

East Tennessee State University Digital Commons @ East Tennessee State University

**Electronic Theses and Dissertations** 

Student Works

8-2007

# The Development of the Self-Injury Self-Report Measure.

Sonia Lorraine Coney East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd Part of the <u>Health Psychology Commons</u>, and the <u>Investigative Techniques Commons</u>

#### **Recommended** Citation

Coney, Sonia Lorraine, "The Development of the Self-Injury Self-Report Measure." (2007). *Electronic Theses and Dissertations*. Paper 2116. https://dc.etsu.edu/etd/2116

This Thesis - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

The Development of the Self-Injury Self-Report Measure

A thesis

presented to

the faculty of the Department of Psychology

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Master of Arts in Clinical Psychology

by

Sonia Lorraine Coney

August 2007

Dr. Christopher Dula, Chair

Dr. Peggy Cantrell

Dr. John Ellis

Keywords: Self-Injury, Measurement

# ABSTRACT

# The Development of the Self-Injury Self-Report Measure

by

#### Sonia L. Coney

Despite the amount of research that has been conducted on self-injury there is a lack of empirically validated instruments with which to measure self-injurious behavior. The present study developed a measure to examine self-injury and the associated features. Undergraduate students (n = 184) were administered a set of surveys to assess demographics, self-injurious behavior, suicidal ideation, Axis I and Axis II disorders, and impulsivity. Results indicated that a reliable measure, able to assess the extent of self-injury as well as associated features, was developed. Such a measure will enable clinicians to better assess self-injury and enable researchers to more fully examine self-injury and its relationship to other disorders. Copyright 2007 by Sonia L. Coney

All Rights Reserved

# DEDICATION

To my father, Charles Clifton Coney, who taught me that life is an adventure. To my mother, Sallie Ruth Coney, who supported me through all of mine.

# ACKNOWLEDGMENTS

I would like to thank Dr. Chris Dula for his guidance and patience without which this project wouldn't have been possible. Thank you to Dr. Peggy Cantrell for your support and guidance. Thank you to Dr. Jon Ellis, your understanding and sense of humor are greatly appreciated. All of you have guided and mentored me and I appreciate it greatly.

Thanks to all of the students who worked so hard on this project. Especially Dese'Rae Stage and Ben Martin, your time spent on this project is greatly appreciated. To my family, with your love and support I can do anything.

# CONTENTS

# Page

ABSTRACT	2
DEDICATION	4
ACKNOWLEDGEMENTS	5
LIST OF TABLES	9

# Chapter

1.	INTRODUCTION	
	Definitional Issues	10
	Onset and Course	12
	Gender Issues	13
	Associated Diagnoses	14
	Motivations	16
	Classification	17
	Direct Versus Indirect	17
	Compulsivity Versus Impulsivity	
	Syndromes	
	Associated Features	21
	Injury Method	
	Dissociation	21

	Injury Placement	22
	Self-Injury and Suicide	22
	Risk Factors	24
	Sexual Abuse	24
	Physical Abuse and Neglect	25
	Abuse-Related Shame and Anger	26
	Separation	26
	Lack of Support	27
	Consequences and Treatment	27
	Measuring Self-Injury	28
	Present Study	28
2.	METHOD	31
	Participants	31
	Materials	31
	Procedure	
	Analysis	
3.	RESULTS	36
4.	DISCUSSION	42
	Summary of Major Findings	42
	Limitations	49
	Practical Implications	50
	Future Research	51
	REFERENCES	52

APPENDICES	.57
Appendix A: Demographic Questionnaire	57
Appendix B: Barratt Impulsivity Scale 11	.62
Appendix C: Suicide Questionnaire	.64
Appendix D: Self-Injury Self-Report (SISR)	65
Appendix E: Instructions	.75
VITA	76

# LIST OF TABLES

Table	Page

1.	Demographic Information	31
2.	SISR Factor Analysis Summary	.39
3.	Descriptives for the SISR	39
4.	SISR Inter-Correlations	39
5.	SISR Correlations with MCMI-III.	40
6.	SISR Correlations with BIS-11	40
7.	SISR Scores for Women and Men	41
8.	SISR Scores for Suicide Ideators and Non-Ideators	41

#### CHAPTER 1

#### INTRODUCTION

Self-injury has received much attention in the empirical literature and in popular media. An abundance of research has concentrated on factors that influence self-injury. However, despite growing awareness of this behavior, a measure has yet to be developed and empirically validated for use as an assessment tool for the potential to engage in self-injurious behavior, even though the importance of such a step is mentioned in past research (Zlotnick, Mattia, & Zimmerman, 1999). Part of the problem with trying to classify self-injury lies in the lack of agreement on the nomenclature of such behaviors as well as what behaviors should be classified as self-injury. Self-injurious behaviors have been misunderstood as suicide attempts, trivialized as acting out, and regarded as a symptom of another disorder (Favazza, 1998b).

#### **Definitional Issues**

In the past, self-injury has been defined as the direct, deliberate destruction or alteration of body tissue without the presence of conscious suicidal intent (Gratz, 2003). Some do not specify deliberateness (e.g., Yates, 2004) and others do not differentiate self-injury from suicide attempts (e.g., Linehan, 1993 as cited in Gratz). The terms autoaggression, malingering, Munchausen's syndrome, symbolic wounding, masochism, local self-destruction, delicate selfcutting, parasuicide, and focal suicide have all been used to denote self-injurious behavior (Clarke & Whittaker, 1998). Despite the wide range of labels, the terms most often found in the literature are; self-injury (e.g., Gratz), self-harm (e.g., Pattison & Kahan, 1983), and selfmutilation (e.g., Favazza, 1998a), and these are sometimes used interchangeably. Favazza and Rosenthal (1993) point out that with so many terms being used to describe self-injury it is possible that different conceptions of the behavior are being studied. There is a need for a unifying nomenclature with clearly identified boundaries in order to precisely define what behavior is being studied.

For the purposes of the present study, the term self-injury will be used to denote intentional physical damage inflicted on the body without suicidal intent. It should be noted that this type of clinical behavior is different from the body modification practices that are becoming popular in Western society as well as ritual practices used in different cultures around the world. These latter practices serve functions that are meant to enhance beauty, be provocative, or hold spiritual or cultural significance.

The label self-injury has been chosen instead of self-mutilation or self-harm because it more accurately reflects the behavioral act without placing a premature and emotionally loaded label on the behavior. The term self-harm could be used to denote any action resulting in shortterm or long-term harm that may or may not be due to a discrete bodily injury, including the use of common intoxicants. The term self-mutilation brings to mind serious disfigurement that may or may not be present, or what Favazza (1998a) labels major self-mutilation, and this type of label carries with it stigma that may well not be justified. Self-injury on the other hand can be used to describe intentional external tissue damage without the connotation of a mutilation.

Due in large part to the lack of consensus on what should be considered self-injurious behavior, reports on the frequency of such behaviors differ to a great extent. The inclusion of such behaviors as nail biting, hair twisting, decorative body modification, and self-poisoning (e.g., ingestion of household products or intentional overdose) in the self-injury category by some researchers may cause frequency estimates of self-injury to be overstated. Evans, Platts, and Liebenau (1996) estimated 100,000 admittances to hospitals each year in the United Kingdom are due to self-injury. The prevalence of self-injury across a lifetime in the general

population is estimated to be from 10% to 15% (Yates, 2004). Others have estimated that 1,400 in 100,000 people engage in self-injurious behaviors (Favazza, 1998a). While some people only have a single episode of self-injury, others have a pattern of multiple episodes. Pattison and Kahan (1983) found that in 56 case histories of people ranging in age from 6 to 75 years the number of episodes of self-injury differed from person to person and varied from 1 to over 100, with a mean of 21 episodes per person.

#### Onset and Course

Self-injurious behaviors not related to mental retardation or pervasive developmental disorders rarely begin before puberty. It generally begins during adolescence and tends to peak in early adulthood (Yates, 2004). However, it may develop into a chronic problem lasting throughout the lifetime (White Kress, 2003). Horrocks, Price, House, and Owens (2003) reported that most of their sample of 885 self-injurers tended to be in the 20s and 30s which is unusual when compared to other samples in the literature. Early onset of self-injurious behavior is rare but people with early onset typically have a chronic course with their episodes tending to be more severe (Pattison & Kahan, 1983). People who experience a physical numbing during self-injury also tend to have a more chronic course of the behavior (Favazza, 1998b). Instances of self-injury occurring in older adults are rare and tend to be an isolated event in response to a psychotic episode (Pattison & Kahan).

Favazza (1998b) has identified the typical course of self-injury. It tends to start in early adolescence and will typically last for 10 to 15 years. During this time episodes of self-harm come and go, at times ceasing all together. However, self-injury may become habitual and take on qualities that mimic addictive patterns. The waxing and waning of self-injury can usually be

attributed to the level of stress that an individual is feeling at the time. The relief that is brought on by self-injury is typically short lived, while the underlying problems remain unchanged, causing some to engage in self-injurious behaviors repeatedly (Favazza & Conterio, 1989). It also appears in some cases the longer a person allows the tension to build before self-injuring the more severe the ensuing self-injury episode (Clarke & Whittaker, 1998).

#### Gender Issues

Historically, self-injury has been described as an activity seen almost exclusively in women. However, research has found that the difference in numbers between men and women who self-injure are not as great as once thought (Horrocks et al., 2003; Pattison & Kahan, 1983; Rodham, Hawton, & Evans, 2004). Ross and Heath (2002) did find girls were more likely to self-injure than boys. They pointed out that the inclusion of such things as recklessness and risk taking in the definition for self-injury may cause the gender differences to disappear. In other words, the inclusion of such behaviors as reckless speeding may cause estimates of the number of men who self-injure to be just as high as those of women. Ross and Heath also noted that as it is less socially acceptable for girls to display anger, and that anger may be turned inward and result in self-injury instead of being expressed in open acts of aggression.

Gender differences may also lie in the risk factors and motivations for self-injury. Rodham et al. (2004) found that there were gender differences in motivations for self-injury in adolescents. However, Kumar, Pepe, and Steer (2004) found that there were no gender differences in motivation in adolescents. The inconsistency between the findings could be related to age differences. Currently, there are no empirical studies on age differences for motivation in self-injury. In addition to gender differences, there may also be differences related to ethnicity

and socioeconomic status. Ross and Heath (2002) found in a self-injury comparison between urban and suburban schools that although the two schools differed in ethnicity, rates of selfinjury were similar between schools, and the majority of those with a history of self-injury were Caucasian. Currently, there is little literature on how race and socioeconomic status may influence self-injury.

#### Associated Diagnoses

Understanding self-injury per se is problematic due to self-injury having been linked with various diagnoses. However, in the past, self-injury has been discussed almost exclusively in the context of Axis II disorders in general and Borderline Personality Disorder (BPD) in particular (Yates, 2004). Dubo, Zanarini, Lewis, and Williams (1997) have found that self-injurious behavior is strongly associated with BPD, distinguishing it from other Axis II disorders. However, Favazza (1998b) theorized that although there is strong support for the link between BPD and self-injury, it may be overstated because self-injury is a criterion for the disorder. Instead, the severity and intended purpose of self-injury may be an indicator of BPD severity. Herpertz, Sass, and Favazza (1997) found that only 48% of 165 participants met the criteria for BPD and that if self-injury as a criterion were removed; only 28% would meet the requirements for BPD. Favazza and Rosenthal (1993) found that some people may evidence traits of the personality disorders while in the course of self-injury. However, once the self-injury episode remits, the traits associated with personality disorders may also wane. This raises some interesting questions in regard to the inclusion of self-injury into the criteria for BPD because this disorder is supposed to be chronic in nature. Removing self-injury as a criterion for BPD may affect how people view the disorder, perhaps reducing stigma for those who would no

longer receive the BPD diagnosis, and making treatment acceptance somewhat more likely as a result.

Self-injurious behaviors have been associated with many other disorders besides BPD. Self-injury has been seen within the context of some adjustment disorders, anxiety disorders, eating disorders, impulse control disorders, mood disorders, and substance use disorders as described in the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association, APA, 2000; Boudewyn & Liem, 1995; Favazza & Conterio, 1989; McAllister, 2003; Schwartz, Cohen, Hoffmann, & Meeks, 1989; Zlotnick, Mattia, & Zimmerman, 1999; Zlotnick et al., 1996). These disorders have been found to exist with selfinjury independently of BPD (Zlotnick et al., 1999). Self-injurious behavior has also been linked with a number of organic disorders such as Tourette's disorder and Neurosyphilis (Feldman, 1988). Simeon and Favazza (2001) point out that while Tourette's Disorder and Obsessive-Compulsive Disorder share many common features, self-injury is much more predominant in the former. In a study conducted by Suyemoto and MacDonald (1995), the most common diagnosis of patients with self-injury was Adjustment Disorder. This is probably because the self-injury was due to current stressors and may have abated once the stressor was removed.

Depression has been connected with self-injury via shared links to sexual abuse. Boudewyn and Liem (1995) found that people who had suffered sexual abuse experienced more depression and self-injury than those who did not, which could be indicative that self-injury may also present in some manifestations of Post Traumatic Stress Disorder. Kumar et al. (2004) found that depression was also correlated with number of motivations for engaging in self-injury. Not only do people who self-injure seem to have higher levels of depression but they seem to

experience higher levels of mood fluctuation as well (Sampson, Mukherjee, Ukoumunne, Mullan, & Bullock, 2004).

Eating disorders may be seen as part of a self-harm continuum but do not necessarily represent self-injury. Favazza, DeRosear, and Conterio (1989) hypothesize that some people who experience both an eating disorder and self-injury might actually be displaying two separate symptoms of an impulse control disorder. They stated that people with bulimia may be at an especially high risk for self-injurious behavior. It was their impression that the two behaviors may wax and wane in a cyclic pattern; when the eating disorder becomes prominent the selfinjury decreases, and vice versa. Because self-injury seems to occur across different disorders it has been suggested that self-injury needs to be given its own classification along the lines of an impulse control disorder (Favazza, 1998a).

#### **Motivations**

One of the most frequently asked questions in the literature is what motivates people to engage in self-injurious behavior. A problem with people endorsing reasons for self-injury is that they themselves may not be fully aware of why they self-injure. The reported functions of selfinjury are highly varied and it is likely that self-injury serves different functions simultaneously (Suyemoto, 1998). Perhaps one of the most parsimonious explanations is that it functions as an alternative to emotional experience, either to relieve a person of unwanted feelings or to make an intangible distress more concrete (Gratz, 2003). It has been theorized that self-injury may employ the same mechanism as crying does, to help ease emotional pain (McAllister, 2003). Sometimes self-injury is used for secondary gain (Feldman, 1988). It may provide an escape from unpleasant situations such as removal from a correctional environment to that of a hospital

or infirmary. Participants in past studies have also said they use self-injury as a means to influence others, either to elicit a caring response or to push others away (Gratz). In the biological sense, self-injury may serve to release endorphins (Leibenluft, Gardner, & Cowdry, 1987), which may reinforce the behavior and cause it to take on an addictive quality.

While many theories abound as to the motivations behind self-injury, some of the most commonly endorsed items are: tension release, termination of depersonalization, euphoria, enhanced sexual feelings, release of anger, self-punishment, a sense of security or control, manipulation of others, and relief of feelings of depression, loneliness, loss, and alienation (Favazza, 1998b). In the sense of relieving unwanted feelings, self-injury may be looked at as a form of self-medication. Some have even gone so far as to say that self-injury is an adaptive and life-preserving coping mechanism (Connors, 1996). It has also been postulated that self-injury may work primarily as a communicative device (Clarke & Whittaker, 1998). In individuals who have experienced trauma, self-injury may operate so as to reenact aspects of the trauma. It may serve to bring an end to a state of dissociation and reassure the affected individuals that they are indeed real, or it may act as a cue for dissociation to begin (Connors). Suyemoto (1998) proposed six divisions for understanding self-injurious behavior: environmental, anti-suicide, sexual, affect regulation, dissociation, and boundary function. Classification of self-injury type and pattern has also been attempted.

# **Classification**

*Direct versus indirect.* The broadest classification of self-injurious behavior is direct and indirect (Pattison & Kahan, 1983). Direct is intentional, immediate physical harm such as cutting, burning, and bone breaking, and indirect includes behaviors that have long-term harmful

effects, like smoking, food restriction, and alcohol abuse. Simeon and Favazza (2001) point out that the DSM-IV has four categories in which self-injurious behavior may be included: Impulse-Control Disorders, Trichtotillomania, Borderline Personality Disorder (BPD), and Stereotypic Movement Disorder with Self-Injurious Behavior. None of these classifications account for all of the self-injurious behaviors or associated features.

*Compulsivity versus impulsivity.* While self-injury is sometimes described as compulsive in nature as in terms of it having an addictive quality, at other times it is described as impulsive. A number of people who self-injure have problems controlling impulsivity in other areas as well (Favazza & Rosenthal, 1993). There is support for impulsivity control problems in relation to self-injury in the areas of neurochemistry as well. Evans et al. (1996) found that a lack of serotonin was linked to both impulsivity and self-injurious behaviors, and that those with a history of self-injury had significantly higher levels of impulsivity as a personality trait than those presenting with self-injury for the first time. Herpertz et al. (1997) found support for impulsivity being linked to self-injury. They also found a link between trait impulsivity and hypofunction of serotonergic activity. Despite the reports of impulsivity being linked with selfinjury, there is evidence that the behavior can take on compulsive qualities as well. Favazza and Rosenthal point out that some who self-injure may spend days thinking about the act and may pre-trace areas of their skin or have a special ritual they go through when they injure. This type of self-injury speaks to a period of contemplation and appears less impulsive in general.

*Syndromes*. The DSM classification that seems to come closest to capturing the phenomenon conceptually is Impulse Control Disorders, but many would not meet the criteria, especially in cases with very limited numbers of self-injury episodes and-or where self-injury is listed as a criterion for another disorder that might be considered primary. Favazza and

Rosenthal (1993) see self-injury as a separate disorder falling under the category of impulse control disorders. They propose the following DSM criteria: a preoccupation with injuring oneself; failure to resist the impulse to injure oneself; increasing tension before the act of self-injury; a sense of relief following the self-injury; and, that self-injury is not substance induced or in response to a delusion or hallucination.

It is suggested that people with this disorder may experience a type of withdrawal syndrome if stopped from self-injuring, marking self-injury an addictive behavior. Matsumoto et al. (2004), in a comparison of wrist and arm cutters, said that when people displayed a propensity for injuring both sites it indicated the behavior had taken on an addictive quality. In one treatment outline for self-injury, one of the issues addressed was the addictiveness of the habit and coping with withdrawal symptoms (Tantam & Whittaker, 1992). So, the question of whether to categorize self-injury as having addictive elements remains open, and if so, it may be best described by an impulse-control categorization along the lines of other types of non-substance-related addictive behaviors such as gambling or sex addiction.

Pattison and Kahan (1983) developed a set of characteristics that delineate the Deliberate Self-Harm Syndrome (DSHS). The DSHS is characterized by the following: sudden and persistent invasive impulses to harm oneself; a perceived inability to resist; a sense of existing in an unendurable situation that one can neither cope with nor control; increasing anxiety; anger, agitation; an inability to perceive other alternatives; a sense of relief after the act of self-harm; a depressive mood although suicidal ideation is not typically present; and, a perceived lack of social support at the time of the act. The onset of the syndrome typically occurs in late adolescence; however, there were reports of children as young as 6 engaging in acts of selfinjury. They found that the younger the onset, the greater the number of total episodes and the

longer the duration of the syndrome. Their model for the syndrome consists of, in addition to the qualities listed above, onset in late adolescence, multiple episodes of self-harm, multiple types of self-harm, low lethality, a continuation of the behavior over many years, concomitant drug and alcohol abuse, homosexuality among men and suicidal ideation in women, and depression and psychosis (Pattison & Kahan)

One of the most comprehensive classification systems comes from Favazza (1998b) who divided self-injurious behavior into three categories; major self-injury, stereotypic self-injury, and superficial-moderate self-injury. Major self-injury is usually seen in response to delusions and hallucinations and may consist of such events as castration, eye removal, and other types of amputation. Stereotypic self-injury includes repetitive, compulsive behaviors such as head banging, orifice digging, and eye or throat gouging. This type of self-injury is seen primarily in the realm of the institutionalized with mental retardation or pervasive developmental disorders. The superficial-moderate category involves cutting, burning, and other acts of superficial tissue damage and can be found in the general population. Favazza breaks the superficial-moderate category into three subcategories; compulsive, episodic, and repetitive.

The behaviors in the compulsive type tend toward nail biting, skin picking, and Trichotillomania. These types of behaviors are compulsive in nature and seem to have more in common with Obsessive-Compulsive Disorder than do the episodic or repetitive subcategories. Episodic and repetitive types of self-injury usually consist of cutting and burning behaviors. Episodic self-injury may become repetitive when the person becomes preoccupied with the selfinjurious behavior. Favazza (1998b) has found that the switch from episodic self-injury to repetitive self-injury is fluid and may occur somewhere between the 5th and 20th episode. Repetitive self-injury may even become a part of the person's self-identity system (Simeon &

Favazza, 2001) where the person may adopt the self-endorsed label of a "cutter" or "burner." When episodic self-injury becomes repetitive it is then that the behavior is described as addictive. The superficial-moderate category is the focus of the present study.

#### Associated Features

*Injury method.* People use different methods to injure themselves and may use more than one method at a time. Cutting seems to be the most common, followed by burning and hitting (Yates, 2004). There have also been reports of bone breaking, needle sticking, and interference with wound healing during self-injury episodes (Favazza, 1998b). In agreement with the fact that cutting is the most accepted form of self-injury, Horrocks et al. (2003) found that a razor blade was the most popular instrument used to self-injure.

*Dissociation*. There is empirical evidence to suggest that people who experience episodes of dissociation are at risk for self-injury. Low, Jones, MacLeod, Power, and Duggan (2000) found a positive correlation between frequency of self-injury and levels of dissociation. When the diagnosis of BPD was controlled for, it was found that dissociation still had a strong link to self-injury. This lends credence to the assertion that self-injury is not exclusive to BPD (Zlotnick et al., 1999). However, Zweig-Frank, Paris, and Guzder (1994) found that while dissociation seems linked to self-injury, in the presence of BPD there does not seem to be a strong distinction between dissociation and self-injury. With regard to childhood abuse causing dissociation, they failed to find a correlation between the two. As dissociation is often reported by those who have been abused, it is possible that dissociation is mediated by another variable. Feldman (1988) described a flat, withdrawn state where a person feels empty as tension before self-injury increases. When people enter this numbed state, they seem to need to reassure themselves that

they can still feel or that they are still alive. Some people who self-injure feel pain during the act while others do not (Feldman). It is thought that those who do not experience pain during selfinjury are in a state of dissociation (Matsumoto et al., 2004). Dissociation may be temporally related to self-injury. Zlotnick et al. (1996) found that people who had engaged in self-injurious behavior more recently had higher levels of dissociation than those who had not.

*Injury placement*. There may be differences in the placement of the injury on the body. Favazza (1998a) found that the most common places to injure were the arms and the front of the body from the shoulders to the knees. Injuring on the arm seems to be highly associated with dissociation (Matsumoto et al., 2004). The site at which a person chooses to injure may be telling of the motivation behind the act. Horrocks et al. (2003) found that the most popular injury site was the forearm with the wrist being second. The forearm may be the most popular because of ease of access and the choice to conceal the injuries and the resulting scars (Feldman, 1988). Some self-injurers cut their wrists as well as their arms. Those who cut their wrists experience more suicidal ideation and endorse wanting to die as their motivations more often than those who do not injure their wrists (Matsumoto et al.). People who cut their wrists are also more likely to make repeated suicide attempts and to stay with one method of self-injury (Favazza & Rosenthal, 1993).

*Self-injury and suicide*. Self-injury has a long history of being tied to suicide. It is not uncommon that self-injurious behaviors are misidentified as suicide attempts. With labels such as parasuicide and focal suicide (Clarke & Whittaker, 1998), it is easy to see how the behaviors could be confused. The literature differs in its viewpoints on where the ties between suicide and self-injury lie. Some have found that among hospital inpatients those with self-injury had more suicidal ideation than those who did not (Low et al., 2000). Impulsiveness, aggression, and

serotonergic dysfunction have been found to play a role in both suicide and self-injury (Stanley, Winchel, Molcho, Simeon, & Stanley, 1992). While people who self-injure are at risk for suicide, it is important to note that this risk is often greater when they are not in an active phase of self-injury (Walsh & Rosen, 1988). The difference lies in the motivation.

People who self-injure usually have no wish to die, while those who attempt to commit suicide may or may be ambiguous about wanting to die. While someone who self-injures may not be suicidal, the shame, loss of self-efficacy, and demoralization may turn a self-injurer into a suicide attempter (Favazza & Conterio, 1989; McAllister, 2003). A consequence of the common misperception of a direct connection between self-injury and suicide attempt is that, at times, people seen for emergency care will falsely admit to their self-injury being a suicide attempt in order to receive a more caring response from caretakers (Favazza, 1998a). Those who sought emergency help for self-injury in the past may have been treated harshly by emergency room staff. Clarke and Whittaker (1998) reported instances of people seeking emergency care for selfinjury who were maltreated and sutured without anesthetic. In a comparative study between selfinjurers and self-poisoners, self-poisoning (where a person deliberately ingested a substance for the specific purpose of self-harm), Horrocks et al. (2003), found that people who self-injured were less likely to receive psychosocial assessments than those who had self-poisoned. In a similar study, Rodham et al. (2004) found that there was a significant difference in motivation between the two groups. Self-poisoners endorsed wanting to die as their major motivation, while those with self-injury did not. Rodham et al. point out that self-poisoning is more likely to be a serious suicide attempt because it takes more planning than self-injury. It is clear that a suicide attempt is self-injury, but it may often be the case that a self-injury is a not a suicide attempt.

#### **Risk Factors**

There are some common risk factors for self-injury. Events that take place during childhood seem to have the most impact on this type of behavior. Connors (1996) points out that traumatic experience in childhood affect perceptions and coping in later life. According to Connors, children who are traumatized become overstimulated and alienated, which keeps them from processing and resolving the experience. They may later turn to self-injury as a way to maintain their integrity in the face of new stressors that are reminders of past traumas. Self-injury may be a reenactment of the traumatic event.

Sexual abuse. Sexual abuse seems to be particularly correlated with self-injurious behavior. The majority of the literature on risk factors for self-injury deals with childhood sexual abuse and the evidence seems to confirm that the two are linked (Gratz, 2003; Low et al., 2000; Yates, 2004; Zlotnick et al., 1996).People who engage in self-injury may not be able to express in words why they engage in self-injurious behavior or to vocalize related emotions and needs (McAllister, 2003; Suyemoto & MacDonald, 1995). Alexithymia is a deficit in which there are difficulties identifying and labeling affective experiences (Paivio & McCulloch, 2004). Zlotnick et al. theorize that alexithymia is a key component to self-injury. Paivio and McCulloch tested a mediational model for alexithymia, self-injury, and abuse. They found that the mediational model was supported for all types of maltreatment except for sexual abuse. However, while sexual abuse may not be associated with alexithymia, abuse still seems to be correlated with self-injury (Wiederman, Sansone, & Sansone, 1999). In fact, Favazza and Conterio (1989) found more than half of their sample of 240 women ranging in age from 14 to 71 years of age had experienced childhood sexual or physical abuse. It seems there may be a high correlation of self-

injury with dissociation when childhood sexual abuse and BPD are controlled for (Zlotnick et al., 1999).

The effects of childhood sexual abuse on self-injury seem especially relevant to women. Boudewyn and Liem (1995) found that even though there was no significant difference between the types of abuse suffered by men and women in their sample of 438 participants from local universities ranging in age from 16 to 65, the differences for the abused and nonabused women were markedly different with regard to self-injury. The use of coercion in abuse was reported to have a positive correlation with number of self-injury episodes. However, they found it was not significant whether the abuse was interfamilial. Zweig-Frank et al. (1994) found that in a sample of patients diagnosed with BPD, the only type of sexual abuse that was significant in relation to self-injury was penetration. However, when the diagnosis of BPD was entered into the regression the association disappeared. However, because their sample consisted solely of patients diagnosed with BPD, this finding cannot be generalized to other populations. Other early risk factors for self-injury include physical abuse, neglect, loss or separation, an early history of surgery, or illnesses requiring hospitalization, depression, and parental alcoholism (Dubo et al., 1997; Favazza & Rosenthal, 1993).

*Physical abuse and neglect.* Green (1978) found that physically abused children had significantly more incidences of self-destructive behavior. It was also noteworthy that while most self-injury does not begin until the onset of puberty and adolescence, Green's sample were preadolescent participants. Green theorized that when a child is neglected, the attention given them during physical abuse may bring about pain-seeking behavior in the future. The influence of neglect on self-injury has been studied less than the role of abuse. Dubo et al., (1997) found that the strength of the relationship between neglect and self-injury depends on the type of

neglect experienced. Emotional neglect seemed to be a stronger predictor for self-injury than abuse; however, physical neglect seemed to have no predictive value. In contradiction, Green also found that abuse had higher correlations with self-injury than did neglect.

*Abuse-related shame and anger.* Whether it is the actual abuse or the aftereffects of the abuse that leads to self-injurious behavior is unclear. McAllister (2003) noted that if a child were to tell an adult about sexual abuse and were not believed, feelings of guilt and shame may be reinforced. This brings up the interesting point that opening up about feelings may have had negative consequences for some in the past, which might cause them to bottle up their feelings to the point that they would have to self-injure to relieve the burden of overwhelming feelings, or in the case when feelings are completely restricted, to make sure they can feel at all. Shapiro (1987) also points out that if the victims of abuse do not disclose the abuse, their anger at others may become turned inward leading to self-destructive behavior. There is evidence in the literature to support that anger is a contributing factor to self-injury. Herpertz et al. (1997) found that severe forms of self-injury are closely related to inwardly directed anger. Other agreed upon characteristics of self-injurers include an inability to self-soothe and low self-esteem in addition to anger (Suyemoto, 1998).

*Separation.* While mention of parental loss and illness as risk factors for self-injury are suggested in the literature, there are studies that have found no support for this (Pattison & Kahan, 1983; Zweig-Frank et al., 1994). However, Matsumoto et al. (2004) did find that early separation and physical abuse was especially significant in relation to self-injury. Perceived interpersonal loss may precipitate an episode of self-injury (Feldman, 1988; Suyemoto, 1998).

*Lack of support.* Isolation and a lack or perceived lack of social support may play a role in self-injurious episodes. Clarke and Whittaker (1998) point out that in hospital settings when there is less structure, self-injury is likely to increase. Episodes of self-injury may also be more common on the weekends when there is a lack of support from the professional community. Incarceration may be seen as a form of isolation, and coping strategies have been looked at in relation to self-injury in prison populations. Haines and Williams (2003) found that prisoners who self-injured did not lack coping or problem-solving skills. The lack of finding a significant difference in coping skills may be mean that self-injury provides some form of secondary gain in prison populations.

*Consequences and treatment.* The consequences of self-injury are very real. The resulting disfigurement and inability to control the behavior may lead to shame and isolation (Favazza, 1989). If scars or wounds are visible, stigma may be also associated with self-injury, possibly resulting in prejudice toward the self-injurer. While much work has been done on the functions of, and risk factors for, self-injury, there is little empirical evidence of effective treatments. Stanley et al. (1992), in one of the few studies on treatments, reported that there has been some success with using Serotonin Reuptake Inhibitors to treat self-injury clients. Feldman (1988) points out that electroconvulsive therapy as well as surgery have been used to treat self-injurie employ a sort of self-treatment where they substitute self-injury with other uncomfortable acts such as taking cold showers, placing ice cubes against the skin, and snapping a rubber band on the wrist (Leibenluft et al., 1987). There are no known data as to whether these tactics work in terms of long-term inhibition of self-injury.

#### Measuring Self-Injury

Empirically validated measures for self-injury are scarce. Most of the measures used in past research have been developed for that particular study and are not published. Most items are taken from larger inventories that are designed to assess personality disorders. A search of the literature turned up only one stand-alone measure for self-injury. Gratz (2001) developed The Deliberate Self-Harm Inventory. The inventory consisted of 17 items that focus on frequency, duration, severity, and type of self-harm. The inventory has high internal consistency and sufficient test-retest reliability. However, the inventory does not account for different phases of self-injury or any of the related characteristics. Focusing solely on the self-injurious behavior alone may miss important aspects of the syndrome.

#### Present Study

While researchers have developed self-injury measures specifically for the purpose of conducting studies, an empirically validated instrument has yet to be developed. If a measure could be developed that would identify individuals who are at risk for developing, or who have developed self-injurious behaviors, interventions and proper treatment could be better targeted and outcomes better measured. This may be especially important for those who are at risk for going from the episodic phase to the repetitive phase where the behavior may become harder to surmount. Many people who engage in self-injurious behavior may not admit it to others for fear they may be labeled with a personality disorder or as someone just trying to get attention or manipulate others. A valid self-injury assessment instrument may enable professionals to break down the barrier to talking about such behaviors. If it is true that self-injurious behaviors have

different phases as well as modes, the most efficient treatment for those phases and modes may different as well.

Thus, a comprehensive self-report measure of self-injury, called the Self-Injury Self-Report (SISR) measure, was created based on descriptions of self-injury described in the previous literature above. Because Clarke and Whittaker (1998) hypothesized that self-injury may work as a communication device, a communication subscale was developed to see what, if any, role this played in a person's self-injurious behavior. The pain subscale was developed on the basis that past literature has postulated that physical pain may be used to alleviate emotional pain (Gratz, 2003; McAllister, 2003), and that some feel pain during the act of self-injury while others do not (Feldman, 1988). A severity subscale was developed because determining the severity of self-injurious behavior is important for the safety of an individual and is also an important component to Favazza's (1998b) classification system for self-injury. Favazza also found that self-injury can become a compulsive act. In accordance with this, a compulsive subscale was developed to measure the degree to which this has become a factor. A social identity-addictiveness subscale was developed in response to the fact that self-injury has been found to be addictive in some cases (Leibenluft et al., 1987; Matsumoto et al., 2004; Tantam & Whittaker, 1992). Because repetitive self-injury is thought to be addictive and may become a part of the person's identity (Simeon & Favazza, 2001), the scales were combined. Because past research has found that self-injury is sometimes used to influence others (Gratz), a relationship subscale was developed to assess how self-injury may impact those relationships. Since substance abuse has been seen in relation to self-injury (Zlotnick et al., 1999), and self-injury may be more likely or more serious while under the influence, a substance abuse subscale was developed to assess what degree substance abuse interacted with self-injurious behaviors. A

dissociation subscale was developed in response to research that found dissociation to be one of the major factors in self-injury (Feldman; Low et al., 2000; Matsumoto et al.). A factor analysis was performed to hone the subscales making up the full measure. As this is a new measure, formal hypotheses were not derived, and consist only of the notion that a number of the SISR subscales will be related to other clinical issues as measured by established inventories, in directions that are consistent with increasing scores on the SISR with increasing scores on other measures of pathology or clinical issues and vice versa. Various other exploratory analyses were also conducted.

#### CHAPTER 2

### METHOD

# Participants

Participants consisted of 184 undergraduates at a midsize university in the Southeastern United States, who ranged in age from 18 to 46 (M = 20.64, SD = 4.99). Demographics are presented in Table 1. Five participants chose not to reveal their gender and 22 chose not to disclose past self-injury status. While only 37 participants labeled themselves as self-injurers, another 77 endorsed having previously engaged in self-injurious behavior, for example by answering a question such as "Do you always use the same type of self-injury instrument", even though not self-labeling as a self-injurer. That yielded a total of 114 (62%) participants who in some way endorsed having engaged in self-injurious behavior.

Table 1.		
Demographic Information		
Demographic	N	% of Sample
Men	82	45.8
Women	97	54.2
Caucasian	152	77.6
Other	26	13.3
Admitted Self-injurers	37	21.3
Endorsed Self-injurious Behavior	114	62.0
$N_{a4a}$ , $T_{a4a}$ $N = 104$		

*Note:* Total N = 184

#### <u>Materials</u>

A demographic questionnaire was used to determine participants' gender and ethnicity. Participants were measured on their propensity toward personality disorders and Axis I disorders using the Millon Clinical Multiaxial Inventory III (MCMI-III) (Millon, Millon, Davis, & Grossman, 1997). The MCMI-III consists of 175 true or false statements that assess the interaction of Axis I and Axis II disorders. The inventory consists of 14 personality disorder scales: Schizoid (i.e., "What few feelings I seem to have I rarely show to the outside world."); Avoidant (i.e., "I'm afraid to get really close to another person because it may end up with my being ridiculed or shamed."); Depressive (i.e., "I've had sad thoughts much of my life since I was a child."); Dependent (i.e., "I am a very agreeable and submissive person."); Histrionic (i.e., "I show my feelings easily and quickly."); Narcissistic (i.e., "I know I'm a superior person, so I don't care what people think."); Antisocial (i.e., "As a teenager, I got into lots of trouble because of bad school behavior."); Sadistic (i.e., "I often criticize people strongly if they annoy me."); Compulsive (i.e., "I think highly of rules because they are a good guide to follow."); Negativistic (i.e., "If my family puts pressure on me, I'm likely to feel angry and resist doing what they want."); Masochistic (i.e., "I seem to choose friends who end up mistreating me."); Schizotypal (i.e., "People make fun of me behind my back, talking about the way I act or look."); Borderline (i.e., "Lately, I have begun to feel like smashing things."); and Paranoid (i.e., "People have never given me enough recognition for the things I've done."). The MCMI-III has 10 clinical syndrome scales: Anxiety (i.e., "I've become very jumpy in the last few weeks."); Somatoform (i.e., "I feel weak and tired much of the time."); Bipolar (i.e., "I enjoy doing so many different things that I can't make up my mind what to do first."); Dysthymia (i.e., "I began to feel like a failure some years ago."); Alcohol Dependence (i.e., "I have an alcohol problem that has made difficulties for me and my family."); Drug Dependence (i.e., "My drug habits have often gotten me into a good deal of trouble in the past."); Post-Traumatic Stress Disorder (i.e., "The memory of a very upsetting experience in my past keeps coming back to haunt my thoughts."); Thought Disorder (i.e., "Lately, I have gone all to pieces."); Major Depression (i.e., "Lately, my strength seems to be draining out of me, even in the morning."); Delusional Disorder (i.e., "Many people have been spying into my private life for years."). The MCMI-III has an internal consistency for the

scales ranging from .66 to .90 with alphas exceeding .80 for the 20 of the scales. Test-retest reliability ranges from .82 to .96 with the median stability coefficient being .91.

Impulsivity was measured using the Barratt Impulsiveness Scale 11 (BIS 11) (Patton, Stanford, & Barratt, 1995). The BIS 11 contains 30 questions that measure impulsivity on three dimensions; attention-focusing on the current task (i.e., "I have 'racing' thoughts."), motoracting without thinking (i.e., "I do things without thinking."), and planning-being able to think ahead to future consequences (i.e., "I plan tasks carefully."). For each of the items, responses could range from 1 (rarely-never) to 4 (almost always-always). The BIS-11 has an internal consistency ranging from .79 to .83.

Suicide ideation was measured with the Suicide Ideation Questionnaire (Ingram & Ellis, 1995). The questionnaire consists of four questions designed differentiate between ideators and non-ideators. The first question stated, "I have attempted suicide (to kill myself) in the past", the second, "I have seriously considered committing suicide in the past OR I have thoughts of harming myself that don't seem to go away OR I have made a plan to commit suicide in the past, but never followed through with it", the third, "Thought of committing suicide has crossed my mind, but I have never seriously considered or made a plan in the past", and the fourth, "I have never thought about committing suicide". Participants who checked the first two questions are classified as suicide ideators.

Self-injurious behavior was measured using the Self-Injury Self-Report (SISR) measure developed for this study. This measure was developed by psychology faculty, graduate, and undergraduate students who were given descriptions of the representative categories described in

the last paragraph of Chapter 1 and who generated an initial pool of items. The initial SISR contained 135 questions regarding self-injurious behaviors, past events that may contribute to self-injury, and states and behaviors associated with self-injury. The measure is divided into seven subscales; communication (i.e., "Do you share your feelings with others?" with 12 initial items), pain (i.e., "Do you feel that you tolerate physical pain better than others?" with nine initial items), severity (i.e., "How often do you draw blood or cause blisters or bruises to form?" with 10 initial items), compulsive behaviors (i.e., "How often do you use self-injury to influence someone else's behavior or feelings?" with nine initial items), substance abuse (i.e., "Do you use a drug or alcohol when you self-injure?" with eight initial items), social identity/addictiveness (i.e., "Do you identify yourself as a cutter, burner, or self-injure?" with 13 initial items), and dissociation (i.e., "Do you have feelings of unreality when you self-injure?" with eight initial items). For each of the items, responses could range from A (never) to E (always).

#### Procedure

Students in various psychology classes took part through in-class participation. Participants received extra credits in their classes for participating in the surveys. Participants filled out the same surveys. Presentation of measures was randomized to control for ordering effects. No identifying information was collected and thus all participants' responses were confidential. After completing the measures, the participants were given clinical referral numbers in case they found themselves to be in need of professional help in any way.

#### <u>Analyses</u>

As subscales were developed thematically, a principle components factor analysis was run on the groups of items comprising each of the subscales of the Self-injury Self-Report (SISR) to identify key items and to guide the elimination of items from the SISR. Due to limitations in the number of admitted self-injurers and for reasons of parsimony, only the first factor solution for each subscale was used in analyses for this initial project. Subscale items with factor loadings below .50 were deleted from the subscales and overall measure. Pearson correlations were performed on SISR scores in conjunction with base rate scores on the MCMI-III. A t-test was performed to determine whether there were significant differences on SISR scores with regard to gender.

# CHAPTER 3

## RESULTS

The first Pain subscale factor had an eigenvalue of 4.02, which accounted for 44.65% of the variance, where  $\alpha = 0.85$ . The subscale was developed with nine items and of those, items 94 and 95 (see Appendix D for all items) were removed because they did not load on the main factor. The first factor of the Severity subscale yielded an eigenvalue of 6.02, which accounted for 60.24% of the variance, and  $\alpha = 0.92$ . The subscale originally had 10 items. Of these 10, two were removed. Item 102 was removed because it did not load on the first factor. Item 106 was removed because it may have tapped into other phenomena. The Compulsive subscale's first factor had an eigenvalue of 11.45, which accounted for 49.78% of the variance, with  $\alpha = 0.94$ . This subscale was developed with 23 items. Items 118, 120, and 132 were removed because they did not load on the first factor. Item 133 is reverse scored. The first Relationship subscale factor had an eigenvalue of 4.89, accounting for 48.88% of the variance and yielding  $\alpha = 0.88$ . The subscale was developed with 10 items and item 144 was removed because it did not load on the main factor. The Substance Abuse subscale first factor had an eigenvalue of 5.21, which accounted for 57.88% of the variance, where  $\alpha = 0.72$ . The subscale was developed with nine items and item 150 was removed because it did not load on the first factor. Items 146 and 152 are reverse scored. The first Dissociation subscale factor yielded produced an eigenvalue of 5.24, accounting for 58.25% of the variance, with  $\alpha = 0.89$ . The subscale was developed with nine items and item 168 was removed as it was determined to be irrelevant to the construct when examined in the analysis. The Social Identity subscale first factor's eigenvalue was 7.01, which accounted for 50.04% of the variance, with  $\alpha = 0.86$ . The subscale was developed with 14 items and items 158 and 159 were removed as it was determined that they were not truly relevant to the subscale. The Communication subscale first factor's eigenvalue was 3.06 which accounted for 27.77% of the variance, and where  $\alpha = 0.75$ . The subscale was developed with 11 items and items 80, 83, 84, 87, and 88 were removed because they did not load on the first factor. Factor analyses are summarized in Table 2.

Total scores on the SISR were calculated by adding the subscales together. There were floor effects for all but two of the SISR subscales and no ceiling effects. Descriptives for the SISR scales are presented in Table 3. SISR subscale correlation coefficients ranged from .43 to .88, indicating moderate relationships existed between subscales, implying some independence of sub-constructs. SISR scale inter-correlations are presented in Table 4.

The SISR Pain subscale was significantly and positively correlated with the MCMI-III Disclosure, Debasement, Schizoid, Anxiety, Dysthymia, Avoidant, Depressive, Dependent, Antisocial, Negativistic, Masochistic, Schizotypal, Borderline, Alcohol Dependence, Drug Dependence, PTSD, and Major Depression scales. The Pain subscale was significantly and negatively correlated with the MCMI-III Histrionic and Compulsive scales. The SISR Severity subscale was not significantly correlated with any MCMI-III scale. The SISR Compulsive subscale was significantly, negatively correlated with the MCMI-III Compulsive scale. The SISR Relationship subscale was significantly, negatively correlated with the MCMI-III Compulsive scale. The SISR Substance Abuse subscale was significantly, positively correlated with the MCMI-III Antisocial, Alcohol Dependence, and Drug Dependence scales. The SISR Substance Abuse subscale was significantly, negatively correlated with the MCMI-III Compulsive scale. The SISR Dissociation subscale was significantly, positively correlated with the MCMI-III Dysthymia, Avoidant, Depressive, Dependent, Borderline, Alcohol, and Thought Disorder scales. The Dissociation subscale was significantly and negatively correlated with the MCMI-III

Histrionic, Narcissistic, and Compulsive scales. The SISR Social Identity subscale was significantly, positively correlated with the MCMI-III Antisocial and Drug Dependence scales. The Social Identity subscale was significantly and negatively correlated with the MCMI-III Histrionic and Compulsive scales. The SISR Communication subscale was significantly, positively correlated with the MCMI-III Disclosure, Debasement, Schizoid, Anxiety, Dysthymia, Avoidant, Depressive, Dependent, Antisocial, Sadistic, Negativistic, Masochistic, Schizotypal, Borderline, Paranoid, Alcohol Dependence, PTSD, Thought Disorder, and Major Depression scales. The Communication subscale was significantly, negatively correlated with the MCMI-III Histrionic, Narcissistic, and Compulsive scales. The SISR Total scale was significantly, positively correlated with the MCMI-III Antisocial, Borderline, Alcohol Dependence, and Drug Dependence scales. The SISR Total scale was significantly, negatively correlated with the MCMI-III Antisocial, Borderline, Alcohol Dependence, and Drug Dependence scales. The SISR Total scale was significantly, negatively correlated with the MCMI-III Antisocial, Borderline, Alcohol Dependence, and Drug Dependence scales. The SISR Total scale was significantly, negatively correlated with the MCMI-III Antisocial, Borderline, Alcohol Dependence, and Drug Dependence scales. The SISR Total scale was significantly, negatively correlated with the MCMI-III Compulsive scale. Pearson correlations between of SISR and MCMI-III scales are presented in Table 5.

All of the SISR subscale score were positively correlated with scores on the BIS-11 except for the Compulsive subscale which was significantly correlated with all but the Attention subscale of the BIS-11. Pearson correlations between the SISR and BIS-11 are presented in Table 6.

An independent samples t-test was conducted to determine mean differences between men and women and SISR total scores and subscale scores. Women did not score significantly different from men on any SISR subscale or the SISR Total score. SISR scores for women and men are displayed in Table 7. Suicide ideators scored significantly higher than non-ideators on all subscales of the SISR. SISR scores for ideators and non-ideators are displayed in Table 8.

Table 2.SISR Factor Analysis Summary

SISR Subscale	Number of	Number of	Factor 1	Factor 2	Number of
	Items	Items	Eigenvalues	Eigenvalues	Items Above
	Deleted	Remaining	-	-	.50 in Second
		-			Factor
Pain	2	7	4.02	1.58	2
Severity	2	8	6.02	1.50	2
Compulsive	3	20	11.45	2.09	2
Relationship	1	9	4.89	1.12	2
Substance Abuse	1	8	5.21	1.25	1
Social Identity	2	12	7.01	2.85	6
Dissociation	1	8	5.24	1.19	2
Communication	5	6	3.06	2.17	2

### Table 3.

Descriptives for the SISR

SISR Scale	Minimum	Maximum	M	SD	α
Pain	0	19	6.72	5.44	.85
Severity	0	20	1.07	3.29	.92
Compulsive	5	47	13.92	13.97	.94
Relationship	0	19	1.93	4.13	.88
Substance Abuse	1	22	7.36	4.49	.72
Social Identity	0	29	3.57	6.20	.86
Dissociation	0	21	3.37	5.19	.89
Communication	0	17	7.12	4.12	.75
SISR Total	10	162	48.52	38.79	.86

Table 4.

1 4010 1.									
SISR Inter-Correl	lations								
SISR Scales	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-T
S-1	-								
S-2	.617†	-							
S-3	.782†	.773†	-						
S-4	.508†	.727†	.611†	-					
S-5	.497†	.519†	.504†	.483†	-				
S-6	.609†	.642†	.672†	.664†	.515†	-			
S-7	.685†	.837†	.818†	.877†	.591†	.784†	-		
S-8	.614†	.441†	.571†	.488†	.426†	.549†	.569†	-	
S-T	.827†	.828†	.921†	.715†	.620†	.803†	.921†	.696†	-

Note:  $* = p \le .05$ ;  $\ddagger = p \le .01$ ;  $\dagger = p \le .001$ ; n ranges from 64 to 123; SISR1 = Pain subscale; SISR2 = Severity subscale; SISR3 = Compulsive subscale; SISR4 = Relationship subscale; SISR5 = Substance Abuse subscale; SISR6 = Dissociation subscale; SISR7 = Social Identity subscale; SISR8 = Communication subscale; ST = SISR Total.

Table 5.SISR Correlations with MCMI-III

SISK Correlations									
MCMI-III Scales	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-T
Personality D/Os									
Schizoid	.209*	.038	.024	040	.024	.091	.085	.420†	.110
Avoidant	.233*	.121	.068	.109	010	.302‡	.171	.386†	.188
Depressive	.284‡	.090	.092	.132	.004	.345‡	.156	.353†	.206
Dependent	.203*	.062	.040	.006	.063	.230*	.005	.231*	.155
Histrionic	208*	140	104	218	077	377†	292*	334‡	224
Narcissistic	089	006	049	104	080	378†	164	223*	152
Antisocial	.289‡	.008	.196	.212	.234*	.239*	.242*	.289‡	.324*
Sadistic	.193	.042	.112	.040	.091	.025	.134	.260*	.182
Compulsive	242*	.012	247*	294‡	252*	263*	271*	320‡	344‡
Negativistic	.200*	028	.028	.055	074	.130	.038	.279*	.071
Masochistic	.246‡	.028	.018	059	118	.192	.001	.327‡	.098
Schizotypal	.276‡	.082	.040	.000	066	.164	.056	.262*	.065
Borderline	.275‡	.078	.180	.178	050	.257*	.147	.360†	.276*
Paranoid	.131	016	.001	.008	070	037	.024	.280*	.061
Clinical D/Os									
Anxiety	.220*	.045	.034	.010	.016	.090	001	.279*	.077
Somatoform	.161	054	.052	.024	066	.051	.027	.161	.018
Bipolar	.082	.048	.130	.047	029	007	.003	.109	.111
Dysthymia	.215*	.035	.013	.062	044	.234*	.010	.287‡	.108
Alcohol Depend.	.199*	027	.146	.149	.323‡	.247*	.215	.331‡	.329*
Drug Depend.	.281‡	.029	.182	.180	.274*	.197	.253*	.212	.295*
PTSD	.256‡	.073	.047	024	120	.167	.016	.241*	.071
Thought Disorder	.193	.033	.015	001	155	.230*	014	.270*	.079
Major Depression	.203 *	044	.057	.101	005	.148	.079	.279*	.124
Delusional Disorder	.048	.026	.016	.058	.014	096	.009	.044	009
	< 01 1	< 0.01	C		140 CICD 1	D' 1	1 010		•.

Note:  $* = p \le .05$ ;  $\ddagger = p \le .01$ ;  $\dagger = p \le .001$ ; n ranges from 55 to 142; SISR1 = Pain subscale; SISR2 = Severity subscale; SISR3 = Compulsive subscale; SISR4 = Relationship subscale; SISR5 = Substance Abuse subscale; SISR6 = Dissociation subscale; SISR7 = Social Identity subscale; SISR8 = Communication subscale; ST = SISR Total.

Table 6.									
SISR Correlations with BIS-11									
BIS-11 Scales	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-T
Attention	.207*	.371†	.197	.371†	.310‡	.292‡	.361†	.427†	.335‡
Motor	.379†	.297‡	.466†	.314‡	.362†	.226*	.346†	.395†	.423†
Planning	.187*	.374†	.272*	.353†	.230*	.240*	.356†	.273‡	.387‡
Total	.331†	.457†	.432†	.453†	.362†	.341†	.462†	.447†	.507†

Note:  $* = p \le .05$ ;  $\ddagger = p \le .01$ ;  $\dagger = p \le .001$ ; n ranges from 55 to 107; S-1 = Pain subscale; S-2 = Severity subscale; S-3 = Compulsive subscale; S-4 = Relationship subscale; S-5 = Substance Abuse subscale; S-6 = Dissociation subscale; S-7 = Social Identity subscale; S-8 = Communication subscale; ST = SISR Total.

SISK Scores for women and wen									
	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-T
Women	14.01	1.90	14.82	1.41	6.72	2.72	2.96	7.42	49.26
M (SD)	(5.86)	(4.14)	(15.10)	(3.19)	(3.75)	(4.54)	(4.75)	(4.11)	(38.84)
Men	13.91	3.13	12.64	2.71	8.41	4.34	4.51	6.64	47.17
M (SD)	(4.76)	(6.25)	(12.29)	(5.20)	(5.35)	(5.96)	(7.95)	(4.16)	(39.53)
t	0.110	-1.18	0.742	-1.38	-1.67	-1.50	-1.04	.923	0.206
р	.912	.241	.460	.174	.101	.136	.303	.358	.837

*Table 7.* SISR Scores for Women and Men

Note:  $* = p \le .05$ ;  $\ddagger = p \le .01$ ;  $\dagger = p \le .001$ ; n ranges from 14 to 73; S-1 = Pain subscale; S-2 = Severity subscale; S-3 = Compulsive subscale; S-4 = Relationship subscale; S-5 = Substance Abuse subscale; S-6 = Dissociation subscale; S-7 = Social Identity subscale; S-8 = Communication subscale; S-T = SISR Total.

*Table 8.* SISR Scores for Suicide Ideators and Non-Ideators

2121 212			ators and r	Non-Iucan	// 5				
	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-T
Ideators	19.33	7.43	31.89	5.76	10.70	10.29	10.95	10.96	99.71
M (SD)	(5.79)	(6.87)	(14.91)	(5.92)	(6.22)	(6.36)	(8.10)	(3.25)	(32.15)
Non- Ideators <i>M (SD)</i>	12.30 (4.10)	0.96 (3.02)	8.29 (7.79)	0.64 (2.23)	5.95 (2.70)	1.19 (2.07)	1.04 (2.60)	6.08 (3.61)	30.92 (20.62)
t	-5.51†	-4.20†	-6.42†	-3.87†	-3.13‡	-6.43†	-5.37†	-5.66†	-8.99†
р	.000	.000	.000	.001	.003	.000	.000	.000	.000
				-					

Note:  $* = p \le .05$ ;  $\ddagger = p \le .01$ ;  $\dagger = p \le .001$ ; n ranges from 14 to 73; S-1 = Pain subscale; S-2 = Severity subscale; S-3 = Compulsive subscale; S-4 = Relationship subscale; S-5 = Substance Abuse subscale; S-6 = Dissociation subscale; S-7 = Social Identity subscale; S-8 = Communication subscale; S-T = SISR Total.

#### CHAPTER 4

### DISCUSSION

#### Summary of Major Findings

The Self-Injury Self-Report (SISR) instrument was developed to measure different aspects of self-injury. This instrument should be able to assess the potential to engage in selfinjurious behavior. Past research has pointed out the need for such a tool (Zlotnick, Mattia, & Zimmerman, 1999). Unlike the Deliberate Self-Harm Inventory (Gratz, 2001), the SISR looks beyond the self-injurious behavior and into the related phenomena such as dissociation and communication. Due to the vast array of related syndromes and different aspects that are related to self-injury it was not desirable to factor analyze the instrument as a whole. As the instrument was developed with conceptual subscales, it was factor analyzed by those subscales.

In interpreting the MCMI-III data with regard to negative correlations, it is important to note what the MCMI-III purports to measure. The Histrionic scale correlated negatively with all SISR scales. According to the MCMI-III manual (Millon, Millon, Davis, & Grossman, 1997), the Histrionic scale measures adept social behavior that serves a continuous need for affection and attention. Given that such behaviors are openly expressive, it makes sense that the type of behaviors represented by the SISR would be in opposition as they are typically more covertly expressive. The Narcissistic scale was likewise negatively correlated with the SISR scales. Elevations on this scale indicate an overvalued sense of self-worth with a concomitant overconfidence and sense of superiority. As people exhibiting self-injurious behaviors are more likely to be suffering from lowered self-esteem or self-worth, it is sensible that these measures would be inversely related. Finally, the MCMI-III Compulsive scale also yielded negative correlations with most SISR scales. Elevated scores on the Compulsive scale of the MCMI-III indicates a rigid self- restraint that results from being intimidated into subservient stances where they yield to others' judgments and demands but are secretly hostile to others who dominate them. Unlike the typical connotations of compulsiveness that incorporates ritualistic behavior as might be present in some forms of self-injury, the MCMI-III measure speaks more to a compulsive compliance with others and over-control of emotions. Thus, a negative correlation with SISR scales is not surprising.

The SISR Pain subscale measures the individual's experience of physical pain, the ability to handle physical pain as well as the outlook on physical pain. It also taps into the interaction between physical pain and emotional pain. People who score high on this subscale may use self-injury as a means to ease emotional pain. Pain may also be an indicator of dissociation levels during the act of self-injury (Feldman, 1988). The Pain subscale was correlated with 17 out of 27 of the scales on the MCMI-III. Only the SISR Communication subscale was related to more MCMI-III scales, many of which were the same as those related to the Pain subscale where the Communication scale tended to have correlation coefficients in the same directions, but generally of greater magnitude.

The positive correlation between the SISR Pain subscale and the MCMI-III Schizoid scale may be indicative of the schizoid personality type's inability to experience deep pleasure or pain. Thus, self-injury may serve as a substitute para-emotional experience. It is not surprising that the Pain subscale would be correlated with the Dysthymia, Depressive, and Major Depression scales of the MCMI-III as self-injury is sometimes found in people with depressive symptoms (Boudewyn & Liem, 1995; Favazza, 1998b; Kumar et al., 2004; Sampson et al., 2004). The correlation between the Avoidant scale of the MCMI-III and the Pain subscale may be indicative that the Pain subscale is tapping into a common wish to avoid anticipated emotional

pain associated with interaction with others. Alternatively, self-injury tends to be a private behavior, which could account for the correlation with avoidance. The SISR pain variable was also related to a variety of other personality disorder traits and clinical disorder syndromes, including anxiety, alcohol and drug dependence, dependence, histrionic personality, narcissism, antisocial personality, compulsiveness, negativism, masochism, and borderline personality disorder. The Pain subscale of the SISR indicates that the use of self-injury may be tied with the need to avoid emotional pain, to induce physical pain, or as symptomatic of a variety of potential disorders. Given the tendency for self-injury to be associated with only a few disorder categories (Yates, 2004), this finding that this self-injury aspect is related to 11 of 14 personality disorder characteristics and 6 of 10 clinical disorder types is important and supports previous findings that self-injury occurs within the context of many disorders (Boudewyn & Liem; Favazza & Conterio, 1989; McAllister, 2003; Schwartz et al., 1989; Zlotnick et al., 1999; Zlotnick et al., 1996). This supports an argument that self-injury not be used as a diagnostic criteria for a particular few disorders, but that it be considered as a clinical syndrome in its own right, or at the least that it may not be indicative of any one particular class of disorders. However, as we will see later, the SISR total score relations to particular disorders tends to support use of self-injury as a diagnostic feature in Borderline, Antisocial, and Alcohol-Drug Dependence categories.

The SISR Severity subscale measures the severity of an individual's self-injury episodes. There were no significant correlations between the Severity subscale and MCMI-III. This is contradictory to previous assumptions that severity level may be indicative of BPD severity (Favazza, 1998b). This may be because the level of severity of self-injury is not related to any specific disorder. The fact that the questions are tapping into the more severe forms of self-injury may also contribute to the lack of any correlations. However, the positive correlations between

the Severity subscale and the BIS-11 may indicate that the severity of self-injury is dependent on the impulsivity of the action.

The SISR Compulsion subscale measures the compulsivity with which self-injury is approached. It taps into any ritualized behaviors that might be present within the self-injury act. The Compulsion subscale was only significantly negatively correlated with the Compulsive scale of the MCMI-III. As mentioned above, the MCMI-III Compulsive scale represents tendencies to withhold emotions, yield to others, and maintain rigid self-control (Millon, Millon, Davis, & Grossman, 1997). As that is conceptually unlike the type of compulsiveness of self-injury that is emotionally expressive and lacks self-control as indicated by positive correlations with the Impulsiveness scale, this inverse relationship is understandable. What is also interesting is that the SISR Compulsion scale does have a positive relationship to impulsiveness, perhaps indicating a combination of ritualistic and thus planned behaviors along with a lack of ability to refrain from engaging in self-injury.

The SISR Relationship subscale measures the extent with which self-injury is used to effect relationships. The fact that the Relationship subscale was not correlated with BPD scale of the MCMI-III is intriguing. The notion that people, especially those with BPD, use self-injury as a means to gain attention or manipulate others would appear not to be supported by the current data. However, it may also be that people have trouble admitting to the fact that they use selfinjury in this method. This could be an example of the stigmatized outlook on self-injurious behavior. Using self-injury as a means to influence others has inherent connotations that there is some control over the behavior and it could be avoided. Also, it could be the case that self-injury is more exclusively private than generally thought to be the case and thus more rarely used to manipulate others than is popularly believed.

The SISR Substance Abuse subscale measures not only whether a person is dependent on substances in general but to how much of an extent that substances play a part in the self-injury experience. Not surprisingly, the Substance Abuse subscale is positively correlated with the Alcohol Dependence and Drug Dependence scales of the MCMI-III. The Substance Abuse subscale is also positively correlated with the Antisocial Personality Disorder scale of the MCMI-III. This is not surprising given that people with Antisocial Personality Disorder have higher rates of alcohol dependence (Moeller & Dougherty, 2001).

The SISR Dissociation subscale was developed to measure not only dissociation in general but the extent to which dissociation plays a part in the self-injury experience. The Dissociation subscale was positively and negatively correlated with 12 out of 27 of the Scales on the MCMI-III. This is indicative that not only is dissociation related to many of the disorders measured by the MCMI-III but that it plays an integral part in self-injury as well.

The SISR Social Identity subscale was developed to measure the extent to which selfinjury has become a part of the person's identity and self-concept. It also taps into the extent in which an individual takes part in the self-injury subculture. The positive correlations between the Social Identity subscale and the Histrionic, Antisocial, and Compulsive personality disorderrelated MCMI-III scales and the Drug Dependence clinical scale may indicate that when selfinjury coincides with these disorders, social identity may play a role in the self-injurious behaviors. Each of the MCMI scales indicates a long-term syndrome, each of which may be related to self-identity. However, that is a limited line of thought as many other personality disorder types were related to aspects of self-injury, but not the aspect of social identity. As there is a subculture tied with drug use, drug users may similarly identify with a subculture or self-

image inclusive of self-injury, especially as some types of drug use are more directly selfinjurious (e.g., needle use) and others more indirectly self-destructive.

The SISR Communication subscale was developed to measure problems with expressing oneself verbally. It also taps into how self-injury may be used as an alternative form of communication. The Communication subscale was correlated with 23 out of 27 scales on the MCMI-III. This is indicative that problems in communication play a large role not only in a wide range of disorders but in self-injury as well. As noted above, many of the MCMI-III scales related to the SISR Pain subscale were also related to the Communication subscale, where the latter tended to have stronger correlations in the same directions as those of the Pain subscale. While the correlation between the two subscales was moderate at r = .61, it may be that they are covering some of the same conceptual ground, with the Communication subscale more strongly measuring a common latent construct. This indicates the need for further research into whether pain itself is some form of communication, or whether some aspect of pain represents a lack of communicative ability. Narcissism was related to the Communication subscale, but not the Pain subscale, where the former was a negative relationship. The MCMI-III Sadistic, Paranoid, and Thought Disorder scales were also related to Communication, but not Pain, and the former relationships were all in a positive direction. It is difficult to interpret how these represent some distinct quality of communicative aspects of self-injury and is fertile ground for further research.

Total scores on the SISR were positively correlated with MCMI-III scales; Antisocial, Borderline, Alcohol Dependence, and Drug Dependence. Interestingly, and counter to the earlier assertion that self-injury may not be a good clinical indicator of particular disorders, these data support prior research that these disorders may occur often with self-injury. The fact that total scores on the SISR are positively correlated with scores on the Borderline Personality Disorder

scale of the MCMI-III lends credence to past research that has linked Borderline Personality Disorder to self-injury (Dubo et al., 1997). The fact that certain aspects of self-injury seem to be related to various disorders while all aspects taken together only seem to be related to a few disorders is an important finding. This may be indicative that while people with many different disorders engage in some self-injurious behavior, it only becomes a pervasive and self-defining act for those suffering from BPD, Substance Abuse, and Antisocial Personality Disorder. This may also account for the fact that while only a small number of participants labeled themselves as self-injurers, many more endorsed self-injurious behavior. The more items a person endorses in the different subscales would be indicative of an increased self-integration of the behavior. For those suffering from BPD, substance abuse, and Antisocial Personality Disorder the behavior may be more integrated and more serious. Further research needs to be conducted to determine the full implications of this finding. For those with BPD, substance abuse problems, and Antisocial Personality Disorder the behavior may be more chronic.

The BIS -11 measures an individual's propensity toward impulsivity (Patton et al., 1995). All of the SISR subscale scores were positively correlated with scores on the BIS-11 except for the Compulsive subscale that was not correlated with the Attention subscale of the BIS-11. This supports past research that has linked impulsivity with self-injury (Evans et al., 1996; Favazza & Rosenthal, 1993; Herpertz et al., 1997). The fact that the Compulsive subscale was correlated with the BIS-11 could mean that despite the fact that the items seem to be measuring compulsivity in terms of compulsive ritualistic components of self-injury, the items may also be measuring an impulsive inability to refrain from ritualistic forms of self-injury. Another possibility is that while people who self-injure may be compulsive with regard to self-injury, they may remain impulsive in other areas where common factors are tapped by both measures.

This would support previous research that has found individuals who self-injure are impulsive in other areas of their life as well and yet the act of self-injury can take on compulsive traits (Favazza & Rosenthal). These positive correlations between the BIS-11 and the SISR taken into account with past research indicate that the SISR is a valid instrument for measuring self-injury.

The Suicide Questionnaire differentiates between suicide ideators and non-ideators (Ingram & Ellis, 1995). Suicide ideators scored significantly higher than non-ideators on all subscales of the SISR. This underscores the fact that people who self-injure may be more at risk for suicide. This finding supports that of past research in which a tie between self-injury and suicide has been found (Favazza & Conterio, 1989; Low et al., 2000; McAllister, 2003; Stanley et al., 1992; Walsh & Rosen, 1988). Because past research has found that the shame and loss of self-efficacy may turn a self-injurer into a suicide attempter (Favazza & Conterio; McAllister), it would be helpful to determine if suicide ideation began after the onset of self-injury. This finding should be taken into account when people seek emergency treatment for self-injury. While past research seems to indicate that hospital staff does not take self-injury seriously (Clarke & Whittaker, 1998; Favazza, 1998a; Horrocks et al., 2003), the current data support that it may be part of a larger problem that may end with an individual attempting suicide.

## Limitations

As with most studies done in this manner, the fact that the measures are self-reported produces some inaccuracies and bias in the data. The fact that self-injury tends to be an emotionally loaded topic may have prompted some participants to deny self-injury. This is evident in that while some participants denied being self-injurers they later went on to endorse self-injurious behaviors. The stigma against self-injury was further evidenced by some

participants feeling they had to write on the sides of the instrument that they did not self-injure and were not content with simply marking no on the self-injury question.

The small number of admitted self-injurers in the participant pool is another limitation. While the overall number of participants was fair the number of admitted self-injurers remained low. However, a large portion of the sample went on to endorse self-injurious behaviors though they did not label themselves as self-injurers. While the majority of college students sampled are in the ideal age range for a study of self-injury, they may not be representative of the general public.

#### Practical Implications

The development and use of an empirically validated measure for self-injury will benefit researchers as development of the SISR is one small step towards unifying the study of self-injury. With such an instrument researchers may be able to better define what makes a person engage in self-injurious behaviors. In clinical use, the SISR can help to break the barriers of stigma and fear against self-injury. Clients may not bring up the subject of self-injury on their own due to a fear of being ridiculed or labeled. The measure may help ease the clients into talking about such behaviors and ease some of the fear, especially if clients perceive themselves as being strange or odd for engaging in such behaviors. A measure may help to reassure them that they are not the only ones engaging in such a behavior. The measure may also help the clinician discover the underlying motives behind the self-injury. Further research may find that certain aspects of self-injury are more often endorsed depending on the motivation behind the behavior. In accord, it may also allow for the discovery of different treatment options based on the underlying cause or causes of the self-injurious behavior.

## Future Research

A more thorough examination of the SISR is needed to fully validate and explore the measure. The lack of other such measures makes determining concurrent validity hard. While the measure had overall good correlations with the MCMI-III, the latter was not developed to measure self-injury. Test-retest reliability also needs to be assessed. Assuming the validity and reliability of the measure will be more conclusively determined, future research could then focus on what, if any, differences exist in self-injurious behaviors when associated with different diagnoses within clinical populations. Additional populations also need to be addressed, especially, children and adolescents because the behavior tends to start during this period of development.

While discussion of self-injury has become more prevalent, it still remains a serious problem that deserves our attention and serious study. The misunderstandings and erroneous assumptions in the past have helped to keep this behavior a taboo subject in modern times. While past research has made great strides in understanding the behavior, there still remains a great deal that we don't understand. By continuing to study self-injurious behavior and working toward a unifying the construct, effective treatments may be developed that will allow us to better deal with self-injurious behaviors.

### REFERENCES

- American Psychiatric Association (APA). (2000). *Diagnostic and statistical manual of mental disorders-IV- Text revision*. (4<sup>th</sup> ed.). Washington, DC: American Psychiatric Association.
- Boudewyn, A. C., & Liem, J. H. (1995). Childhood sexual abuse as a precursor to depression and self-destructive behavior in adulthood. *Journal of Traumatic Stress*, *8*, 445-459.
- Clarke, L., & Whittaker, M. (1998). Self-mutilation: Culture, contexts and nursing responses. *Journal of Clinical Nursing*, *7*, 129-137.
- Connors, R. (1996). Self-injury in trauma survivors: 1. Functions and meanings. *American Journal of Orthopsychiatry, 66*, 197-206.
- Dubo, E. D., Zanarini, M. C., Lewis, R. E., & Williams, A. A. (1997). Childhood antecedents of self-destructiveness in borderline personality disorder. *Canadian Journal of Psychiatry*, 42, 63-68.
- Evans, J., Platts, H., & Liebenau, A. (1996). Impulsiveness and deliberate self-harm: A comparison of 'first-timers' and 'repeaters'. *Acta Psychiatrica Scandinavica*, *93*, 378-380.
- Favazza, A. R. (1989). Normal and deviant self-mutilation. *Trancultural Psychiatric Research Review: Vol. 26. Abstracts and Reviews*, 26, 113-127.
- Favazza, A. R. (1998a). Self-mutilation. In *The Harvard Medical School guide to suicide* assessment and intervention (1st ed., pp. 125-145).San Francisco: Wiley, John & Sons.
- Favazza, A. R. (1998b). The coming age of self-mutilation. The Journal of Nervous and Mental Disease, 186, 259-268.
- Favazza, A. R., & Conterio, K. (1989). Female habitual self-mutilators. Acta Psychiatrica Scandinavica, 79, 283-289.
- Favazza, A. R., & Rosenthal, R. J. (1993). Diagnostic issues in self-mutilation. Hospital and Community Psychiatry, 44, 134-139.

- Favazza, A. R., DeRosear, L., & Conterio, K. (1989). Self-mutilation and eating disorders. Suicide and Life-Threatening Behavior, 19, 352-401.
- Feldman, M. D. (1988). The challenge of self-mutilation: A review. *Comprehensive Psychiatry*, 29, 252-269.
- Gratz, K. L. (2001). Measurement of deliberate self-harm: Preliminary data on the deliberate self-harm inventory. *Journal of Psychopathology and Behavior Assessment*, *4*, 253-263.
- Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice, 10*, 192-205.
- Green, A. H. (1978). Self-destructive behavior in battered children. *American Journal of Psychiatry*, 135, 579-582.
- Haines, J., & Williams, C. L. (2003). Coping and problem solving of self-mutilators. *Journal of Clinical Psychology*, 59, 1097-1106.
- Herpertz, S., Sass, H., & Favazza, A. (1997). Impulisivity in self-mutilative behavior:Psychometric and biological findings. *Journal Of Psychiatric Research*, 31, 451-465.
- Horrocks, J., Price, S., House, A., & Owens, D. (2003). Self-injury attendances in the accident and emergency department. *British Journal of Psychiatry*, *183*, 34-39.
- Ingram, E., & Ellis, J.B. (1995). Situational analysis of attitudes toward suicide behavior. *Death Studies*, *19*, 269-275.
- Kumar, G., Pepe, D., & Steer, R. A. (2004). Adolescent psychiatric inpatients' self-reported reasons for cutting themselves. *The Journal of Nervous and Mental Disease*, 192, 830-836.
- Leibenluft, E., Gardner, D. L., & Cowdry, R. W. (1987). The inner experience of the borderline self-mutilator. *Journal of Personality Disorders*, *1*, 317-324.
- Low, G., Jones, D., MacLeod, A., Power, M., & Duggan, C. (2000). Childhood trauma, dissociationand self-harming behaviour: A pilot study. *British Journal of Medical Psycholgoy*, 73, 269-278.

- Matsumoto, T., Yamaguchi, A., Chiba, Y., Asami, T., Iseki, E., & Hirayasu, Y. (2004). Patterns of self-cutting: A preliminary study on differences in clinical implications between wristand arm-cutting using a Japanese juvenile detention center sample. *Psychiatry and Clinical Neurosciences*, 58, 377-382.
- McAllister, M. (2003). Multiple meanings of self harm: A critical review. *International Journal of Mental Health Nursing, 12,* 177-185.
- Millon, T., Millon, C., Davis, R., & Grossman, S. (1997). *Manual for the MCMI-III* (3<sup>rd</sup> ed.). Minneapolis, MN: National Computer Systems.
- Moeller, F. G., & Dougherty, D. M. (2001). Antisocial personality disorder, alcohol, and aggression. *Alcohol Research & Health*, *25*(1), 5-11.
- Paivio, S. C., & McCulloch, C. R. (2004). Alexithymia as a mediator between childhood trauma and self-injurious behaviors. *Child Abuse & Neglect*, 28, 339-354.
- Pattison, E. M., & Kahan, J. (1983). The deliberate self-harm syndrome. American Journal of Psychiatry, 140, 867-872.
- Patton, J.H, Stanford, M.S., Barratt, E.S (1995). Factor structure of the Barratt Impulsiveness Scale. *Journal of Clinical Psychology 51*, 768-774.
- Rodham, K., Hawton, K., & Evans, E. (2004). Reasons for deliberate self-harm: Comparison of self-poisoners and self-cutters in a community sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 80-88.
- Ross, S., & Heath, N. (2002). A study of the frequency of self-mutilation in a community sample of adolescents. *Journal of Youth and Adolescents, 31*(1), 67-77.
- Sampson, E., Mukherjee, S., Ukoumunne, O. C., Mullan, N., & Bullock, T. (2004). History of deliberate self-harm and its association with mood fluctuation. *Journal of Affective Disorders, 79,* 223-227.
- Schwartz, R. H., Cohen, P., Hoffman, N. H., Hoffman, N. G., & Meeks, J. E. (1989). Self-harm behaviors (carving) in female adolescent drug abusers. *Clinical Pediatrics*, 28, 340-346.

- Shapiro, S. (1987). Self-mutilation and self-blame in incest victims. *American Journal of Psychotherapy*, *41*(1), 46-54.
- Simeon, D., & Favazza, A. R. (2001). Self-injurious behaviors: Phenomenology and assessment. In *Clinical Practice: Vol. . Self-Injurious Behaviors: Assessment and Treatment* (1st ed., pp. 1-28). Washington, DC: American Psychiatric Publishing.
- Stanley, B., Winchel, R., Molcho, A., Simeon, D., & Stanley, M. (1992). Suicide and the selfharm continuum: Phenomenological and biochemical evidence. *International Review of Psychiatry*, 4, 149-155.
- Suyemoto, K. L. (1998). The functions of self-mutilation. *Clinical Psychology Review*, 18, 551-554.
- Suyemoto, K. L., & MacDonald, M. L. (1995). Self-cutting in female adolescents. *Psychotherapy*, 32, 162-171.
- Tantam, D., & Whittaker, J. (1992). Personality disorder and self-wounding. British Journal of Psychiatry, 161, 451-464.
- Walsh, B. W., & Rosen, P. M. (1988). Self-Mutilation: Theory, research, and treatment. New York: Guilford Press.
- White Kress, V. E. (2003). Self-injurious behaviors: Assessment and diagnosis. *Journal of Counseling and Development*, *81*, 490-499.
- Wiederman, M. W., Sansone, R. A., Sansone, L. A. (1999). Bodily self-harm and its relationship to childhood abuse among women in a primary care setting. *Violence Against Women*, 5, 155-163.
- Yates, T. M. (2004). The developmental psychopathology of self-injurious behavior:
   Compensatory regulation in posttraumatic adaptation. *Clinical Psychology Review, 24,* 35-74.
- Zlotnick, C. M., Shea, T., Pearlstein, T., Simpson, E., Costello, E., & Begin, A. (1996). The relationship between dissociative symptoms, alexithymia, impulsivity, sexual abuse, and self-mutilation. *Comprehensive Psychiatry*, 37, 12-16.

- Zlotnick, C., Mattia, J. I., & Zimmerman, M. (1999). Clinical correlates of self-mutilation in a sample of general psychiatric patients. *The Journal of Nervous and Mental Disease*, 187, 296-301.
- Zweig-Frank, H., Paris, J., & Guzder, J. (1994). Psychological risk factors for dissociation and self-mutilation in female patients with borderline personality disorder. *Canadian Journal* of Psychiatry, 39, 259-263.

## **APPENDICES**

## Appendix A: Demographic Questionnaire

1. Are all of your parental figures living?

1 Yes 2 No

2. If not, which parent figure(s) is/are deceased?

Please write in:	
r lease write III.	

3. If one or both of your parent figures are deceased, at what age(s) were you when this occurred?

Please write in:

4. If either of your parent figure(s) are deceased, was their death unexpected or sudden?

1 No 2 Yes

5. Are your parental figure(s) separated or divorced (or no longer living together if never married)?

1 No 2 Yes

6. If your parent figure(s) are separated or divorced, at what age did this occur?

Please write in:

7. Was the separation/divorce amicable?

A. Completely	B. Fairly	C. Moderately	D. Not very	E. Not at all
---------------	-----------	---------------	-------------	---------------

8. How involved is/was the most prominent female parent figure(s) in your life?

A. Completely B. Fairly C. Moderately D. Not very E. Not at all

9. How involved is/was the most prominent male parent figure(s) in your life?

A. Completely B. Fairly C. Moderately D. Not very E. Not at all

10. Is either parent figure currently remarried?

1 Yes 2 No

11. If your most prominent female parent is currently remarried, is the relationship between you and your step-parent amicable?									
A. Complete	ly B. Fairly	C. Moderately	D. No	ot very	E. Not at all				
12. If your most prominent male parent is currently remarried, is the relationship between you and your step-parent amicable?									
A. Complete	ely B. Fairly	C. Moderatel	y D. N	ot very	E. Not at all				
13. Would you have	13. Would you have been considered as being a sick/ill child?								
A. Never 14. How many time	B. Rarely s were you hos	C. Sometimes pitalized as a ch	D. Ot	ften	E. Always				
A. 0-3	B. 4-7	C. 8-11	D. 12-15	E. 16	or more				
15. How many times did you have surgery as a child?									
A. 0-3	B. 4-7	C. 8-11	D. 12-15	E. 16	or more				
16. How often did y	ou visit the doo	ctor as a child?							
A. 0-3	B. 4-7	C. 8-11	D. 12-15	E. 16	or more				
17. How often did y	ou take medici	ne as a child?							
A. 0-3	B. 4-7	C. 8-11	D. 12-15	E. 16	or more				
18. As a child or tee	enager, how mu	ich were you phy	vsically abused	d?					
A. Never	B. Rarely	C. Sometimes	D. Ot	ften	E. Always				
19. If you were even	r physically abu	used as a child of	r teenager, wa	s the abu	ser a family member?				
1 Nc	2 Ye	S							
<ul> <li>20. If you were ever physically abused as a child or teenager, how long did the physical abuse go on?</li> <li>Only one time</li> </ul>									
	an 6 months								

\_\_\_\_ Between 6 months and 1 year

\_\_\_\_ Between 1 year and 2 years

\_\_\_\_ Between 2 years and 5 years

\_\_\_\_ Between 5 years and 10 years

\_\_\_\_ More than 10 years

21. As a child or teenager how much were you emotionally abused?

A. Never B. Rarely C. Sometimes D. Often E. Always

22. If you were ever emotionally abused as a child or teenager, was the abuser a family member?

1 Yes 2 No

- 23. If you were ever emotionally abused as a child or teenager, how long did the emotional abuse go on?
  - \_\_\_\_ Only one time
  - Less than 6 months
  - \_\_\_\_ Between 6 months and 1 year
  - \_\_\_\_ Between 1 year and 2 years
  - \_\_\_\_ Between 2 years and 5 years
  - \_\_\_\_ Between 5 years and 10 years
  - \_\_\_\_ More than 10 years

24. As a child or teenager, how much were you sexually abused?

A. Never B. Rarely C. Sometimes D. Often E. Always

25. If you were ever sexually abused as a child or teenager, was the abuser a family member?

1 Yes 2 No

- 26. If you were ever sexually abused as a child or teenager, how long did the sexual abuse go on for?
  - \_\_\_\_ Only one time
  - \_\_\_\_ Less than 6 months
  - \_\_\_\_ Between 6 months and 1 year
  - \_\_\_\_ Between 1 year and 2 years
  - \_\_\_\_\_Between 2 years and 5 years
  - \_\_\_\_ Between 5 years and 10 years
  - \_\_\_\_ More than 10 years

27. How many tattoos do you have?

Please write in number: \_\_\_\_\_

28. Are any of your	tattoos easily visible?	

	A. None	B. A Few	C. Most	D. Almost All	E. All				
29. V	Vere most or all	of your tattoos	s done professio	onally?					
	A. None	B. A Few	C. Most	D. Almost All	E. All				
30. H	Iow many pierc	ings do you ha	ve?						
	Please write	in number:							
	31. Are any of your piercings easily visible? (do not include a single, double, or triple ear piercing on one or both ears)								
	A. None	B. A Few	C. Most	D. Almost All	E. All				
32. Were most or all of your piercings done professionally?									
	A. None	B. A Few	C. Most	D. Almost All	E. All				
33. E	33. Do you consider your piercings and/or tattoos to be decorative?								
	A. None	B. A Few	C. Most	D. Almost All	E. All				
34. E	Oo you consider	your piercings	and/or tattoos	to have special meaning	g(s) to you?				
	A. None	B. A Few	C. Most	D. Almost All	E. All				
35. H	Iow many times	s have you done	e suspension (b	eing held in the air by y	your skin)?				
	Please write	in							
36. E	Besides tattoos a	and piercings, w	vhat body modi	fications have you had	done?				
	Body im Sub-derr Skin Pee	nal Implants ling Punching g	pecs, buttocks)						

37. I	Other (pl	Splitting not tattoo) emoval ncement nt makeup ion jections constructive su lease write in):	rgery tion has an addictive		
	-	-	C. Moderately		E. Completely
		n:	ger you to self-injure		songs etc.)
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always
40. I	Had you ever see	en or heard of s	elf-injury before this	survey?	
	1 Yes	2 No			
	f you have seen/ nedia?	heard of self-in	njury before this surv	vey, had you see	en it in the
	1 Yes	2 No			
42. I	Had you ever per	rsonally known	someone who self-i	njured?	
	1 Yes	2 No			
	f you have perso who were they?	onally known s	omeone other than yo	ourself who has	self-injured,
	Friends Family Significa				

situa act a appro	<b>ctions:</b> People differ in the ways they act and think in different tions. This is a test to measure some of the ways in which you nd think. Read each statement and place a check in the opriate box on the right side of the page. Do not spend too h time on any statement. Answer quickly and honestly.	Rarely/Never	Occasionally	Often	Almost always/ Always
1.	I plan tasks carefully				
2.	I do things without thinking				
3.	I am happy-go-lucky				
4.	I have "racing" thoughts				
5.	I plan trips well ahead of time				
6.	I am self-controlled				
7.	I concentrate easily				
8.	I save regularly				
9.	I find it hard to sit still for long periods of time				
10.	I am a careful thinker				
11.	I plan for job security				
12.	I say things without thinking				
13.	I like to think about complex problems				
14.	I change jobs				
15.	I act "on impulse"				
16.	I get easily bored when solving thought problems				
17.	I have regular medical/dental checkups				
18.	I act on the spur of the moment				
19.	I am a steady thinker				
20.	I change where I live				
21.	I buy things on impulse				
22.	I finish what I start				
23.	I walk and move fast				
24.	I solve problems by trial-and-error				
25.	I spend or charge more than I earn				

26.	I talk fast		
27.	I have outside thoughts when thinking		
28.	I am more interested in the present than the future		
29.	I am restless at lectures or talks		
30.	I plan for the future		

# Appendix C: Suicide Questionnaire

PLEASE ANSWER ONE OF THE FOLLOWING AS IT APPLIES TO
YOU: (YOUR ANSWERS ARE CONFIDENTIAL
AND ANONYMOUS. PLEASE ANSWER HONESTLY)

1. I have attempted suicide (to kill myself) in the past. If so how did you try to commit suicide?

What kept you from succeeding?

Is suicide still an option for you now?

How many times have you attempted suicide?\_\_\_\_\_

2. I have seriously considered committing suicide in the past OR I have thoughts of

harming myself that don't seem to go away OR

I have made a plan to commit suicide in the past, but never followed

Through with it.

\_\_\_\_\_ 3. Thought of committing suicide has crossed my Mind, but I have never seriously considered or made a plan in the past.

4. I have never thought about committing suicide.

## Appendix D: Self-Injury Self Report (SISR)

Please answer all questions as they apply to you. If some questions do not apply to you then mark never.

The definition of self-injury we are using here is a purposeful, direct injury to the body, however slight or severe, with NO suicidal intentions. If you do NOT currently self-injure, but have in the past, please answer the items as they applied to you when you did self-injure.

Age (write in # years old): \_\_\_\_\_

Sex: \_\_\_\_ Female \_\_\_\_ Male

Sexual Preference: \_\_\_\_\_Heterosexual \_\_\_\_\_Homosexual \_\_\_\_\_Bisexual

Racial/Ethnic/Cultural Identity (If Bi-racial or Multi-racial, Check All That Apply):

African American/Black	European American/White
American Indian	Hispanic American
Asian American	Citizen of a Foreign Country
Other (please write in):	

Who do you consider to be the most significant parent figures in your life?

Please check all that apply:	
Biological Mother	Grandmother
Biological Father	Grandfather
Adoptive Mother	Foster Mother
Adoptive Father	Foster Father
Step-Mother	Sister
Step-Father	Brother
Mother's Significant Other	Aunt
Father's Significant Other	Uncle
Other(s) (Please List)	

18. What coping techniques do you use for physical pain?

Please check all that apply:

- 19. Have you EVER self-injured (purposely injured your body, however slight or severe, with NO suicidal intentions)?

\_\_\_\_Yes \_\_\_\_No

20. Have you ever used the same instrument to self-injure more than once?

Yes No

21. What type of instrument do you usually use to self-injure?

Please check all that apply:

Glass	Cigarette	Matches/Lighter	Metal (nail, paperclip)
Razor	Knife	Hands/Fingernails	Pencil/Pen
Other(s) (Please List)			

22. At what age did you start to self-injure?

Please write in number: \_\_\_\_\_

- 23. About how many times in the past month have you self-injured? Please write in number:
- 24. If you currently do NOT self-injure about how often did you self injure in a typical month when you did self-injure?

Please write in number: \_\_\_\_\_

25. On average, after self-injuring, how long does your desired effect last before you felt the urge to self-injure again?

Please write in number of days and/or hours and/or minutes: Days and/or Hours and/or Minutes

- 26. On average, how many times do you self-injure before your desired effect takes place? Please write in number:
- 27. How long do you spend self-injuring at a time?
  - Please write in number of hours and/or minutes:
  - \_\_\_Hours and/or \_\_\_\_Minutes
- 28. Where on your body have you MOST OFTEN self-injured?

Please check all that apply:	
Face	Chest
Upper Arms (Above the elbow)	Stomach
Lower Arms (elbow to wrist)	Thighs/upper legs
Wrists	Lower legs
Hands	Feet
Other(s) (Please List)	

29. In what area(s) have you EVER self-injured?

Please check all that apply:

Face	Chest
Upper Arms (Above the elbow)	Stomach
Lower Arms (elbow to wrist)	Thighs/upper legs
Wrists	Lower legs
Hands	Feet
Other(s) (Please List)	

30. What is the effect you are trying to achieve by self-injuring? Please check all that apply:

- To create a change in emotion/feeling
- To get relief from fluctuating emotions
- To create feelings of euphoria
- To prove to yourself you could take pain
- To punish someone else for something
- \_\_\_\_\_ To get your way or manipulate someone
- \_\_\_\_\_ To fit in or comply with a social group
- \_\_\_\_ To create a significant/symbolic mark on yourself
- \_\_\_\_\_ To combat feelings of unreality and or emptiness
- \_\_\_\_\_ To get relief from mounting tension or anxiety
- \_\_\_\_\_ To get relief from racing thoughts
- Other(s) (Please List)

- \_\_\_\_ To numb emotional pain
- \_\_\_\_ To release anger
- \_\_\_\_ To get relief from depression
- To draw attention to yourself
- \_\_\_\_ To punish yourself for something
- \_\_\_\_ To create a feeling of uniqueness
- \_\_\_\_ To enhance sexual feelings
- \_\_\_\_ To provide a sense of security
- \_\_\_\_ To provide a sense of control
- \_\_\_\_ To decrease troublesome thoughts

31.	What is the most times that you have injured a specific body part? Please write in number:					
32.	What other things have you tried in place of self-injuring? Please write in:					
33.	About how many people know about your self-injuries (past or present)? Please write in number:					
34.	How many people do you know who have self-injured themselves? Please write in number:					
35.	If so, from whom do you hide self-injuries? EveryoneFamilyAcquaintancesFriends					
36.	Have you ever been treated for an eating disorder?					
37.	Do you feel that you might have (or have had) an eating disorder which has/was not been diagnosed? YesNo					
38.	B. Which eating disorder have you been diagnosed with or feel that you might have/had? Anorexia Both Anorexia and Bulimia					
39.	For how long have you had (or did you have) the eating disorder? Please write in number of years and/or months: Years and/orMonths					
40.	Did the eating disorder start before, after, or at the same time you started self-injuring?					
	A. Before B. At the same time C. After D. Does not apply					
41.	Do you find that periods of self-injury seem(ed) to coincide with increased preoccupation with food?					
	A. Never B. Rarely C. Sometimes D. Often E. Always					
42.	Does your urge for self-injury seem to cease when you are being preoccupied by food?					
	A. Never B. Rarely C. Sometimes D. Often E. Always					
43.	What substances have you used in relation to self-injury?         Please check all that apply:        Amphetamines (diet pills, speed)      Cocaine        Marijuana (pot, weed)      LSD        Opium (Heroin, Morpheine, Methadone)      Alcohol        Pills (oxycontin, vicodin, etc)      Mushrooms        MXB (or other designer drugs)      Cold Medicine        Methamphetamine (crystal meth, crank)      Hashish        Cother(s) (Please List)					
44.	At what point during a self injury episode do you typically use substances?					

A. Never B. Before C. During D. After

45. As time goes on do you find yourself self-injuring less, more, or about the same amount?	
A. Much Less B. Somewhat Less C. About The Same D. Somewhat More E. Much M.	ore
46. How long do you think about self-injury before you self-injure?	
A. Immediately B. Under 5 minutes C. Up to an hour D. Hours E. A day or more	э
47. If you have cried when you self-injure, at what point did you usually cry?	
A. Before B. During C. After D. Some of each A, B, &/or C E. Never	
48. How much pain do you feel during the act of self-injury?	
A. Extremely Intense B. Intense C. Moderate D. A little E. None	
49. How long does it take you to feel physical pain from the injuries?	
Please write in number of days and/or hours and/or minutes and/or seconds: Days and/orHours and/orMinutes and/or Seconds	
50. If you have had feelings of unreality when you self-injured, at what point did you usually have	
these feelings?	
Please check all that apply: Before During After Never	
51. If you have had feelings of being outside yourself when you self-injured, at what point did you	
usually have these feelings? Please check all that apply:	
Before During After Never	
52. Does the severity of self-injury vary within a single self-injury episode?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
53. If so, at what point during a single self-injury episode are injuries typically more severe?	
A. Very Beginning B. Toward the Beginning C. Middle D. Toward the End E. Very End	
54. Do you share your feelings with others?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
55. Do you have trouble asking others for help?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
56. Do you have a difficult time talking about your life problems?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
57. Do you have people that you can depend on for support?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
58. Do you seek professional help for your life problems?	
A. Never B. Rarely C. Sometimes D. Often E. Always	
59. Do you use self-injury as a way to communicate your feelings to others?	
59. Do you use self-injury as a way to communicate your feelings to others?A. NeverB. RarelyC. SometimesD. OftenE. Always	

60. Do you view self-injury wounds or scars as a statement to others?							
A. Never	r B. Rarely	C. Sometimes	D. Often	E. Always			
61. Do you feel you better communicate feelings by talking?							
A. Never	r B. Rarely	C. Sometimes	D. Often	E. Always			
62. Do you feel	62. Do you feel you better communicate feelings in ways other than talking?						
A. Never	r B. Rarely	C. Sometimes	D. Often	E. Always			
63. Do you feel j	pain can sometimes	be used as a form of per	rsonal expression?				
A. Never	r B. Rarely	C. Sometimes	D. Often	E. Always			
64. Do you find	yourself wanting to	talk with people but una	able to do so?				
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
65. Do you hide	your self-inflicted in	njuries?					
A. Alway	ys B. Often	C. Sometimes	D. Rarely	E. Never			
66. Do you inten	tionally show others	s self-inflicted injuries?					
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
67. Do you feel t	that you tolerate phy	sical pain better than ot	hers?				
A. Never	r B. Rarely	C. Sometimes	D. Often	E. Always			
68. Do you use p	prescription pain med	dication when you have	significant physic	al pain?			
A Marra	r B. Rarely	C. Sometimes	D. Often	E. Always			
A. Never	D. Rulely	C. Sometimes	D: Onen	L. Always			
	-	n medication when you		2			
	over-the-counter pair	n medication when you		2			
69. Do you use o A. Never	over-the-counter pair r B. Rarely	n medication when you	have significant pl D. Often	hysical pain? E. Always			
69. Do you use o A. Never	over-the-counter pair r B. Rarely in medication, do yo	n medication when you C. Sometimes	have significant pl D. Often	hysical pain? E. Always			
<ul><li>69. Do you use of A. Never</li><li>70. If you use pa A. Never</li></ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely	n medication when you C. Sometimes ou use more than the dir	have significant pl D. Often rections say you sh D. Often	hysical pain? E. Always would?			
<ul><li>69. Do you use of A. Never</li><li>70. If you use pa A. Never</li></ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely r experiencing pain a	n medication when you C. Sometimes ou use more than the dir C. Sometimes	have significant pl D. Often rections say you sh D. Often	hysical pain? E. Always would?			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely r experiencing pain a r B. Rarely	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo	have significant pl D. Often rections say you sh D. Often our existence? D. Often	hysical pain? E. Always ould? E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo C. Sometimes	have significant pl D. Often rections say you sh D. Often our existence? D. Often	hysical pain? E. Always ould? E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> <li>72. Do you hand A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett r B. Rarely	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo C. Sometimes er than emotional pain?	have significant pl D. Often rections say you sh D. Often our existence? D. Often D. Often	hysical pain? E. Always oould? E. Always E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> <li>72. Do you hand A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett r B. Rarely sperience pain do yo	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo C. Sometimes er than emotional pain? C. Sometimes	have significant pl D. Often rections say you sh D. Often our existence? D. Often D. Often	hysical pain? E. Always oould? E. Always E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> <li>72. Do you hand A. Never</li> <li>73. When you ex A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett r B. Rarely sperience pain do yo r B. Rarely	n medication when you C. Sometimes ou use more than the dir C. Sometimes as a way of affirming yo C. Sometimes er than emotional pain? C. Sometimes u become physically nu	have significant pl D. Often rections say you sh D. Often our existence? D. Often D. Often umb? D. Often	hysical pain? E. Always ould? E. Always E. Always E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> <li>72. Do you hand A. Never</li> <li>73. When you ex A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett r B. Rarely sperience pain do yo r B. Rarely that physical pain he	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo C. Sometimes er than emotional pain? C. Sometimes u become physically nu C. Sometimes	have significant pl D. Often rections say you sh D. Often our existence? D. Often D. Often umb? D. Often	hysical pain? E. Always ould? E. Always E. Always E. Always			
<ul> <li>69. Do you use of A. Never</li> <li>70. If you use pa A. Never</li> <li>71. Do you view A. Never</li> <li>72. Do you hand A. Never</li> <li>73. When you ex A. Never</li> <li>74. Do you find A. Never</li> </ul>	over-the-counter pair r B. Rarely in medication, do yo r B. Rarely experiencing pain a r B. Rarely lle physical pain bett r B. Rarely sperience pain do yo r B. Rarely that physical pain he r B. Rarely	n medication when you C. Sometimes ou use more than the dir C. Sometimes s a way of affirming yo C. Sometimes er than emotional pain? C. Sometimes u become physically nu C. Sometimes elps you deal with emot	have significant pl D. Often rections say you sh D. Often our existence? D. Often D. Often umb? D. Often ional pain?	hysical pain? E. Always ould? E. Always E. Always E. Always E. Always			

76. How often do you draw blood or cause blisters or bruises to form?					
A Never	B. Rarely	C. Sometimes	D. Often	E. Always	
77. How often do you seek medical treatment for injuries inflicted by self-injury?					
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
78. How often do yo	ou have an episod	le of self-injury requiri	ng stitches?		
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
79. How often do yo	ou have an episod	le of self-injury requiri	ng treatment for a	burn?	
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
80. How often do yo	ou have an episod	le of self-injury requiring	ng bandaging?		
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
81. How often do yo	ou have an episod	le of self-injury requiring	ng a brace or cast?		
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
82. How often do yo	ou have an episod	le of self-injury causing	g physical shock?		
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
83. Do you find you achieved?	rself continuing	with a self-injury episo	de even though yo	ur desired result was	
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
84. How often do yo	ou have an episod	le of self-injury causing	g you to pass out o	r go unconscious?	
84. How often do yo A. Never	ou have an episod B. Rarely	le of self-injury causing C. Sometimes	g you to pass out o D. Often	r go unconscious? E. Always	
A. Never	B. Rarely		D. Often	E. Always	
A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
A. Never 85. How often do yo A. Never	B. Rarely ou have an episod B. Rarely	C. Sometimes le of self-injury putting	D. Often you in a real dang D. Often	E. Always ger of dying? E. Always	
A. Never 85. How often do yo A. Never	B. Rarely ou have an episod B. Rarely	C. Sometimes le of self-injury putting C. Sometimes	D. Often you in a real dang D. Often	E. Always ger of dying? E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo	B. Rarely ou have an episod B. Rarely ou injure in a patt B. Rarely	C. Sometimes le of self-injury putting C. Sometimes eern? (example: lines, sl C. Sometimes	D. Often you in a real dang D. Often hapes, names, criss	E. Always ger of dying? E. Always scrosses)	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never	B. Rarely ou have an episod B. Rarely ou injure in a patt B. Rarely	C. Sometimes le of self-injury putting C. Sometimes eern? (example: lines, sl C. Sometimes	D. Often you in a real dang D. Often hapes, names, criss	E. Always ger of dying? E. Always scrosses)	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never	B. Rarely bu have an episod B. Rarely bu injure in a patt B. Rarely bu INTEND to in B. Rarely	C. Sometimes le of self-injury putting C. Sometimes eern? (example: lines, si C. Sometimes jure in a pattern?	D. Often you in a real dang D. Often hapes, names, criss D. Often D. Often	E. Always ger of dying? E. Always scrosses) E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never	B. Rarely bu have an episod B. Rarely bu injure in a patt B. Rarely bu INTEND to in B. Rarely	C. Sometimes le of self-injury putting C. Sometimes ern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes	D. Often you in a real dang D. Often hapes, names, criss D. Often D. Often	E. Always ger of dying? E. Always scrosses) E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never 88. Do you always u A. Never	B. Rarely bu have an episod B. Rarely bu injure in a path B. Rarely bu INTEND to in B. Rarely use the same type B. Rarely	C. Sometimes le of self-injury putting C. Sometimes ern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes e of self-injury instrume	D. Often D. Often D. Often D. Often hapes, names, criss D. Often D. Often D. Often D. Often	E. Always ger of dying? E. Always Scrosses) E. Always E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never 88. Do you always u A. Never	B. Rarely bu have an episod B. Rarely bu injure in a path B. Rarely bu INTEND to in B. Rarely use the same type B. Rarely	C. Sometimes le of self-injury putting C. Sometimes ern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes e of self-injury instrume C. Sometimes	D. Often D. Often D. Often D. Often hapes, names, criss D. Often D. Often D. Often D. Often	E. Always ger of dying? E. Always Scrosses) E. Always E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never 88. Do you always u A. Never 89. Do you reuse the A. Never	B. Rarely bu have an episod B. Rarely bu injure in a patt B. Rarely bu INTEND to in B. Rarely use the same type B. Rarely e same instrumen B. Rarely	C. Sometimes le of self-injury putting C. Sometimes ern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes c of self-injury instrume C. Sometimes t to self-injure more th	D. Often you in a real dang D. Often hapes, names, criss D. Often D. Often ent? D. Often an once? D. Often	E. Always ger of dying? E. Always E. Always E. Always E. Always E. Always E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never 88. Do you always u A. Never 89. Do you reuse the A. Never	B. Rarely bu have an episod B. Rarely bu injure in a patt B. Rarely bu INTEND to in B. Rarely use the same type B. Rarely e same instrumen B. Rarely	C. Sometimes le of self-injury putting C. Sometimes eern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes e of self-injury instrume C. Sometimes t to self-injure more th C. Sometimes	D. Often you in a real dang D. Often hapes, names, criss D. Often D. Often ent? D. Often an once? D. Often	E. Always ger of dying? E. Always E. Always E. Always E. Always E. Always E. Always	
A. Never 85. How often do yo A. Never 86. How often do yo A. Never 87. How often do yo A. Never 88. Do you always u A. Never 89. Do you reuse the A. Never 90. If your regular so A. Never	B. Rarely bu have an episod B. Rarely bu injure in a patt B. Rarely bu INTEND to in B. Rarely use the same type B. Rarely e same instrumen B. Rarely elf-injury instrun B. Rarely	C. Sometimes le of self-injury putting C. Sometimes ern? (example: lines, sl C. Sometimes jure in a pattern? C. Sometimes of self-injury instrume C. Sometimes t to self-injure more th C. Sometimes nent is unavailable do y	D. Often you in a real dang D. Often hapes, names, criss D. Often D. Often ent? D. Often an once? D. Often you wait until you of D. Often	E. Always ger of dying? E. Always Scrosses) E. Always E. Always E. Always E. Always E. Always E. Always	

92. Do you self-injure in the presence of others?						
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
93. Do you self-injure alone?						
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
94. Do	you share your	self-injury instru	uments with others?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
95. Do	you cleanse the	area of your bo	dy <u>BEFORE</u> you self-inj	ure?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
96. Do	you cleanse the	area of your bo	dy <u>AFTER</u> you self-inju	re?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
97. Do	you cleanse the	e self-injury instr	ument you use <u>BEFORE</u>	<u>E</u> you self-injure?	,	
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
98. Do	you cleanse the	e self-injury instr	ument you use <u>AFTER</u> y	you self-injure?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
99. Do	you keep or hic	le your self-inju	ry instrument in a specifi	c location?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
100.	Does everythin	ng have to be set	up a certain way before	you self-injure?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
101.	Do you like to	look at your hea	ling self-injury wounds	or scars?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
102.	Do you pick at	your healing sel	lf-injury wounds?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
103.	If you pick at y you self-injure	your healing selfed?	-injury wounds, is pickin	ng at them as sati	sfying as the first time	
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
104.	Do you like to	look at your self	f-injury scars?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
105.	Do you feel or	run your fingers	over your scars?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
106.	Are you able to	o resist the urge	to self-injure?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
107.	When you self	-injure do you fe	el that you have no choi	ce but to self-inju	ure?	
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	

108.	Do you choose to self-injure when you think you could have gone without doing so?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
109.	When you self-injure do you do it in a place it can be seen by others?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
110.	Do you ever t	feel that you use	self-injury to influence	someone else's l	behavior or feelings?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
111.	Whether or not you try to influence someone else's behavior or feelings with self-injury, do you think others believe that is what you are trying to do?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
112.	Has someone	threatened to se	elf-injure in order to get	you to stop self-i	njuring?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
113.	Do you use se	elf-injury as a m	eans to control a signific	cant relationship	?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
114.	Do you have A. Never	the urge to tell o B. Rarely	thers about hurting your C. Sometimes	rself? D. Often	E. Always			
115.	Do you injure	e yourself to attra	act attention from others	s?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
116.	Do you feel th	hat others cause	you to injure yourself?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
117.	Do you self-i	njure to develop	or improve a relationsh	ip with a person	you like or love?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
118.	When you self-injure do you do it in a place it can be seen by only someone who is intimate with you?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
119.	Do you use a drug or alcohol when you self-injure?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
120.	Do you use a	drug or alcohol	when you are not self-in	njuring?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
121.	Are you too d	lrunk or high to	know you are self-injuri	ing?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
122.	Are your self	-injuries more se	evere when using a drug	or alcohol?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
123.	Do you find y	ourself using su	ibstances to help you de	al with problems	?			

	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
124.	Do you feel y	ou need to use d	rugs or alcohol to be able	e to self-injure?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
125.	Do you use di	ugs or alcohol a	fter a bad day?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
126.	Do you ever self-injure when you are not under the influence?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
127.	Are you more	likely to self-inj	jure when under the influ	ence?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
128.	Do you identi	fy yourself as a	cutter, burner, or self-inju	urer?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
129.	Do you visit s	elf-injury websit	tes?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
130.	Do you post c	on self-injury me	ssage boards?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
131.	Do you ever f	eel your self-inju	ary scars are like badges	of honor?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
132.	If someone se	es the self-injury	do you make up an exc	use?				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
133.	Do you hide s	elf-injury marks	, wounds, or scars?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
134.	Do you feel th	nat you have con	trol over your self-injury	?				
		-	C. Sometimes		E. Always			
135.	5. After you complete an act of self-injury do you feel ashamed?							
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
136.		•	s about self-injury					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
137.		0 0	hen you injure yourself?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
138.			her people who self-inju					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			
139.	-		mal or should be conside	•				
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always			

140.						
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
141.	Do you self-in	jure to stand out	?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
142.	Do you cry wł	nen you self-inju	re?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
143.	Do you have f	eelings of unreal	ity when you self-injured	1?		
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
144.	Do you have f	eelings of being	outside of yourself when	you self-injured	!?	
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
145.	Do you self-in	jure and not rem	embered doing it?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
146.	Do you have f	eelings of emotion	onal numbness?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
147.	Do you feel "d	lisconnected" fro	om the world?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
148.	Does your life feel like a movie you are watching?					
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
149.	Does self-inju	ry bring on feelin	ngs of reality?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	
150.	Do you self-in	jure to bring on	feelings of unreality?			
	A. Never	B. Rarely	C. Sometimes	D. Often	E. Always	

### Appendix E: Instructions

Please read the following carefully as proceeding with this study past this point indicates that you have read and agree to the following. This is a study about experiences with, and perceptions of, various types of self-injury, and asks some potentially sensitive questions about potential abuse history. These questions are important to the study of self-injury. Your participation in this study is completely voluntary and you may discontinue at any time without penalty of any kind. While we hope you are able to answer all the items, you are free to decline to answer any items that make you uncomfortable. Your responses are anonymous and you will not be asked to identify yourself in any way other than to provide basic demographic data that would not lead to anyone being able to identify you personally. While the researchers have no reason to assume anyone taking this study would have any mental health concerns, it may be that a person reading the items in this study might wonder if their behavior or mental state might be cause for personal concern. If this is the case, it is strongly suggested that you make use of the free mental health services provided by the ETSU Counseling Center in the D.P. Culp Center, where you can receive a professional mental health evaluation and treatment if needed. The ETSU Counseling Center can be reached at 423-439-4841 or found on the Internet at

http://www.etsu.edu/students/counsel/counsel.htm or by typing in "counseing center" on ETSU's home page search function. For any emergency mental health situation, call 911 immediately. Proceeding from this point indicates that you have read the above and agree to its contents.

## VITA

## Sonia L. Coney

## Education:

- 2007 East Tennessee State University, Johnson City, TN MA in Clinical Psychology
- 2003 East Tennessee State University, Johnson City, TN BA Major: Psychology, Minor: Theater
- 2000 Northeast State Technical Community College, Blountville, TN Associate of Arts

Professional Experience:

- 2006 <u>Tester</u> (Project REEL, University of Tennessee, Knoxville, TN)
- 2005-2006 Practicum (Southwest Virginia Mental Health Institute, Marion, VA)
- 2005-2006 <u>Instructor</u>: Principles of Psychological Research Lab (East Tennessee State University)
- 2004-2006 Graduate Research Assistant (East Tennessee State University)

# Presentations:

- Coney, S., Martin, B., & Dula, C. (2007). Impacts of gender and knowledge on attitudes toward self-injury. Poster presented at the meeting of the Southeastern Psychological Association, New Orleans.
- Martin, B., Coney, S., Stage, D., & Dula, C. (2006). The effects of knowledge and Conservatism on the stigma of self-injury. Poster presented at the meeting of the Tennessee Psychological Association, Nashville, TN.
- Cantrell, P., Smith, R., & Coney, S. (2003). Physical violence in dating relationships: Gender effects. Poster presented at the meeting of the Southeastern Psychological Association, New Orleans.