1 - 20
Total	229	6.07	13.17	1 - 100

[a] number of patients with a history of self-harm who answered the question (51 patients did not answer this question, and 87 patients gave qualitative answers).

Table 10

Method of self-harm by diagnostic category (Question 8)

Method	MDD (n [a] = 118) %	BPD (n = 167) %	Comorbid MDD and BPD (n = 77) %
Cut, stabbed, or slashed yourself	24.6	22.2	28.6
Overdosed on prescribed, over-the-counter, or street drugs	38.1	24.6	22.1
Swallowed poisonous chemicals	0.8	1.8	1.3
Other	14.4	7.8	6.5
Multiple methods	22.0	43.7	41.6

[a] number of patients with a history of self-harm who answered the question

Table 11

Responses to suicide intent questions by diagnostic category (Questions 9 – 13)

	Diagnostic Category						
	MDD		BPD		Comorbid MDD and BPD		
Question	n [a]	% [b]	n	%	n	%	p-value [c]
9. Did you receive medical attention as a result of harming yourself?	118	46.6	167	61.1	78	56.4	.052
10. Was anybody near you (e.g., in the same house) or expected to arrive when you harmed yourself?	117	53.0	159	55.3	77	51.9	.865
11. After you harmed yourself, did you contact someone to tell them what you just did?	112	27.7	154	43.5	77	33.8	.026
12. Had you planned to harm yourself for some time (e.g., saving pills, etc.)?	115	23.5	166	36.7	75	29.3	.058
13. Did you expect to die as a result of harming yourself?	103	42.7	154	48.7	72	47.1	.550

[a] number of patients who answered the question
[b] proportion of patients who endorsed the question
[c] p-value for comparing all three diagnostic categories using the chi-square test

Table 12

Patients' attitude toward life and death at the time of self-harm (Question 14)

Attitude	MDD (n [a] = 114) %	BPD (n = 162) %	Comorbid MDD and BPD (n = 77) %
I did not want to die	16.7	21.0	13.0
I did not care whether I lived or died	50.0	35.8	48.1
I wanted to die	19.3	23.4	20.7
Multiple answers	14.0	19.8	18.2

[a] number of patients with a history of self-harm who answered the question

Table 13

Summary scores of intent to die by diagnosis

Diagnostic Category	Mean	SD	95% CI
MDD	0.64	0.22	0.60 - 0.68
BPD	0.62	0.23	0.58 - 0.65
Comorbid MDD and BPD	0.65	0.24	0.60 - 0.70

Table 14

Correlations (below the diagonal) and odds ratios and confidence intervals (above the diagonal) among the suicide intent questions of the SFSQ

Question	Q 9	Q 10	Q 11	Q 12	Q 13
Q 9	**1.0**	**2.4** (1.6 - 3.7)	**3.2** (2.0 - 5.2)	**1.6** (1.0 - 2.6)	**3.2** (2.0 - 5.0)
Q 10	.216*	**1.0**	**1.8** (1.1 - 2.8)	**0.8** (0.5 - 1.2)	**0.8** (0.5 - 1.2)
Q 11	.267*	.140*	**1.0**	**0.9** (0.6 - 1.5)	**1.0** (0.6 - 1.6)
Q 12	.110*	-.055	-.019	**1.0**	**4.0** (2.4 - 6.6)
Q 13	.280*	-.056	.077	.306*	**1.0**
Q 14	.174*	-.083	-.025	.165*	.387*

* $p < .01$

Odds ratios are presented in bold; 95% CI in parentheses

Table 15

Univariate logistic regression analyses with "Expecting to die" as the dependent variable

Variables	OR	95% CI	p-value
Diagnostic category			.551
MDD	0.8	0.5 - 1.3	.346
Comorbid MDD and BPD	1.1	0.6 - 1.8	.856
BPD	1.0		
Method			< .001
Overdose	19.2	8.5 - 43.1	< .001
Poison	11.0	1.6 - 73.8	.014
Other	2.2	0.8 - 6.1	.142
Cut	1.0		
Medical attention			
Required	3.2	2.0 - 5.0	< .001
Not required	1.0		
Plan to self-harm			
Yes	4.0	2.4 - 6.6	< .001
No	1.0		
Attitude			< .001
Wanted to die	28.4	11.1 - 72.8	< .001
Did not care	3.9	1.8 - 8.5	.001
Did not want to die	1.0		
Someone near or expected to arrive			
Yes	0.8	0.5 - 1.2	.320
No	1.0		
Patient contacted someone after			
Yes	1.0	0.6 - 1.6	.895
No	1.0		
Gender			
Male	1.3	0.8 - 2.1	.319
Female	1.0		
Age	1.0	1.0 - 1.1	.005

Table 16

Multivariate logistic regression analysis with "Expecting to die" as the dependent variable

Variables	OR	95% CI	p-value
Diagnostic category			.803
MDD	0.8	0.3 - 2.2	.649
Comorbid MDD and BPD	1.2	0.4 - 3.9	.771
BPD	1.0		
Method			< .001
Overdose	15.2	4.8 - 47.8	< .001
Poison	14.8	1.1 - 195.4	.040
Other	3.7	0.9 - 16.3	.079
Cut	1.0		
Medical attention			
Required	1.5	0.6 - 3.7	.427
Not required	1.0		
Plan to self-harm			
Yes	10.4	3.4 - 32.1	< .001
No	1.0		
Attitude			.001
Wanted to die	11.9	2.9 - 48.8	.001
Did not care	1.9	0.6 - 6.1	.300
Did not want to die	1.0		
Gender			
Male	2.5	0.8 - 7.1	.098
Female	1.0		
Age	1.0	1.0 - 1.1	.111

Chapter 4

Discussion

1. Summary of findings

Self-harm is a well-established predictor of suicide and therefore an important area of research in psychiatric patient populations. This study was undertaken to investigate whether the level of intent of self-harming behaviours in psychiatric *outpatients* is similar to the pattern found by Soloff et al. (2000) in psychiatric *inpatients*.

The SFSQ, which was developed by the PREU in the Department of Psychiatry at the UAH, was administered to all patients who presented for an intake assessment at the PTC during the 12-month period from February 1, 2009 to January 31, 2010. A total of 1420 patients completed the questionnaire at least partially. The high partial response rate provides support for Harkavy-Friedman and Asnis' (1989) claim that patients may be more comfortable providing information about self-harm in questionnaire format rather than face-to-face.

The demographic profiles of the diagnostic groups showed similar patterns to other psychiatric outpatient populations (Table 4), with both MDD and BPD being more frequently diagnosed in women than in men (DSM-IV-TR, 2000). The BPD group was also significantly younger than the MDD group, which is generally the case, as BPD patients' symptoms tend to lessen over time so that the diagnosis is not assigned as commonly to patients in their later years (DSM-IV-TR, 2000).

The lifetime prevalence rate of self-harm was significantly higher in the BPD only (78.1%) and comorbid MDD and BPD (76.5%) patients than it was in the MDD only group (36.7%), (Table7). Lifetime prevalence rates of self-harm vary greatly in the existing literature, making it difficult to compare the rates in the current samples to those reported by others. Yen et al. (2003) reported an overall rate of 15.5% of suicidal behaviour in their personality disordered sample, while Soloff et al. (1994) found that 72.6% of their borderline sample "had some lifetime experience of suicide attempts (p. 1318). Gunderson and Ridolfi (2001) estimate that suicide threats or gestures occur in 90% of BPD patients. The variability in terminology used by researchers, as well as the possible under-reporting of such behaviour, contribute to this range of estimates. Tejedor et al. (1999) proposed that an operational definition of different types of suicidal behaviours be among criteria for future research on the topic. Unfortunately, this continues to be an issue that complicates comparison of studies on self-harm.

The BPD group in the current study was approximately six times more likely to have engaged in self-harm than their MDD counterparts (Table 8). Self-harming behaviour is frequently the factor that brings BPD patients to seek treatment. Some clinicians assume these behaviours in their BPD patients to be a means of communication rather than an intent to die (Soloff et al., 2000), gestures of manipulation and attention-seeking (Brodsky et al., 2006) or simply their "behavioral specialty" (Gunderson & Ridolfi, 2001, p. 61). As a result of these clinical perspectives, BPD patients are at times not taken seriously. However,

there is some evidence in psychiatric inpatients that the severity of the intent of self-harm is similar in BPD patients to those with MDD (Soloff et al., 2000).

The difference in the number of lifetime self-harming events across the diagnostic groups was similar to the virtually only published study of suicidal intent comparing MDD and BPD patients (Soloff et al, 2000). In their study of psychiatric inpatients, the BPD patients reported a significantly higher frequency of suicidal behaviours when compared to MDD patients, while the comorbid MDD and BPD patients reported the greatest number of suicide attempts. In the present study, the comorbid MDD and BPD patients were similar to the MDD group in terms of the number of self-harming episodes, while the BPD patients reported a number that was significantly higher (Table 9).

When asked about the method of the most serious self-harming event (the patients were instructed to focus on the episode of self-harm that they considered to be most serious), more than 36% of the patients were unable to select one method; instead, they selected two or more types of self-harm. This was especially the case for the BPD and comorbid MDD and BPD patients. There are at least two possible explanations for this. The patients may not have read the instructions for the questionnaire accurately, and were actually reporting what types of behaviours they had engaged in across separate events of self-harm. Alternatively, they may have harmed themselves in multiple ways during a given episode, e.g., overdosing and cutting. Due to the nature of the questionnaire, it is impossible to know which scenario was more likely to have taken place.

The main question from the SFSQ that was used to measure the patients' intent of self-harm was "Did you expect to die as a result of harming yourself?" It was anticipated that if the BPD patients were self-harming in order to receive attention or to manipulate others, they would report less serious intent by showing a lower rate of endorsing this question. However, 48.7% of the BPD patients expected to die, while the rate for MDD patients was 42.7% (Table 12). These findings are similar to the Soloff et al. (2000) study, in that no statistically significant difference was found between the groups in the present study, despite sufficient statistical power to detect such a difference. Almost half of those in each diagnostic category with a lifetime history of self-harm reported that they expected to die as a result of their act. This may be an indication that BPD patients are no more likely to use self-harm for secondary gain, i.e., for getting a desired response from others, than MDD patients.

The comorbid inpatients in Soloff and colleagues' study reported a level of objective planning that was statistically higher than the level reported by the other two groups. This was not the case in the present study. The BPD outpatients reported the highest rate of planning for some time prior to the event. This result is contrary to the assumption that BPD patients often act impulsively when they engage in self-harm (Gunderson & Ridolfi, 2001). It might have been helpful to ask follow-up questions to examine the length of time and type of planning that took place, but this was not part of the study design.

BPD patients also reported a tendency to seek medical attention as a result of harming themselves that was similar to the other two groups. This may be

interpreted in different ways. It is possible that their self-harming acts were as medically serious as those of the other outpatients, and medical attention was necessary. Unfortunately, Emergency Department and other data were not collected to evaluate the medical severity of the self-harming behaviours. However, the possibility of seeking medical help as a form of attention for emotional reasons cannot be ruled out based on these data.

The remaining two questions about the possibility of self-harm as an attention-seeking effort yielded contradictory results. There was no statistically significant difference between the groups in regard to behaving in a self-harming manner in the vicinity of others. Again, the BPD patients would have been expected to differ from the other groups, were they acting in order to manipulate others. They were, however, more likely to contact someone afterward to tell them what they had done. These data do not provide information about how soon after the behaviour this contact was made, nor is it clear how the patients interpreted the concept of someone being near them when they harmed themselves.

In summary, we feel that the findings of the present study support the hypothesis that suicidal intent regarding self-harming behaviours does not differ between MDD and BPD outpatients.

2. Strengths and limitations

A main strength of this study is its large sample size. During the data collection period, 1445 psychiatric outpatients were asked to complete the SFSQ,

and 1420 of them did so, at least partially. The sample consisted of 120 MDD patients, 168 BPD patients, and 78 comorbid MDD and BPD patients with a history of self-harm. This exceeded the number of patients required based on the sample size estimate of 102 MDD patients and 58 BPD patients. The sample was representative of the clinic's patient population, and the clinic is, for the most part, typical of North-American psychiatric outpatient populations when the distributions of MDD and BPD are considered (DSM-IV-TR, 2000). The lifetime prevalence rate of MDD is estimated to be about 10%, and the rate of BPD in outpatients is about 10%. The rates in the present sample were higher (23.3% and 15.2%, respectively). The PTC is known in the community to be one of few mental health services specializing in personality disorders. Other professionals commonly refer their personality-disordered patients to the PTC for assessment and/or treatment.

The high response rate (98% of the patients answered at least one item on the questionnaire) was another strength in this survey. The number of patients in the sample (MDD, BPD, and comorbid MDD and BPD patients with a history of self-harm) who answered each question varied, but the number for each individual question was large, i.e. at least 315 patients (86%). The question about the number of self-harm episodes was an exception, in that it was answered qualitatively rather than quantitatively by a large proportion of patients. While the response rate for partial completion of the SFSQ was high, only 54% of the self-harm sample answered every question in a way that could be included in the analyses. For example, some subjects checked both "yes" and "no" answers to a question,

in which case the response resulted in a missing data point. Subjects also frequently supplied a qualitative answer, such as “lots of times,“ when asked to report the number of self-harming events they had experienced.

There was a significant age difference between the groups, with the MDD group being significantly older than the BPD group. This may have played a role in the lifetime prevalence rates of self-harm in the two groups being similar. The MDD group had had more opportunities to engage in self-harm due to their greater life-span. Also, the length of their illness may have been longer and more severe. Therefore, a severity bias in favour of the MDD group may have been present.

The sample for this study was consecutive, therefore ensuring that here was no sampling bias or self-selection present. Every patient arriving for an intake assessment at the PTC during the year that data were collected was asked to complete the SFSQ. The questions in the SFSQ were drawn from existing questionnaires that have been validated, namely the HASS-I (Harkavy Friedman & Asnis,1989) and the SIS (Beck, 1974). In particular, the suicide intent questions were based on the SIS which has been used extensively in research on self-harm.

There have been few studies that compare suicidal intent between MDD and BPD patients. The existing studies (Soloff et al., 2000; Horesh et al., 2003) have been conducted with psychiatric inpatients, and the Horesh et al. study was based on an adolescent sample. Extensive literature searches on PsycInfo, MedLine, and ERIC failed to produce any such studies based on psychiatric outpatient populations.

There are a number of limitations associated with this study. The most important one is that the measure used (SFSQ) is not an established questionnaire. It has not been validated, nor checked for reliability. However, as remarked above, the questions were extracted from other, validated measures. When the PREU developed the SFSQ for use in the PTC, the length of the questionnaire was an important consideration. The patients in the PTC routinely complete a battery of questionnaires as a part of their assessment, and it was important to keep the increase in this demand to a minimum. As a result, the number of questions selected was fewer than would have been ideal for capturing all relevant information regarding self-harming behaviours. For example, it would have been desirable to inquire about temporal information regarding patients' self-harm, such as the age of the subjects at the time of self-harm.

Patients who reported more than one episode of self-harm were asked to select the "most serious time" to think of when answering the questions about suicidal intent at the time. They were given no direction in terms of how to evaluate the seriousness of the event. They were not asked to report how they chose the particular episode, and most likely numerous types of criteria were used in this task.

The SFSQ captured information about a very large range of self-harming activities. The patients were given a multiple choice option to answer this question: cutting, overdosing, poison, or other methods. Those who selected other types of self-harm reported behaviours as variable as self-harm due to eating disorders, head banging, alcohol abuse, hanging, overdosing, etc., making this

category extremely heterogeneous. Future studies may benefit from classifying the method of self-harm into finer categories.

The current study did not have the scope to examine several important factors that may be predictors or confounders. Other diagnoses in combination with MDD and/or BPD may play a role, yet there were not resources to go into these analyses within the scope of this project. Many other variables would also have been interesting and important to explore, such as a history of childhood sexual, physical, and psychological abuse. While there is evidence that a history of abuse does play a role in self-harm (e.g., Afifi et al., 2008), it is important to distinguish how it is related to psychiatric diagnoses in terms of self-harm, e.g., whether its contribution is different between MDD and BPD patients. An attempt was made to gather information about whether the patients had experienced abuse during childhood by examining their charts. This task could not been completed as the data were of inconsistent quality.

3. Future research

This study provides information about the intent of self-harm in a population of psychiatric *outpatients* with MDD, BPD, and comorbid MDD and BPD. The main finding was that self-harming outpatients appear to be similar to adult inpatients in this regard: the level of intent is not different among the diagnostic groups studied.

Replication of the current study could serve two purposes. First, limitations of the design and method of the study were discovered during the course of data

collection, and these could be corrected in future studies. Second, if these results can be reproduced, there is a rationale for further research about the function of self-harm in both MDD and BPD. However, the SFSQ would need to be validated and examined for reliability if it were to be used in future research. Additional questions and instruction might be added to the questionnaire to collect more accurate and detailed information about patients' suicidal intent associated with self-harm.

Future projects are needed to examine the role of other factors that may play a role in self-harm in combination with diagnoses. For example, the impact of a history of childhood abuse, which is associated with both self-harming behaviours and BPD, needs to be studied further. The relationship of age to the lifetime prevalence rate of self-harm in MDD and BPD patients also deserves more research. A longitudinal cohort study design would be well-suited to examine the relationships between age, diagnoses, and self-harm.

Ultimately, it is hoped that this line of research could lead to clinical applications, in particular, a shift in the paradigm for evaluating BPD patients for self-harm.

4. Conclusion

This study was conducted in an attempt to research the intent of self-harm in psychiatric outpatients diagnosed with MDD or BPD. The results showed that the level of suicidal intent, as measured by the SFSQ, did not differ statistically between the two patient groups. This result may suggest that there is a need for

educating clinicians about self-harming behaviors in BPD patients in order for this patient group to receive help that better meets their needs.

Due to the limitations of this study, its results cannot be generalized to populations outside the PTC. However, the information provided by the project can be used to stimulate ideas for future research. Self-harm remains a topic that requires more study in order to learn about its role as a risk factor for suicide.

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Appendix A
PTC patient history and assessment form

Patient History
Outpatient Psychiatry—Psychiatric Treatment Clinic

Registration Date:
Identification:
Mode of Admission:
Presenting Complaint:
History of Presenting Complaint:

Patient History
Outpatient Psychiatry—Psychiatric Treatment Clinic

Previous Medical History (Including Last Physical: Date & Findings):
Previous & Present Psychiatric History:
Family History: **Family of Origin:** **Present Family**:
Genogram:
Family History of Mental Illness / Substance Abuse:
Relevant Details:

Patient History
Outpatient Psychiatry—Psychiatric Treatment Clinic

Alcohol, Drug Abuse, and Gambling:
Legal Difficulties:
Development: **Relevant Detail:**
Birth:
Finances:
School & Intellectual:
Social:
Occupational:
Sexual & Marital:
Avocations:
Current Physical Status:
Allergies to medications:
Medications:
Current Physical Symptoms:
Libido:
Premorbid Personality:

Mental Status:
General Behavior, Appearance, & Speech:
Mood:
(objective & subjective)
Concentration & Memory:
Psychomotor Functioning:
Appetite/Eating Disorders:
Weight:
Sleep:
Excessive Guilt:
Anxiety:
Panic Attacks:
Suicide:
Homicide:
Orientation:
Thoughts (Process/ Content):
Hallucinations:
Auditory:
Visual:
Obsessive/Compulsive Phenomena:
Intelligence:
Judgment & Insight:
Abstract Thinking:
Psychological Mindedness:

Patient History
Outpatient Psychiatry—Psychiatric Treatment Clinic

Formulation:
Diagnosis (DSM IV): Axis I:
Axis II:
Axis III:
Axis IV:
Axis V:
Differential:
Treatment Plan:
R.T.C.:
Rounds Psychiatrist:
Therapist:

Appendix B

UAH Department of Psychiatry - Registration Forms

These forms have been developed to assist staff in obtaining basic information to understand and work with you. These forms become part of the records maintained at the University of Alberta Hospital Site. Please fill these out as completely as possible. If you need more space to answer any questions you may write at the bottom of the page.

Name: _____
LAST NAME FIRST NAME MIDDLE NAME

Date of Birth: _____
DAY MONTH YEAR

Age: _____

Gender: 1 - FEMALE
2 - MALE

Address: _____
STREET, AVENUE, ETC.

_____
CITY / TOWN PROVINCE POSTAL CODE

Phone #: (____) _____ (____) _____ (____) _____
HOME CELL WORK

Marital Status: 1 - NEVER MARRIED 4 - DIVORCED 7 - OTHER
2 - MARRIED 5 - WIDOWED _____
3 - SEPARATED 6 - COMMON-LAW

Health Care: _____ _____
HEALTH CARE # PROVINCE (IF NOT ALBERTA)

Emergency Contact Information:

FULL NAME: _____

FULL ADDRESS: _____

RELATIONSHIP: _____

PHONE #: (____) _____ (____) _____ (____) _____
HOME CELL WORK

Family Physician: NAME _____

PHONE # _____

ADDRESS _____

_____

Current Treatment: *Are you currently receiving any kind of mental health treatment?*

☐ NO

☐ YES PLEASE SPECIFY… _____

Referred by: *Who referred you to our service? Please circle one…*

101 - MYSELF / FRIEND / RELATIVE
102 - PSYCHIATRIST
103 - PSYCHOLOGIST
104 - GENERAL PRACTITIONER
105 - UAH EMERGENCY
106 - OTHER UAH DEPARTMENT
107 - AADAC
108 - AGENCY
109 - SCHOOL
110 - OTHER (PLEASE SPECIFY) _____

Usual Occupation: *Please circle one…*

1 - PROFESSIONAL / EXECUTIVE / MANAGERIAL
2 - CLERICAL / SALES / TECHNICAL
3 - TRADESPERSON / LABOURER
4 - UNEMPLOYED
5 - RETIRED
6 - HOMEMAKER
7 - STUDENT

Education (highest level obtained): *Please circle one…*

1 - GRADE 9 OR LESS
2 - HIGH SCHOOL OR LESS
3 - TECHNICAL SCHOOL / COLLEGE
4 - UNIVERSITY DEGREE
5 - POST GRADUATE DEGREE

Current Employment Status: *Please circle one…*

1 - FULL-TIME
2 - PART-TIME
3 - JOB TRAINING
4 - NOT WORKING

Previous Mental Health Treatment: *Please circle all that apply…*

1 - NONE
2 - ONE OF OUR SERVICES…
a) Psychiatric Treatment Clinic
b) Day Treatment Program
c) Evening Treatment Program
3 - GENERAL PRACTITIONER
4 - PRIVATE PSYCHIATRIST
5 - PRIVATE PSYCHOLOGIST
6 - SOCIAL AGENCY / AGENCY THERAPIST
7 - REGIONAL MENTAL HEALTH SERVICES
8 - OTHER COUNSELLOR / THERAPIST (NOT SOCIAL AGENCY)

Previous Hospitalization for Mental Health Reasons: *Please circle all that appy*

1 - NONE
2 - UNIVERSITY OF ALBERTA HOSPITAL
3 - ROYAL ALEXANDRA HOSPITAL
4 - GREY NUNS HOSPITAL
5 - MISERICORDIA HOSPITAL
6 - ALBERTA HOSPITAL EDMONTON
7 - GLENROSE HOSPITAL / YOUVILLE
8 - INSTITUTION OUT OF PROVINCE
9 - INSTITUTION OUT OF CITY

I have a legal document that details which medical decisions are to be made on my behalf should I become unable to do so.

☐ YES ☐ NO

Information Regarding Confidentiality

I) All University of Alberta Hospital Site records are confidential. However:

1. If you are referred by a medical doctor, the following occurs: in the interest of better patient care this facility routinely informs your referring doctor that you carried through with his/her referral. We send a letter thanking them for their referral, briefly outlining our understanding of your problem and our treatment recommendations.

2. Our policy is not to release any information about you without your written consent. However, there are exceptions which you should be aware of:

a) We are required by law to release information to a physician who may treat you in the future.
b) We are required by law to report any suspicion of child abuse or elder abuse to the appropriate agency.
c) Access to charts is available in exceptional circumstances: for example, in the event of a subpoena from a judge, to the Workers' Compensation Board, and to the Medical Examiner in cases falling under their jurisdiction and other exceptions noted in the Alberta Hospital Act.
d) If you are a danger to yourself or others.

II) Emphasis on team work, teaching and training of medical and non-medical professionals dictates that observers may be present in all program activities.

I have read and understood the above.

SIGNED: _____

Consent to Be Assessed

I HEREBY CONSENT TO BE ASSESSED AS AN OUTPATIENT AT THE PSYCHIATRIC TREATMENT CLINIC, DAY TREATMENT PROGRAM, or EVENING TREATMENT PROGRAM.

_____ _____
DATE SIGNATURE OF PATIENT

What problem brought you to this service today?

What other significant problems or stresses are you facing at the present time?

Have any of the following happened in your life in the past year? Mark any that apply…

☐ Death of someone close to you. ☐ Change in residence. ☐ Bankruptcy.

☐ Severe illness in self or family. ☐ Divorce or separation. ☐ Traumatic event (assault, natural disaster, accident).

☐ Child left home. ☐ Pregnancy.

Please list any medications prescribed by a doctor that you are currently taking and the reason:

Please list any non-prescription medications that you are currently taking and the reason:

Have you had a period of alcohol or drug use, present or past, that led to problems for you and others?

☐ YES ☐ NO If yes, please describe…

Have you had any legal problems?

☐ YES ☐ NO If yes, please describe…

List the number of times each of the following has occurred and describe any problems with the pregnancies:

_____ Pregnancies _____ Abortions _____ Miscarriages

Problems: _____

_____

Family:

Please list the members of your family.

Name	Gender (M / F)	Age	Living with you now? (YES / NO / DECEASED)	If not, where do they live?	Current or usual occupation:
SPOUSE:					
CHILDREN:					
1.					
2.					
3.					
4.					
5.					
6.					
PARENTS and/or STEP-PARENTS:					
1.					
2.					
3.					
4.					
BROTHERS and SISTERS:					
1.					
2.					
3.					
4.					
5.					
6.					

Partner Relationships:

List significant partner relationship(s) in your life (e.g., marriage, common-law union) beginning with the current or most recent…

Approximate dates of relationship:		Reason for end of relationship (e.g., death, divorce, separation, move)
FROM	TO	

Employment:

List your three previous employers, beginning with the current or most recent:

	Employer	Position / Duties	Length of Employment	Reason for Leaving
1.				
2.				
3.				

What kind of help are you expecting to receive from staff at this service?

Suicidal Feelings

Please check the answer that fits best.
During the past two weeks have you…

	YES	NO
A) …had ideas about killing yourself?	☐	☐
B) …thought that the world would be better off without you?	☐	☐
C) …wished you were dead?	☐	☐
D) …felt like life is not worth living?	☐	☐
E) …had a plan to kill yourself?	☐	☐

Self Harm

	YES	NO
Have you **ever** intentionally harmed yourself?	☐	☐

How many times have you intentionally harmed yourself? _____

If you have ever intentionally harmed yourself, please answer the following questions.
If more than once, think of the **most serious time**.

What did you do to harm yourself that time?

- Cut, stabbed, or slashed yourself. ☐
- Overdosed on prescribed, over-the-counter, or street drugs. ☐
- Swallowed poisonous chemicals. ☐
- Other (please specify) _____ ☐

	YES	NO
Did you receive medical attention as a result of harming yourself?	☐	☐
Was anybody near you (e.g., in the same house) or expected to arrive when you harmed yourself?	☐	☐
After you harmed yourself, did you contact someone to tell them what you just did?	☐	☐
Had you planned to harm yourself for some time (e.g., saving pills, etc.)?	☐	☐
Did you expect to die as a result of harming yourself?	☐	☐

What was your attitude toward life and death at the time?

- I did not want to die. ☐
- I did not care whether I lived or died. ☐
- I wanted to die. ☐

Problem Orientation Worksheet

Please mark the item(s) which apply to you.
I need to learn…

- ☐ 1. to stop drinking too much.
- ☐ 2. to control my feelings of attraction to members of my own sex.
- ☐ 3. to control my feelings of attraction to members of the opposite sex.
- ☐ 4. to stop thinking about things that depress me.
- ☐ 5. to stop thinking about things that make me anxious.
- ☐ 6. to stop worrying about my physical condition.
- ☐ 7. to stop cleaning or straightening things up so often.
- ☐ 8. to stop thinking the same thoughts over and over again.
- ☐ 9. to stop hearing voices.
- ☐ 10. to stop thinking people are against me or are out to get me.
- ☐ 11. to stop taking drugs (including marijuana).
- ☐ 12. to control my urge to gamble.
- ☐ 13. to control my desire to hurt other people or to be hurt.
- ☐ 14. to control my desire to steal.
- ☐ 15. to control my tendency to lie a lot.
- ☐ 16. to feel more comfortable carrying on a conversation with other people.
- ☐ 17. to stop thinking about committing suicide.
- ☐ 18. to not be upset when others criticize me.
- ☐ 19. to stop thinking so much about things that make me feel guilty.
- ☐ 20. to feel at ease just being with other people in a group.

Symptom Checklist

Indicate how much you've been **distressed** during the past 2 weeks by each of the following symptoms…

NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
0	1	2	3	4

1.	0 1 2 3 4	Nervousness or shakiness inside.
2.	0 1 2 3 4	Faintness or dizziness.
3.	0 1 2 3 4	The idea that someone else can control your thoughts.
4.	0 1 2 3 4	Feeling others are to blame for most of your troubles.
5.	0 1 2 3 4	Trouble remembering things.
6.	0 1 2 3 4	Feeling easily annoyed or irritated.
7.	0 1 2 3 4	Pains in heart or chest.
8.	0 1 2 3 4	Feeling afraid in open spaces or on the streets.
9.	0 1 2 3 4	Thoughts of ending your life.
10.	0 1 2 3 4	Feeling that most people cannot be trusted.
11.	0 1 2 3 4	Poor appetite.
12.	0 1 2 3 4	Suddenly scared for no reason.
13.	0 1 2 3 4	Temper outbursts that you cannot control.
14.	0 1 2 3 4	Feeling lonely even when you are with people.
15.	0 1 2 3 4	Feeling blocked in getting things done.
16.	0 1 2 3 4	Feeling lonely.
17.	0 1 2 3 4	Feeling blue.
18.	0 1 2 3 4	Feeling no interest in things.
19.	0 1 2 3 4	Feeling fearful.
20.	0 1 2 3 4	Your feelings being easily hurt.
21.	0 1 2 3 4	Feeling that people are unfriendly or dislike you.
22.	0 1 2 3 4	Feeling inferior to others.
23.	0 1 2 3 4	Nausea or upset stomach.
24.	0 1 2 3 4	Feeling that you are watched or talked about by others.
25.	0 1 2 3 4	Trouble falling asleep.
26.	0 1 2 3 4	Having to check and double-check what you do.
27.	0 1 2 3 4	Difficulty making decisions.
28.	0 1 2 3 4	Feeling afraid to travel on buses, subways, or trains.
29.	0 1 2 3 4	Trouble getting your breath.
30.	0 1 2 3 4	Hot or cold spells.

Symptom Checklist (continued)

Indicate how much you've been **distressed** during the past 2 weeks by each of the following symptoms…

NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY
0	1	2	3	4

31.	0	1	2	3	4	Having to avoid certain things, places, or activities becaus
32.	0	1	2	3	4	Your mind going blank.
33.	0	1	2	3	4	Numbness or tingling in parts of your body.
34.	0	1	2	3	4	The idea that you should be punished for your sins.
35.	0	1	2	3	4	Feeling hopeless about the future.
36.	0	1	2	3	4	Trouble concentrating.
37.	0	1	2	3	4	Feeling weak in parts of your body.
38.	0	1	2	3	4	Feeling tense or keyed up.
39.	0	1	2	3	4	Thoughts of death or dying.
40.	0	1	2	3	4	Having urges to beat, injure, or harm someone.
41.	0	1	2	3	4	Having urges to break or smash things.
42.	0	1	2	3	4	Feeling very self-conscious with others.
43.	0	1	2	3	4	Feeling uneasy in crowds, such as shopping or at a movie
44.	0	1	2	3	4	Never feeling close to another person.
45.	0	1	2	3	4	Spells of terror or panic.
46.	0	1	2	3	4	Getting into frequent arguments.
47.	0	1	2	3	4	Feeling nervous when you are left alone.
48.	0	1	2	3	4	Others not giving you proper credit for you achievements.
49.	0	1	2	3	4	Feeling so restless you can't sit still.
50.	0	1	2	3	4	Feelings of worthlessness.
51.	0	1	2	3	4	Feelings that people will take advantage of you if you let t
52.	0	1	2	3	4	Feelings of guilt.
53.	0	1	2	3	4	The idea that something is wrong with your mind.

Patient Responsibilities

There are certain responsibilities I am prepared to undertake to help maximize my treatment response. I agree to the following:

1. I will keep appointments. If I have to cancel an appointment I will call and cancel as far ahead as possible. I understand my chart will be closed if I do not remain in contact with the Psychiatric Treatment Clinic.

2. I understand and accept that my medication must be monitored by either a doctor at the Psychiatric Treatment Clinic or my family doctor. I will not change doses or my pills on my own.

3. I will not stop any medications unless directed to do so by a doctor or by a therapist under a doctor's supervision.

4. Medications prescribed at this Clinic may affect mental alertness and physical coordination. Occasionally this may result in an impaired ability to drive or to perform hazardous tasks. In view of this, precautions should be taken, particularly after starting a new prescription.

5. I will call if side effects of medication become a problem.

6. I will ensure I have a family doctor to manage any physical needs that may arise. I will provide the Psychiatric Treatment Clinic with the name, address and telephone number of my doctor.

7. If I need to speak to my therapist on an urgent matter and my therapist is away, I will ask to speak to another therapist at the Psychiatric Treatment Clinic.

8. I will be open and honest about my situations, behaviours and thoughts.

9. If I feel suicidal or homicidal I will call the Psychiatric Treatment Clinic at 780.407.6501 or go to the emergency department at any hospital; or call the Crisis Response Team at 780.482.0222.

10. I have been told and understand that talk therapy can open up memories. I understand that I may feel worse before I feel better. I will tell my therapist/doctor about these feelings rather than stop coming to the clinic.

11. I understand that the use of alcohol and street drugs, including marijuana, can complicate my treatment. I will not use substances while in treatment. I understand and accept that substance abuse/dependence treatment programs may be a condition of my treatment at the Psychiatric Treatment Clinic. I further understand that my refusal to enter into such a program may result in the termination of my treatment at the Psychiatric Treatment Clinic.

DATE	PATIENT'S SIGNATURE	WITNESS

CHART COPY

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PATIENT'S COPY

(This is yours to take home.)