

ASSESSING THE INTERPERSONAL DYNAMICS ASSOCIATED WITH SERIOUS
SUICIDE ATTEMPTS: THE CONCEPT OF PROBLEM IRRESOLVABILITY

APPROVED BY SUPERVISORY COMMITTEE

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DEDICATION

To Marvin Curtis

1921 – 2004

My Biggest Silent Supporter

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Kim Roaten, 2005

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by

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Suicide represents a significant threat to a large number of individuals each year. This study sought to create an adult version of an adolescent suicide prediction instrument created by Orbach and colleagues (Subject Experience of Problem Irresolvability, 1999). An additional objective was to examine the relationship between the suicide attempters' experience of certain previously-researched interpersonal dynamics and lethality of suicide attempts. Eighty-three participants from a large, publicly-funded teaching hospital emergency department in Dallas completed a battery of questionnaires including a newly developed adult version of the SEPIA . Of the 83 participants, 42 individuals presented for psychiatric

evaluation after a suicide attempt, and 41 patients presented for treatment of unintentional traumatic injury.. An independent samples t-test suggested that the SEPIA-A accurately discriminates between individuals who have attempted suicide and those who have not ($t = 5.41, p = 0.00$). In addition, analysis of the internal reliability of the SEPIA-A yielded a Cronbach's alpha of 0.97. Further analyses were conducted to refine and examine the items included on the newly constructed SEPIA. Finally, a significant positive correlation was noted between scores on the SEPIA-A and the BHS ($r = 0.64$). Overall, the results of the current study support further development of the SEPIA-A and provide encouraging results regarding its ability to distinguish between suicidal and non-suicidal individuals. The final step in the present study was the compilation of a revised version of the SEPIA, based on item-to-scale analyses, to be used in future studies examining the instrument's utility as a risk assessment measure.

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CHAPTER ONE

Introduction

MAIN HEADING LEVEL ONE

Death resulting from suicide is unique in the traumatic impact that it has on surviving friends and family members. It is a persisting problem that affects thousands of people annually. In 2002, 509,000 individuals presented to emergency departments across the United States for self-inflicted injuries (McCaig & Burt, 2004). Suicide is the eleventh leading cause of death in the United States; the eighth leading cause of death among men, and the nineteenth leading cause of death among women. In 2002 alone, over 30 thousand deaths were attributed to intentional self-harm (Kochanek & Smith, 2004). Suicide accounts for 1.2% of the total number of deaths in the nation. Additionally, it has been found that more men than women die as a result of self-inflicted injuries, at a ratio of 4:1 (Anderson & Smith, 2003; Oquendo, et al., 2001). Furthermore, more Caucasian men commit suicide than all other races combined (Miniño, et al., 2002; Oquendo, et al., 2001).

Thus far researchers have been unable to predict potential suicidality consistently or effectively (Pokorny, 1983; Goldstein et al., 1991, Geddes, 1999, Beck et al., 1999). In addition, treatment of suicide attempters has not been proven to be successful in preventing future attempts (Appleby, 1992, Stanford, Goetz, & Bloom, 1994, McKenzie & Wurr, 2001). Clearly further research is necessary in order to better understand and avert this type of life-threatening behavior.

Recent research from a variety of sources suggests that it may be possible to fashion and test a theory that more accurately characterizes the interpersonal dynamics commonly associated with serious suicide attempts. The goal of the present study is to develop an adult suicidality screening instrument based on the concepts of problem irresolvability, perceived burdensomeness, and role captivity pioneered by Orbach, Linehan, and Pearlin, respectively. Orbach and colleagues (1999) have developed an instrument used to assess suicidality in the adolescent population; however, the current study will attempt to adapt the instrumentation for an adult population. Additionally, this paper will present preliminary psychometric properties for the newly developed measure.

CHAPTER TWO

Review of the Literature

Nomenclature for Suicidology

At first glance the terminology associated with suicide may seem unambiguous and self-explanatory. However, upon closer inspection it becomes clear that many of the definitions in this field overlap one another, leading to problems with comparing and compiling data. O'Carroll and colleagues (1996) have established a framework of terms for discussing suicidal behavior. The term 'suicide attempt' has been defined as "a potentially self-injurious behavior with a nonfatal outcome, for which there is evidence (either explicit or implicit) that the person intended at some level to kill himself/herself" (O'Carroll et. al, 1996, p. 247). 'Suicide', therefore, is "death from injury, poisoning, or suffocation where there is evidence (either explicit or implicit) that the injury was self-inflicted and that the decedent intended to kill himself or herself" (O'Carroll, et al., 1996, pp. 246-247). In contrast, O'Carroll and colleagues defined 'instrumental suicide-related behavior' as "potentially self-injurious behavior for which there is evidence (either implicit or explicit) that (a) the person did not intend to kill himself/herself, and (b) the person wished to use the appearance of intending to kill himself/herself in order to attain some other end" (O'Carroll et al., 1996, p. 247). 'Suicidal ideation' is "any self-reported thought of engaging in suicide-related behavior" and a "suicidal act" is described as "a potentially self-injurious behavior for which there is evidence (either implicit or explicit) that person intended to kill himself/herself at some (nonzero) level...a suicidal act may result in death (completed suicide), injuries, or no injuries" (O'Carroll et al., 1996, p. 247). Finally, 'Parasuicidal

behavior” is defined as “deliberate self-injury or imminent risk of death, with or without the intent to die” (Brown, Comtois, & Linehan, 2002, p. 198).

Suicide Attempters versus Suicide Completers

“Suicidality occurs on a continuum of severity that progresses from less serious and more prevalent behaviors through increasingly severe, less prevalent, and more lethal behaviors (Mościcki, 2001, p. 310).” It is important to consider individuals who attempt suicide (IAS) and individuals who complete suicide (ICS) as two separate populations. Research has shown that although the two populations overlap in many ways, they are different both demographically and psychologically (Beautrais, 2001; Michel, 1987). Beautrais (2001) found that individuals who have attempted and completed suicide were more likely to be suffering from a mood disorder, and had increased rates of previous psychiatric care and contact. Other factors that ICS and IAS had in common were socioeconomics (both groups are predominantly from a socially disadvantaged background) and the experience of recent stressful life events (Beautrais, 2001).

Although there are a number of characteristics that link ICS and IAS, researchers have discovered several factors that differentiate the two populations as well. Michel (1987) found that IAS were generally younger than ICS (IAS males average 36.2 years of age, females average 36.9 years of age; ICS males average 41.2 years of age, females average 50.2 years of age), and tended to score higher on a suicide intent scale. Beautrais (2001) found four primary differences between IAS and ICS:

“(a) non-affective psychosis was a predictor of suicide but not of serious suicide attempts; (b) gender was a predictor of suicide but not of serious suicide attempts; (c) a poor parental relationship during childhood was predictive of suicide attempts but not of suicide (pp. 843)”

Additionally, Michel (1987) has shown that ICS utilized more medically serious means of causing themselves harm than IAS. For example, the most frequent method for attempting to commit suicide was the ingestion of large drug doses, while the most frequent method of completing suicide was shooting oneself. Furthermore, it is important to note that the more serious the attempt, the more likely the individual is to resemble a completer. The current study will focus on medically serious suicide attempters in order to try and determine interpersonal elements common to this class of attempts.

Eriksonian Stages and Suicide

Eric Erikson’s stages of development have been used as a framework for developing an explanation of increased suicide attempts in various age groups (Kaplan & Worth, 1993). In their 1993 study, Kaplan and Worth posited that working through life stage-related negative or dystonic ego qualities, rather than avoiding them, is essential to successful ego development. Furthermore, individuals who fail to successfully progress through each of the developmental stages can exhibit suicidal levels of stress. For each stage Kaplan and Worth (1993) described various integration and attachment issues that can lead to suicidal behavior. These researchers began their discussion of Erickson’s stages as they relate to suicidal

behavior by discussing the School Age stage due to the fact that very few young children commit or attempt suicide.

During the School Age stage (ages 6-12) children are confronted with the conflict of inferiority vs. industry. Failure to reconcile this conflict can lead to poor self-concept and low self-esteem, both of which may lead to the child acting out, thus perpetuating their low opinions of themselves and factors which lead to the garnering of negative feedback (Stillion & McDowell, 1991). In this stage children are expected to learn skills that will allow them to succeed in school and interact with their peers. Children who are unable to work through the challenges in this stage will be unable to successfully begin the next stage in their developmental process, adolescence. A child who enters adolescence unprepared will be more susceptible to exhibiting aggressive and depressive behaviors that often precipitate a suicidal act (Kaplan & Worth, 1993).

As the individual enters the crucial adolescent stage (ages 12-22) the primary developmental issue concerns the conflict between identity confusion and identity. According to Stierlin, adolescents more prone to suicidal disintegration have either felt “expelled” or “bound” by their families (as cited by Kaplan & Worth, 1993, p. 219). Adolescents who have been expelled have been “pushed by their families into premature autonomy (Kaplan & Worth, 1993, p. 219).” In contrast, binding occurs when the family infantilizes the adolescent. Both binding and expulsion can lead to a family situation where the adolescent feels trapped and unable to resolve the problems that they have encountered. Orbach (1986) has conceptualized that this experience as an ‘insolvable problem’ during adolescence which can lead to feelings of hopelessness and depression, common precursors

to suicidal behavior. Additionally, factors such as social isolation and difficulty relating to peers can have a deleterious effect on psychological functioning. Again, both social isolation and difficulty relating to peers have been shown to lead to depression which is a primary factor in adolescent suicide (Kaplan & Worth, 1993). Another potential problem during the adolescent stage involves stage-typical fluctuations in mood. Although moodiness may be due to biological changes, it can also be a manifestation of underlying psychological conflict, and thereby an impediment to healthy functioning (Stillion & McDowell, 1991).

In Erikson's Young Adulthood Stage (ages 22-34), the conflict is isolation versus intimacy. In this stage young adults require more than just the social acceptance they were seeking in the previous phase. The individual must develop an individual identity apart from pressures of his/her established group of peers. Kaplan and Worth use Marcia's terms of "foreclosure" and "diffusion" to describe pathology in this stage (as cited in Kaplan & Worth, 1993, p. 222). An example of foreclosure is described as "a young adult who prematurely commits to another without sufficient exploration", which tends to lead to dependency and depression (Kaplan & Worth, 1993, p. 222). Diffusion, on the other hand, can be seen in "an adolescent who engages in pseudo-exploration without personal commitment" which later leads to withdrawal and suffering from feelings of social isolation (Kaplan & Worth, 1993, p. 222).

Once an individual has progressed through the early adulthood stage, the journey into middle adulthood begins (ages 34 through 60). The conflict encountered is described as stagnation versus generativity. During this time period, individuals are forced to recognize that their childhood dreams may not be fully achieved (Stillion & McDowell, 1991).

Reconciliation of these dreams and realities must occur in order for the individual to successfully progress through this phase. Often the individual arriving for therapy during this stage believes that the rigors of everyday life have taken over, and they are feeling overwhelmed and confused (Kaplan & Worth, 1993). Suicidal crises can arise when a precipitating event occurs; such as divorce, a death in the family, or a child leaving home.

Erikson's last stage is labeled 'older adulthood' (ages 60 to 75). During this stage individuals are thought to be battling between despair and integrity. At this point in development Erikson describes the most common problem as 'disdain', often exhibited through social isolation (Kaplan & Worth, 1993). Potential for suicidality arises when older adults feel plagued by their sense of loneliness. Additionally, increased passivity can become a problem due to the lack of purposeful activity in older adulthood (Stillion & McDowell, 1991). Also inherent in this stage is deliberation of one's own mortality, clearly a topic that can promote depression and despair.

Erikson's stages have become increasingly relevant as more information is uncovered about the precipitating factors for suicide attempts. At each stage in development, role-related conflicts can arise that have the potential to negatively affect the individual who doesn't possess the ego qualities necessary to cope properly.

Identification and Treatment of Individuals Who Have Attempted Suicide

Assessing the risk of suicidal behavior in vulnerable individuals is a clinical problem that has plagued psychologists and physicians alike. One reason it is so difficult to accurately predict serious suicidal behavior is that it is so rare, even in high risk populations

(Geddes, 1999). Research has shown that Caucasian men commit suicide at a significantly higher rate than any other population (Anderson, 2002). Although this statistic holds true in countries world-wide (excluding certain areas of China) (Phillips, Liu, & Zhang, 1999; Schmidtke, et al., 1999), demographic information alone is clearly not a sufficient tool for predicting and preventing suicidality.

Personality characteristics, such as impulsivity and aggression, have been studied in relation to suicidal behaviors in various populations (Koller, et al., 2002; Mann, et al., 1999). Mann and colleagues (1999) found that impulsive and aggressive behaviors are significantly associated with suicidal behavior in a population of patients with mood disorders, psychoses, and other diagnoses. IAS demonstrated greater lifetime impulsivity and aggression than individuals with the same psychiatric illness but no previous suicide attempts. Furthermore, Koller and associates (2002) discovered evidence of impulsivity and aggression in alcoholic patients who reported a history of suicidal behavior. It is important to note that impulsive-aggressivity is unlikely to cause suicidal behavior; however, it is possible that an individual with these personality traits would be at greater risk for suicide.

In a recent study Mann and colleagues (1999) incorporate this idea of impulsive-aggressivity into a diathesis-stress model of risk for suicidality. These researchers found that objective severity of depression and psychosis did not distinguish between IAS and non-suicidal patients; however, high levels of aggression, impulsivity, subjective depression, suicidal ideation, and comorbid borderline personality disorder were present in IAS. Therefore, the authors posit a model of suicidality that takes into account the propensity for impulsive behavior and suicidal ideation.

In an effort to more accurately predict suicidality Beck and colleagues (1974) developed an important suicide risk scale; the Beck Hopelessness Scale (BHS). Hopelessness as a construct has been as successful, or more so, than other constructs in the prediction of suicidal behavior among depressed individuals in both inpatient and outpatient settings (Beck, Brown, & Steer, 1989; Beck et al., 1990), but still does not predict suicidality well. Additionally, previous studies have shown that several psychiatric diagnoses, in particular, mood disorders, addiction disorders and schizophrenia, are significantly associated with completed suicide (Lambert, 2003). Further, in his study, Lambert (2003) identified six suicide risk factors for individuals with personality disorders:

- (1) comorbidity with major mood disorders, addiction, and some anxiety disorders; (2) history of childhood sexual abuse; (3) antisocial and impulsive traits; (4) younger age compared to general population at risk for suicide; (5) inadequate psychiatric treatment of personality disorder and co-morbid disorders; (6) reduction in psychiatric care, including recent irregular discharges (p. 72)

Numerous studies have been conducted in an effort to assist the clinician in risk assessment. The vast research in this area has only succeeded in producing “significant” correlational relationships (Pokorny, 1983). Pokorny (1983) attempted to combine a number of rating instruments and items previously shown to predict higher rates of suicide in order to develop a comprehensive set of rating instruments, but was unsuccessful in identifying particular persons who will commit suicide due to low sensitivity and specificity of instrumentation. In a follow up study, Pokorny (1993) reanalyzed the previously acquired

data using logistic regression, and was still unable to predict suicidality in a satisfactory manner. In a similar study, Goldstein and colleagues (1991) compiled a set of potential suicidality predictors based on previous literature, and utilized a stepwise multiple logistic regression in order to manufacture a comprehensive statistical model. Again, the results of the study showed that the instrument was unable to predict suicide in a high-risk population. An additional study conducted by Beck and associates (1999) compared the ability of three instruments (Scale for Suicide Ideation-Worst, SSI-W; Scale for Suicide Ideation-Current, SSI-C; and the BHS) to identify patients who are at high risk for suicide. Researchers found that patients who scored in the “higher risk” category of the SSI-W had 14 times higher odds of committing suicide than the patients who scored in the “lower risk” category. Current suicidal ideation, as measured by the SSI-C was not a significant predictor of suicidality; however, the study confirmed previous assertions (Beck, Brown, & Steer, 1989; Beck et al., 1990) that the construct of hopelessness and history of suicidal behavior can play a role in predicting suicide.

Clinician and researchers inability to predict suicidality is made even more poignant by research suggesting that a significant number of ICS present to some sort of treatment setting shortly before their deaths. Appleby et al. (1999) conducted a retrospective examination of the treatment seeking behaviors exhibited by 2370 suicide completers in England in the 12 months before their deaths. Results showed that 24% of ICS had been in contact with mental health services in the year prior to their death. Additionally, Appleby and colleagues (1999) found that among recently discharged psychiatric inpatients, 24% committed suicide within three months of inpatient discharge, with the highest portion of

completions occurring in the first week following release. Clearly, in this unique cohort involving a socialized mental health care system, community support for discharged patients was inadequate, or the patients were discharged prematurely (McKenzie & Wurr, 2001).

Current difficulties assessing for suicidality have led to the necessitation of effective treatment following a suicide attempt. Several modes of treatment for suicidal patients have been presented in the past. However, many researchers have noted poor post-emergency department (ED) compliance with aftercare advice by IAS (van der Sande, R., Buskens, E., Allart E., van der Graaf, Y., & van Engeland, H., 1997). Van der Sande et al. (1997) compared intensive in-patient and community intervention to routine ED care with IAS. The intensive psychosocial treatment involved a short admission into a crisis-intervention unit and problem-solving aftercare, while routine care consisted of any form of ED treatment that physicians thought appropriate. Van der Sande et al. (1997) found no significant differences in the treatment groups' outcomes. Levels of suicide at the 12-month follow-up for participants in both groups were virtually identical. Researchers were unable to find evidence that intense in-patient and community intervention programs for IAS after ED crisis intervention were justified.

An additional study by van der Sande and colleagues (1997) failed to find significant reduction of repeated suicide attempts with various types of psychotherapeutic intervention, except in the case of cognitive-behavioral therapy. In this study, cognitive-behavioral treatments "focused on the cognitive deficits that disrupted the ability to solve interpersonal problems and the capacity to regulate emotions" (van der Sande et al., 1997, p. 45). Despite promising findings, van der Sande and colleagues (1997) were hesitant to draw conclusions

from the apparent success of cognitive-behavioral therapy citing several methodological issues that needed to be addressed.

A recent prospective study conducted by Oquendo and colleagues (2002) found that antidepressant treatment of depressed individuals with a diagnosis of major depressive disorder had minimal positive impact on the occurrence of suicidal acts. Even individuals who had a history of a prior suicide attempt did not show a significant positive effect, possibly due to the lack of aggressive pharmacological treatment by physicians. Overall, the researchers found that a major depressive episode was the best predictor of future suicide attempts, a finding that further clarifies the importance of adequate prediction and treatment.

In a 2003 study, Tyrer and colleagues examined the efficacy of brief cognitive behavioral therapy versus treatment as usual with participants who have a history of deliberate self-harm attempts. The cognitive behavioral intervention utilized was based on a combination of brief cognitive therapy techniques and dialectical behavioral therapy techniques, and was developed with the intention of being able to use it in a variety of healthcare settings. Unfortunately, the cognitive behavioral intervention was no more effective than treatment as usual in preventing suicide.

The difficulties encountered predicting, treating, and recognizing risk factors for suicide have led government organizations to avoid advocating a screening system for suicidality. In a 2004 report the U.S. Preventative Services Task Force found “no evidence that screening for suicide risk reduces suicide attempts or mortality...insufficient evidence that treatment of those at high risk reduces suicide attempts or mortality” (p.820).

Furthermore, the authors stated that they were unable to take a definitive position regarding screening for suicidality due to the lack of substantial evidence one way or the other.

Clearly, further research into the risk factors for, and treatment of, suicidal behavior is necessary in order to reduce and prevent deaths resulting from intentional self-harm. Because of low incidence of IAS and serious suicide attempts, studies attempting to develop predictive models have to use large databases. Appropriate large databases seldom include much more than demographic and minimal treatment data. The poor prediction of past models suggests that these variables are probably only poorly correlated with suicidality. Emile Durkheim's (1951) work suggests that suicide occurs in the context of the individual's relationship to culture and other people. Recent work by Orbach (1999) and others corroborate this observation.

Orbach's Subjective Experience of Problem Irresolvability Scale

Orbach and colleagues (1999) have developed a scale intended to distinguish between suicidal, normal, and psychiatric adolescents based on the individual's inability to resolve "irresolvable" problems, and the subsequent lack of experienced control. Orbach (1986, 1986) describes the insolvable problem as "a phenomenological state of mind which reflects the child's experience of being trapped and incapacitated."

Orbach (1986) specifies several characteristics of the insolvable or irresolvable problem, the first of which is that the problem is inherently beyond the child or adolescent's ability to resolve; for example, the child is placed in the role of needing to achieve beyond his/her capabilities in order to validate the parents' sense of worth. The problem is likely

deep-rooted in the family's history, and a solution would require a radical change for all of the family members. Families who attempt to remain together in this negative situation can harbor feelings of anger and hostility that are projected onto the child or adolescent. The second characteristic of the irresolvable problem lies not in the problem itself, but in the restricted number of alternatives and solutions presented for change. Narrowing the options for action leaves the child feeling trapped, and this limitation of behavior is often enforced in extremely negative ways, including withdrawal of love and physical punishment. A third characteristic of the irresolvable problem presents itself when one problem is replaced with another, leading to a vicious cycle of distress for the child involved. A final facet of the irresolvable problem is that it is often disguised or unclear to the family (Orbach, 1986).

Although suicide at a young age is quite infrequent, many psychologists believe that the groundwork for suicidal behavior as an adolescent or adult is created as a child (Kaplan & Worth, 1993; Orbach, 1986). Orbach (1986) describes the progression from an irresolvable problem to suicidal behavior in this way: "being confronted with a problem that cannot be resolved, on the one hand, and constant pressures to resolve it accompanied by various sanctions, on the other, can easily lead to the formation of a depressive attitude" (Orbach, 1986, p. 518). Eventually, when the only solution available continuously fails, the child or adolescent may resort to suicide as the final answer.

Orbach and colleagues examined the relationship between role-related problem irresolvability and suicidal tendencies exclusively in the adolescent population (Orbach, 1986; Orbach et al., 1999). However, other researchers have identified similar notions in the adult populations (Aneshensel, Pearlin, & Schuler, 1993). The idea of "role captivity" has

previously been used in relation to the stress felt by adult caregivers for impaired elderly relatives. Like serious suicidality, it is almost exclusively found among Caucasians, as compared to African-American or Hispanic populations. Pearlin and colleagues (1990) described role captivity as existing “when one wants to be and to do something other than that in which they feel compelled to engage” (p. 589). This feeling of being trapped in an unwanted but essential role-related function is integral to the notion of both role captivity and problem irresolvability, Orbach (personal communication, July 2002) personally noted that the concept of role captivity is very similar to the idea of problem irresolvability.

Studies of male law enforcement suicide attempters provide indirect evidence for a similar interpersonal dynamic among some adults at the time of attempt. Danto (1978) reexamined previously collected data concerning policemen who had committed suicide between January 1, 1934 and January 1, 1940. Danto noted that marital discord, in combination with job-related stress, was a previously unstudied characteristic of the suicidal policemen. Jobs in law enforcement have long been associated with extremely high levels of job-related stress (Danto, 1978; Janik & Kravitz, 1994; McCafferty, McCafferty, & McCafferty, 1992); however, only in more recent years has the research community begun to examine these high stress levels, combined with marital difficulties, within the context of suicide. Janik and Kravitz (1994) describe the relationship between stress in the home and the workplace in this way:

Stress emanating either from work or from the home can establish a vicious cycle of demands and frustrations that will at best lead to

deterioration in functioning and at worst become superimposed on preexisting psychological impairment. (p. 271)

Janik and Kravitz went on to conclude that the interplay between marital problems and workplace problems was an important factor in identifying suicide attempters.

Additional indirect evidence for the concept comes from Linehan's recently published work on "perceived burdensomeness" (Brown, Comtois, & Linehan, 2002). In their study, Brown and colleagues (2002) examined self-reported reasons for suicide attempts and nonsuicidal self-injury, and found that suicide attempters most often endorsed items that reflected a desire to "decrease the burden one creates for others" (p. 200). In an early investigation Bancroft, Skrimshire, and Simkin (1976) similarly found that a number of IAS intended to make others better off by engaging in suicidal behavior. In contrast, Brown, Comtois, and Linehan (2002) also found that individuals who engaged in nonsuicidal self-injury were more likely to select reasons associated with expressing anger, punishing themselves, regaining normal feelings, and distracting themselves. The construct of "perceived burdensomeness" is similar to that of both "role captivity" and "problem irresolvability." In each of these three concepts the individual is faced with a situation where they feel obligated or pressured to perform in a certain manner and are completely unable to do so. As Pearlin (1993) has shown, these irresolvable problems can begin and/or persist through adulthood. Thus, the assessment of problem irresolvability may be relevant as a possible risk management tool for adults.

Based on his theory of problem irresolvability Orbach and colleagues (1999) developed an instrument designed with the idea of distinguishing between suicidal

adolescents on the one hand, and normal and psychiatric patients on the other. The Subjective Experience of Problem Irresolvability (SEPI; Orbach, et al., 1999) attempts to differentiate between suicidal, psychiatric, and normal adolescents by examining four factors: unattainable demands, commitment to parental happiness, need to be problematic, and no individuality. Orbach (1999) posits that these four factors stand in direct opposition to “protective parental care and emotional warmth, which induces self-worth and self-esteem” (p. 152). Construction of the SEPI began with a list of thirty-two items believed to be related to the idea of problem irresolvability based on clinical experience with suicidal adolescents. Ten items were eventually eliminated leaving a list of twenty-two statements to be tested for reliability and validity. Suicidal patients (N = 35), psychiatric patients (N = 33), and normal participants (N = 43) completed the SEPI. In addition, participants completed the Multi-Attitude Suicidal Tendencies Scale (MAST; Orbach et al., 1991), a previously proven measure of suicidal tendencies, the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979), a measure of parental or maternal care and overprotection as reported by the child, and a Self-Esteem Scale (Rosenberg, 1965). Researchers found that the SEPI adequately correlates with the MAST, and significantly and inversely correlates with maternal bonding scores (caring, overprotection) and self-esteem scores (Orbach et al., 1999).

In their 1999 study Orbach and colleagues further validated the SEPI by examining the four factors in more detail and comparing them to scales that measure other characteristics of suicidal adolescents; specifically, hopelessness, anxiety and depression. Both anxiety and depression were found to be significantly correlated with the four SEPI

factors, and the hopelessness score was significantly associated with three of the four SEPI factors. Overall the findings within the study provide preliminary construct and concurrent validity.

Purpose of the Current Study

Risk assessment of attempted suicide and completed suicide is difficult, but necessary work. Previous studies have failed to find clear indicators for potential suicide attempters. However, recent promising work suggests that complex interpersonal dynamics may prove to be better predictors of attempter status.

This study extended preliminary research in the area of IAS perceived role-related functioning by adapting previously-developed instrumentation to measure the concept. The purpose of this study was to develop and pilot an adult instrument combining characteristics of the SEPI with the construct of perceived burdensomeness, in order to test its ability to distinguish between suicide attempters and non-attempters in an emergency room-base psychiatric population.

Hypotheses

H₁: High lethality of self-harm attempts will be significantly associated with high levels of perceived burdensomeness, hopelessness, and role captivity where:

- “High lethality of self-harm attempt” is defined as a score of 28 or greater on the Risk-Rescue Rating Scale.
- “Perceived burdensomeness” is defined as endorsement of this item on the List of Reasons for Parasuicide from the Parasuicide History Interview.
- “Role Captivity” is defined as a score of 85 or higher on the Problem Irresolvability Scale, Adult Version.

H₂: Study-developed instrumentation will differentiate between adult psychiatric patients who have attempted suicide and those who have not.

CHAPTER THREE

Methodology

Study Design

Setting:

This emergency room-based, case-control study tested the value of an adult version of Orbach's Problem Irresolvability instrument in correctly identifying suicide attempters versus non-attempters being treated in the Parkland Psychiatric Emergency Service (PES). This emergency department contains a separate psychiatric emergency service for patients treated within the Parkland Health and Hospital System (PHHS). PHHS is a large, publicly funded hospital for indigent care in Dallas, Texas which serves as the teaching hospital for the University of Texas Southwestern Medical School. The PES treats an average of 900 patients per month, of which approximately 15-20% are suicide ideators or attempters (Claassen, personal communication, July, 2003). The PES serves as the gateway to inpatient and outpatient public mental health care in Dallas County. Since 1995 the PHHS emergency department has treated approximately 4800 IAS who required some degree of medical stabilization (an average of two suicide attempters per day) (POIS database, 2002). Suicide attempters whose injuries are serious enough to necessitate medical care are initially triaged to the general emergency medical service. If general inpatient medical care is not required, once the suicide attempter has been stabilized, he/she is routinely transferred to the psychiatric emergency room.

Instrument Development:

Development of the instrument began by compiling a list of items intended to address the idea of role captivity as experienced by an adult population based on Orbach's adolescent version of the SEPI (Orbach et al., 1999) and Linehan's construct of perceived burdensomeness (Brown, Comtois, and Linehan, 2002). Once the preliminary instrument was assembled it was administered to a pilot group of eighty-three participants. Following this administration, a series of statistical analyses were conducted in order to assess instrument reliability. Items were either retained or removed in order to assemble the final instrument.

Participants

Inclusionary Criteria

All participants were patients presenting for treatment in the Parkland Hospital Emergency room, and were between 18 and 60 years of age. Group A (Experimental) consisted of patients who presented to the Parkland Psychiatric Emergency Room following a suicide attempt. Group B (Control) participants were recruited from patients who sustained a non-self-inflicted traumatic injury and subsequently were admitted to 23-hour inpatient observation.

Exclusionary Criteria

Exclusionary criteria included: 1) suicide attempts so lethal that hospitalization for medical reasons was required or 2) restricted capacity to communicate or respond, 3) presence of psychosis, 4) a documented history of closed head injuries or mental retardation,

5) reading level is below a 6th grade level, 6) drug or alcohol intoxication at the time of presentation for treatment, and 7) patients in whom it was unclear whether the etiology of the injury was self-induced.

Measures

The Subjective Experience of Problem Irresolvability Scale (SEPI)

The Subjective Experience of Problem Irresolvability Scale was developed by Orbach, Mikulincer, Blumenson, Mester and Stein (1999). This 22-item self-report questionnaire was designed to distinguish between suicidal, psychiatric and normal adolescents. The questions are based on a 5-point Likert-type scale. Factor analysis yielded four main factors including: (1) unattainable demands, (2) commitment to parental happiness, (3) need to be problematic, and (4) no individuality. Cronbach's alpha ranged from 0.71 to 0.89.

Additionally, the four SEPI factors were correlated to the four scores of the Multi-Attitude Suicidal Tendencies Scale (MAST), an instrument proven to discriminate between suicide attempters and non-attempters. The MAST consists of four scores in the categories of: attraction to life, attraction to death, repulsion by life, and repulsion by death. Attraction to life, as measured by the MAST, exhibited a negative correlation when compared to the four SEPI factors (Pearson $r = -.46, -.22, -.28, -.23$). Attraction to death and repulsion by life were significantly and positively correlated with the four SEPI factors (Pearson $r =$ attraction to death .27, .26, .27, .39; repulsion by life .52, .29, .44, .37). In contrast, repulsion by death was not correlated with any of the four SEPI factors.

Beck Hopelessness Scale (BHS)

The Beck Hopelessness Scale was developed by Beck, Weissman, Lester and Trexler (1974). The BHS is a 20-item, true-false inventory designed to measure lack of hope about the future. Beck et al. (1974) report internal consistency ratings of .93 for this measure. It has been used frequently with adolescent and young adult samples. Additionally, the BHS demonstrated concurrent validity with a correlation of .60 ($p < .001$) with the Stuart Future Test, and a correlation of .63 ($p < .001$) with the pessimism item of the Depression Inventory.

List of Reasons for Parasuicide on the Parasuicide History Interview

The List of Reasons for Parasuicide as part of the Parasuicide History Interview was developed by Brown, Comtois, and Linehan (2002). The list consists of twenty-two potential reasons for parasuicide which are further clustered into four scales: Emotion Relief (6 reasons), Interpersonal Influence (8 reasons), Avoidance/Escape (5 reasons), and Feeling Generation (3 reasons). The remaining seven reasons did not fall into any of the four derived scales and are referred to as Independent Reasons. Two raters agreed with the classification of 100% of the Emotion relief items, 80% of the Interpersonal Influence items, 89% of the Avoidance/Escape items, and 66% of the Feeling Generation items; as an assessment of reliability. In addition, the alpha coefficient for Emotion Relief was 0.65, 0.77 for Interpersonal Influence, 0.36 for Avoidance/Escape, and 0.70 for Feeling Generation.

Risk-Rescue Rating

The Risk-Rescue Rating was developed by Weisman and Worden (1972). It is an instrument designed to assess the lethality of a suicide attempt based on a series of factors influencing risk and rescue. Risk factors have been divided into five categories: Agent,

Impaired Consciousness, Lesions and Toxicity, Reversibility and Treatment Required.

Similarly, rescue factors have also been divided into five categories: Location, Person Initiating Rescue, Probability of Discovery by any Rescuer, Accessibility to Rescue, and Delay Until Discovery. Each of the five risk factors is rated on a scale of one to three points. The total risk points are then converted to a total risk score ranging from one to five. The same process is followed for the five rescue factors, resulting in a total rescue score. The totals are then transformed into a lethality rating for implementation. The Risk-Rescue Rating has shown adequate validity with a 0.66 correlation to independent clinical judgment of the patient's intent to himself/herself, and a correlation of 0.60 with the Medical Lethality Scale. In addition, interrater reliability ranged from 0.93 to 0.95.

Procedure

All suicide attempt patients between the ages of 18 and 60 years of age were approached in the psychiatric emergency room after stabilization to pre-qualify them for the study and solicit consent. While researchers approached the patient for consent and prequalification, a patient advocate insured that the patient's rights were protected and reassured the patient that there were no negative consequences if he or she declined to participate.

Additionally, control group participants were recruited by approaching trauma patients between the ages of 18 and 60 years of age who were being held on the 23-hour observation floor. Any patient who indicated that the nature of their injury was self-inflicted, or the etiology was unclear, was excluded from the study.

Qualified, consenting patients were asked to fill out study instrumentation in the psychiatric emergency room while waiting for a psychological evaluation. The patient was observed while completing information. If at any time the patient exhibited distress, a physician was notified. Feedback on the results of the battery was provided to the patient, physician, and family when appropriate.

Researchers used medical records in order to collect additional data including (where present): current stressors, other psychiatric or psychological history or treatment, the quantity and quality of the social support system, discharge recommendations, and any history of previous suicide attempts. Outcome data was double entered into a database and checked for accuracy. Statistical analysis will be contracted through Academic Computing Services.

Statistical Design

Instrument Development (SEPI-A):

Initially, a list of 60 possible items were generated by researchers and evaluated as below.

Face validity of instrument questions was established using a focus group of four Parkland Psychiatrists. Each item on the instrument was evaluated and rated on a 1 through 3 scale by clinicians as relevant to risk assessment of suicidal patients. Information resulting from the inquiries was used to revise items as necessary.

Content validity was established using item-ratings of five content experts in the field of suicide risk assessment. Analysis consisted of establishing mean and standard deviation scores for each item as rated on a 4-point scale(1 not relevant, 2 unable to assess relevance without revision, 3 relevant but needs minor changes, 4 very relevant and succinct) by experts. Only items that received a score of 3 or 4 were retained.

Initial readability was established using the Flesch-Kincaid Grade Level and Flesch Reading Ease grade level. Readability and comprehensibility was further evaluated by a group of Parkland Hospital patients who rated the comprehensibility of each question on a 3-point scale. Questions receiving a score indicating low readability were modified as necessary.

Finally, the instrument was piloted in a group of 42 suicidal and 41 non-suicidal patients. An item to scale correlation was done on each scale. Correlations between .3 and .7 were considered acceptable. These item-to-scale correlations were used to further refine or omit questions.

Statistical Analyses

H₁: High lethality of self-harm attempts will be significantly associated with high levels of perceived burdensomeness, hopelessness, and role captivity.

One-tail, bivariate correlations were conducted in order to assess the relationship between lethality of self-harm attempt and levels of perceived burdensomeness, hopelessness, and role captivity.

H₂: Study-developed instrumentation will differentiate between adult psychiatric patients who have attempted suicide and those who have not.

An independent samples T-test was conducted to determine if there was a difference in scores received on study instrumentation between adult psychiatric patients who have attempted suicide and those who have not.

CHAPTER FOUR

Results

The purpose of this study was to examine a set of attitudes related to interpersonal experience believed to be frequently associated with suicide attempts (, “role captivity” and role-related rigidity). To this end, instrument items were developed and evaluated and, preliminary instrument-related statistical analyses were conducted. The following paragraphs provide descriptive information regarding the demographic composition of the sample as well as the results of the initial steps in development of the newly constructed instrument. It is important to note that while there is a difference between race and ethnicity, for the purposes of this study they were combined in order to compare persons of Hispanic ethnicity with other cultures.

Results of Item Development Tasks

An initial pool of 60 items was compiled based on the content matter of the Subjective Experience of Problem Irresolvability scale (SEPIA). Items were altered to pertain to adult issues regarding relationships and employment. Furthermore, questions were added that addressed traditional attitudes toward gender roles (e.g. the role of husband/wife and mother/father). Following the compilation of these items five content experts in the field of suicidality were asked to review the item pool and rate each question on a 4-point Likert scale (1-Not Relevant, 2-Unable to assess relevance without revision, 3-relevant but needs minor changes, 4-Very relevant and succinct). Items were excluded if three of the five experts did not give a rating of 3 or 4. Based on these expert ratings four items were excluded leaving the total number of items at fifty-seven (Table 3). Furthermore, the author

of the adolescent version of the SEPIA recommended the inclusion of seven additional items, bringing the total number of questions in the instrument to sixty-four. Before the SEPIA-A added to the battery of tests administered to each participant the readability of the questions was examined, yielding a Flesh Reading Ease score of 75.4 and a Flesch-Kincaid Grade Level of 5.4.

Preliminary Instrument Analyses:

Description of the Sample: The sample size for the current study included 83 total patients, 42 experimental and 41 controls, treated for emergent conditions in the Parkland Hospital emergency room between December, 2003 and November, 2004. The mean age of the sample was 34, with a range of 18 to 57. The results of an exploratory analysis in SPSS showed that the distribution of the ages in the sample was positively skewed, indicating that a majority of the patients fell at the lower end of the age distribution. Fifty percent of the sample fell between the ages of 23 and 44.

Further examination of the data indicated that the sample was skewed with respect to other demographic characteristics as well. For example, the majority of the subjects were men (65.1%) and Caucasian (75.9%). With regard to marital status, 34.9% of the sample was single/never married, and 26.5% fell into the 'other' category (Table 1). Additional descriptive data, including employment information and education level are presented in Table 1.

Attempters: Forty-two study participants presented to Parkland Psychiatric Emergency Room following a suicide attempt. Twenty-five of the suicide attempters (IAS) were male (59.5%) and 17 were female (40.5%). The average age of the individuals

recruited in the psychiatric emergency room was 36 and ranged from 18 to 57 years. The majority of the group members were Caucasian (71.4%) and unemployed (57.1%).

Additional demographic information is presented in Table 1.

Trauma Patients: The remaining forty-one participants were patients admitted to the 24-hour observation floor in Parkland Hospital following initial assessment, triage, and treatment in the emergency room. The average age of the trauma patients was 32 and ranged from 19 to 57 years. The majority of these subjects were Caucasian (80.5%), Male (70.7%), and employed full-time (51.2%). Additional descriptive data including education level and marital status are reported in Table 1.

Comparison of Trauma Patients and Suicide Attempters: An independent samples t-test revealed that the difference in mean ages between the two sample groups was not significant, $t(83) = 1.85$, $p = 0.068$ (two-tailed). Further analyses of demographic variables revealed no significant differences between IAS and trauma patients for the variables of gender ($X^2[1, N = 83] = 1.15$, $p = 0.28$) and race-ethnicity ($X^2[3, N = 83] = 3.22$, $p = 0.36$). Moreover, no significant differences were found for marital status ($X^2[4, N = 83] = 4.51$, $p = 0.34$), employment ($X^2[2, N = 83] = 4.62$, $p = 0.10$), and education ($X^2[4, N = 83] = 1.21$, $p = 0.88$). These results are presented in Table 2.

The Major Study Hypotheses

The primary objective of this research was to compile a novel instrument designed to assess suicidality. This study sought to combine previously developed concepts including perceived burdensomeness, role captivity, and hopelessness in order to develop a battery of questions that differentiated between individuals who attempted suicide and patients treated

for acute traumatic injury. Among individuals presenting for treatment of intentional self-harm, the analyses conducted in this study correlated several concepts (e.g., levels of perceived burdensomeness, role captivity, and hopelessness) with lethality of suicide attempt. Additional analyses were performed to examine the statistical properties of the newly constructed instrument.

Hypothesis 1

High lethality of self-harm attempts will be significantly associated with high levels of perceived burdensomeness, hopelessness, and role captivity.

A one-tail bivariate correlation revealed no significant relationship between endorsement of the perceived burdensomeness item on the List of Reasons for Parasuicide and high Risk-Rescue Ratings ($r [N = 42] = -.059, p = 0.36$). In contrast, a significant correlation was found between total score on the Beck Hopelessness Scale and lethality of attempt, represented by scores on the Risk-Rescue Rating Scale ($r [N = 42] = -.269, p = 0.04$). Additionally, further analysis indicated a significant positive relationship between the SEPIA, adult version, and Risk-Rescue Ratings ($r [N = 42] = -.270, p = 0.04$). These findings are presented in Table 4.

Hypothesis 2

Study instrumentation will differentiate between adult psychiatric patients who have attempted suicide and those who have not.

In order to examine the ability of the SEPIA-A to differentiate between trauma patients and individuals who attempted suicide, an independent samples t-test was conducted. The mean total SEPIA-A score of the trauma group was 84.95 while the mean total score of

the suicide group was 46.78. A statistical analysis of the distributions within each of the samples indicated that equal variance could be assumed. Comparison of the two sample means yielded a t-critical of 5.41 ($df = 81$) corresponding to a p-value of 0.000 (Table 5, Figure 11). Because between-group demographic characteristics were not significantly different, no follow-up analyses controlling for covariates was conducted.

Additional Instrument Analyses

Preliminary validity of the instrument was examined using, bivariate correlations comparing total Beck Hopelessness Scale (BHS) scores and SEPIA-A total scores. A one-tailed bivariate correlation between total BHS scores and total SEPIA-A scores in the attempter group yielded a Pearson's r of 0.45 ($N = 42$, $p = 0.001$). A correlation comparing the total SEPIA-A and BHS scores for the entire sample produced a Pearson's r of 0.64 ($N = 83$, $p = 0.000$) (Table 6). Next, an analysis of the reliability of the items in the SEPIA produced a Cronbach's alpha of 0.971 (Table 8).

Item-to-scale correlations were conducted for each of the items in the SEPIA-A. The correlations obtained ranged from 0.07 to 0.80 (Table 7). Items that received a correlation less than 0.30 and greater than 0.70 will be removed from future versions of the instrument. Twenty-six items were removed from that used in this study to create the most recent draft of the instrument. A copy of the revised instrument with these deletions is found in Table 9.

CHAPTER FIVE

Conclusions and Recommendations

Past research has shown that health care professionals' ability to predict and prevent suicidal behavior is extremely limited. Historically, researchers tended to focus primarily on demographic characteristics in order to identify those at risk for suicidal behavior.

Therefore, although health care professionals have a substantial knowledge base regarding the demographic features of suicidal individuals, little is known about other, perhaps more salient variables associated with self-harm behaviors. Previously developed assessment tools demonstrated limited predictive ability and often do a poor job of identifying those patients at increased risk of harming themselves. More recent studies have begun to recognize the impact of personality characteristics, interpersonal dynamics, and co-morbid psychiatric diagnoses on an individual's likelihood to engage in suicidal behavior. As a result of these findings, the most recent risk assessment research and instrument development efforts were aimed at incorporating newly-conceptualized cognitive variables and psychological factors in order to more accurately identify individuals likely to attempt suicide.

The primary objective of the present study was to develop and pilot a suicide assessment tool to aid in assessment of suicide risk. The newly developed instrument is an attempt to integrate the concepts of "perceived burdensomeness" and "problem irresolvability" which are believed to be related to acts of self-harm. The instrument was administered to both trauma patients and suicide attempters in an effort to determine whether it differentiated between the two groups. Reliability analyses and item-to-scale correlations

were conducted in order to further refine the instrument. Finally, a revised set of instrument items was compiled to be further validated in future studies.

The secondary objective of the current study was to analyze the relationship between the concepts of perceived burdensomeness, hopelessness, and problem irresolvability and the lethality of the suicide attempts.

Generalizability of Data

The population of this study represents a diverse sample of individuals who attempted suicide or sustained unintentional traumatic injury. Previous research has found that females are more likely to attempt suicide, while males are more likely to complete suicide (Anderson & Smith, 2003). Additionally, it is known that more Caucasian men commit suicide than all other gender and race/ethnicity combinations (Miniño, et al., 2002). Interestingly, in the current study the majority of suicide attempters were Caucasian males (59.5% Male; 71.4% Caucasian). This discrepancy between expected and observed gender suggests that the cohort of deliberate self-harm patients in this study may be associated with more serious suicide attempts, and is not necessarily reflective of the most “typical” suicide attempter profile. The finding that the majority of the patients were Caucasian was consistent with past research regarding suicidal behavior.

In one seminal early study, Michel (1987) reported that the average age of the male patients in his subject pool who attempted suicide was 36.2 and the average age of female suicide attempters was 36.9. Analysis of the demographics in the current study indicates that

the average age of the suicidal participants was similar to those found by Michel (Average age of IAS in current study = 36.38 years).

Overall, the prototypical suicide attempter in this study was a Caucasian (71.4%), unemployed (57.1%), male (59.5%), with some college or technical school (42.9%). The attempter group had some variance in regard to marital status. In contrast, the “average” trauma patient was a Caucasian (80.5%), male (70.7%), employed full-time (51.2%) with some college or technical training (48.8%). The trauma patient group had somewhat less variance in regard to the variable of marital status with 41.5% of the participants reporting that they were single and had never been married.

Comparative Analysis

Despite the differences discussed above, analyses of the demographic variables yielded no significant differences between the “attempter” and “trauma” groups for the variables of age, gender, race/ethnicity, marital status, education level, or employment level. Although no significant differences were found between the two groups, it is interesting to note the relatively large numbers of young, Caucasian, males in both the trauma patient group and the suicide attempter group. It is possible (although it wasn’t examined in the present study) that individuals in this demographic category share some characteristics such as impulsivity and risk-taking behavior

Discussion of Hypotheses

Hypothesis 1

High lethality of self-harm attempts will be significantly associated with high levels of perceived burdensomeness, hopelessness, and role captivity.

In contrast to Brown and colleagues' (2002) research, this study did not show a significant relationship between high lethality of self-harm attempts and high levels of perceived burdensomeness. However, a significant relationship was found between the concepts of problem irresolvability and hopelessness and high lethality of self-harm attempts. Unfortunately, the nature of the correlation seems to indicate that the total scores for each instrument have a negative relationship. That is, when the total score of the SEPIA-A increases, the Risk-Rescue Rating decreases and when the BHS total score increases, the Risk-Rescue Rating decreases. It is hypothesized that this weak, negative relationship indicates that the BHS and the SEPIA have limited ability to distinguish between the varying degrees of suicidality.

Hypothesis 2

Study instrumentation will differentiate between adult psychiatric patients who have attempted suicide and those who have not.

As a first step in evaluating the newly developed SEPIA-A's ability to differentiate between IAS and trauma patients, an analysis comparing the average total scores of the two groups was performed. In the comparison, a significant difference was found between the mean scores of the two groups. Furthermore, analysis of the overall homogeneity of the sample by Levene's test showed no significance.

The ability of the SEPIA-A to differentiate between the two groups demonstrates that individuals who have recently attempted suicide score significantly higher on the instrument than patients who recently sustained unintentional traumatic injury. This difference may foreshadow the SEPIA-A's ability to predict suicidality among similar cohorts of patients. The findings in the current study are consistent with the results of the analysis of an adolescent version of the instrument conducted by Orbach and colleagues (1999). Furthermore, the constructs upon which the instrument is based are closely related to the stages of ego development previously discussed in relation to suicidality by researchers (Kaplan & Worth, 1993; Stillion & McDowell, 1991).

An additional finding of the current study was that of a significant relationship between the SEPIA-A and the Beck Hopelessness Scale, a previously established measure of suicidal tendencies. The positive correlation between the SEPIA-A and the BHS is expected because both instruments are purported to operationalize some concept related to suicidality. These results are preliminary evidence of the instrument's convergent validity and suggest that it would be profitable to future examine the properties of the SEPIA-A.

An additional step in the instrument development process was the calculation of the internal reliability of the instrument. Calculation of the Cronbach's Alpha Coefficient Reliability yielded a value of 0.971, indicating excellent internal consistency.

These findings support the hypothesis that the SEPIA-A differentiates between individuals who have attempted suicide and those who have not and indicate that future examination and refinement of the instrument is imperative, and suggest that it might be

possible to develop the instrument so that it demonstrates adequate reliability and validity for use in risk assessment settings.

Limitations of the Present Study and Future Recommendations

In this study, the first steps of instrument development were undertaken with the hope of creating a measure with the ability to distinguish between suicidal and non-suicidal individuals. Results indicate that the newly compiled SEPIA-A does indeed differentiate between the two populations. Instrument development was taken one step further with item to scale correlations. The results of the correlations led to the elimination of certain items and the recompilation of the instrument. Future studies will be needed to further investigate and refine both item content and factor structure of the instrument. Furthermore, future research involving this instrument will need to examine predictive validity, or the ability of the SEPIA-A to accurately predict suicide attempts. Finally, future research should address the concept of discriminant validity by comparing individuals' total scores on the SEPIA-A to those of instruments designed to measure concepts that are not similar to those included in the SEPIA-A.

Future studies should further investigate the ability of the SEPIA-A to differentiate lethality of suicide attempts. Recent research (Zehner, 2004) demonstrated that the instrument utilized to assess lethality of suicide attempts in this study produces scores so tightly clustered that they do not do an adequate job of distinguishing between the varying degrees of lethality. Therefore, further inquiry is necessary to establish the discriminative ability of measures of suicide risk with respect to lethality of the suicide attempt.

One limitation of the study involved the fact that a small sample size was included in the analyses. Adding additional participants to the study design is one important way to increase the power and generalizability of the results. Future studies would benefit from the inclusion of a larger sample size in order to more fully explore the variance among individuals who attempt suicide.

An additional methodological limitation of the present study is the single-site nature of the data collection. Individuals included in this study presented to a large, community-based, urban hospital, and may differ with respect to socioeconomic and psychological variables from suicide attempters found in other settings. The SEPIA items place significant importance on stress related to socioeconomic and relationship status and future research will be an important way to explore the impact of these variables.

An additional methodological consideration for future studies would involve the collection of added socioeconomic information. Research concerning the relationship between income level and risk of suicide is mixed (Agerbo, et al., 2001; Qin, et al., 2003; Timonen, et al., 2001). Future studies should collect additional socioeconomic information in order to pinpoint additional demographic factors associated with risk for suicidality.

Another limitation involved the possibility that test-fatigue may have differentially affected results between groups. Participants in this study were recruited from the psychiatric emergency room and the 24-hour trauma observation floor. Individuals in both groups had often had very little sleep in the hours preceding study interviews. Patients in the psychiatric emergency room were even more likely to be suffering from exhaustion due to the absence of beds in this environment. Furthermore, the battery of tests administered to

each patient was extensive and could take longer than two hours to complete. It is difficult to accurately estimate the impact that these variables had on testing. Future studies should implement a system by which the instruments contained in the battery are administered in random order to minimize test-fatigue effects. Finally, future studies should use a psychiatric control group in order to better control for comorbid psychiatric diagnoses and other extraneous variables.

Summary

The current study supported the utility of the Subjective Experience of Problem Irresolvability, Adult Version as a measure designed to differentiate between suicidal and non-suicidal individuals. The SEPIA-A demonstrated excellent internal reliability, and was successful in categorizing individuals based on the absence or presence of a recent suicide attempt. Additionally, the relationship between the SEPIA-A and the BHS was demonstrative of convergent validity. However, the SEPIA-A (as well as the BHS) did not positively correlate with a measure of the lethality of suicide attempts, which may indicate that the original form of the instrument does not discriminate between varying degrees of suicidality. Clearly, future research is necessary to further validate the effectiveness of the SEPIA-A in differentiating between individuals who attempt suicide and those who do not.

Further analysis of the personality characteristics believed to be associated with suicide attempts yielded unexpected results. In contrast to previous research, the current analyses indicated that the construct of “perceived burdensomeness” was not associated with lethality of the suicide attempts. These results further illustrate the elusive nature of the risk factors related to suicidal behavior and should serve as impetus for future investigation.

Overall, the current study indicates that the concept of problem irresolvability is a useful new paradigm for the understanding of suicidality and its precipitant risk factors. Future exploration of the nature of problem irresolvability and role captivity will likely contribute important information to the field of suicidology.

APPENDIX A


IRB MATERIALS

SOUTHWESTERN

THE UNIVERSITY OF TEXAS
SOUTHWESTERN MEDICAL CENTER
AT DALLAS

Institutional Review Board

TO: Cindy Claassen, PhD
c/o Mandy Station - 8898
Psychiatry - 8898

FROM:  Robert Bash, MD
Institutional Review Board 2 Chairperson
IRB - 8843

DATE: 8 August 2003

RE: **Final Approval of the Protocol dated 8 July 2003, HIPAA Request for Waiver and Revised Subject Consent Form**
Acknowledgment of HIPAA Authorization Form
IRB Number: 0703-471
Title: Temporal Stability of Dimensional Personality Trait Expression Found in Acutely Suicidal Patients with BPD

Thank you for submitting the modifications as requested by the Institutional Review Board in the memo dated 31 July 2003. This letter is notification of final approval of the protocol and the attached informed consent document(s) dated 8 August 2003. IRB approval of this research lasts until 27 July 2004. If the research continues beyond twelve months, you must apply for updated approval of the protocol and informed consent document one month before the date of expiration noted above. **Your currently approved subject sample size is 240 for experimental subject(s) and 0 for control subject(s).**

All subjects must sign a copy of the IRB-approved consent form(s) attached here before undergoing any study procedures, including screening procedures performed solely for the purposes of the research. A photocopy of the signed consent form(s) should be given to each participant. The copy of the consent form(s) bearing original signatures should be kept with other records of this research for at least five years past the completion of the study. For research involving treatment or invasive procedures, a photocopy of the signed consent form(s) should be on file in a subject's medical record.

The IRB requires that you report to the Board any unexpected adverse events (including life-threatening or fatal events) that occur during the study. In the future, if you require a modification to the protocol or the informed consent document, obtain review and approval by the Board prior to implementing any changes except when prompt changes are necessary to eliminate apparent immediate hazards to a subject.

The IRB requires that all personnel who interact with research subjects or who have access to research data identified with the names of subjects receive a copy of the Multiple Project Assurance on file with the Department of Health and Human Services and document their agreement to comply with the statements therein. Such documentation should be kept with other records of the research, which are subject to review by the IRB. Copies of the Multiple Project Assurance and the Federal regulations governing the participation of human subjects in research (45 CFR 46) are available on the IRB website or from Patrick Fisher at irb@mednet.swmed.edu.

Page 2 of 2

Approval by the appropriate authority at a collaborating facility is required before subjects may be enrolled on this study.

Reminder: Please put the following information on the footer of every page of the consent form: 1) IRB file number, 2) consent form approval date (date of this memo) and consent form expiration date (see first paragraph).

If you have any questions related to this approval or the IRB, you may telephone Anne Kormeier at 214.648.3691.

RB/ak

Attachment(s)	Revised Consent Form HIPAA Authorization Form HIPAA Request for Waiver Form
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APPENDIX B
Suicide Expert Materials

Introduction to Current Problem Irresolvability Research

Much of the current research regarding factors that predict potential suicidality focuses primarily on demographic factors such as age, race, and gender. Other research examines previous suicidal behavior, including characteristics of prior suicide attempts. As risk assessment methods, this body of research has limited sensitivity and specificity (Geddes, 1999).

Dr. Israel Orbach, a prominent suicide researcher and recipient of the prestigious 2002 American Association of Suicidology Louis I. Dublin Award for outstanding services/contributions to the field of suicide prevention, has recently developed the Subjective Experience of Problem Irresolvability (SEPI) scale. The SEPI is intended to distinguish between suicidal, normal, and psychiatric adolescents based on the individual's inability to resolve "irresolvable" problems, and the subsequent lack of experienced control (Orbach et al., 1999). We believe that the construct of problem irresolvability is an important addition to suicidality assessment because it allows for the exploration of relationship dynamics. In an adult population, research has shown that the combination of family and career difficulties is related to suicidal behavior among police officers (Janik & Kravitz, 1994; McCafferty et al., 1992), and we hypothesize that the "role captivity" experienced by some men under these circumstances may be related to the Orbach concept of problem irresolvability.

The following items draw upon Orbach's concept of problem irresolvability, and include additional statements designed to cover adult role-related conflicts (i.e. items regarding parenting, marital responsibilities, and occupation).

References

- Geddes, J. (1999). Suicide and homicide by people with mental illness. *British Medical Journal*, 318, 1225-1226
- Janik, J., & Kravitz, H. M. (1994). Linking work and domestic problems with police suicide. *Suicide and Life-Threatening Behavior*, 24(3), 267-274.
- McCafferty, F. L., McCafferty, E., & McCafferty, M. A. (1992). Stress and suicide in police officers: Paradigm of occupational stress. *Southern Medical Journal*, 85(5), 233-243.
- Orbach, I., Mikluciner, M., Blumenson, R., Mester, R., & Stein, D. (1999). The subjective experience of problem irresolvability and suicidal behavior: Dynamics and measurement. *Suicide and Life-Threatening Behavior*, 29(2), 150-164.

Please review each of the questions and rate them on the following scale:

1-Not Relevant

2-Unable to assess the relevance without revision

3-Relevant but needs minor revisions

4-Very relevant and succinct

SEPI (Adult Version)

_____ The expectations that people have of me are unattainable.

_____ My family demands too much of me at this time.

_____ Different members of my family want me to do different things.

_____ People around me are pressuring me, but I don't know exactly what would make them happy.

_____ My family does not treat me with respect.

_____ I can never satisfy my family.

_____ My family members are giving me the feeling that there is something wrong with me.

_____ I feel guilty that I cannot live up to my family member's expectations.

_____ I would have to be a different person in order to make my family happy.

_____ When my family has problems, they tend to direct the problems toward me.

_____ If I were well, there would be more stress between my family members.

_____ When I am in trouble, my family members are more relaxed.

_____ When I solve one problem, another one seems to pop up right away.

_____ It is my responsibility to make my family members happy.

_____ It is my duty to help my family get along with each other.

_____ My family thinks there is something wrong with me, but they don't talk to me about it.

_____ My problems make my family feel better about themselves.

_____ I have to protect my family from hurting each other.

_____ I have to help my family members achieve goals that they could not achieve for themselves.

_____ I have very few rights of my own any more.

_____ I cannot meet the goals that people have set for me.

_____ My family asks me to do too many things at one time.

_____ People put me under a lot of pressure, but I don't know how to make them happy.

_____ If I were healthy, my family would actually be more unhappy.

_____ I can never make my family happy.

_____ The problems I have with my family will never be solved.

_____ I am not able to make my own decisions any more.

_____ I am in charge of making sure my family members are happy.

_____ Most of the big problems in my life will never be fixed.

_____ When my family has problems they make it seem like the problems are my fault.

_____ Some of my family members want me to do one thing, while other family members want me to do the opposite.

_____ Every time I fix one problem, another one comes up.

_____ My family members act like there is something wrong with me, but don't talk to me about it.

_____ I have to keep my family members from harming each other.

_____ My family is never happy with what I have accomplished.

_____ My family does not value my opinions.

_____ My family is happier when I have problems.

_____ My family members could not achieve their goals if I didn't help them.

_____ My family is asking me to do too much.

_____ My family members treat me like there is something wrong with me.

_____ I would have to completely change who I am to make my family happy.

_____ Every time I figure out a way to fix a problem, a new one comes up.

_____ I am responsible for making sure that my family members aren't angry with each other.

_____ It makes my family happy when they see how many problems I have.

_____ I am carrying a great burden.

_____ I am a burden to the people around me.

_____ My boss demands too much of me.

_____ I cannot satisfy my coworkers.

_____ I am under a great deal of stress at work.

_____ My boss does not value my opinions.

_____ I have more responsibilities at work than I can handle.

Male

- _____ It is the man's responsibility to earn money for the family.
- _____ Men should make the major decisions for the family.
- _____ Men should be responsible for fixing major things around the house.
- _____ A man should be in charge of the family.
- _____ I cannot live up to the role of husband/father.

Female

- _____ The women in the family should prepare the meals.
- _____ Women should be in charge of cleaning the house.
- _____ Women are responsible for raising the children.
- _____ Wives should do everything that their husbands ask them to.
- _____ I cannot live up to the role of wife/mother.

APPENDIX C
Patient Packet Materials

The University of Texas Southwestern Medical Center at Dallas

Parkland Health and Hospital System

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research: **Temporal Stability of Dimensional Personality Trait Expression**
Found In Acutely Suicidal Patients with BPD

Sponsor: **Borderline Personality Disorder Research Foundation**

Investigator:	Telephone No. (regular office hours)	Telephone No. (other times)
Cindy Claassen, Ph.D. 648-5555	214-648-0164	214-
<i>Mandy Staton, B.A.</i>	<i>214-648-0175</i>	
Katrina van de Bruinhorst, M.A.	214-648-0175	
Margeaux Hollenbeck, B.S.	214-648-4696	

INVITATION: You are invited to participate in this research because you are receiving emergency treatment for an injury or for suicidal behavior or thoughts.

Medical research involves collecting and studying information about patients' experiences, and using that information to develop the best possible care for future patients.

NUMBER OF PARTICIPANTS: The sponsor plans to include 240 participants in this research.

PURPOSE: The purpose of this research is to: 1) understand the state of mind of certain groups of patients who are treated for thoughts or actions related

to a self- or accidental injury and 2) correlate personality types and certain types of stressful life events with outcome three-months after the injury.

This research is being done because previous research has suggested that there are often certain personality types and certain kinds of life events present when a person reaches the decision to attempt to end their life or hurt themselves, or even when they are more likely to experience an accidental injury. If we know more about these patterns, we may be able to identify people at risk for some of these problems in the future.

PROCEDURES

Screening: The study doctor will first ask your permission to question you about your personality style, your ability to speak and read English, your current mental functioning, your willingness to take computer-based tests, and your willingness/ability to provide phone numbers for people who usually know where to find you (to arrange follow-up testing).

If you agree to answer some initial questions, you will have the following evaluations: an evaluation of your personality style and a brief test of your ability to read English. Some questions related to personality style may be asked even if you do not participate in this research.

If you qualify for this study and agree to participate, you will go through two testing sessions. The first one will be immediately or within a few days of your emergency room visit. The second one will be about three months later. Your total involvement in the study will last 2 – 2 ½ hours in these two sessions, approximately three (3) months apart from the time of your index injury.

Evaluations during the research: In each testing session you will be asked whether you are currently having suicidal or homicidal thoughts. If you are, your level of risk to act on these thoughts will be assessed. If you are at risk of hurting yourself, you will be taken to doctors who can provide treatment (See “Possible Risks,” below.)

The study testing sessions will identify:

- a) any psychiatric problems you are currently experiencing (such as depression or substance abuse),
- b) your personality traits and personality style,
- c) any important stressful life events that you may be experiencing now or have experienced in the past,
- d) characteristics of the injury you have sustained or thoughts you have been having,

e) recent life stressors you have experienced

In addition, we will need your permission to access your past medical records at the time of the three month post-injury testing to learn about any other self-harm or traumatic injuries you have ever had, and any other medical or psychiatric problems you have been treated for.

POSSIBLE RISKS

Assessment Sessions: It is not always possible to predict whether you will have problems or not during the testing sessions. First, these sessions may seem somewhat long and uncomfortable to you, particularly if you still have complications from your injury. There is no past research on how many patients experience this discomfort, but, based on the kinds of injuries self-harm patients are treated for, it is estimated that 20-49% of patients may have this problem. However, study personnel will do everything possible to make you comfortable during these sessions.

In addition, answering questions about emotional issues can make some people feel extremely uncomfortable or very sad. In past research, less than 10% of people have had this problem.

Finally, it is possible that you will be feeling very suicidal or self-destructive when you come back for the three-month follow-up testing session. *If this is the case, you should know that all study personnel have an ethical obligation to keep you safe, even if you are not concerned about this at the time.*

The study doctor will ask you at the beginning of the three-month follow-up testing sessions if you are suicidal (feeling like hurting yourself) or homicidal (feeling like hurting someone else). If you answer that you are, the study doctor is trained to ask you several questions about how likely you are to try and harm yourself or someone else in the next few days. If this seems likely, you will be taken to the Parkland Psychiatric Emergency Service where doctors can assess your mental state and provide emergency care.

It is extremely important that your safety, and the safety of others, be protected at all costs at such a time!! Therefore, even if you do not want treatment at that point, the doctor will strongly encourage you to get help. If it seems very likely that you are at high risk of harming yourself in the near future, study personnel are ethically obligated to escort you to the psychiatric emergency service, even if you do not want to go. In past research, about 10-15% of self-harm or traumatic injury patients admitted that they felt like hurting themselves three months after they were hurt; less than 3% were unwilling to get help.

Unforeseen risks: A previously unknown problem could result from your participation in this research. It is not possible to estimate the chances of such problems or how serious problems could be.

How you can help reduce some of the risks: During your participation in this research, your study doctor will watch closely to determine whether there are

problems that need medical or psychiatric care. It is your responsibility to do the following:

- Ask questions about anything you do not understand.
- Keep appointments.
- Follow the study doctor's instructions.
- Let your study doctor know if your telephone number changes.
- Talk to a family member or friend about your participation in this research.

What to do if you have problems: If you have problems, such as unusual symptoms or emotional or physical pain, at any time during your participation in the research, your study doctor can recommend treatment. Please report the problem to your study doctor promptly. Telephone numbers where he/she may be reached are listed on the first page of this consent form.

If you suddenly have a serious problem (such as difficulty breathing) or recurrent thoughts of hurting yourself or someone else, go to the nearest hospital emergency room, or call 911 (or the appropriate emergency telephone number in your area).

POSSIBLE BENEFITS

Benefit to you: Your medical or emotional problems may get better or go away. But they could possibly get worse. Participation in this research will not affect this.

Benefit to other people with suicide-related or accidental injuries: In the future, other people with self- or accidentally-induced injuries could benefit from the results of this research. Information gained from this research could lead to improved medical and/or psychiatric care for them. However, your study doctor will not know whether there are benefits to other people who are susceptible to such injuries until all of the information obtained from this research has been collected and analyzed.

ALTERNATIVES TO PARTICIPATION IN THIS RESEARCH: You do not have to participate in this research to receive care for your medical problem.

Please ask your study doctor as many questions as you wish. The doctor's answers to your questions could help you decide whether to participate in this research or receive the standard care that is currently available for your medical problem.

If you decide to participate in research now, and later change your mind, you may stop your participation in the research.

THE STUDY DOCTOR'S DECISION TO STOP YOUR PARTICIPATION: Your study doctor or the study sponsor may stop your participation in this research without your permission under any one of the following conditions:

- Your medical or emotional problem remains unchanged or becomes worse.
- Your study doctor believes that participation in the research is no longer safe for you.
- The sponsor cancels the research.
- You are unable to keep appointments or to follow your study doctor's instructions.

PROCEDURES AFTER STOPPING PARTICIPATION IN THIS RESEARCH: If you, the study doctor, or the sponsor stops your participation in the research, it is your responsibility to do the following:

- Let your study doctor know immediately that you wish to withdraw from the research.
- Discuss your future medical care with your study doctor and/or your regular doctor.

PAYMENT TO TAKE PART IN THIS RESEARCH: You will be paid **\$30** for the first assessment session and **\$60** for the second assessment session to participate in this research. If you do not complete all study procedures, you will be paid according to the number of assessment sessions you complete.

If you are an employee of UT Southwestern, tax will be deducted from the payment given to you for your participation in the research.

UT Southwestern, as a State agency, will not be able to make any payments to you for your participation in this research if the State Comptroller has issued a "hold" on all State payments to you. Such a "hold" could result from your failure to make child support payments or pay student loans, franchise taxes, etc. Should this occur, UT Southwestern will be able to pay you for your participation in this research after you have made the outstanding payments, and the State Comptroller has issued a release of the "hold."

COSTS TO YOU: Expenses related to standard medical care for your self-harm or accidental injury are your responsibility (or the responsibility of your insurance provider or government program).

There are no funds available to pay for transportation to and from the research center, parking, lost time away from work and other activities, lost wages, or child care expenses.

COMPENSATION FOR INJURY: Compensation for an injury resulting from your participation in this research is not available from the University of Texas Southwestern Medical Center at Dallas or Parkland Health & Hospital System or the Borderline Personality Disorder Research Foundation.

You retain your legal rights during your participation in this research.

VOLUNTARY PARTICIPATION IN RESEARCH: You have the right to agree or refuse to participate in this research. If you decide to participate and later change your mind, you are free to discontinue participation in the research at any time.

Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Refusal to participate will not affect your legal rights or the quality of health care that you receive at this center.

NEW INFORMATION: Any new information that becomes available during your participation in the research and may affect your health, safety, or willingness to continue in the research will be given to you.

RECORDS OF YOUR PARTICIPATION IN THIS RESEARCH

You have the right to privacy. Any information about you that is collected for this research will remain confidential as required by law. In addition to this consent form, you will be asked to sign an "Authorization for Use and Disclosure of Protected Health Information for Research Purposes."

Certificate of Confidentiality: To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health. With this Certificate, the researchers cannot be forced to disclose information that may identify you, even by a court.

subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. The researchers will use the Certificate to resist any demands for information that would identify you, except as explained below.

The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of Federally funded projects or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA).

You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

The Certificate of Confidentiality does not prevent the researchers from disclosing voluntarily, without your consent, information that would identify you as a participant in the research project under the following circumstances.

Please note: If you are experiencing thoughts of hurting yourself or someone else and researchers are concerned about your immediate safety, or the safety of someone else, they will disclose this information to family members, law enforcement officials and treating professionals who may help to ensure your safety and the safety of others.

YOUR QUESTIONS: Your study doctor is available to answer your questions about this research. The Chairman of the IRB is available to answer questions about your rights as a participant in research or to answer your questions about an injury or other complication resulting from your participation in this

research. You may telephone the Chairman of the IRB during regular office hours at 214-648-3060.

YOU WILL HAVE A COPY OF THIS CONSENT FORM TO KEEP.

Your signature below certifies the following:

- You have read (or been read) the information provided above.
- You have received answers to all of your questions.
- You have freely decided to participate in this research.
- You understand that you are not giving up any of your legal rights.

Participant's Name (printed)

Participant's Signature

Date

Legally responsible representative's name
(printed)

Legally responsible representative's
Signature

Date

Witness' name (printed)

Witness' signature

Date

Name (printed) of person obtaining
Consent

Signature of person obtaining consent

Date

The University of Texas Southwestern Medical Center at Dallas
Children's Medical Center, Parkland Health & Hospital System
Retina Foundation of the Southwest, Texas Scottish Rite Hospital for Children
Zale Lipshy University Hospital, St. Paul University Hospital
The University of Texas Southwestern Moncrief Cancer Center

**Authorization for Use and Disclosure of
 Health Information for Research Purposes**

NAME OF RESEARCH PARTICIPANT: _____

1. You agree to let **Parkland Health & Hospital System** share your health information with Dr. Cindy Claassen and his / her staff at the University of Texas Southwestern Medical Center at Dallas ("Researchers") for the purpose of the following research study: **Temporal Stability of Dimensional Personality Trait Expression Found In Acutely Suicidal Patients with BPD (IRB # 0703-471)**. ("Research Project").

2. You agree to let the Researchers use your health information for this Research Project. You also agree to let the Researchers share your health information with others who may be working with the Researchers on the Research Project ("Recipients") as follows.

- **Borderline Personality Research Foundation:** The sponsor includes any people, entities, groups or companies working for or with the sponsor or owned by the sponsor. The sponsor will receive written reports about your participation in the research. The sponsor may look at your health information to assure the quality of the information used in the research.
- The UT Southwestern Institutional Review Board (IRB). This is a group of people who are responsible for assuring that the rights of participants in research are respected. Members and staff of the IRB at UT Southwestern may review the records of your participation in this research. A representative of the IRB may contact you for information about your experience with this research. If you do not want to answer their questions, you may refuse to do so.
- Representatives of the Office of Human Research Protections (OHRP). The OHRP may oversee the Research Project to confirm compliance with laws, regulations and ethical standards.

3. Whenever possible your health information will be kept confidential. Federal privacy laws may not apply to some institutions outside of UT Southwestern. There is a risk that the Recipients could share your information with others without your

permission. UT Southwestern cannot guarantee the confidentiality of your health information after it has been shared with the Recipients.

4. You agree to permit the Researchers to use and share your health information as listed below:

- Results of a brief personality test
- Data regarding current mental functioning
- Multiple phone numbers from people who know you, including your emergency contact, for scheduling follow-up assessment
- Discharge information for current *injury / admission*.
- Description of any other traumatic injury or self-harm episodes—dates, diagnoses, treatment, and outcome for each,
- Information regarding thoughts of harming yourself or someone else, current risk of suicidal behavior, current treatment provider(s), and current treatment plan
- Questionnaires about clinical history, depression, substance misuse, personality, recent stressors
- Among deliberate self-harm patients, seriousness of the suicide attempt,
- Level of cultural factors involved in the suicide attempts among Hispanic self-harm patients

5. The Researchers may use your health information to create research data that does not identify you. Research data that does not identify you may be used and shared by the Researchers (for example, in a publication about the results of the Research Project); it may also be used and shared by the Researchers and Recipients for other research purposes not related to the Research Project.

6. This authorization is voluntary. Your health care providers must continue to provide you with health care services even if you choose not to sign this authorization. However, if you choose not to sign this authorization, you cannot take part in this Research Project.

7. This Authorization has no expiration date.

8. If you change your mind and do not want us to collect or share your health information, you may cancel this authorization at any time. If you decide to cancel this authorization, you will no longer be able to take part in the Research Project. The Researchers may still use and share the health information that they have already collected before you canceled the authorization. To cancel this authorization, you must make this request in writing to **Cindy Claassen, Ph.D., Department of Psychiatry, 5323 Harry Hines Blvd., Dallas, TX 75390-9119, Phone: 214-648-0164.**

9. A copy of this authorization form will be provided to you.

Signature of Research Participant

Date

For Legal Representatives of Research Participants (if applicable):

Printed Name of Legal Representative: _____

Relationship to Research Participant: _____

*I certify that I have the legal authority under applicable law to make this
Authorization on behalf of the Research Participant identified above. The basis for
this legal authority is:*

_____.
(e.g. parent, legal guardian, person with legal power of attorney, etc.)

Signature of Legal Representative

Date

SEPI – Adult Version

		Rarely/Never	Occasionally	Often	Almost Always
1.	The expectations that people have of me are unattainable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	My family demands too much of me at this time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	Different members of my family want me to do different things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	People around me are pressuring me, but I don't know exactly what would make them happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	My family does not treat me with respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	I can never satisfy my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	My family members are giving me the feeling that there is something wrong with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	I feel guilty that I cannot live up to my family member's expectations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	I would have to be a different person in order to make my family happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	If I were well, there would be more stress between my family members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	When I am in trouble, my family members are more relaxed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	When I solve one problem, another one seems to pop up right away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	It is my responsibility to make my family members happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14.	It is my duty to help my family get along with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	My family thinks there is something wrong with me, but they don't talk to me about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	My problems make my family feel better about themselves.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	I have to protect my family from hurting each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Rarely/Never	Occasionally	Often	Almost Always
18.	I have very few rights of my own any more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	I cannot meet the goals that people have set for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	My family asks me to do too many things at one time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	People put me under a lot of pressure, but I don't know how to make them happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	If I were healthy, my family would actually be more unhappy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	I can never make my family happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	The problems I have with my family will never be solved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	I am not able to make my own decisions any more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	I am in charge of making sure my family members are happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	Most of the big problems in my life will never be fixed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	When my family has problems they make it seem like the problems are my fault.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	Some of my family members want me to do one thing, while	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	other family members want me to do the opposite.				
30.	Every time I fix one problem, another one comes up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	My family members act like there is something wrong with me, but don't talk to me about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	I have to keep my family members from harming each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	My family is never happy with what I have accomplished.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	My family does not value my opinions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	My family is happier when I have problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Rarely/Never	Occasionally	Often	Almost Always
36.	My family is asking me to do too much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	My family members treat me like there is something wrong with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	I would have to completely change who I am to make my family happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39.	Every time I figure out a way to fix a problem, a new one comes up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40.	I am responsible for making sure that my family members aren't angry with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41.	I am carrying a great burden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42.	I am a burden to the people around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43.	My boss demands too much of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44.	I cannot satisfy my coworkers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45.	I am under a great deal of stress at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46.	My boss does not value my opinions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47.	I have more responsibilities at work than I can handle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48.	No decision that I make can solve my major problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49.	Every solution that I come up with causes a new problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50.	I feel that there is no way to eliminate the trap in which I am caught.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51.	Every solution that I have for my problems will still result in great loss to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52.	I feel trapped in my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53.	I cannot escape my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Rarely/Never	Occasionally	Often	Almost Always
54.	I can resolve some of my problems only at great cost to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55.	It is the man's responsibility to earn money for the family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56.	Men should make the major decisions for the family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57.	Men should be responsible for fixing major things around the house.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58.	A man should be in charge of the family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59.	The women in the family should prepare the meals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60.	Women should be in charge of cleaning the house.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

61.	Women are responsible for raising the children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62.	Wives should do everything that their husbands ask them to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Please answer #63 OR #64				
63.	I cannot live up to the role of husband/father.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64.	I cannot live up to the role of wife/mother.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BECK

Subject ID: _____ **Physician ID:** _____ **Date:** ____/____/____

Visit Number: Baseline **Rater Initials** _____ **Study: IMPACTS**

Instructions: Please mark if you believe the following statements are true or false about yourself:

- | | | | |
|-----|---|----------------------------------|-----------------------------------|
| 1. | I look forward to the future with hope and enthusiasm. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 2. | I might as well give up because I can't make things better for myself. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 3. | When things are going badly, I am helped by knowing they can't stay that way forever. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 4. | I can't imagine what my life would be like in 10 years. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 5. | I have enough time to accomplish the things I most want to do. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 6. | In the future, I expect to succeed in what concerns me most. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 7. | My future seems dark to me. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 8. | I expect to get more of the good things in life than the average person. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 9. | I just don't get breaks, and there's no reason to believe I will in the future. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 10. | My past experiences have prepared me well for my future. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 11. | All I can see ahead of me is unpleasantness rather than pleasantness. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 12. | I don't expect to get what I really want. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 13. | When I look ahead to the future, I expect I will be happier than I am now. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 14. | Things just won't work out the way I want them to. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 15. | I have great faith in the future. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 16. | I never get what I want so it's foolish to want anything. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 17. | It is very unlikely that I will get any real satisfaction in the future. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 18. | The future seems vague and uncertain to me. | <input type="checkbox"/>
True | <input type="checkbox"/>
False |
| 19. | I can look forward to more good times than bad times. | <input type="checkbox"/> | <input type="checkbox"/> |

True

False

20. There's no use in really trying to get something I want because I probably won't get it.

☐
True☐
False

REASONS FOR SELF-HARM *** Attempters Only

Subject ID: _____ Group: _____ Date: ____/____/____

Visit Number: 0 - Baseline Rater Initials _____ Study: PRO-ACTS I

Please read the list of possible reasons for suicide below and fill in the circle next to any that were your reason for attempting suicide.

Y/N

1. To stop bad feelings	<input type="radio"/>
2. To stop feeling angry or frustrated or enraged	<input type="radio"/>
3. To relieve anxiety or terror	<input type="radio"/>
4. To relieve feelings of aloneness, emptiness or isolation	<input type="radio"/>
5. To stop feeling self-hatred, shame	<input type="radio"/>
6. To obtain relief from a terrible state of mind	<input type="radio"/>
7. To communicate to or let others know how desperate you were	<input type="radio"/>
8. To get help	<input type="radio"/>
9. To gain admission into a hospital or treatment program	<input type="radio"/>
10. To shock or impress others	<input type="radio"/>
11. To get other people to act differently or change	<input type="radio"/>
12. To get back at or hurt someone	<input type="radio"/>
13. To demonstrate to others how wrong they are/were	<input type="radio"/>
14. To make others understand how desperate you are	<input type="radio"/>
15. To feel something, even if it was pain	<input type="radio"/>
16. To stop feeling numb or dead	<input type="radio"/>
17. To feel sexually aroused	<input type="radio"/>
18. To get away or escape	<input type="radio"/>
19. To get a vacation from having to try so hard	<input type="radio"/>

20.To get out of doing something	<input type="radio"/>
21.To distract yourself from other problems	<input type="radio"/>
22.To prevent being hurt in a worse way	<input type="radio"/>
23.To punish yourself	<input type="radio"/>
24.To prove to yourself that things really were bad and it was okay to feel as bad as you did	<input type="radio"/>
25.To make others better off	<input type="radio"/>
26.To express anger or frustration	<input type="radio"/>
27.To give you something, anything to do	<input type="radio"/>
28.To be with people you love	<input type="radio"/>
29.To die	<input type="radio"/>

RISK-RESCUE RATING ** Attempters Only

Subject ID: _____ Group: _____ Date: ____/____/____

Visit Number: 0 - Baseline Rater Initials _____ Study: PRO-ACTS I

Risk Score _____

Rescue Score _____

Risk-Rescue Rating _____ Previous Attempts _____

Circumstances

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

Total Risk Points _____

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

Total Rescue Points _____

RISK SCORE

- 5. High risk (13-15 risk points)
- 4. High moderate (11-12 risk points)
- 3. Moderate (9-10 risk points)
- 2. Low moderate (7-8 risk points)
- 1. Low risk (5-6 risk points)

RESCUE SCORE

- 1. Least rescuable (5-7 rescue points)
- 2. Low moderate (8-9 rescue points)
- 3. Moderate (10-11 rescue points)
- 4. High moderate (12-13 rescue points)
- 5. Most rescuable (14-15 rescue points)

* Self-rescue automatically yields a Rescue Score of 5

** If there is no data, the absolute treatment effect is assumed.

APPENDIX D

Figures

Figure 1

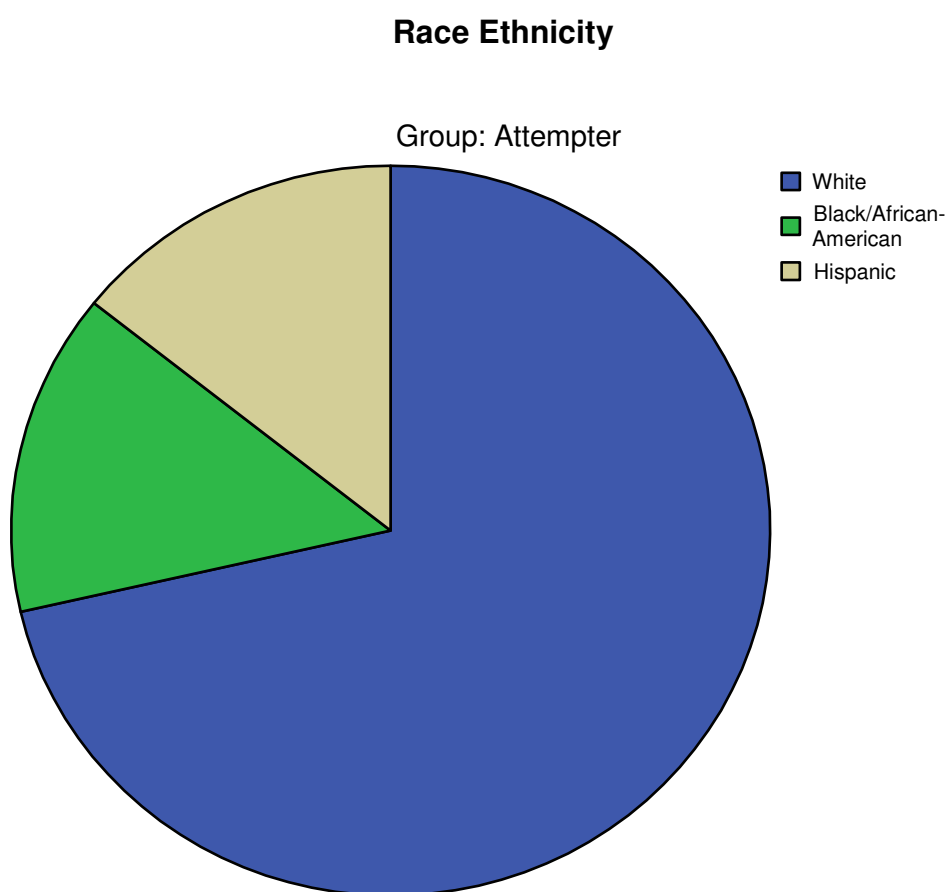
Race/Ethnicity Distribution – Attempter Group

Figure 2

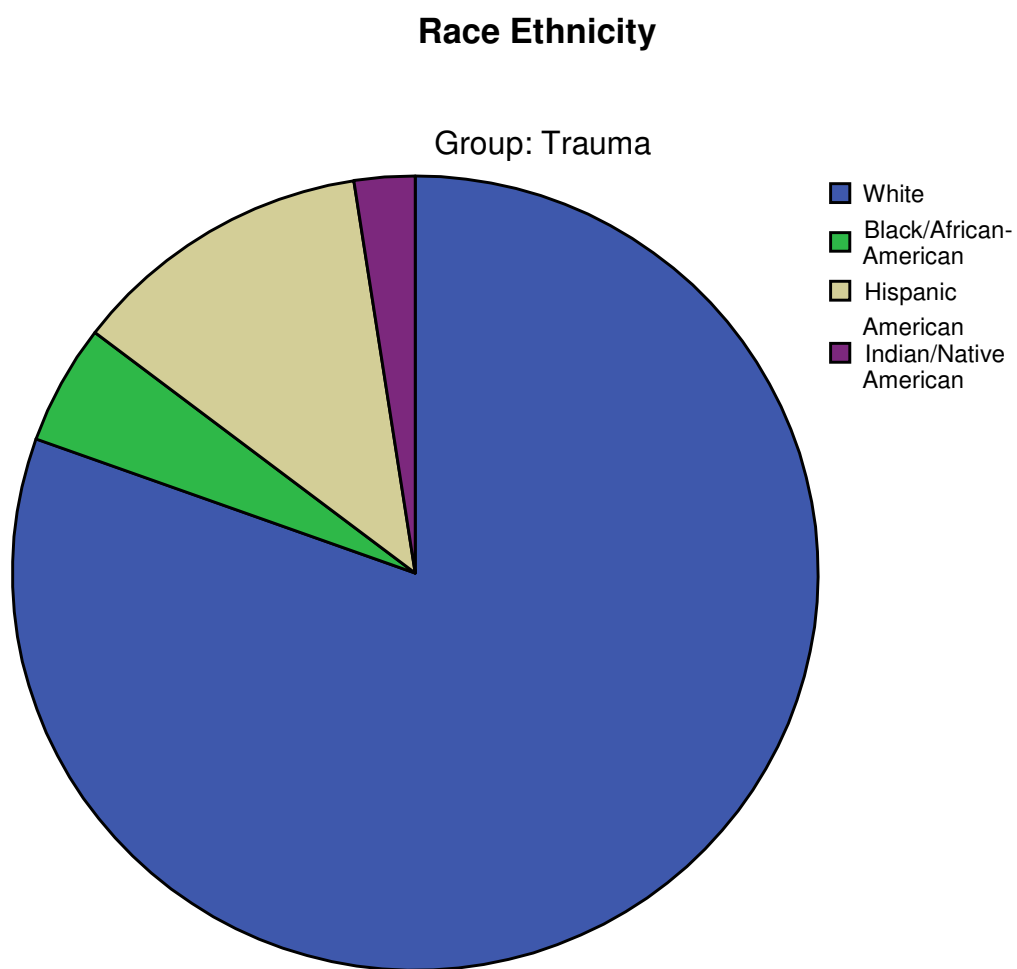
Race/Ethnicity Distribution – Trauma Group

Figure 3

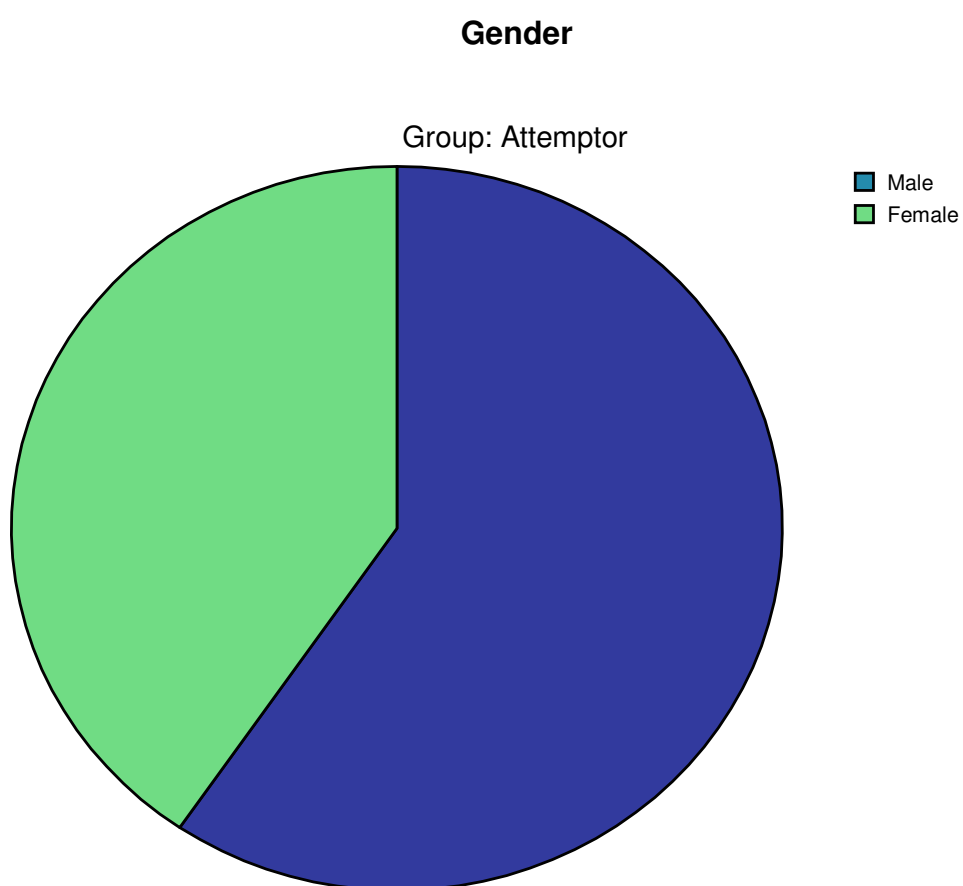
Gender Distribution – Attempter Group

Figure 4

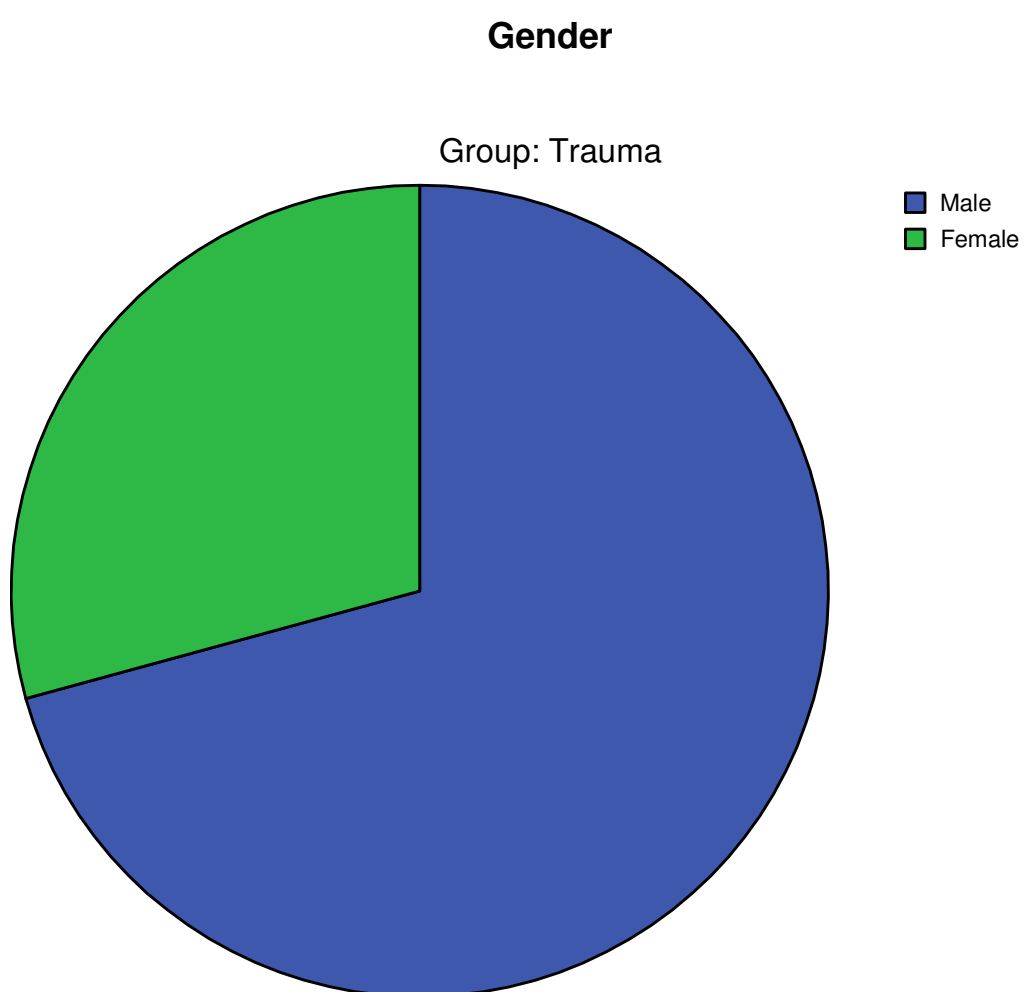
Gender Distribution – Trauma Group

Figure 5

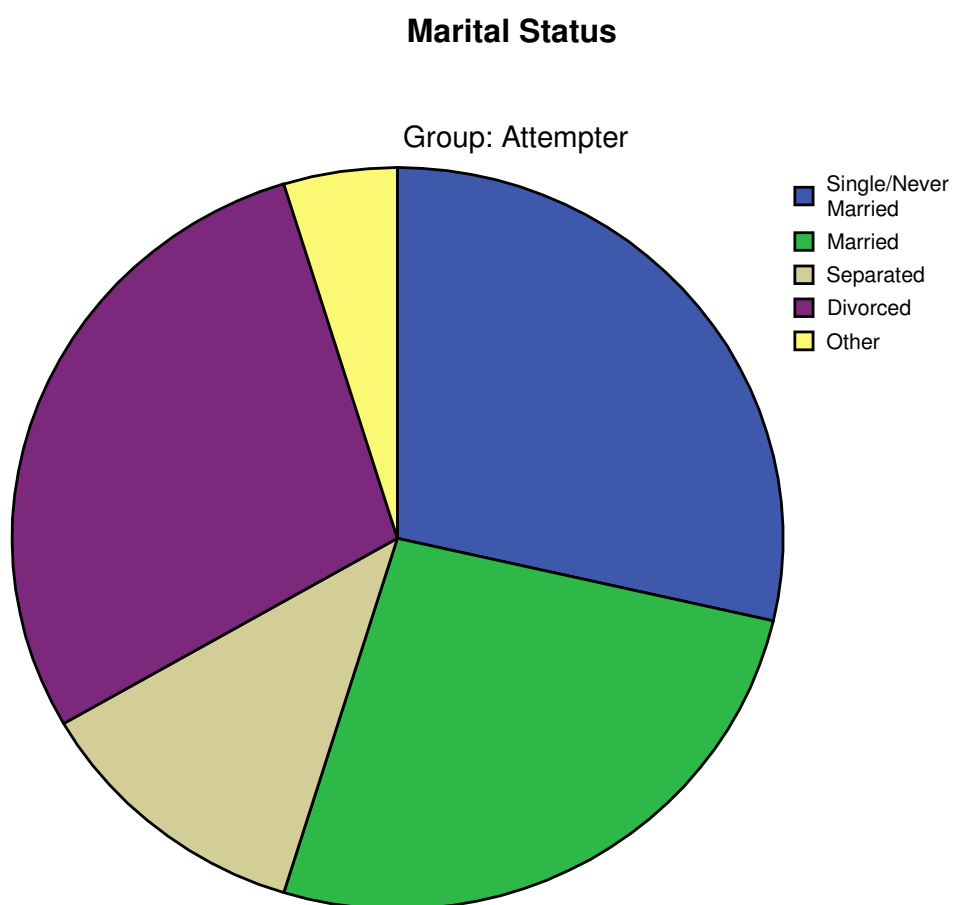
Marital Status Distribution – Attempter Group

Figure 6

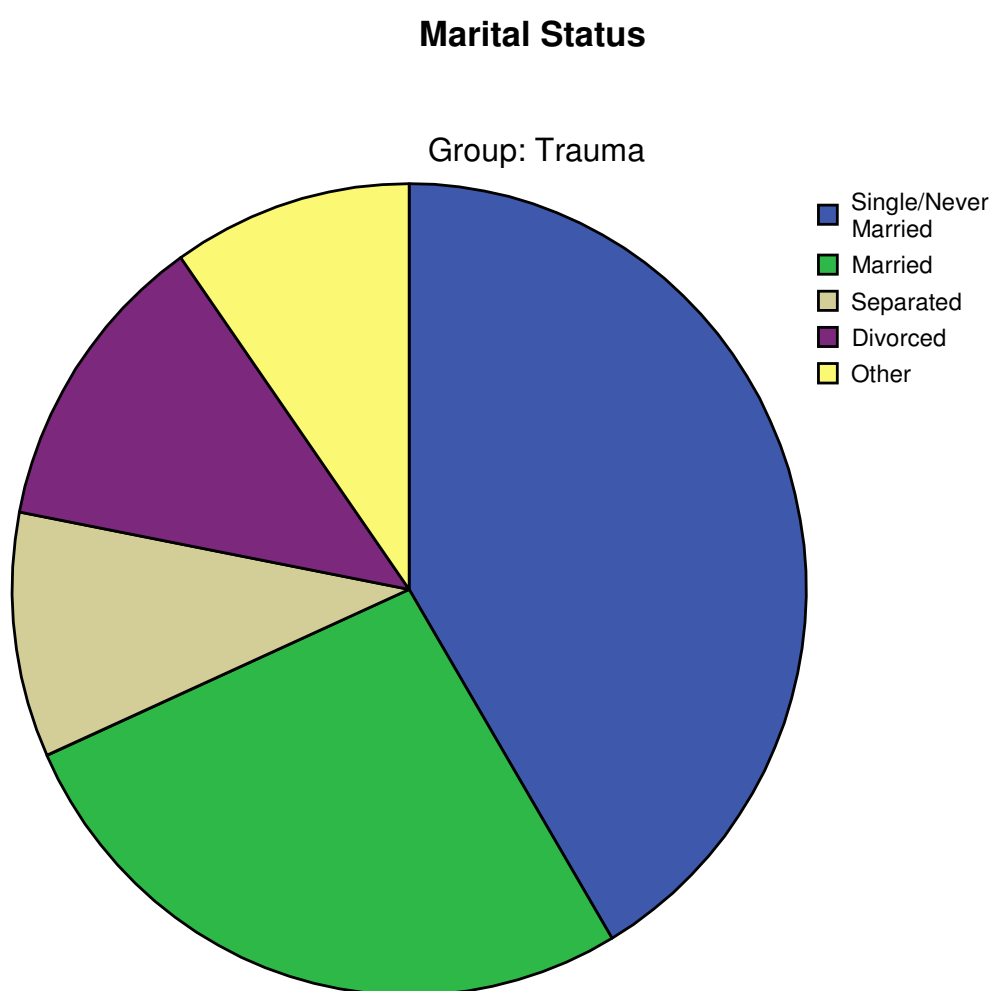
Marital Status Distribution – Trauma Group

Figure 7

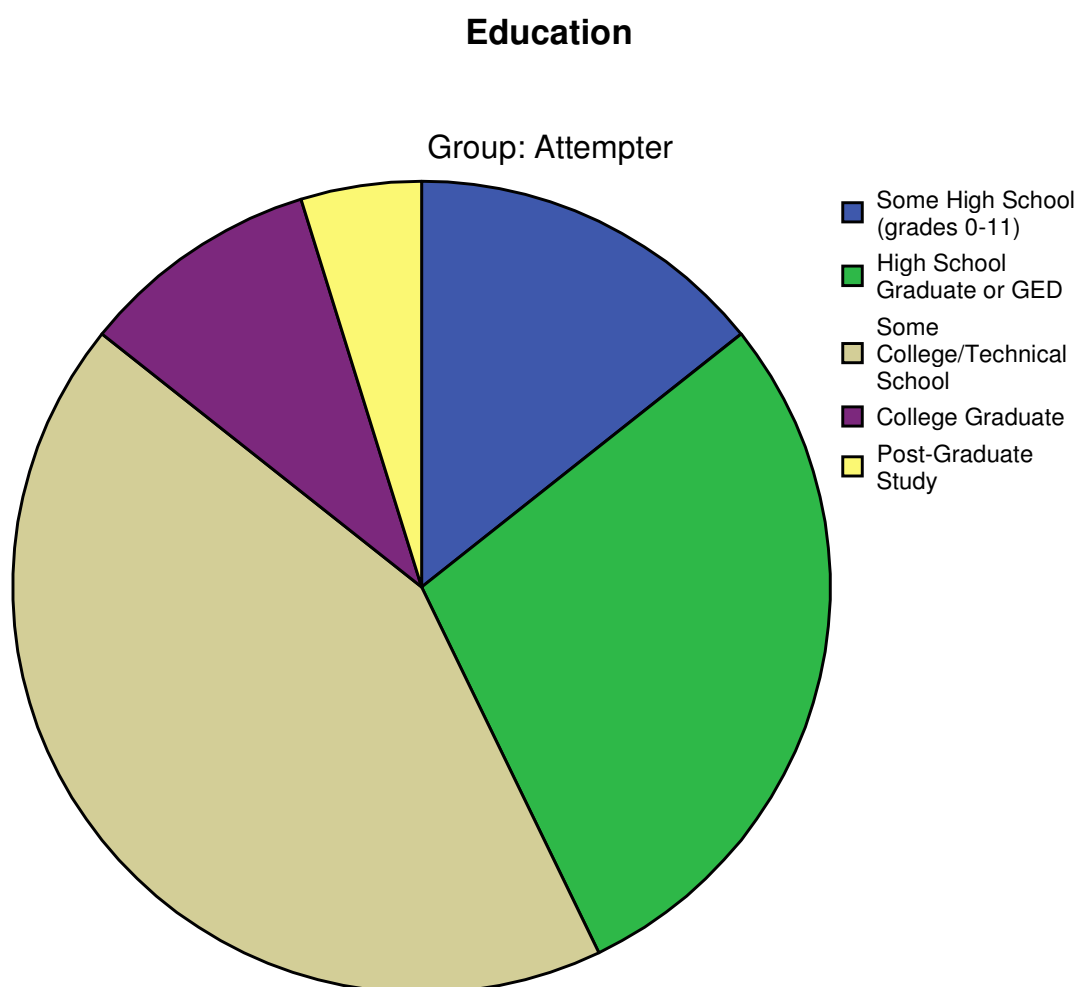
Education Distribution – Attempter Group

Figure 8

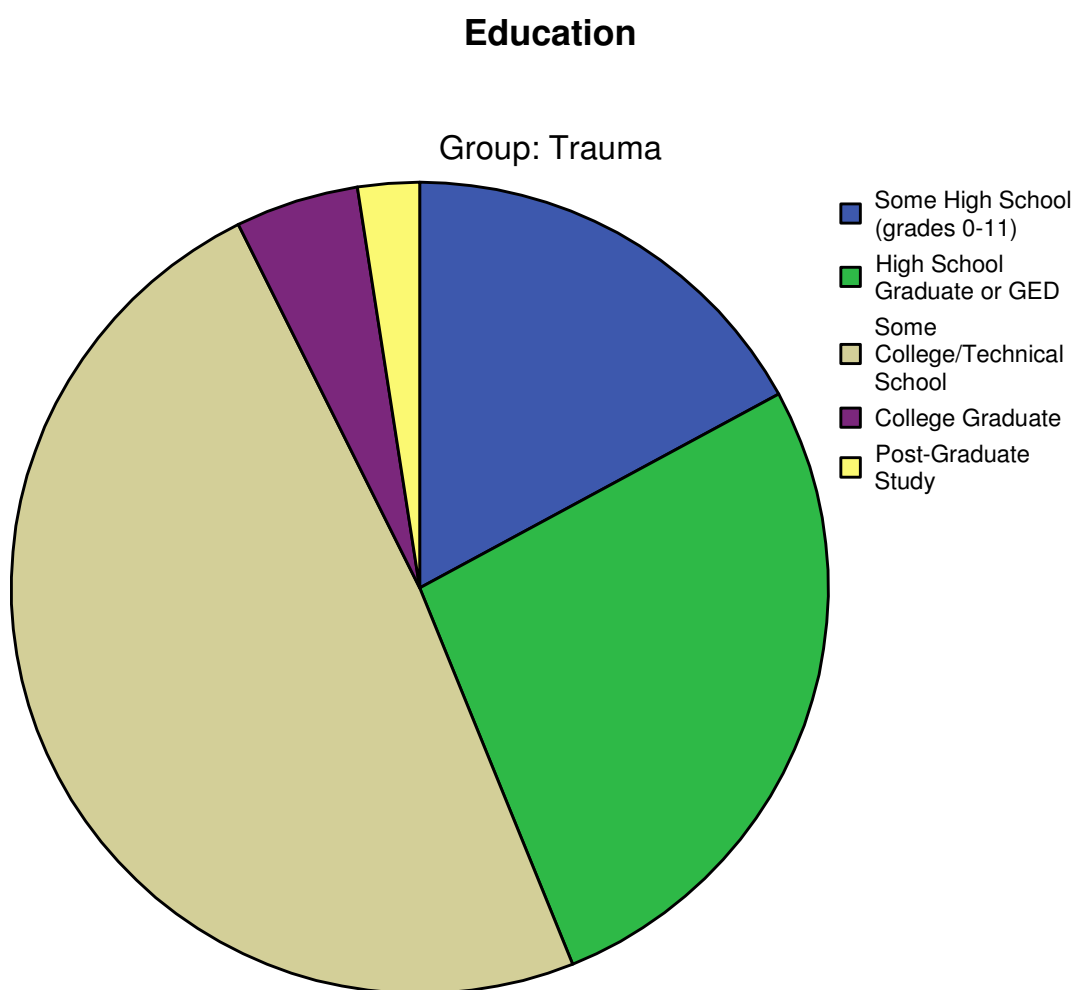
Education Distribution – Trauma Group

Figure 9

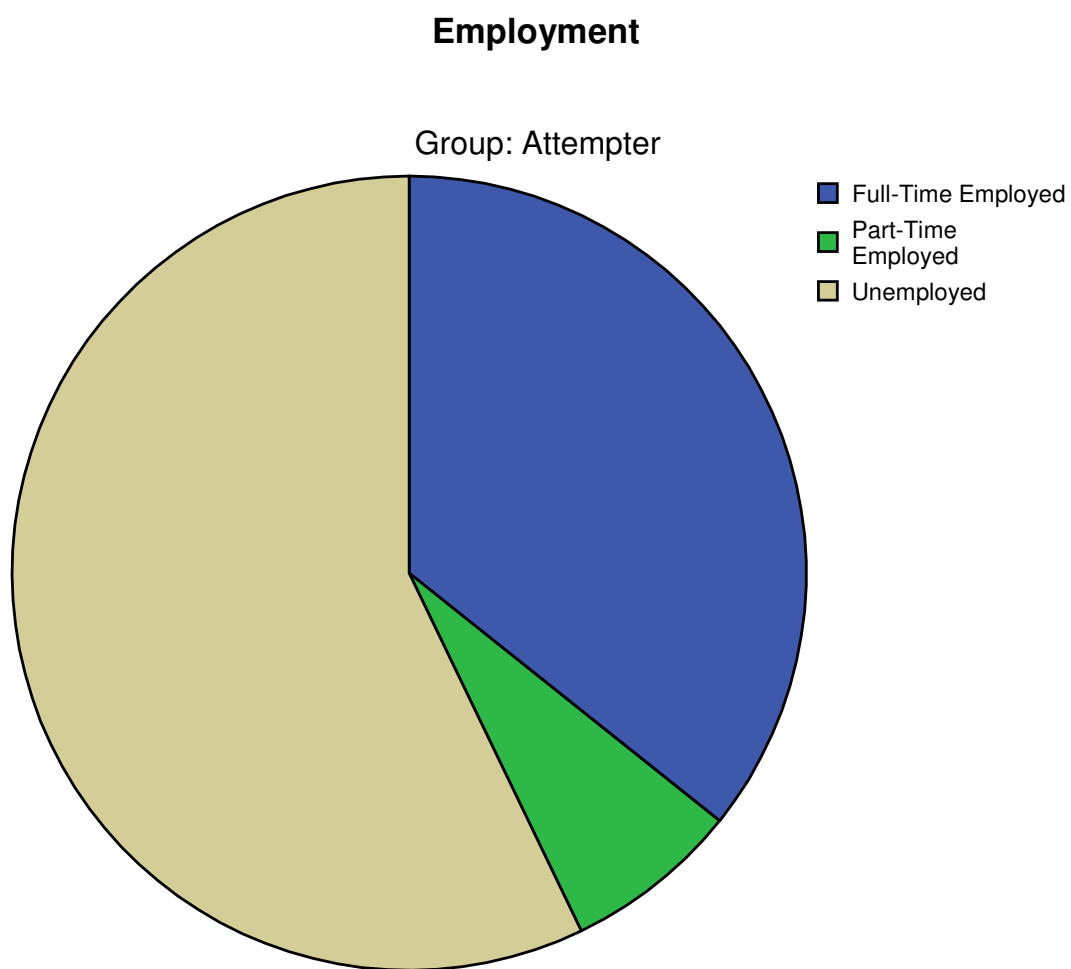
Employment Distribution – Attempter Group

Figure 10

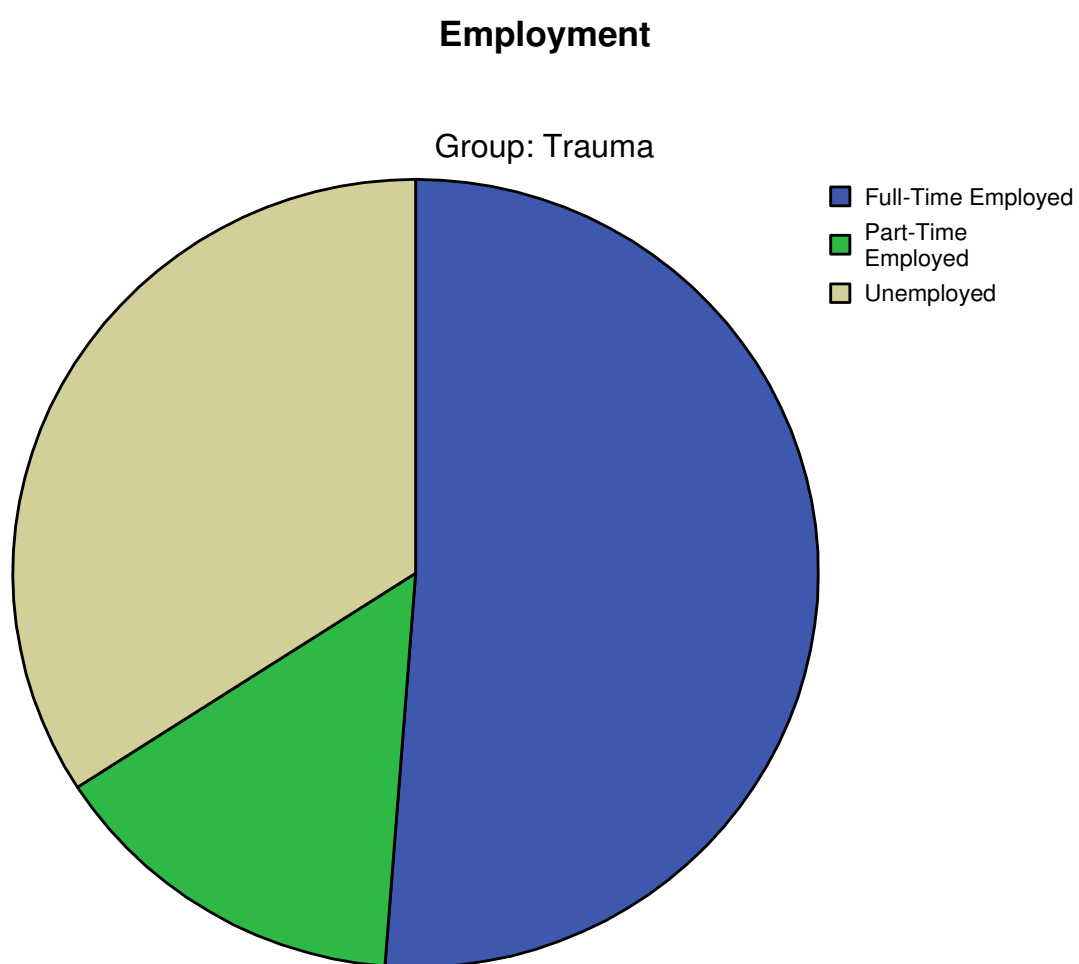
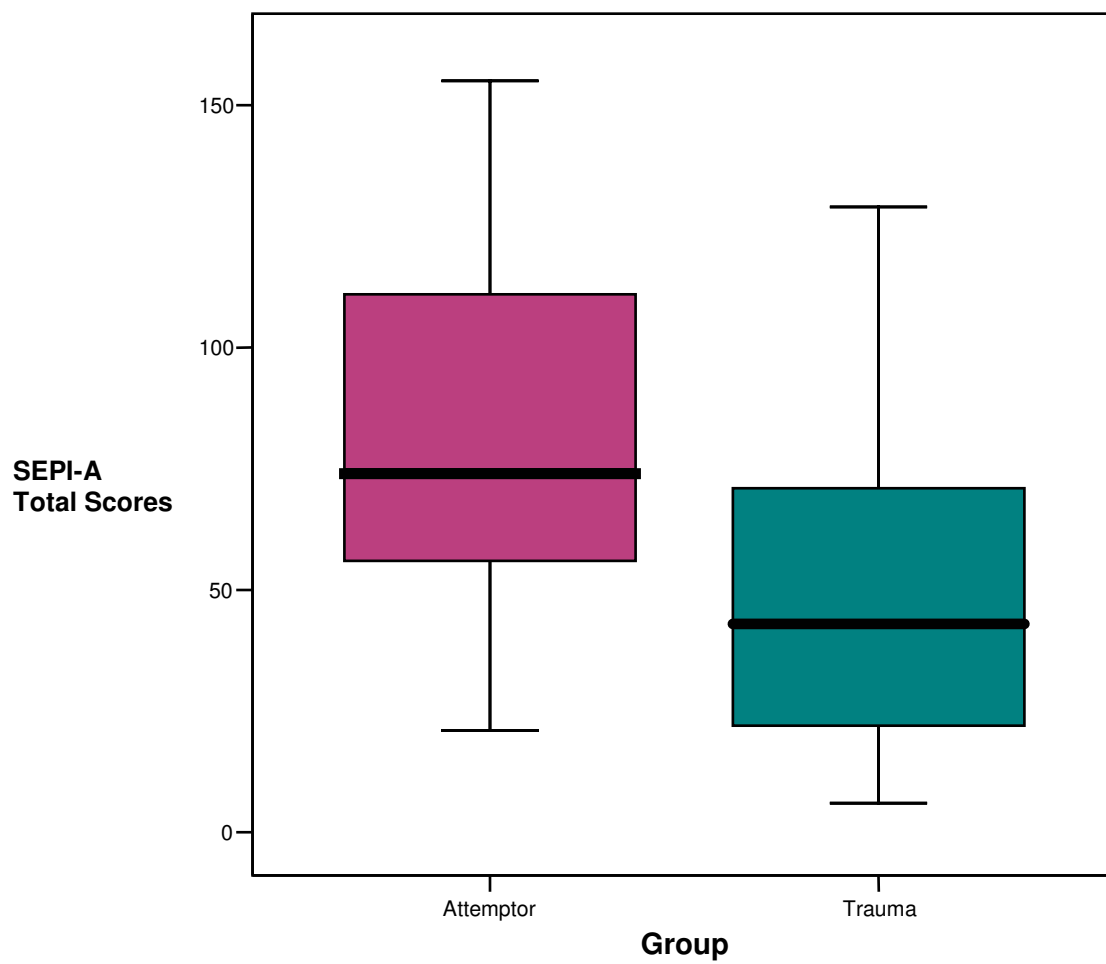
Employment Distribution – Trauma Group

Figure 11

Distribution of Total SEPI-A Scores – Attempter vs. Trauma



APPENDIX E

TABLES

Table 1

Demographic Data Between Suicide Attempters and Trauma Patients

<u>Demographic Variable</u>	<u>Attempters</u>		<u>Trauma</u>	
	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>
N	42		41	
Age (years)	<u>M</u> = 36.38, <u>SD</u> = 10.93 Range = 18 – 57 years		<u>M</u> = 31.71, <u>SD</u> = 12.07 Range = 19 – 57 years	
Gender				
Males	25	59.5	29	70.7
Females	17	40.5	12	29.3
Race Ethnicity				
Caucasian	30	71.4	33	80.5
African/American	6	14.3	2	4.9
Hispanic	6	14.3	5	12.2
American Indian/ American Native	0	0.0	1	2.4

(table continues)

Table 1 (cont.)

<u>Demographic Variable</u>	Attempter		Trauma	
	Frequency	Percent	Frequency	Percent
Marital Status				
Single / Never Married	12	28.6	17	41.5
Married	11	26.2	11	26.8
Separated	5	11.9	4	9.8
Divorced	12	28.6	5	12.2
Other	2	4.8	4	9.8
Employment				
Full-Time Employed	15	35.7	21	51.2
Part-Time Employed	3	7.1	6	14.6
Unemployed	24	57.1	14	34.1
Education Level				
Some High School (grades 0 – 11)	6	14.3	7	17.1
High School Graduate or GED	12	28.6	11	26.8
Some College/ Technical School	18	42.9	20	48.8
College Graduate	4	9.5	2	4.9
Post-Graduate Study	2	4.8	1	2.4

Table 2

Statistical Analyses of Comparisons Between Attempters and Trauma PatientsIndependent Samples T-Test Between Attempters and Trauma Patients for Age

	<u>N</u>	<u>Mean (SD)</u>	<u>t</u>	<u>df</u>	<u>p</u>
Attempters	42	36.38 (10.93)	1.85	81	.068
Trauma	41	31.71 (12.07)			

2 x 2 Chi Square Test of Independence for Attempters and Trauma Patients for Gender

	<u>Gender</u>	<u>Frequency</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Attempters	Male	25	1.15	1	0.28
	Female	17			
Trauma	Male	29			
	Female	12			

(table continues)

Table 2

Statistical Analyses of Comparisons Between Attempters and Trauma Patients2 X 4 Chi Square Test of Independence for Attempters and Trauma Patients for Race/Ethnicity

	<u>Race/Ethnicity</u>	<u>Frequency</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Attempters	Caucasian	30	3.22	3	0.36
	African-American	6			
	Hispanic	6			
	American Indian/ Native American	0			
Trauma	Caucasian	33			
	African-American	2			
	Hispanic	5			
	American Indian/ Native American	1			

(table continues)

Table 2 (cont.)

Statistical Analyses of Comparisons Between Attempters and Trauma Patients2 X 5 Chi Square Test of Independence for Attempters and Trauma Patients for Marital Status

	<u>Marital Status</u>	<u>Frequency</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Attempters	Single/Never Married	12	4.51	4	0.34
	Married	11			
	Separated	5			
	Divorced	12			
	Other	2			
Trauma	Single/Never Married	17			
	Married	11			
	Separated	4			
	Divorced	5			
	Other	4			

(table continues)

Table 2 (cont.)

Statistical Analyses of Comparisons Between Attempters and Trauma Patients2 X 4 Chi Square Test of Independence for Attempters and Trauma Patients for Employment

	<u>Employment</u>	<u>Frequency</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Attempters	Full-Time Employed	15	4.62	2	0.10
	Part-Time Employed	3			
	Unemployed	24			
Trauma	Full-Time Employed	21			
	Part-Time Employed	6			
	Unemployed	14			

2 X 5 Chi Square Test of Independence for Attempters and Trauma Patients for Education

	<u>Education</u>	<u>Frequency</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>
Attempter	Some High School (grades 0 – 11)	6	1.21	4	0.88
	High School Graduate or GED	12			
	Some College/Technical School	18			
	College Graduate	4			
	Post-Graduate Study	2			

(table continues)

Table 2 (cont.)

Trauma	Some High School (grades 0 – 11)	7
	High School Graduate or GED	11
	Some College/Technical School	20
	College Graduate	4
	Post-Graduate Study	2

Table 3

Content Expert Ratings

	Dr. Gilfillan	Dr. Orbach	Dr. Perdue	Dr. Quinn	Dr. Wolff	Inclusion (YES/NO)
1	4	4	4	4	4	YES
2	4	4	1	4	4	YES
3	4	4	1	3	3	YES
4	4	4	2	3	2	YES
5	4	4	3	4	4	YES
6	4	4	3	4	4	YES
7	4	4	3	3	4	YES
8	4	4	4	4	4	YES
9	4	4	4	4	4	YES
10	3	4	1	3	4	YES
11	3	4	2	4	4	YES
12	4	4	4	4	4	YES
13	4	4	3	4	4	YES
14	3	4	2	4	4	YES
15	4	4	1	3	2	YES
16	4	4	2	4	1	YES
17	2	4	1	4	4	YES
18	2	4	1	4	1	NO
19	3	4	3	4	4	YES
20	4	4	3	4	4	YES
21	4	4	2	4	4	YES
22	4	4	3	3	1	YES
23	3	4	1	3	1	YES
24	4	4	3	4	4	YES
25	4	4	4	4	4	YES
26	4	4	3	4	4	YES
27	4	4	2	4	1	YES
28	4	4	4	4	4	YES
29	4	4	2	3	4	YES
30	4	4	4	4	1	YES
31	4	4	4	4	4	YES

Table 3 (cont.)

Content Expert Ratings

32	4	4	2	3	2	YES
33	1	4	1	3	4	YES
34	4	4	4	4	4	YES
35	4	4	4	4	4	YES
36	4	4	2	4	4	YES
37	4	4	2	3	1	NO
38	4	4	3	4	4	YES
39	4	4	4	4	1	YES
40	4	4	4	3	2	YES
41	3	4	4	4	2	YES
42	1	4	3	3	4	YES
43	2	4	1	4	2	NO
44	4	4	3	4	4	YES
45	4	4	3	4	4	YES
46	3	4	3	4	4	YES
47	3	4	4	4	4	YES
48	4	4	3	4	4	YES
49	3	4	3	4	4	YES
50	3	4	3	4	4	YES
51	3	4	4	4	4	YES
52	4	4	4	4	1	YES
53	4	4	4	4	1	YES
54	4	4	4	4	4	YES
55	3	4	4	4	4	YES
56	3	4	4	4	4	YES
57	3	4	3	4	4	YES
58	4	4	4	4	4	YES
59	4	4	4	4	1	YES
60	3	4	4	4	4	YES

Table 4

One-Tail Bivariate Correlations Between Attempter Risk-Rescue Ratings and Measures of Perceived Burdensomeness, Hopelessness, and Role Captivity

Measures	<u>n</u>	Pearson's <u>r</u> (with Risk-Rescue Rating)	<u>p</u>
Reasons For Self-Harm Question #25	42	-.020**	0.36
Beck Hopelessness Scale	42	-.269*	0.04
Subjective Experience of Problem Irresolvability Scale - Adult Version	42	-.270*	0.04

*p < .05, one-tailed; **Spearman's Rho

Table 5

Comparison of Attempter SEPIA-A Total Scores and Trauma Patient SEPIA-A Total ScoresIndependent Samples T-Test Between Attempters and Trauma Patients for SEPIA-A Total Scores

<u>Group</u>	<u>n</u>	<u>Mean (SD)</u>	<u>t</u>	<u>df</u>	<u>p</u>
Attempters	42	84.95 (34.26)	5.41**	81	0.00*
Trauma	41	46.78 (29.75)			

* denotes significance at the 0.01 level

** homogeneity of variances assumed

Table 6

One-Tail Bivariate Correlation Between SEPIA-A Total Score and BHS Total Score

Measure	<u>n</u>	Pearson's <u>r</u> (with SEPIA Total Score)	<u>p</u>
Beck Hopelessness Scale (BHS) – Attempters and Trauma Patients	83	.64*	0.000
Beck Hopelessness Scale (BHS) – Attempters Only	42	.45*	0.001

* $p < 0.01$, one-tailed

Table 7

Item to Scale Correlations Between Individual SEPIA Items and SEPIA Total Score

Item #	<u>n</u>	Pearson's <u>r</u> (with SEPIA Total Score)	<u>p</u>
Item # 1	83	0.43	0.000
Item #2	83	0.61	0.000
Item #3	83	0.45	0.000
Item #4	83	0.58	0.000
Item #5	83	0.62	0.000
Item #6	83	0.72	0.000
Item #7	83	0.76	0.000
Item #8	83	0.75	0.000
Item #9	83	0.66	0.000
Item #10	83	0.49	0.000
Item #11	83	0.47	0.000
Item #12	83	0.52	0.000
Item #13	83	0.36	0.001
Item #14	83	0.28	0.011
Item #15	83	0.69	0.000
Item #16	83	0.52	0.000

(table continues)

Item #	<u>n</u>	Pearson's <u>r</u> (with SEPIA Total Score)	<u>p</u>
Item #17	83	0.41	0.000
Item #18	83	0.62	0.000
Item #19	83	0.66	0.000
Item #20	83	0.73	0.000
Item #21	83	0.72	0.000
Item #22	83	0.48	0.000
Item #23	83	0.72	0.000
Item #24	83	0.61	0.000
Item #25	83	0.56	0.000
Item #26	83	0.34	0.001
Item #27	83	0.70	0.000
Item #28	83	0.75	0.000
Item #29	83	0.70	0.000
Item #30	83	0.64	0.000
Item #31	83	0.69	0.000
Item #32	83	0.36	0.001
Item #33	83	0.73	0.000
Item #34	83	0.75	0.000

(table continues)

Item #	<u>n</u>	Pearson's <u>r</u> (with SEPIA Total Score)	<u>p</u>
Item #35	83	0.47	0.000
Item #36	83	0.76	0.000
Item #37	83	0.80	0.000
Item #38	83	0.71	0.000
Item #39	83	0.72	0.000
Item #40	83	0.44	0.000
Item #41	83	0.65	0.000
Item #42	83	0.59	0.000
Item #43	83	0.45	0.000
Item #44	83	0.30	0.006
Item #45	83	0.36	0.001
Item #46	82	0.25	0.022
Item #47	83	0.30	0.006
Item #48	83	0.72	0.000
Item #49	83	0.64	0.000
Item #50	82	0.68	0.000
Item #51	83	0.68	0.000
Item #52	83	0.75	0.000
Item #53	83	0.71	0.000

(table continues)

Item #	<u>n</u>	Pearson's <u>r</u> (with SEPIA Total Score)	<u>p</u>
Item #54	83	0.64	0.000
Item #55	83	0.25	0.025
Item #56	83	0.26	0.020
Item #57	83	0.07	0.553
Item #58	83	0.13	0.24
Item #59	83	0.07	0.550
Item #60	83	0.02	0.875
Item #61	83	0.00	0.992
Item #62	83	0.10	0.349
Item #63 (only answered by males)	59	0.36	0.005
Item #64 (only answered by females)	34	0.40	0.019

Table 8

Internal Reliability Analysis for the Subjective Experience of Problem Irresolvability Scale,
Adult Version

Measure	<u>n</u>	Cronbach's Alpha
SEPIA	64	0.971

Table 9

SEPI – Adult Version (Revised)

		Rarely/Never	Occasionally	Often	Almost Always
1.	The expectations that people have of me are unattainable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	My family demands too much of me at this time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	Different members of my family want me to do different things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	People around me are pressuring me, but I don't know exactly what would make them happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	My family does not treat me with respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	I would have to be a different person in order to make my family happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	If I were well, there would be more stress between my family members.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	When I am in trouble, my family members are more relaxed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	When I solve one problem, another one seems to pop up right away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	It is my responsibility to make my family members happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	My family thinks there is something wrong with me, but they don't talk to me about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	My problems make my family feel better about themselves.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	I have to protect my family from hurting each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	I have very few rights of my own any more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	I cannot meet the goals that people have set for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	If I were healthy, my family would actually be more unhappy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	The problems I have with my family will never be solved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

		Rarely/Never	Occasionally	Often	Almost Always
18.	I am not able to make my own decisions any more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	I am in charge of making sure my family members are happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	Most of the big problems in my life will never be fixed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	Some of my family members want me to do one thing, while other family members want me to do the opposite.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	Every time I fix one problem, another one comes up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	My family members act like there is something wrong with me, but don't talk to me about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	I have to keep my family members from harming each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	My family is happier when I have problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	I am responsible for making sure that my family members aren't angry with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	I am carrying a great burden.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	I am a burden to the people around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	My boss demands too much of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	I cannot satisfy my coworkers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	I am under a great deal of stress at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	I have more responsibilities at work than I can handle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	Every solution that I come up with causes a new problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	I feel that there is no way to eliminate the trap in which I am caught.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	Every solution that I have for my problems will still result in great loss to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	I can resolve some of my problems only at great cost to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Please answer #37 OR #38				
37.	I cannot live up to the role of husband/father.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	I cannot live up to the role of wife/mother.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

REFERENCES

- Agerbo, E. Mortenson, P. B., Eriksson, T., Qin, P., & Westergaard-Nielsen, N. (2001). Risk of suicide in relation to income level in people admitted to hospital with mental illness: nested case-control study. *British Medical Journal*, 322, 334-335.
- Anderson, R. N., & Smith, B. L. (2003) Deaths: Leading Causes for 2001. *National Vital Statistics Report*, 52(9).
- Appleby, L., Shaw, J., Amos, T., McDonnell, R., Harris, C., McCann, K., Kiernan, K., Davies, S. Bickley, H., & Parsons, R. (1999) Suicide within 12 months of contact with mental health services: national clinical survey. *British Medical Journal*, 318, 1235-1239.
- Apter, A., Gothelf, D., Offer, R., Ratzoni, G, Orbach, I., Tyano, S., & Pfeffer, C. R. (1997). Suicidal Adolescents and Ego Defense Mechanisms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1520-1527.
- Bancroft, J. H. J., Skrimshire, A. M., & Simkin, S. (1976). The reasons people give for taking overdoses. *British Journal of Psychiatry*, 128, 538-548.
- Beautrais, A. L. (2001) Suicides and serious suicide attempts: two populations or one? *Psychological Medicine*, 31, 837-845.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974) The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, 42, 861-865.

- Beck, A. T., Brown, G., Berchick, R. J., Stewart, B. L., & Steer, R. A. (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients. *American Journal of Psychiatry*, 147:2, 190-195.
- Beck, A. T., Brown, G., & Steer, R. A. (1989). Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. *Journal of Consulting and Clinical Psychology*, 57(2), 309-310.
- Brickman, A. L., & Mintz, D. C. (2003) U.S. Rates of Self-Inflicted Injuries and Suicide, 1992-1999. *Psychiatric Services*, 54, 168.
- Brown, M. Z., Comtois, K. A., & Linehan, M. M. (2002) Reasons for suicide attempts and nonsuicidal self-injury in women with borderline personality disorder. *Journal of Abnormal Psychology*, 111, 198-202.
- Danto, B. L. (1978) Police Suicide. *Police Stress*, 1, 32-40.
- First, M. B., Spitzer, R. L., Gibbon, M., Williams, J. G. W., & Benjamin, L. (1994) Structured Clinical Interview for DSM-IV axis II personality disorders (SCID-II) (Version 2.0). New York: Biometrics Research Department, New York State Psychiatric Institute.
- Geddes, J. (1999). Suicide and homicide by people with mental illness. *British Medical Journal*, 318, 1225-1226.
- Goldstein, R. B., Black, D. W., Nasrallah, A., & Winokur, G. (1991). The prediction of suicide: Sensitivity, specificity, and predictive value of a multivariate model applied to suicide among 1906 patients with affective disorders. *Archives of General Psychiatry*, 48, 418-422.

- Janik, J., & Kravitz, H. M. (1994). Linking work and domestic problems with police suicide. *Suicide and Life-Threatening Behavior*, 24(3), 267-274.
- Kaplan, K. J. & Worth S. A. (1997). Individuation-Attachment and Suicide Trajectory: A developmental guide for the clinician. *Omega*, 27, 207-237.
- Kochanek, K. D. & Smith, B. L. (2004). Deaths: Preliminary Data for 2002. *National Vital Statistics Report*, 52(13).
- Koller, G., Preuß, U.W., Bottlender, M., Wenzel, K., & Soyka, M. (2002). Impulsivity and aggression as predictors of suicide attempts in alcoholics. *European Archives of Psychiatry and Clinical Neuroscience*, 252, 155-160.
- Lambert, M. T. (2003) Suicide risk assessment and management: focus on personality disorders. *Current Opinion in Psychiatry*, 16, 71-76.
- Mann, J. J., Oquendo, M., Underwood, M. D., & Arango, V. (1999). The neurobiology of suicide risk: A review for the clinician. *Journal of Clinical Psychiatry*, 60 (suppl 2), 7-11.
- Mann, J.J., Waternaux, C., Haas, G.L, & Malone, K.M. (1999). Toward a clinical model of suicidal behavior in psychiatric patients. *American Journal of Psychiatry*, 156(2), 181-189.
- McCafferty, F. L., McCafferty, E., & McCafferty, M. A. (1992). Stress and suicide in police officers: Paradigm of occupational stress. *Stress and Suicide in Police Officers*, 85(5),233-243.

- McCaig, L. F. & Burt, C. W. (2004). National Hospital Ambulatory Medical Care Survey: 2002 Emergency Department Summary. *Advance Data from Vital and Health Statistics*, 340.
- McKenzie, I. & Wurr, C. (2001). Early suicide following discharge from a psychiatric hospital. *Suicide and Life-Threatening Behavior*, 31, 358-363.
- Michel, K. Suicide Risk Factor: A comparison of suicide attempters versus suicide completers. *British Journal of Psychiatry*, 150, 78-82.
- Mikluciner, M & Orbach, I. Attachment Styles and Repressive Defensiveness: The Accessibilty and Architecture of Affective Memories. *Journal of Personality and Social Psychology*, 68, 917-925.
- Mikulincer, M., Orbach, I., & Iavieli, D. Adult Attachment Style and Affect Regulation: Strategic Variations in Subjective Self-Other Similarity. *Journal of Personality and Social Psychology*, 75, 436-448.
- Miniño, A. M., Arias, E., Kochanek, K. D., Murphy, S .L., & Smith, B. L. (2002). Deaths: Final data for 2000. *National Vital Statistics Reports*, 50(15),. Hyattsville, MD: National Center for Health Statistics.
- Moscicki, E. K. (2001). Epidemiology of completed and attempted suicide: toward a framework for prevention. *Clinical Neuroscience Research*, 1, 310-323.
- O'Carroll, P. W., Berman, A. L., Maris, R. W., Moscicki, E. K., Tanney, B. L., & Silverman, M. M. (1996). Beyond the Tower of Babel: A Nomenclature for Suicidology. *Suicide and Life-Threatening Behavior* ,26, 237-252.

- Oquendo, M. A., Ellis, S. P., Greenwald, S., Malone, K. M., Weissman, M. M., & Mann, J. J. (2001). Ethnic and sex differences in suicide rates relative to major depression in the United States. *American Journal of Psychiatry*, 158(10), 1652-1658.
- Oquendo, M. A., Kamali, M., Ellis, S. P., Grunebaum, M. F., Malone, K. M., Brodsky, B. S., Sackeim, H. A., & Mann, J. J. (2002). Adequacy of antidepressant treatment after discharge and the occurrence of suicidal acts in major depression: A prospective study. *American Journal of Psychiatry*, 159(10), 1746-1751.
- Orbach, I. (1986). The “insolvable problem” as a determinant in the dynamics of suicidal behavior in children. *American Journal of Psychotherapy*, 40, 511-520.
- Orbach, I., Mikluciner, M., Blumenson, R., Mester, R., & Stein, D. (1999). The subjective experience of problem irresolvability and suicidal behavior: Dynamics and measurement. *Suicide and Life-Threatening Behavior*, 29(2), 150-164.
- Orbach, I. (2001). Therapeutic Empathy with the Suicidal Wish: Principles of Therapy with Suicidal Individuals. *American Journal of Psychotherapy*, 55,.
- Phillips, M. R., Liu, H., & Zhang, Y. (1999). Suicide and Social Change in China. *Culture, Medicine and Psychiatry*, 23, 25-50.
- Pokorny, A. D. (1983). Prediction of suicide in psychiatric patients. *Archives of General Psychiatry*, 40, 249-257.
- Pokorny, A. D. (1993). Suicide prediction revisited. *Suicide and Life-Threatening Behavior*, 23(1), 1-10.

- Qin, P., Agerbo, E., & Mortenson, P. B. (2003). Suicide risk in relation to socioeconomic, demographic, psychiatric, and familial factors: a national register-based study of all suicides in Denmark, 1981-1997. *American Journal of Psychiatry*, 160(4), 765-772.
- Rich, C. L., Fowler, R. C., Fogarty, L. A., & Young, D. (1988). San Diego Suicide Study: III. Relationships between diagnoses and stressors. *Archives of General Psychiatry*, 45, 589-592.
- Ruta, D. A., Garratt, A. M., Leng, M., Russell, I. T., & MacDonald, L. M. (1994). A new approach to the measurement of quality of life: The patient-generated index. *Medical Care*, 32(11), 1109-1126.
- Schmidtke, A., Weinacker, B., Apter, A., Batt, A., Berman, A., Bille-Brahe, U., Botsis, A., De Leo, D., Doneux, A., Goldney, R., Grad, O., Haring, C., Hawton, K., Hjelmeland, H., Kelleher, M., Kerkhof, A., Leenaars, A., Lönnqvist, J., Michel, K., Ostamo, A., Salander, E., Renberg, A., Sayil, I., Takahashi, Y., van Heeringen, C., Värnik, A., & Wasserman, D. (1999). Suicides rates in the world: Update. *Archives of Suicide Research*, 5(1), 81-89.
- Stanford, E. J., Goetz, R. R., & Bloom, J. D. (1994). The No Harm Contract in the Emergency Assessment of Suicidal Risk. *Journal of Clinical Psychiatry*, 55, 344-348.
- Stein, D., Asherov, J., Lublinsky, E., Sobol-Havia, D., Lazaravitch, L., Weizman, A., & Apter, A. (2002). Sociodemographic factors associated with attempted suicide in

two Israeli cities between 1990 and 1998. *The Journal of Nervous and Mental Disease*, 190, 115-118.

Stillion, J. M. & McDowell, E. E. (1991). Examining suicide from a life span perspective. *Death Studies*, 15, 327-354.

Timonen, M., Viilo, K., Hakko, H., Väisänen, E., Räsänen, P., & Särkioja, T. (2001). Psychiatric disorders are more severe among suicide victims of higher occupational level. *British Medical Journal*, 323, 232.

Tyrer, P., Thompson, S., Schmidt, U., Jones, V., Knapp, M., Davidson, K., Catalan, J., Airlie, J., Baxter, S., Byford, S., Byrne, G., Cameron, S., Caplan, R., Cooper, S., Ferguson, B., Freeman, C., Frost, S., Godley, J., Greenshields, J., Henderson, J., Holden, N., Keech, P., Kim, L., Logan, K., Manley, C., MacLeod, A., Murphy, R., Patience, L., Ramsay, L., De Munroz, S., Scott, J., Seivewright, H., Sivakumar, K., Tata, P., Thornton, S., Ukoummunne, O.C., & Wessely, S. (2003) Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: the POPMACT study. *Psychological Medicine*, 33, 969-976.

U. S. Preventative Services Task Forces. (2004). Screening for suicide risk: Recommendation and rationale. *Annals of Internal Medicine*, 140(10), 820-821.

Van der Sande, R., Buskens, E., Allart, E., van der Graaf, Y., & van Engeland, H. Psychosocial intervention following suicide attempt: a systematic review of treatment interventions. *Acta Psychiatrica Scandinavica*, 96, 43-50.

- Van der Sande, R., van Rooijen, L., Buskens, E., Allart, E., Hawton, K., van der Graaf, Y., & van Engeland, H. Intensive in-patient and community intervention versus routine care after attempted suicide. *British Journal of Psychiatry*, 171, 35-41.
- Weisman, A. D. & Worden, J. W. Risk-rescue rating in suicide assessment. *Archives of General Psychiatry*, 26(6), 553-560.
- Zehner, L. (2004). Correlates of Medically Serious and Non-Medically Serious Suicidal Behavior. Unpublished master's thesis, University of Texas Southwestern Medical Center at Dallas, Dallas, Texas.

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