

CONSISTENCY OF SELF-REPORTED SUICIDAL INTENT FOLLOWING A  
SUICIDE ATTEMPT

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## DEDICATION

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SUICIDE ATTEMPT

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ABSTRACT: CONSISTENCY OF SELF-REPORTED SUICIDAL INTENT  
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Suicide is a major problem in the U.S., but the empirical basis for assessment of suicidal risk is severely lacking. Critical to understanding the level of risk present after an act of self-harm is the degree to which the self-injuring patient intended to die via the act, which is called the degree of suicidal intent. In most studies, suicidal intent is identified at baseline as the self-reported intent of the self-injurer; however, clinicians commonly encounter cases where patients' self-reported suicidal intent immediately after an injury episode is denied a few days later. This study tested the hypothesis that subjects would retrospectively report reduced levels of suicidal intent and fewer motives for their self-injury at follow-up (7 to 12 days after the attempt)

than they did at baseline (within 48 hours after the attempt). Intent and motives were assessed using the Oxford Reasons for Parasuicide Interview and the Suicide Intent Scale (SIS). Statistical analyses found that subjects scored significantly higher on the SIS at baseline than they did at follow-up, confirming the hypothesis that retrospective self-reported suicidal intent would decrease with increasing time since the event. Although subjects reported fewer motives on average at follow-up than at baseline, the hypothesis that subjects would significantly decrease the number of reported motives at follow-up was not supported due to a lack of statistical significance. The findings of this study suggest that self-reports of suicidal intent are not consistent over time and are thus not necessarily reliable. Therefore, clinicians may do well to group suicide attempters and non-suicidal self-harmers together and treat them with similar precaution, as is done in Europe.

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## LIST OF DEFINITIONS

Intent– [also suicidal intent, intention] how much the person wanted to die at the time he/she attempted suicide (Harriss, Hawton, & Zahl, 2005); one's subjective probability estimate that one's suicidal plan or wish would result in death (Beck, Schuyler, & Herman, 1974)

Lethality – the relative ability of the method or the combination of methods of suicide to induce death (Beck, Beck, & Kovacs, 1975)

Motive – the underlying reason for an act of self-harm (Freedenthal, 2007); a factor which stimulates movement towards self-injurious acts (Hjelmeland & Knizek, 1999)

Parasuicide – used in Europe to designate all nonfatal and deliberately self-inflicted injuries to one's own body, regardless of suicidal intent (Hjelmeland, Hawton, Nordvik, Bille-Brahe, De Leo, Fekete, et al., 2002)

Risk assessment – assessing for level of suicidality and discerning what steps should be taken to prevent suicide or further self-harm (Apter, Horesh, Gothelf, Graffi, & Lepkifker, 2001)

Self-harm – [also deliberate self-harm] in the United States, refers to nonfatal episodes of deliberately self-inflicted injury to one's own body without suicidal intent; in Europe, the same definition is used except it is applied regardless of whether suicidal intent is present or absent (Skegg, 2005)

Self-injury – any nonfatal and deliberately inflicted injury to oneself regardless of suicidal intent (Skegg, 2005)

Self-poisoning – [also overdose] intentional ingestion of a potentially lethal substance regardless of suicidal intent (Prosser, Perrone, & Pines, 2007)

Suicide – [also fatal suicidal behavior] the intentional ending of one's own life by some infliction of a fatal deliberate injury (Skegg, 2005)

Suicide attempt – [also attempted suicide] a survived act of self-inflicted bodily harm carried out with the intention to die; in Europe, may not imply suicidal intent (Skegg, 2005); includes aborted suicide attempts (the attempter changes their mind in the midst of a suicide attempt) and interrupted suicide attempts (the attempt is disrupted by another person or some outside force)

## **CHAPTER ONE**

### **Introduction**

#### **THE IMPORTANCE OF INTENT FOR SUICIDE RISK ASSESSMENT**

##### **Suicide in the United States**

Suicide is a major problem in the United States (Apter, Horesh, Gothelf, Graffi, & Lepkifker, 2001; Gaynes, West, Carol, Frame, Klein, & Lohr, 2004; Kung, Hoyert, Xu, & Murphy, 2008). It is the 11<sup>th</sup> ranking cause of death in adults and the 3<sup>rd</sup> leading cause of death in adolescents. In 2005, suicide accounted for 1.3% of total deaths (32,637 deaths) in the nation and a shocking 12.3% of all deaths in young people aged 15-24 (Kung et al., 2008). Even more startling is the number of reported nonfatal suicide attempts in the United States. The prevalence of attempts has reached close to 816,000 annually (Kung et al., 2008). Even though a nonfatal suicide attempt may sometimes appear to be a cry for help without a genuine intention to die, no suicidal gesture should ever be taken lightly. Nonfatal self-injury, which by definition encompasses any kind of deliberate self-harm regardless of whether there is intention to die or not, carries with it a high risk for completed suicide in the future (Apter et al., 2001; Pokorny, Kaplan, & Lorimor, 1983; Skeem, Silver, Aippelbaum, & Tiemann, 2006). In other words, individuals who self-harm are at an increased lifetime risk for eventual suicide. Fifteen percent of people seen at a hospital for self-injury will present again within a year for self-injury and, within 9 years, five percent will have committed suicide (Owens, Horrocks, & House, 2002).

## **Definitions of Suicidal Behavior Used in the United States and Europe**

Before going on to discuss suicide risk assessment and intent, it is necessary to clarify the differences between definitions of suicidal behaviors used in the United States (U.S.) and Europe, which inform differences in approaches towards risk assessment and in the understanding of suicidal intent found on different sides of the Atlantic Ocean. Along with most of Europe, the United Kingdom has embraced the term “deliberate self-harm” or “self-harm” as an all-encompassing definition to include all suicidal behaviors, and non-suicidal self-harm, by any methods, and with any level of suicidal intent. Self-harm, as used throughout Europe, includes everything from putting out cigarettes on one’s arm in the absence of any suicidal intent, to shooting oneself in the head (but surviving) with high intent to die. Other behaviors included in this broad definition of self-harm include deliberate recklessness, self-hitting, self-cutting, self-poisoning (overdose), self-hanging, self-electrocution, and drowning oneself. The term “parasuicide”, also used frequently in Europe, is synonymous with this notion of self-harm. The practical implication is that European suicidal researchers are not as concerned with ascribing intent as they are with understanding the behaviors of all self-harmers, regardless of their intentions (Skegg, 2005).

The U.S. also uses the term “deliberate self-harm”, but it is specifically used to indicate self-inflicted harm without suicidal intent. This typically includes behaviors like self-cutting, self-hitting, and other reckless or harmful behaviors that invite injury but are not intended to be fatal. In contrast, the term “attempted suicide” is used specifically in the U.S. to designate those people who fully intend to kill themselves, but survive a self-

injury (Skegg, 2005). This American approach assumes that people who commit acts of self-harm with no intent to die are qualitatively different than those who purposefully try to kill themselves, and that these two groups should be considered independent of each other.

## **Suicide and Risk Assessment**

### *What Risk Assessment Involves*

Accurate assessment of the potential for repeated self-harm among treated or hospitalized self-injurers is very important so that appropriate measures can be taken to prevent a future completed suicide. Risk assessment should include efforts to elucidate the factors that distinguish the suicidal patient at risk for completed suicide from other patients (Apter et al., 2001). In this context, suicidal intent, or how much a person wanted to die at the time of a self-injurious act (Harriss, Hawton, & Zahl, 2005), is believed to be the single factor that can tell us the most about the risk of additional, near-term suicidal behavior. Motives can also provide rich insight into near-term risk for additional suicidal behavior, especially by clarifying and adding to the understanding of suicidal intent. “Motives” are the reasons behind self-injury (Freedenthal, 2007) and can be anything from a wish to escape from an unbearable situation, to a desire to show others how much the suicide attempter loves them. In addition to the patient’s level of intent and stated motives for a suicidal act, other factors that should be clarified during risk assessment include: severity of depression, degree of hopelessness, impact of recent life events, lethality of the attempt, amount of current social support, relevance and



subjective importance of motives for taking one's life, and demographic variables (Kumar, 2005). Ideally, the clinician should assess all of these factors in recent self-injurers, and these factors should inform decisions about necessary safety precautions and further treatment.

### *The Inadequacy of Current Risk Assessment*

As crucial as risk assessment of recent self-injurers is, it has been shown to be universally inadequate as a means of preventing suicide (Gaynes et al., 2004). In fact, many hospitalized attempters kill themselves either during inpatient care, or soon after being discharged, often within 6 months (Pokorny et al., 1983). Assessing the risk for repeated suicidal acts in the near-term is difficult, especially considering the ambivalence that the suicidal individual so often feels about their intentions and their future (Freedenthal, 2007; Schnyder, Valach, Bichsel, & Michel, 1999). Since a satisfactory risk assessment protocol does not currently exist, a reliable way to predict which suicidal individuals will actually go on to commit suicide remains elusive (Apter et al., 2001). Risk factors for suicide that have been identified by past research include being of male gender, unmarried, having mental illness (especially depression), using highly lethal methods during self-injury, being involved in stressful life situations (Sudhir Kumar, Mohan, Ranjith, & Chandrasekaran, 2006), having high intent during suicidal acts (Beck, Beck, & Kovacs, 1975), and low self-disclosure about suicidal urges (Apter et al., 2001). However, little knowledge exists about how to quantify the amount of risk that equates to "high" suicide risk, which is why no assessment protocol has been found to reliably and accurately predict suicide (Geddes, 1999). The U.S. Preventative Services Task Force

released a study in 2004 in which they found no evidence that screening for suicide risk actually reduces suicide attempts (Gaynes et al., 2004). Their conclusion was that, “the [overall] lack of well-developed, credible measurement tools in suicide research has severely limited the field, leaving many risk assessment initiatives without the means to truly document public health return.” In short, near-term risk factors need to be more extensively researched and risk assessment strategies require substantial improvement.

### *Intent and Risk Assessment*

Arguably, the most important component of risk assessment is suicidal intent. In spite of the inadequacies that plague current risk assessment practices, intent has proven to have prognostic power. For instance, intent during a nonfatal suicidal act demonstrates high predictive capacity for subsequent completed suicide (Bancroft, Hawton, Simkin, Kingston, Cumming, & Whitwell, 1979; Beck et al., 1975; Freedenthal, 2007; Harriss, Hawton, & Zahl, 2005; Hjelmeland, Hawton, Nordvik, Bille-Brahe, De Leo, Fekete et al., 2002). In addition, intent has been found to be a valid qualifying term for designating attempted suicide (Beck et al., 1975). In other words, intent can be used to distinguish between suicidal acts with differing levels of seriousness. Understanding the intentional aspects of suicidal behavior provides a better perspective into the self-injurer’s inner drive. It provides a glimpse into the reasoning that drove the instigator of such a potentially devastating act (Rodham, Hawton, & Evans, 2003). It can be argued that determining the most serious lifetime level of intent is among the best ways to prevent future episodes on the individual level, because this factor helps us to evaluate how

serious the person is about dying and how serious they may become in the future (Rodham et al., 2003; Harriss et al., 2005).

The problem is that the level of suicidal intent present during any given self-injurious act is often reported in an inconsistent manner across time. Self-reports of intent following self-injury have been shown to change from one interview to the next (Cantor, McTaggart, & DeLeo, 2001). At any given time, a self-injurer's self-report of intent is influenced by a set of emotional and societal pressures. For instance, there may be pressures to de-emphasize intent to avoid psychiatric hospitalization or embarrassment, or there may be pressures to exaggerate intent to justify a self-injurious act, or to remain in a sick role. In the United States, when we interview self-injurers we ask them if they meant to kill themselves. If they indicate that they did, we treat them aggressively, but if they indicate that there was no suicidal intent, we often send them on their way (after appropriate medical treatment). However, clinicians cannot be certain that their self-injuring patients are disclosing the true intent of their acts. If suicidal patients hide their intent to die, they do not receive relevant treatment and thereby are at increased risk for repeated self-injurious behavior.

The present study seeks to understand how consistently people report suicidal intent over time. It also seeks to answer the question: are suicide attempters as we define them in the United States (possessing intent to die) substantially different than self-harmers (possessing no intent to die)? European clinicians tend to treat patients in similar ways whether they report suicidal intent or not. If reports of the intent of any given self-injuring act are not consistent over time, it is possible that clinicians in the United States should adopt this strategy as well. The present study will look at the consistency of self-

reported intent by comparing reported intent immediately after an attempt to intent as described 7 to 12 days later.

## **CHAPTER TWO**

### **Review of the Literature**

#### **CONSISTENCY OF SELF-REPORTED SUICIDAL INTENT**

##### **Definition of Suicidal Intent**

Suicidal intent can be defined as the seriousness or intensity of the wish of a self-injurer to end his or her life (Beck, Schuyler, & Herman, 1974). It indicates what the person intended to achieve by a suicidal behavior (Hjelmeland et al., 2002). The intent of any cohort of self-injurers can be grouped into three basic categories: (a) those who wish to die, (b) those who do not wish to die, and (c) those who are ambivalent about, or who do not care, whether they live or die. Self-reported intent may depend heavily on the nature of the questions asked. In one study of 46 patients receiving psychiatric consultation following a suicide attempt, 56% indicated a wish to die. Interestingly, however, almost a third of the sample denied suicidal intent (Bancroft et al., 1979). Hawton, Cole, O'Grady, and Osborn (1982) found that a third of adolescents who presented to a hospital after overdoses said they wanted to die, while another study by Rodham, Hawton, & Evans (2003), asking adolescents from a school population to retrospectively report suicidal behaviors, found approximately 67% of overdosers and 40% of self-cutters expressed the wish to die at the time of their attempt.

##### *Assessing Intent*

Conceptually, suicidal intent represents the self-injurer's subjective point-of-view regarding their suicidal act. Even so, researchers have argued that it can be measured by

both self-report and objective indicators. Intent is assessed subjectively by simply asking the individual what he or she intended to happen as a result of their self-injurious act. In one well-designed multi-site study, this was done using the question, “People hurt themselves for all sorts of reasons. On a scale of 0 to 100, how much did you want to die?” (Kennard, Silva, Vitiello, Curry, Kratochvil, Simons, et al., 2006). As the most integral part of suicide risk assessment, it is important the patient report as clearly as possible whether there was any desire to die whatsoever. Intent has also been assessed in some studies by looking at more objective circumstantial indicators surrounding the self-injury act. For instance, indicators of high suicidal intent might include evidence of premeditation, unusual or secretive behavior, isolated location, timing to forestall an intervention, lack of help-seeking, or written or verbal expressions of desire to kill oneself (Beck et al., 1974). Freedenthal (2007) suggests that clinicians give the patient’s subjective self-report priority unless there is objective evidence that he or she may be underreporting the seriousness of the wish to die. For the purposes of this proposed study, we will be referring exclusively to self-reported, or “subjective”, intent.

### *Levels of Intent*

When suicidal intent is present, including even a mild or ambivalent wish to die, the level of intent can be quantified as any degree above zero, ranging from low to high intent (De Leo et al., 2006). So, depending on the clinician, patients who admit uncertainty about whether they truly wished to die might be labeled as “moderate intent”, and other patients who tried as hard as they could to kill themselves, but were saved by some twist of fate, might be labeled as “high intent”. On the other hand, patients who

have seriously hurt themselves and who report that they did not wish to die are regarded “low intent”, no matter how life-threatening their injuries may be.

Intent may vary with time before or after the self-injury act. Intent is generally understood to be higher closer to the act, when the risk of committing suicide is highest. Conversely, intent is understood as being lower when the risk is lower, that is, further in time from the act (Klerman, 1987). It has been suggested in numerous studies that self-injurers with high intent may also have different characteristics than those with low intent. One study of 203 patients admitted for treatment following a suicide attempt, for instance, discovered that patients with high suicidal intent were more often male and single, compared to patients with low intent (Sudhir Kumar et al., 2006). They were also more often diagnosed with depression and schizophrenia, had higher levels of stress, and used more violent and lethal methods to try to kill themselves than low-intent suicide attempters (Sudhir Kumar et al., 2006).

Beck et al. (1975) believed that the lethality of method used was an inaccurate predictor of intent, but that the accuracy of the attempter’s conception of lethality was correlated with degree of intent. So, in the case of accurate understanding of the potential lethality of any given method of self-harm, the higher the lethality of the method used, the higher the intent to die. In the case of inaccurate understanding of the potential lethality of any given method of self-harm, there was no relationship between lethality and intent (Beck et al., 1975). However, a more recent study found that lethality was strongly associated with intent (Haw, Hawton, Houston, & Townsend, 2003). Likewise, in another recent study looking at differences between self-poisoners and self-cutters, self-poisoners more often reported intent to die than self-cutters (Rodham et al., 2003),

and self-poisoning is widely regarded as a potentially more lethal method of self-injury than cutting.

## **Intent and Motives**

### *Motives*

Suicidal intent cannot be meaningfully discussed and understood without also considering the motives for an act of self-injury. Motives can be defined as reasons to act (Freedenthal, 2007). In the case of suicidal behaviors, motives are what stimulate movement towards action (Hjelmeland & Knizek, 1999). One cannot have suicidal intent without at least one motive to give it grounds to exist. Common reasons (motives) that have been given by people who have knowingly taken an overdose are: to die, to seek help, to gain relief from a terrible state of mind, to influence someone (Bancroft et al., 1979), not being able to think of an alternative way to cope, or losing control (Schnyder et al., 1999). According to a study by Rodham et al. (2003), the most common motive reported by self-cutting adolescents was depression, and the most common motive for self-poisoners was to escape. Another study found the most common reasons for any act of self-harm were to escape, to get relief from distress, and to demonstrate one's feelings to others (Hawton et al., 1982). Michel, Valach, & Waeber (1994) found that, in a sample of 327 people being treated for attempted suicide, the wish to find relief from an unbearable state of mind was the most important. Interpersonal and manipulative motives were assigned far less importance by the participants.



### *The Relationship Between Intent and Motive*

There is no one universally accepted way to conceptualize the relationship between intent and motive. These two terms are often confused or considered to be synonymous. For the purposes of this discussion, intent and motive are not considered to be the same thing, but are understood as being intrinsically related. Conceptually, intent can be understood to be a higher order factor than motive: any given level of intent (from low to high) can encompass any combination of motives with varying degrees of intensity (see Figure 1.). The degree to which motive influences level of intent depends on several factors, including the type of motive, the personal importance assigned to the motive, the relevance of the motive to current circumstance, and the number of motives to self-injure that are present. Certain types of motives will typically be associated with certain levels of intent. Motives typically associated with high intent, or “strong” motives, include the wish to die, a strong desire to get relief from a terrible state of mind, and an urge to escape from an impossible situation. Low intent motives, or “weak” motives might include: getting help from someone, influencing someone, and discovering the “true” feelings of another person. As a rule of thumb, strong motives might be understood as involving the removal of oneself from a particular environment or circumstance, whereas weak motives are more likely to involve manipulation of the environment or another person (Beck et al., 1974).

As mentioned earlier, other factors related to motives will also influence the person’s level of intent. For example, a man may wish to show an ex-girlfriend how much he really loves her and, as a last resort, thinks a suicidal gesture would do just that. This might normally be considered low intent, but he may become particularly desperate

when his ex says she is about to marry another man. This would likely also raise the level of suicidal intent associated with any related self-injurious act. When he starts to feel more hopeless, he may also have a secondary motive related to communicating his desperation. As noted before, the more motives that pile on, the more the level of intent is likely to be raised.

Intent is more closely related to the suicidal act than motive (Hjelmeland & Knizek, 1999). For this reason, intent should hold more sway in explaining or predicting suicidal behaviors. Motives are the influencing factors that contribute towards and work up to a self-injurious act, but they cannot be used to determine whether someone is seriously trying to kill himself. Intent is the more important factor in describing the purpose of the suicidal act. Moreover, intent is more subjective and personal than motive because it's true level is something only the self-injurer can really know and report.

### **Inconsistency of Intent**

#### *Ambivalence and False Reports*

The level of suicidal intent and the motives that contribute to a self-injurious act are incalculably valuable components of near-term suicide risk assessment, but unfortunately the reporting of these features of the injury episode is often inconsistent and unreliable across time (Haw, Hawton, Houston, & Townsend, 2003). It may be that intent is difficult for a self-injurer to accurately report because it is associated with the strength of multiple motives for the behavior, many of which may be connected to highly ambivalent and transitory feelings (Bancroft et al., 1979; Rodham et al., 2003; Schnyder

et al., 1999). Consider the endless combinations of motives for self-injury that are possible, each with its own complex interplay between relevance and personal meaning. One person may communicate a wish to escape an unbearable situation (a strong motive that frequently suggests high intent), but ascribe to the same act a desire to seek help from others (generally implying low intent). We know this combination of motives may place the suicidal individual on the scale somewhere between low and high overall suicidal intent, but we do not know how this translates into meaningful assessment of the intent expressed via the act or whether it will be consistently expressed across time. Ambivalence is a trait that is inherent in much of suicidal behavior (Freedenthal, 2007). The self-injurer may not only have several motives, but may also feel conflicting emotions about suicide, struggling between feelings of hopeless despair and the instinct to survive. In this way, intent may be hard to define even for the self-injuring individual himself. As a result, many self-injurers may be unaware of their own intentions, or find these internal pressures to be so complex that they cannot be articulated clearly (Freedenthal, 2007; Hjelmeland et al., 2002).

In addition, a potentially large number of self-injurers may deliberately give false reports of their true intent in some context, further compromising the reliability of self-reported intent. In the case of a “false negative”, individuals may deny having any intent to die even though they actually did wish to die (Freedenthal, 2007). This may be done to evade treatment, hospitalization, social stigma, or the concern of others. Likewise, a “false positive” happens when someone falsely claims suicidal intent in order to justify his or her actions, get sympathy, or be taken care of (Freedenthal, 2007). Although the case of a false positive inevitably creates a drain on precious psychiatric resources and

reinforces negative behavior in the individual, Freedenthal has suggested that the individual's report should always be given priority over any objective evidence available to the clinician, as it is best to err on the side of caution in case the individual does truly harbor even the slightest wish to die.

### *Impulsivity*

Impulsivity characterizes many acts of nonfatal self-injury and contributes further to our problems in characterizing suicidal intent. Essentially, impulsive self-injurers are acting on an impulse to kill themselves without much forethought (Freedenthal, 2007). This happens frequently. One study of 50 adolescent self-poisoners found that many of the participants they interviewed had little forethought or premeditation prior to the act (Hawton et al., 1982). Another study found that 25% of suicide attempters made their attempts within 5 minutes of deciding to do so (Simon, Swann, Powell, Potter, Kresnow, & O'Carroll, 2002). This makes it harder for either clinicians or the attempters themselves to identify motives and intents and to know if they would do the same thing if there had been a longer delay prior to the attempt. In such cases, intent may be so ephemeral that one moment the person may stand firm in reporting that they most certainly wanted to die via the act, but the next moment they may be certain that they wanted to live (Freedenthal, 2007). Finally, people who are mentally ill or under the influence of drugs or alcohol may also be more impulsive, have memory gaps, or basically experience a loss of control right before self-injury, making it difficult if not impossible to establish the presence and level of suicidal intent associated with these impulsive, injurious episodes (Schnyder et al., 1999).

The question, then, presents itself: do highly impulsive acts of self-injury represent higher or lower suicidal intent? In his Suicide Intent Scale, Beck scores suicidal behaviors with evidence of more planning (extensive preparation, presence of a note, and plans such as taking out insurance) as higher on the intent scale than those with little or no planning (Beck, 1974). This implies that the less impulsive the act, the higher the suicidal intent. Findings from the study by Rodham et al. (2003) comparing adolescent self-cutters and self-poisoners support this view: the study found that self-cutters, more often associated with low intent, were significantly more likely to have spent less than one hour planning their suicidal behavior compared to self-poisoners (associated with more deadly outcomes and higher intent).

Acting upon the known impulsivity of many self-injurious acts, researchers in the United Kingdom have focused on restricting the availability of common methods of self-injury. They have successfully reduced suicide rates by pushing the government to reduce the size of analgesic packages sold to individuals. Theoretically, this reduces the ease and quickness with which people can ingest the pills, giving them more time to reconsider acting on suicidal impulses. After one year of means restriction, the number of nonfatal self-poisonings was decreased in the United Kingdom by 15%, paracetamol (Tylenol) overdoses were decreased by 29%, and salicylate (aspirin) overdoses were decreased by 46% (Hawton, Simkin, Deeks, Cooper, Johnston, Waters et al., 2004).

### *Studying Inconsistency as a Function of Intent*

There is little doubt that suicidal intent is an integral piece of the suicide risk assessment process. By definition, a person cannot commit suicide without some level of

intent to die. The problem lies in the ability to measure it. It is not necessarily a difficult task to measure the presence of suicidal intent as it is presently understood; it can be assessed by simply asking about the desired outcome of the suicidal act. The problem is that we do not understand intent well enough to know how to measure it accurately. Perhaps one of the greatest obstacles in understanding intent is its inconsistent nature. As discussed earlier, the sheer variety of suicidal behaviors makes intent difficult to assess and measure consistently across methods of suicidal injury. In addition, ambivalence and impulsivity so color self-reports of intent that they further muddle our understanding of the concept. Perhaps instead of trying to overcome these inconsistencies, we can try to integrate them into our concept of intent. For instance, we can treat ambivalence and impulsivity as traits that can potentially enrich our understanding of suicidal intent. In addition, temporal consistency of intent across time periods has never before been addressed empirically, despite the fact that previous research has noted that descriptions of intent following suicide attempts change from one interview to the next (Cantor et al., 2001). Perhaps the more we learn about the inconsistent nature of suicidal intent, the more we can accurately assess intent and the better we can address the discrete or overlapping nature of the treatment required by groups of suicide attempters and non-suicidal self-harmers.

## **The Present Study**

### *Assumptions*

This study asks the question: what do self-injurers report as their intent (at the suicidal moment) within 48 hours of their self-injury act and how does that compare with what they report as their intent (again, at the suicidal moment) 7 to 12 days after the self-injury act? We assume the transitory, ambivalent, and multiply-determined nature of motive and intent are important factors that will influence self-reports of intent at both points in time. We also assume that at the moment of the suicidal act, self-injurers are often essentially blinded by their motives: intent is heightened by the intensity of feelings the person has about the motive for the act. Feelings tied to motives may be overwhelming because they are vivid, immediate, and prioritized. At this crucial point, where the person is overwhelmed and desperately wants to die to end the agony, intent will be the highest. Shortly after the act, the person may still feel the bitter and anguishing pull of these motives, along with any number of different strong emotions related to having survived the attempt. This is the time (48 hours after the act) when this study will elicit the first self-report of level of suicidal intent and identification of the motives for the act. The second self-report of intent and motives will be elicited 7 to 12 days later. By this time, in many cases, the “impulse” to die may have passed and the motives may have been relegated to the past or just be less relevant. Because of these factors, we assume that level of suicidal intent ascribed to the act will be lower at the time of the second interview.

In the cases where this hypothesis is supported and self-reports of intent are confirmed to be inconsistent between time periods, the transitory and ambivalent nature of intent will thus be demonstrated. More importantly, this will demonstrate that suicide attempters and self-harmers are not discreet groups that can be easily separated based on self-reports of intent. As such, the implication will be that all self-injurers should be treated similarly and approached with similar precaution, regardless of self-reported level of suicidal intent.

#### *Research Hypotheses*

Specifically, I hypothesize that:

1. Retrospective description of level of suicidal intent during the index suicide attempt will be significantly lower at follow-up than at baseline, as measured by both the Oxford Reasons for Parasuicide Interview and the Suicide Intent Scale.
2. Subjects will retrospectively report fewer and weaker motives for their suicide attempt at follow-up than at baseline, as identified on the Oxford Reasons for Parasuicide Interview.



## **CHAPTER THREE**

### **Methodology**

#### **Participants**

The participants were a convenience sample of 19 self-injuring patients at Parkland Hospital in Dallas, Texas. These participants were part of a larger sample of 60 participants who completed identical baseline protocols. However, only the 19 participants used in this study completed the follow-up protocol along with the baseline protocol, and thus were the only ones who qualified for our study.

Out of our sample of 19 participants, 13 were admitted into the Psychiatric Emergency Services, 2 were admitted into the Main Emergency Department, and 4 were inpatients who were referred to the Psychiatry Consult Liaison Service for assessment of suicidality. Females made up 63.2% (n=12) of the sample and males made up 36.8% (n=7). The average age for the sample was 37, ranging in age from 18-58, with 36.8% (n=7) of the sample falling within the 18-29 age range, 21.2% (n=4) in the 30-39 age range, 15.8% (n=3) in the 40-49 age range, and 26.3% (n=5) in the 50-59 age range. The sample consisted of 47.4% (n=9) Caucasians, 31.6% (n=6) Hispanics, and 21.1% (n=4) African-Americans. Approximately 31.6% (n=6) of the sample were married or living with a partner, while the rest of the sample (68.4%; n=13) were single, including 31.6% (n=6) who had never been married and 36.8% (n=7) who were divorced or separated. The majority of the sample (57.9%; n=11) was currently unemployed, 36.8% (n=7) was employed full-time, and one person was retired. The primary mental health diagnoses given by treating physicians were depression (n=7), bipolar disorder (n=6), anxiety (n=4),

unspecified behavioral or emotional problem (n=3), substance abuse or dependence (n=1), and psychosis (n=1). As for means of self-injury, 11 participants attempted overdose, 3 were considered self-mutilators, 1 sustained a serious cut, 1 sustained self-immolation, 1 sustained a gunshot wound, and 2 used a combination of overdose and cutting. In all, 52.6% of the sample had previously self-injured.

A comparison to the larger sample consisting of 60 participants revealed no significant differences in age distribution (mean=37), marital status (70% single, 30% married or cohabitating), employment (60% unemployed, 36.7% employed), or means of self-injury (56.7% overdose, 16.7% self-mutilation, 11.7% serious stab/cut wound) as compared to our study sample. The larger sample had a more equal gender distribution, consisting of 55% females and 45% males, and a larger percentage of Caucasian participants (56.7%), but a greater diversity, including one Middle Eastern and one Native American participant. Diagnoses were similar to our sample population, with the largest difference being diagnoses of depression (n=30) than bipolar disorder (n=13) as compared to our study sample where these diagnoses were approximately equal.

To be eligible for the study, participants had to: be interviewed within 48 conscious hours after the attempt, initially admit to intentionally hurting themselves, be 18 years old or older, speak and write fluent English, allow access to their medical records, and be able to provide informed consent. They agreed to participate in an interview at the hospital and also to a follow-up interview 7 to 12 days later. Patients who were psychotic, intoxicated, intubated, head-injured, deaf, mute, or otherwise deemed incompetent to complete the interview were excluded from the study.

## Materials

After consenting to the study, participants were given the Oxford Reasons for Parasuicide Interview (ORPI; Bancroft, Hawton, Simkin, Kingston, Cumming, & Whitwell, 1979; Hjelmeland, Hawton, Nordvik, Bille-Brahe, De Leo, Fekete, S., et al., 2002), a semi-structured interview including the following: (a) one question prompting a spontaneous account of the self-injury act, (b) five questions detailing reasons and feelings associated with the act, (c) ten questions establishing circumstances of the self-injury act, (d) two questions detailing previous suicide attempts/self-harming acts, (e) one set of cards the patient uses to choose the most important of five feelings associated with the act, (f) one set of cards the patient uses to choose the most important of fourteen possible motives for the act, (g) one set of cards the patient uses to choose the most important of three levels of suicidal intent, and (h) one set of cards the patient uses to choose the most important of three feelings they are currently experiencing related to surviving the self-injury act (see Appendix A for a copy of the interview). The motivation cards and the intent cards were used to test the hypotheses presented in this study. The motivation cards are used to measure motives, with the importance of the contribution of each motive to the decision to act being coded as a number between 1-14. The intent cards are used to measure intent: responses were scored on a scale of 0 to 2, 0 being “I did not want to die”, 1 being “I did not mind whether I lived or died”, and 2 being “I wanted to die”. Each participant was given an intent score based on the card they choose. No reliability or validity has been established for the interview, but it has been used in multiple studies for over three decades in the United Kingdom as well as in

the thirteen-nation WHO/EURO Study of Parasuicide (Hjelmeland et al., 2002). All sets of cards are straightforward and face valid.

Participants were also given the Suicide Intent Scale (Beck, Schuyler, & Herman, 1974), a measure designed to be a comprehensive representation of suicidal intent. It takes into account suicidal behaviors before, during and after an attempt. It is a 15-item schedule consisting of two parts: (a) questions 1-9 cover the objective circumstances of the attempt and (b) questions 10-15 cover the attempter's subjective conception of the lethality, premeditation, purpose, and expectations of rescue (see Appendix B for a copy of the scale). Each item is scored on a scale from 0 (least severe) to 2 (most severe), with total scores ranging from 0-30. The Suicide Intent Scale (SIS) has been shown to have a high degree of interrater reliability ( $r=.95$ ) and acceptable internal consistency ( $r=.82$ ). Construct validity has also been supported for the instrument (Beck et al., 1974).

Participants were scored at baseline on the Risk-Rescue Rating (Weisman & Worden, 1972), a 10-item measure administered by the interviewer and used in this study primarily to assess the medical lethality of a suicide attempt (see Appendix C for a copy of the scale). Each item has specific values ranging from 1 to 3. The first five items measure the risk of suicide and yield a Risk Score ranging from 5 ("low risk") to 15 ("high risk"). The other five items indicate the likelihood of intervention and yield a Rescue Score ranging from 5 ("least rescuable") to 15 ("most rescuable"). A Risk-Rescue Rating is calculated  $[(\text{Risk Score}/(\text{Risk Score} + \text{Rescue Score})) \times 100]$  to measure the overall seriousness of the attempt. The Risk-Rescue Rating has high interrater reliability ( $r=.93$ ). It has face validity and correlates with other measures of self-injury, particularly independent clinical judgment ( $r=.66$ ; Weisman & Worden, 1972).

## **Procedure**

To the extent possible, consecutive participants were recruited for the study from April 19, 2009 through October 30, 2009. The researchers recruited participants in five-hour shifts as follows: Monday, Thursday, and Friday from 1:00pm-5:00pm; and Saturday and Sunday from 7:00am-12:00pm. During a given shift, the researchers checked for potential participants at Parkland Hospital by reviewing the electronic hospital records for patients currently admitted into Emergency Services for self-injury. The on-call doctor or intern for the Psychiatry Consult Liaison team was contacted at the beginning of every shift and asked whether they assessed any hospitalized self-injury patients that were not caught by the hospital records review. Demographic information was recorded for all self-injuring patients in the hospital, including those that were missed, excluded or refused.

After being notified about a potential participant, the interviewer visited the patient as soon as possible to explain the purpose of the study and ask whether the patient would be willing to participate. To ensure that invited patients qualified for the study, the interviewer made sure they met criteria verbally, including a verbal acknowledgment of intentional self-injury. Once the participant was selected to take part in the study, they were provided with a patient advocate. The advocate was instructed to make sure the patient understood the study, to make certain that they were not being coerced into the study, and to ensure that they were able to give consent. Along with the advocate, the participant read or was briefed by the interviewer on both consent and HIPAA forms.

The patient advocate was also invited to ask any questions they deemed to be necessary to ensure that the rights of the patient were protected during the interview.

The interviewer also explained that a follow-up interview 7 to 12 days later was a necessary part of the study and patients were asked to provide at least three pieces of contact information for the purpose of scheduling this follow-up interview (telephone, cell phone, address, email, etc). Participants were also asked a series of questions about demographic information, including gender, ethnicity, marital status, education, employment, and family history of mental illness.

The participant was interviewed using the ORPI and the interviewer recorded their responses. During the first part of the interview, the participant provided only verbal responses. During the second part of the interview, the participant looked at sets of cards representing motivations and intent associated with the self-injurious act (see Appendix A), and chose which cards described them at the time of self-injury (multiple cards can be chosen for each set). They also chose the single most important reason and intent out of the ones previously chosen. During the interview, the interviewer kept track of the SIS and the Risk-Rescue so that when one of the interview questions answered a question on one of these measures, they recorded the answer on the appropriate form. The interviewer verbally asked and recorded whatever SIS and Risk-Rescue questions had not been answered by the end of the interview. This entire protocol took anywhere from 30 to 45 minutes.

The researchers again met with each participant 7 to 12 days later as previously agreed-upon and recorded in the signed contract. Participants were asked to again choose from the card sets which motivations and level of intent were present and which

they believed were most important at the time of the suicidal act. The first part of the ORPI interview was not re-done during the follow-up, given that those questions involve immutable details of the act. Participants were asked to orally answer questions from the SIS read to them by the interviewer. This follow-up interview took no more than 15 minutes, and was be timed, whenever possible, to coincide with a visit to Parkland for follow-up treatment of the self-inflicted injury (if outpatient at the time).

### **Statistical Procedures**

To assess the research hypothesis that retrospective description of level of suicidal intent during the index suicide attempt will be significantly lower at follow-up than at baseline, the score derived from the ORPI was analyzed separately from the score derived from the SIS. The ORPI was analyzed using three scores: 0 representing low intent, 1 representing moderate intent, and 2 representing high intent. The SIS was broken into similar categories, with a score range of 0-10 representing low intent, 11-20 representing moderate intent, and 21-30 representing high intent.

Three separate statistical procedures were used to look at different aspects of the relationship between self-reported suicidal intent at baseline and follow-up. First, a Pearson's correlation coefficient was used to examine the correlation between baseline (T1 ) and follow-up (T2) scores on the SIS. This shows if there is a linear association between intent at T1 and intent at T2. It was hypothesized that intent at T1 would have low correlation with intent at T2, which would be evidenced by a low Pearson r value ( $r < .50$ ).

Next, a paired Student t test was conducted to determine if there is a significant difference between mean SIS scores at T1 and T2. This indicates if the reported levels of intent changed and in what direction. It was hypothesized that participants would report lesser intent at T1 than at T2, which would be evidenced by a significantly lower mean SIS score at T2 ( $p < .05$ ).

Finally, a McNemar's chi square was used to investigate the change between self-reported intent at T1 and T2 as measured by the ORPI intent cards. The table shows if and how the participants' choices of intent cards changed from T1 to T2 (see Table 1 for a copy of the table). Changes resulting in a majority of participants endorsing a card of lesser intent at T2 than at T1 would lend additional qualitative evidence to support the hypothesis.

The other research hypothesis was tested that subjects will retrospectively report fewer motives for their self-injury act at follow-up (T2) than they will at baseline (T1). First, a Pearson's correlation coefficient was used to examine the relationship between the number of motives at T1 and T2. Then, a paired Student t test was conducted to see if there is a significant difference between the mean number of motives at T1 and T2. Finally, a Pearson's correlation coefficient was used to investigate the association between scores on the SIS and scores on the Risk-Rescue. The score for each instrument was taken from baseline only. This was used to determine if there is a relation between scores on the two measures, which provides us with information on whether the lethality of a self-injurious act is related to an individual's suicidal intent.

The final result provided six analyses: (a) a correlation between the SIS scores at T1 and T2, (b) a comparison of means of SIS scores at T1 and T2, (c) a comparison of



ORPI intent card choices at T1 and T2, (d) the correlation between the number of ORPI motives at T1 and T2, (e) a comparison of means of the number of ORPI motives at T1 and T2, and (f) the correlation between baseline scores on the SIS and Risk-Rescue.

Additional analyses were performed to investigate if intent and motives varied according to certain demographic variables.

## **CHAPTER FOUR**

### **Results**

#### **Intent at Baseline Versus Follow-up**

##### *Suicidal Intent Scale*

As hypothesized, a paired Student t-test found that the mean score on the Suicide Intent Scale (SIS) was significantly higher at baseline than at follow-up ( $t=2.60$ ;  $p=.02$ ). Contrary to the hypothesis, a Pearson's correlation coefficient found a significant positive correlation between baseline and follow-up scores on the SIS ( $r=.812$ ;  $p<.001$ ).

At baseline, the mean SIS score in this sample was 11.95, indicating moderate intent to die. Out of all the participants, 9 (47.4%) scored in the low intent range, 9 (47.4%) scored in the moderate intent range, and 1 (5.3%) scored in the high intent range on the SIS. At follow-up, the mean SIS score in this sample was 9.95, indicating low intent to die. A total of 9 (47.4%) participants scored in the low intent range and 10 (52.6%) scored in the moderate intent range (See Figure 2). For participants who initially reported low intent at baseline, the average SIS score decreased from 6.78 to 6.11 (0.67 point difference). Participants who indicated moderate intent at baseline had a more substantial decrease in average SIS scores, from 15.89 to 12.78 (3.11 point difference). The single participant who initially reported high intent at baseline had an even larger decrease in his/her SIS score, from 23 to 19. The participants whose SIS scores changed the most over time (difference of 4 or more points between baseline and follow-up) had few discernable differences from the rest of the sample except for how they reported

motives. At baseline, this sub-group reported varied motives similar to the rest of the sample. At follow-up, 57.1% of this sub-group reported the most important motive as “I wanted others to pay for the way they treated me,” whereas only 21.1% of the total sample chose this motive.

### *Oxford Reasons for Parasuicide*

An analysis of Oxford Reasons for Parasuicide (ORPI) scores provided the following information: 7 participants (36.8%) indicated that they did not want to die, 7 (36.8%) indicated ambivalent feelings towards dying, and 5 (26.3%) indicated that they wanted to die at baseline. At follow-up, 10 participants (52.6%) indicated that they did not want to die, 6 (31.6%) indicated ambivalent feelings towards dying, and 3 (15.8%) indicated that they wanted to die (See Figure 2).

A McNemar’s chi square revealed that 7 participants (36.8%) reported less intent on the ORPI at follow-up than at baseline; 3 participants (15.8%) reported worse intent at follow-up and 9 participants (47.4%) reported having the same level of intent at follow-up and baseline (see Table 1). The majority (55.6%) of participants who endorsed the same intent at baseline and follow-up reported having no intent to die both times. Every participant who reported worse intent at follow-up, raised their score by no more than one level (i.e. from no intent to ambivalent intent).

ORPI and SIS scores were also compared to support the validity of the measurements. At baseline, participants who chose the “no intent” card scored an average of 8 on the SIS; participants who chose “ambivalent intent” scored an average of 13.3 on the SIS, and those who chose “high intent” scored an average of 17.2. These findings

indicate that as people endorsed higher intent on the ORPI, they tended to also score higher on the SIS.

### *Additional Analyses*

Additional analyses were performed to investigate how different demographic variables influenced reported intent. Female participants (n=12) had an average SIS score of 10.58 at baseline and 7.67 at follow-up, whereas male participants (n=7) had average SIS scores of 14.29 and 13.86, respectively. Females more often endorsed no intent to die on the ORPI; 50% of females endorsed no intent at baseline and this increased to 66.7% at follow-up, whereas at baseline 14.3% of males endorsed no intent and at follow-up 28.6% of males endorsed no intent. Males more often endorsed ambivalent intent (42.8% baseline, 57.1% follow-up) and high intent (42.8% baseline, 14.3% follow-up). At baseline, the average SIS score was 12.89 for Caucasian participants (n=9), 12.17 for Hispanic participants (n=6), and 9.5 for African American participants (n=4). Caucasian participants did not indicate any change in intent between baseline and follow-up on the ORPI (33.3% no intent, 33.3% ambivalent intent, and 33.3% high intent at both baseline and follow-up), nor did they indicate a significant change in SIS scores at follow-up (mean=12). At follow-up, both Hispanic and African American participants indicated lower intent on the SIS (follow-up scores of 9.33 and 6.25, respectively). They also changed their responses on the ORPI to indicate less intent, Hispanics indicating no intent from 33.3% up to 66.7% of the time, and African Americans from 50% up to 75% of the time. At baseline, the 30-39 age range (n=4) had the highest average SIS score of 18; the 50-59 age range (n=5) had an average SIS of

12.4, the 18-29 age range (n=7) had an average of 10, and the 40-49 age range (n=3) had the lowest average SIS of 7.67. Participants who overdosed (n=11) had an average SIS score of 17.82 and most often indicated ambivalent (36.4%) or high (36.4%) intent. Participants who self-mutilated (n=3) had an average SIS score of 11.67 and most often indicated ambivalent intent (75%).

#### *Table of Participants Who Endorsed Intent*

A table was done to look at the number of participants who endorsed any intent to die at baseline and follow-up (see Table 2). A participant was considered to possess intent if they chose either, “I did not mind whether I lived or died,” or “I wanted to die,” on the ORPI and if they scored in the moderate or high range on the SIS.

Out of all the participants (n=19), 12 participants could be considered “suicide attempters” based on their endorsement of some level of intent to die at baseline. The average SIS score for this group of participants was 14.92 at baseline, and it dropped to 12.17 at follow-up. For the remaining 7 participants who could be considered purely “self-harmers” with no reported intent, the average SIS score was 6.86 at baseline and 6.14 at follow-up. By follow-up, the number of participants who endorsed any intent on the ORPI dropped to 9 participants. There were 10 participants at both baseline and follow-up who scored in the moderate to high range on the SIS. There were 2 participants who initially reported having no intent and later endorsed moderate intent at follow-up.

Out of the 7 male participants, 6 males endorsed intent on the ORPI at baseline and this dropped to 5 males at follow-up. The number of males who scored in the

moderate to high range on the SIS increased from 5 to 6 by follow-up. As for the 12 female participants, there were 6 females at baseline and 4 females at follow-up who endorsed intent on the ORPI. Out of the 7 participants younger than 30-years-old, 4 participants indicated intent at baseline, and this dropped to 1 participant at follow-up. Out of the 6 participants between the ages of 30 and 45, 5 participants reported intent at baseline and 4 participants reported intent at follow-up. For participants aged 45 and older ( $n=6$ ), the number of participants endorsing intent actually increased slightly from 3 to 4 participants by follow-up. There were 2 out of the 4 African American participants who reported intent at baseline, and 1 participant reported intent at follow-up. As for Hispanic participants, 4 out of 6 participants indicated intent at baseline and this dropped to 2 participants at follow-up. At both baseline and follow-up, 6 out of the 9 Caucasian participants reported intent. For Caucasians, the number of participants who scored in the moderate to high range on the SIS increased from 6 to 8 participants by follow-up. Out of the 11 participants who overdosed, there were 6 participants at baseline and 5 participants at follow-up who reported suicidal intent. For those participants who self-mutilated ( $n=3$ ), there was 1 participant at baseline and no participants at follow-up who endorsed intent. There were 10 participants who had previously attempted suicide. Out of those, 7 participants indicated intent at baseline and this dropped to 4 participants at follow-up. At both baseline and follow-up, there were 6 participants in this group who scored in the moderate to high intent range on the SIS. Out of the participants who were hospitalized as inpatients ( $n=4$ ), 2 participants indicated intent at baseline, and this actually increased to 4 participants by follow-up. As for the 15 participants who only

went through the Emergency Services, 10 participants indicated intent at baseline and this dropped to 5 participants at follow-up.

### **Motives at Baseline Versus Follow-up**

#### *Oxford Reasons for Parasuicide*

The mean number of motives chosen by participants on the ORPI was 5.84 at baseline and 4.95 at follow-up. A paired Student t-test did not find a significant difference between the mean number of reported motives at baseline and follow-up ( $t=1.29$ ;  $p=0.22$ ). Also, a Pearson's correlation coefficient did not find a significant correlation between the number of motives at baseline and follow-up ( $r=-0.251$ ;  $p=0.286$ ).

The most commonly chosen motive card at both baseline and follow-up was, "The situation was so unbearable, I could not think of an alternative" (chosen by 14 participants at both baseline and follow-up). The second most common motive at baseline was, "It seemed I lost control of myself, and I do not know why" (chosen by 11 participants). At follow-up, the second most common motive was, "I wanted to die" (chosen by 11 participants; See Table 2 to see the frequencies that each motive was chosen). When asked to choose their most important motive, the majority of participants ( $n=5$ ) chose "I wanted to die" at baseline. At follow-up, the majority of participants ( $n=5$ ) chose, "The situation was so unbearable, I could not think of an alternative" as the most important motive. "I wanted to die" was the third most commonly chosen important motive at follow-up ( $n=3$ ).

At baseline, 52.6% (n=10) of participants chose a strong motive (i.e. “I wanted to die,” or “The situation was so unbearable, I could not think of an alternative.”) as their most important motive at the time of self-injury. A total of 47.4% (n=9) of participants endorsed weak motives (i.e. “I wanted to get help from someone,” or “I wanted to make someone feel guilty.”) at baseline. At follow-up, 63.2% (n=12) of participants endorsed strong motives and 36.8% (n=7) of participants endorsed weak motives. Participants who chose, “I wanted to die” as their most important motive had an average SIS score of 16.2 at baseline and 15.3 at follow-up. Interestingly, at follow-up, none of the 3 participants who had chosen “I wanted to die” as the most important motive chose the intent card indicating a wish to die. Participants who chose weak motives had an average SIS score of 10.8 at baseline and 8 at follow-up.

#### *Additional Analyses*

Additional analyses were performed to investigate how different demographic variables influenced reported motives for self-injury. Females chose an average of 6.33 motives at baseline and 4.33 at follow-up, whereas males chose an average of 5 motives at baseline, then increased this to 6 motives at follow-up. Males were more likely to choose “I wanted to die” (42.9% males versus 16.7% females), whereas females more often chose motives based on influencing others such as, “I wanted to show someone how much I loved them.” Caucasian participants chose approximately the same number of motives at baseline as they did at follow-up (4.89 and 5, respectively). Hispanic participants went from an average of 5.5 to 4.67 motives, and African Americans went from an average of 8.5 to 5.25 motives. Participants who overdosed chose an average of



6.18 motives at baseline, then decreased this to 5 motives at follow-up. Participants who self-mutilated went from 4 to 3.33 motives.

### **Correlation of Scores on the Suicide Intent Scale and Risk Rescue Rating**

A significant correlation was found between baseline scores on the SIS and Risk Rescue Rating (RRR;  $r=.502$ ;  $p<.05$ ). This indicates a positive relationship between the participants' intent to die and the lethality of their attempt.

Additional investigation into the demographic data found that males had an average RRR of 38.4, whereas females had an average of 32.2. Caucasian participants had an average RRR of 35.9, Hispanics had an average of 34.6, and African Americans had an average of 31.2. Participants who self-mutilated had an average RRR of 28.3, while participants who attempted overdose had an average RRR of 36.6.

## **CHAPTER FIVE**

### **Discussion**

#### **Purpose of the Present Study**

The purpose of this study was to investigate how self-injurers reported their suicidal intent at different points in time, those being immediately after the self-injury act and 7 to 12 days after the act. It was hypothesized that medically-treated self-injuring participants would report greater intent at baseline (within 48 hours of the self-injuring act) than at follow-up (7 to 12 days after baseline), thus demonstrating the ambivalent and transitory nature of self-reported intent in some suicide attempters. It was also hypothesized that participants would report fewer motives at follow-up than they did at baseline. Since motives are the factors that influence overall suicidal intent, changes in how motives are reported would also lend evidence towards the idea that intent is often transient.

Previous studies have found that self-reports of suicidal intent are often not consistent, but rather they tend to change over time (Cantor, McTaggart, & De Leo, 2001; Haw, Hawton, Houston, & Townsend, 2003). Even so, self-reported intent is arguably the most valuable factor in predicting the short-term risk of repeated self-injury or completed suicide in self-injuring patients (Bancroft, Hawton, Simkin, Kingston, Cumming, & Whitwell, 1979; Beck, Beck, & Kovacs, 1975; Freedenthal, 2007; Harriss, Hawton, & Zahl, 2005; Hjelmeland, Hawton, Nordvik, Bille-Brahe, De Leo, Fekete et al., 2002). For this reason it is widely used as an essential tool for risk assessment of self-

injurers. In the United States, treatment of self-injury is split mainly into two distinct groups identified here as either “self-harmers” (with no intent to die) or “suicide attempters” (with high intent to die; Skegg, 2005). However, if the self-report of suicidal intent is indeed transitory and influenced by current feelings as other studies suggest (Bancroft et al., 1979; Rodham, Hawton, & Evans, 2003; Schnyder, Valach, Bichsel, & Michel, 1999), then treating self-harmers as less of a risk than suicide attempters may deprive some patients of the level of care that they actually need. In Europe, self-harmers and suicide attempters are grouped together and treated with the same caution (Skegg, 2005). There has been previous literature citing the tendency of self-injuring patients to decrease reports of suicidal intent over time (Cantor, et al., 2001) as well as research noting that self-injuring patients tend to less frequently report a “wish to die” one to six months after being hospitalized (Rygnestad & Hauge, 2001). However, no previous studies have empirically investigated self-reported intent over time using both the SIS and self-reports (from the ORPI) to see whether intent was consistent (and thus a reliable way to classify self-injuring patients) or inconsistent, which may suggest a re-working of how self-injurers are classified. This study is also unique because it looks at how intent is reported at two set points in time (48 hours after self-injury and again 7 to 12 days later), which gives us a better idea of how the passage of time is influencing intent and minimizes the effects of other external variables, such as treatment or social support.

## Study Findings

There were a few key findings in this study. On average, the participants scored significantly higher on the Suicide Intent Scale (SIS) at baseline than they did at follow-up, confirming the research hypothesis that retrospective self-reported suicidal intent would decrease with increasing time since the event. Although statistically significant results did not result from longitudinal analysis of Oxford Reasons for Parasuicide (ORPI) scores, the McNemar's chi square analysis added credibility to this hypothesis. It found that over a third (36.8%) of the sample chose a card indicating lesser intent at follow-up than they had at baseline, whereas a minority of the sample (15.8%) increased their self-reported intent.

The hypothesis that there would be no correlation between SIS scores from baseline to follow-up was rejected. There was a significant positive correlation between SIS scores at both times, indicating that the scores were related in such a way that a participant's score at follow-up could be estimated from his or her score at baseline. In other words, the higher a participant scored at baseline, the higher the participant was likely to score at follow-up.

Although participants in our study reported fewer motives on average at follow-up than at baseline, the statistical analyses did not find a significant difference between the means. Therefore, we did not support the research hypothesis that participants would report significantly fewer motives at follow-up. Also, a correlation between the number of motives reported at baseline and follow-up yielded insignificant results.

Additional statistical analyses yielded some interesting findings that were not directly related to the hypotheses. The present study found that only 63.1% of self-injuring participants reported having any kind of suicidal intent at baseline (including a wish to die or ambivalent feelings about dying on the ORPI), and this dropped to 47.4% at follow-up. There has been an absence of longitudinal research on suicidal intent, so it is hard to compare these findings to previous findings. However, other cross-sectional studies have looked at suicidal intent after a self-injury act and found results similar to our baseline results. One study found that approximately two-thirds of survivors of near-fatal self-injury reported any suicidal thoughts (Douglas, Cooper, Amos, Webb, Guthrie, & Appleby, 2004). Bancroft et al. (1979) looked more specifically at people who had taken overdoses and found that 56% spontaneously indicated a wish to die. When specifically asked, 70.7% endorsed some suicidal intent whereas 29.3% did not endorse any suicidal intent.

The 12 participants in our study who reported suicidal intent (as gleaned from the ORPI) at baseline are what American researchers and clinicians would generally categorize as “suicide attempters.” This group had significantly higher SIS scores (14.92 at baseline and 12.17 at follow-up) than the rest of the sample, who could be considered “self-harmers” (whose SIS scores were 6.86 and 6.14, respectively). Approximately 86% of male participants in our sample could be considered suicide attempters based on their endorsement of intent at baseline, as compared to 50% of female participants. Half of African American participants and two-thirds of both Hispanic and Caucasian participants could be considered suicide attempters. Approximately 55% of overdosers and 33% of self-mutilators could be considered suicide attempters. As for participants

who previously attempted suicide, 70% could be considered suicide attempters. An interesting finding was that 50% of participants who were hospitalized as inpatients could be considered suicide attempters at baseline, but later at follow-up 100% of these participants indicated suicidal intent. Approximately 67% of participants who only went through the Emergency Services could be considered suicide attempters based on their endorsement of intent at baseline.

On average, self-injuring participants indicated moderate intent at baseline, and this dropped to low intent at follow-up. The higher a participant initially reported their intent, the more it tended to drop at follow-up. Another interesting finding was that those participants whose SIS scores changed the most dramatically over time more often chose the motive, “I wanted others to pay for the way they treated me” at follow-up, whereas no one chose this motive at baseline.

Average baseline scores on the SIS and Risk Rescue Rating (RRR) were found to have a significant positive correlation, meaning that how a participant scored on one measure could approximately predict how they would score on the other measure. This implies that there is a close relationship between lethality of a self-injury act and suicidal intent; the more potentially lethal the act, the higher the intent was likely to be reported. Other research has also pointed to a relationship between lethality and suicidal intent. A study by Haw et al. (2003) also found that lethality of an attempt and suicidal intent were significantly correlated in a positive direction. Beck, Beck, and Kovacs (1975) found that there was a very strong positive relationship between intent and lethality, but only when the person who attempted suicide could accurately predict how lethal their attempt was. In the present study, we did not determine the accuracy of each participants’ conception

of lethality of their self-injury act, so we can only say that in general, intent and lethality were positively correlated.

A look at demographic variables found that male participants by and large reported higher intent than female participants. Males had higher average SIS scores than females and indicated high intent more often on the ORPI. Interestingly, males also dramatically decreased their reports of high intent from baseline to follow-up on the ORPI, but not on the SIS. A previous study that was a part of the WHO/EURO Multicentre Study on Suicidal Behavior also found that suicidal intent was generally somewhat higher in men. In their study, the mean SIS score was 12.99 for female participants and 14.06 for male participants, compared to our study, which was 10.58 for females and 14.29 for males (Hjelmeland et al., 2002). Another study also found that a “high intent group” had significantly more males (62%) than a “low intent group” (44%; Sudhir Kumar, Mohan, Ranjith, & Chandrasekaran, 2006).

Out of all the ethnic groups represented in this study, African American participants reported the lowest suicidal intent and Caucasian participants reported the highest suicidal intent. Whereas reports of intent were lower at follow-up than at baseline for Hispanic and African American participants, Caucasians were the only distinct group of participants who did not lower their reports of intent over time. The potential lethality of the self-injury, as measured by the RRR, was highest for Caucasians, then Hispanics, and finally lowest for African Americans. A comprehensive study that looked at records of all the suicides in the United States in 2005 found that Caucasian males had the highest rates of completed suicide (Kung, Hoyert, Xu, & Murphy, 2008).

Participants who ranged in age from 30 to 39 reported significantly higher intent than all other age groups. Interestingly, the very next age bracket, which was the 40 to 49 age group, reported the lowest intent, which was more than 10 points lower than the 30 to 39 age range. However, these findings are not substantiated by previous research. The study by Kung et al. (2008) found that most suicides were completed by people in the 75+ age range as well as the 45 to 54 age range.

Participants who overdosed reported significantly more suicidal intent than did self-mutilators (there being an over 6-point difference between SIS scores). A previous study done by Rodham, Hawton, and Evans (2004) found that self-poisoners were more than two times as likely as self-mutilators to indicate they seriously wanted to die.

When asked to choose the most important motive that influenced the self-injurious act, participants chose, “I wanted to die” more than any other motive at baseline. This changed to, “The situation was so unbearable, I could not think of an alternative” at follow-up. Even though “I wanted to die” was chosen more at baseline, strong motives (indicating a wish to escape from a bad situation) in general were chosen more often at follow-up than at baseline. Males were more likely than females to choose strong motives, especially “I wanted to die.” Females leaned more towards motives that involved influencing other people. Both Hispanic and Caucasian participants chose more strong motives (the majority being, “I wanted to die”) than weak motives. On the other hand, African American participants chose only weak motives.

Several previous studies have looked at the types of motives that patients ascribed to their self-injury. Multiple studies also found that the most commonly endorsed motive by self-injurers was, “The situation was so unbearable, I could not think



of a solution,” (Bancroft, et al., 1979; Hjelmeland, et al., 2002; Michel, Valach, & Waeber, 1994). “I wanted to die” was also commonly chosen in several other studies (Bancroft, et al., 1979; Hjelmeland, et al., 2002; Michel et al., 1994; Rodham, et al., 2004; Schnyder, et al., 1999). Other common motives found by previous studies include, “It seemed that I lost control over myself, and I do not know why” (Bancroft, et al., 1979; Michel et al., 1994), “My thoughts were so unbearable, I could not endure them any longer” (Hjelmeland, et al., 2002; Michel et al., 1994), and “To get relief from a terrible state of mind” (Bancroft, et al., 1979; Rodham, et al., 2004). Similar to our study, all of the aforementioned studies found that participants by and large chose strong motives more frequently than any other type of motive.

Statistical analyses comparing the number of motives chosen by participants did not yield significant results. Overall, the number of motives chosen at follow-up were less than the number chosen at baseline by a limited amount (5.84 to 4.95). It was difficult to discern any patterns in the number of motives chosen by different groups of participants. Interestingly, African Americans, who indicated the least amount of intent of all the ethnic groups, chose the greatest number of motives.

### **Implications for the Nature of Suicidal Intent**

A key finding that emerged from this study is that self-reports of suicidal intent after a self-injury act significantly decrease in intensity over time. This could lead to two different conclusions: either self-injurers are initially over-reporting intent immediately after the act, or they are underreporting intent after time has passed. Based on a

correlation between RRR and SIS scores, the study concluded that self-reports of intent were fairly accurate predictors of the lethality or severity of self-injury. The RRR was taken at baseline and compared only to baseline scores of the SIS, so we can surmise that baseline scores were fairly accurate predictors of lethality. This would lead us to think that intent is perhaps being accurately reported at baseline and underreported as time passes. However, we cannot draw a conclusion as to whether follow-up scores were more or less accurate than baseline scores on the SIS, due to sample size.

Although the study results imply that self-reported intent tends to change over time, it also shows that intent is not completely inconsistent or arbitrary. Self-reported intent at baseline correlated with intent reported 7 to 12 days later, providing evidence that instead of changing haphazardly, intent actually changed in a patterned or predictable manner. This could give credence to an argument that intent is being accurately reported at baseline, but by follow-up is reported as less intense after the passing of time has stripped the memory of the self-injury of its potency. This “passing-of-time” effect would be influencing reports of intent by all participants in a fairly consistent manner. Klerman (1987) also reasoned that suicidal intent is highest right before a self-injurious act. Conversely, the further away in time from a suicidal act, the lower the suicidal intent becomes.

Cantor, McTaggart, and De Leo (2001) previously commented on the inconsistency of suicidal intent, stating that it is not uncommon for physicians to see self-injuring patients change their stories of intent from one visit to the next. A previous study by Rygnestad and Hauge (1991) studied self-poisoners admitted to a Norwegian hospital. They discovered that a “wish to die” was the most frequently chosen reason

patients gave at the initial interview, but this significantly dropped in frequency one to six months later at the follow-up interviews. Similar to the aforementioned speculations, Rygnestad and Hauge said that these findings may indicate the magnitude of distress that patients are feeling right after they have self-injured. It was assumed to be “natural” that this distress wanes after time passes.

There are other possible explanations for why suicidal intent is decreasing with time. It could be that the patients are experiencing a therapeutic effect after receiving medical care for their injury. The patients are, after all, in the hospital to receive treatment, and perhaps the effectiveness of the treatment (or the attention) they receive is contributing to less perceived distress by the time they leave the hospital. However, an interesting finding from this study was that 100% of participants who were hospitalized as inpatients, meaning they likely received more treatment than the rest of the participants who went only through Emergency Services, indicated intent at follow-up. This had increased from 50% at baseline. This finding may lead us to consider that additional treatment was not a major influencing factor in this study. Another explanation could be that the self-injuring patients are over-reporting intent at baseline in an attempt to establish their credibility for care, which was also suggested by Rygnestad and Hauge (1991). Perhaps patients are reasonably assuming that physicians and treating staff will give them more attention or better treatment if they are reporting that they are “really suicidal.” Once they leave the hospital, there is no longer a reason to report suicidal intent, so their self-report drops.

Another pattern that emerged from the data was the following: the higher a participant reported his or her intent to be at baseline, the greater their level of intent

tended to drop by follow-up. There was a slight tendency for all the intent scores to begin to converge at follow-up. After reflecting on this finding along with the aforementioned findings, it is important to consider that the participants may have been misinforming the researchers of their intent at follow-up in a way to conform to what they thought would appear “normal” at that point in time. Now that the participants were out of the hospital and supposed to be doing better, they may have felt an expectation to report less severe intent than they remembered initially feeling.

One particular finding from our study demonstrated that male participants had a significant drop in their reported level of intent from baseline to follow-up. This could indicate that male reports of suicidal intent are more variable than those of females. It could also mean that males who end up in the hospital for self-injury have more serious intent to die, but once they have had time to work through the difficult emotions, they are able to see their self-injury more objectively. Males were found to have a higher overall RRR score than females, indicating that their self-injurious acts were more potentially lethal.

There was no discernable pattern in the data showing any relation between the number of motives chosen and intent. Against expectations, African Americans reported having the lowest intent but the highest number of motives of all the ethnic groups being represented, which may be more attributable to cultural factors than to an actual relation between number of motives and intent. A study by Schnyder et al. (1999) also looked at number of reported motives and found that hospitalized suicide attempters chose approximately seven motives on average. This number is slightly higher than what the participants in our study chose (5.84 at baseline and 4.95 at follow-up). Also, their study

did not have a follow-up to see if the number of motives changed over time. We can infer that the number of motives a participant chose were unrelated to suicidal intent, and by doing so can dismiss number of motives as an unhelpful construct. This finding may lend credence to the idea that we should pay more attention to the type and intensity of the motive chosen rather than how many motives a person gave. Indeed, more participants chose, “I wanted to die” at baseline, which corresponded with higher intent scores. This is a strong motive that is typically associated with higher intent because it involves escape from a situation.

However, when we consider strong motives in general (including, but not limited to, “I wanted to die”), participants actually chose more strong motives at follow-up than they did at baseline. So, does this mean that the type of motive is not necessarily a good indicator of intent? A safe conclusion to draw might be that motives are not necessarily related to intent in the “cut and dry” way that we think. What may be more influential could be the intensity of the motive; in other words, how strongly the motive was felt or how relevant and important the motive was at the time of self-injury. Why the motive, “I wanted to die” was more closely related to intent than other strong motives might be that it is inherently associated with strong, important feelings, whereas it is possible to feel the other strong motives with varying levels of intensity.

It is also important to consider that participants may have been over-reporting or underreporting their motives for self-injury. As reports of suicidal intent decreased from baseline to follow-up, the participants may have felt obliged to not choose the motive, “I wanted to die” so that it would be consistent with how they were reporting their intent. However, we also have to consider why participants reported other strong motives more

frequently at follow-up. Perhaps as time passed, the participants had time to consider which motives most critically contributed to their self-injurious behavior. It could be that the strong motives seemed more important and stuck out more in participant's minds, so that is why these motives were chosen more often at the follow-up interview. It could also be that participants felt that as they reported less intent at follow-up, they wanted to choose strong motives as a way to justify their previous distress.

A few clinical implications can be made based on the results of this study. Foremost, treating physicians and staff who are dealing with self-injuring patients should pay special attention to when intent is being assessed (Rygnestad & Hauge, 1991). If intent is being assessed immediately after a self-injuring act, it can be expected to be higher than if it is being assessed a week or more later. If a patient is being evaluated a week or more after his or her self-injury act, the intent being reported may be an underrepresentation of the intent they felt when they were in the suicidal moment. As Freedenthal (2007) suggested, it is crucial that treating physicians and staff choose to be cautious and assume that all self-injuring patients may be underreporting intent. This ensures that patients are getting at least the minimum level of care they need.

Treating physicians and staff should also take extra precautions when they see patients who belong to certain demographic groups. Findings of note from this study suggest that patients who overdose are more likely to report higher levels of intent and have more lethal injuries than patients who self-mutilate. Also, participants who are Caucasian, male, and in the age range of 30-39 tend have more lethal self-injury and also report the highest levels of suicidal intent. As detailed earlier, these findings were

supported by previous research, excluding the findings about age range (Hjelmeland et al., 2002; Kung et al., 2008; Rodham et al., 2003; Sudhir Kumar et al., 2006).

Participants who would traditionally be classified as suicide attempters based on an endorsement of intent to die at baseline scored, on average, in the moderate intent range on the SIS. This indicates that this group of participants is likely a moderate to high-risk group when you consider the high correlation between SIS scores and the potential lethality of an attempt. American researchers and clinicians are treating suicide attempters differently than patients who do not endorse intent, and the reasoning behind this is clear: the people who endorse intent generally seem to be at a higher risk for repeated self-harm. However, in this study there were two patients who did not report intent at baseline and later endorsed moderate intent at follow-up. However small, these participants who increased their intent, along with other data showing that SIS scores increase by follow-up for a few groups of people, leads us to question if distinguishing suicide attempters from self-harmers might be depriving some people of appropriate treatment.

### **Limitations of the Present Study**

Perhaps the most obvious limitation of this study is the small sample size. The study enrolled 60 participants at baseline, but only 19 of those original participants came to the follow-up interview. The payment may not have been worth the inconvenience of returning for a second interview for several participants. Another limitation of this study is that researchers were unable to get a consecutive sample. Several potential participants

were missed during the night hours when no researchers were on duty. Also, several participants refused or were too intoxicated/sedated at the time of attempted enrollment to be interviewed. A consecutive sample would give a better representation of self-injurers and add validity to the data.

The statistical analyses were limited by their inability to take into account both the ORPI and the SIS at the same time, which would provide a more global assessment of intent. As it is, the ORPI picked up on different aspects of intent than did the SIS. For instance, the ORPI is a purely subjective measure of intent from the self-injurer's perspective, whereas the SIS, though also subjective, takes into account more objective evidence of intent. Since the ORPI gives us ordinal data with only three options for intent, statistical analysis of the ORPI was limited to qualitative observations about changes seen in how people reported their intent. For this reason, special care should be taken as to how the data are interpreted.

The nature of suicidal intent is a tricky construct to attempt to measure. It is still unclear how much of intent can be accurately gauged by a subjective report and how much can be determined by purely objective evidence. This data are biased by the inability of the measures to truly and accurately gauge intent at any time in the participant's life. However, the purpose of the study is not to accurately gauge intent, but to test consistency of people's self-reports of intent.



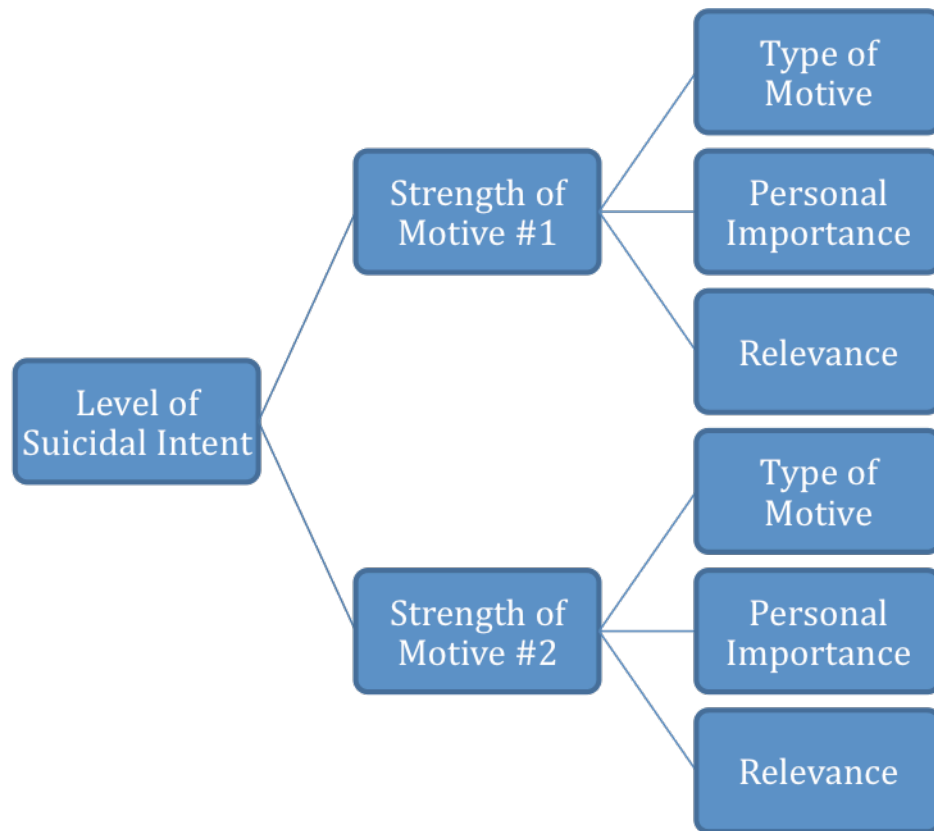
### **Implications for Future Studies**

This study yielded some significant findings, and hopefully it will spark some interest in other researchers to approach the concept with even more resources and fervor in the future. Some suggestions can be made for ways that future studies might improve and expand on this study. The most important suggestion: enroll more participants. Future attempts at a similar study should have a larger, consecutive sample of participants. Unfortunately, part of the problem is inherent in the hospital setting. It can be very difficult to interest patients in a study after they have just recently been through a traumatic experience, such as trying to kill themselves. Many patients are unwilling or simply not in the state of mind to complete an interview. Future studies will have to spend extra time and attention on enrolling participants and convincing them to come back to a follow-up interview. Though researchers in the present study built rapport with participants and framed the follow-up as an integral part of the study, return rates were less than hoped-for (31.7%). More intensive actions may have to be taken. For instance, the more involved physicians and hospital staff can be to help enroll participants, the better. Ideally, the hospital staff could ask every self-injuring patient if they were interested in the study and give them a handout. If they are interested, a researcher can be paged to come conduct the interview.

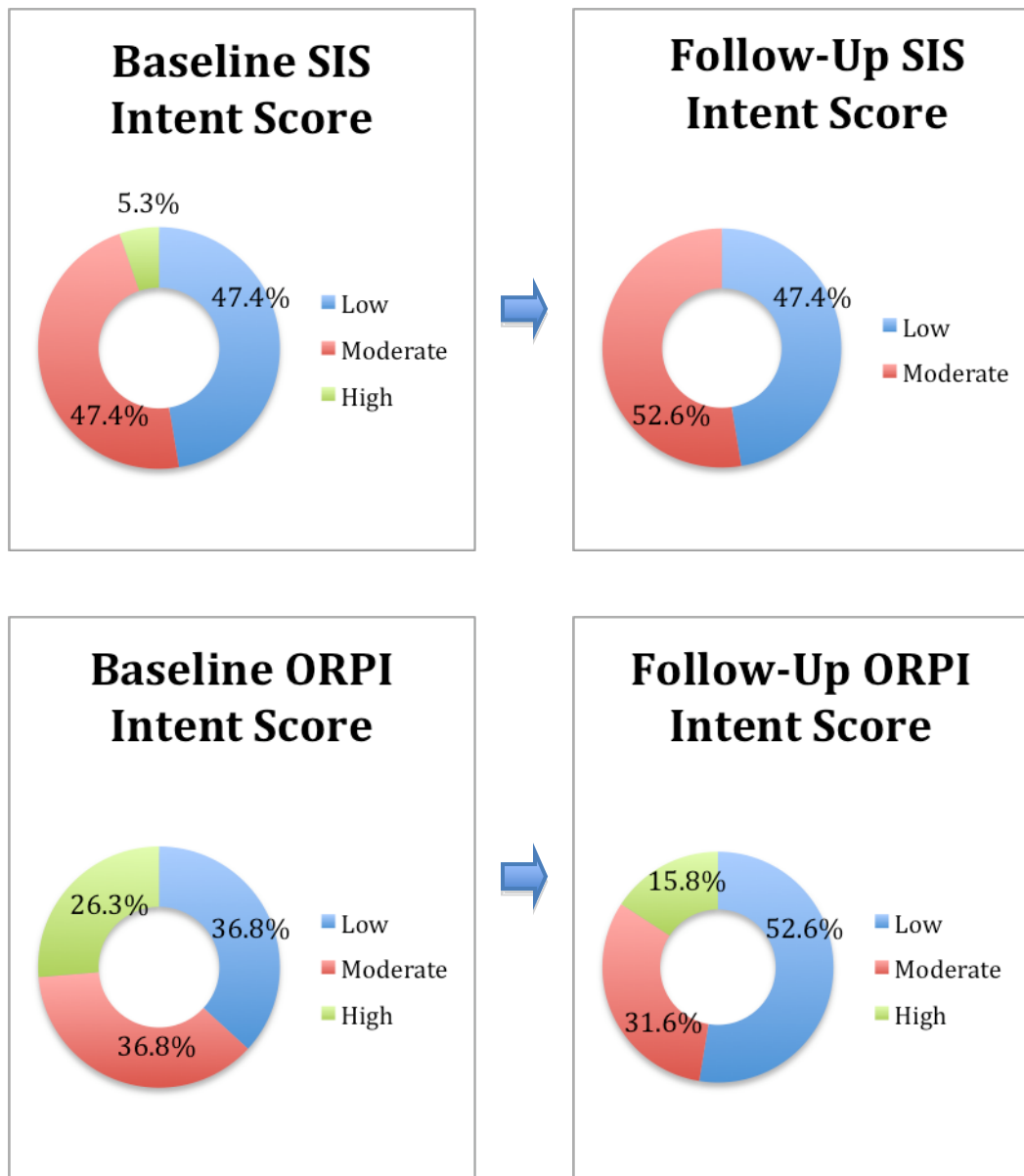
Overall, this study found that suicidal intent is reported differently from one time to the next: self-reports tend to decrease in intensity over time. It also found that intent changes in predictable ways and is not completely haphazard. This study has, in a sense, opened a door: it invites other researchers to explore the depths of suicidal intent even

further. This study demonstrates that consistency of self-reported suicidal intent is a concept worth questioning; one that can lead us into a greater understanding of self-injuring patients. Ideally, it is a concept that physicians and hospital staff can use to determine risk and route of treatment. As we gain more knowledge about the inconsistent nature of self-reported suicidal intent, we can address whether suicide attempters and non-suicidal self-harmers should be grouped together and treated with similar precaution, as is done in Europe.

**FIGURE 1.**  
**Conceptualized relationship between intent and motives**

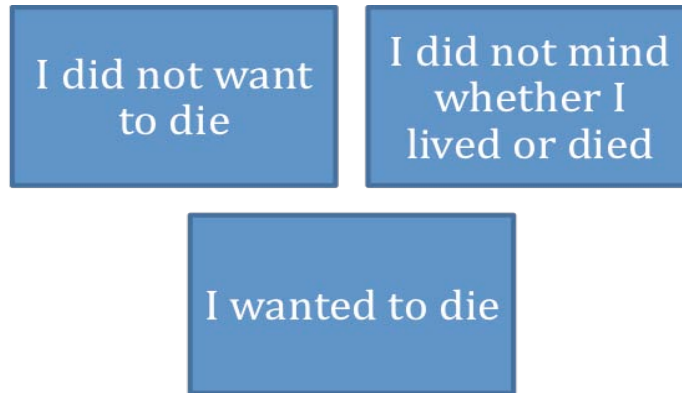


**FIGURE 2.**  
Distribution of participant intent scores



**APPENDIX A**  
**Oxford Reasons for Parasuicide Interview**

“INTENT” CARDS



“MOTIVES” CARDS



**APPENDIX B**  
**Suicide Intent Scale**

**CIRCUMSTANCES RELATED TO THE 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 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 preparation
    1. Minimal or 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

## 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

## 10. Expectations Regarding Fatality of Act

- 0. Patient thought that death was unlikely or didn't think about it
- 1. Patient thought that death was possible but not probable
- 2. Patient thought that death was probable or certain

## 11. Conception 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 could 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



## **APPENDIX C**

### **Risk-Rescue Rating**

#### **RISK FACTORS**

1. Agent used:
  1. Ingestion, cutting, stabbing
  2. Drowning, asphyxiation, strangulation
  3. Jumping, shooting
2. Impaired consciousness:
  1. None in evidence
  2. Confusion, semi-coma
  3. Coma, deep coma
3. Lesions/Toxicity:
  1. Mild
  2. Moderate
  3. Severe
4. Reversibility:
  1. Good, complete recovery expected
  2. Fair, recovery expected with time
  3. Poor, residuals expected, if recovery
5. Treatment required:
  1. First aid, E.D. care
  2. House admission, routine treatment
  3. Intensive care, special treatment

#### **RESCUE FACTORS**

1. Location:
  3. Familiar
  2. Non-familiar, non-remote
  1. Remote

2. Person initiating rescue:
  3. Key person
  2. Professional
  1. Passerby
3. Probability of discovery by any rescuer:
  3. High, almost certain
  2. Uncertain discovery
  1. Accidental discovery
4. Accessibility to rescue:
  3. Asks for help
  2. Drops clues
  1. Does not ask for help
5. Delay until discovery:
  3. Immediate – 1 hour
  2. Less than 4 hours
  1. Greater than 4 hours

**TABLE 1**  
**McNemar's Chi Square of ORPI intent cards**

	Baseline 0	Baseline 1	Baseline 2
Follow-Up 0	5	4	1
Follow-Up 1	2	2	2
Follow-Up 2	0	1	2

**INTERPRETATION:**

7 participants reported less intent at follow-up

3 participants reported more intent at follow-up

9 participants reported the same intent at baseline and follow-up

**TABLE 2**

**Number of participants who endorsed any intent to die**

	<b>ORPI Intent at T1</b>	<b>ORPI Intent at T2</b>	<b>SIS Intent at T1</b>	<b>SIS Intent at T2</b>
<b>All Participants (n=19)</b>	12	9	10	10
<b>Males (n=7)</b>	6	5	5	6
<b>Females (n=12)</b>	6	4	5	4
<b>Age&lt;30 (n=7)</b>	4	1	2	1
<b>Age 30-45 (n=6)</b>	5	4	5	4
<b>Age&gt;45 (n=6)</b>	3	4	4	5
<b>African American (n=4)</b>	2	1	1	0
<b>Hispanic (n=6)</b>	4	2	3	2
<b>Caucasian (n=9)</b>	6	6	6	8
<b>Overdose (n=11)</b>	6	5	5	5
<b>Self-Mutilate (n=3)</b>	1	0	1	1
<b>Prior Attempters (n=10)</b>	7	4	6	6
<b>Hospitalized Inpatient (n=4)</b>	2	4	3	3
<b>Emergency room (n=15)</b>	10	5	7	7

**TABLE 3****Frequencies of each motive baseline versus follow-up**

Motives	Baseline	Follow-Up
I wanted to die	10	11
I wanted to get away from an unacceptable situation	8	10
I wanted to get help from someone	5	6
I wanted to know if someone really cared about me	10	4
I wanted to make someone feel guilty	5	7
I wanted to make things easier for others	8	5
I wanted to persuade someone to change his/her mind	6	4
I wanted to show someone how much I loved him/her	7	3
I wanted to sleep for a while	7	6
I wanted others to know how desperate I felt	8	5
I wanted others to pay for the way they treated me	5	6
It seemed I lost control of myself, and I do not know why	11	6
My thoughts were so unbearable, I could not endure them	7	7
The situation was so unbearable, I could not think of an alternative	14	14

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