DISSERTATION

SELF-HARM AMONG COLLEGE STUDENTS: AN EPIDEMIOLOGICAL AND QUALITATIVE ANALYSIS

Submitted by

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Summer 2002

In partial fulfillment of the requirements

For the Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

UMI Number: 3063996

UMI Microform 3063996

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OCTOBER 24, 2001

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY WENDY D. HOYT ENTITLED SELF-HARM AMOUND COLLEGE STUDENTS: AN EPIDEMIOLOGICAL AND QUALITATIVE ANALYSIS BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

SELF-HARM AMONG COLLEGE STUDENTS:

AN EPIDEMIOLOGICAL AND QUALITATIVE ANALYSIS

To date, research regarding cutting, its prevalence, etiology and comorbidity with other behaviors has been limited, particularly with respect to college student populations. In addition, existing research has failed to identify intervention strategies that are consistently effective in the treatment of cutting. Thus, two studies examining cutting were conducted in order to determine 1) the prevalence of cutting on a large college campus, 2) the comorbidity of cutting with disordered eating, substance use, depression and abuse/neglect, 3) utilization of campus treatment options, 4) phenomenological aspects, and 5) interviewees' perceptions of what interventions were most helpful in their recovery. These issues were addressed through a two-stage process consisting of an epidemiological study of a large college campus, and interviews with 9 college-aged students engaging in cutting. In the first stage, a total of 1941 of 4000 surveys mailed to randomly selected undergraduate students were returned. Results indicated that there was an overall prevalence rate of 11.6% for cutting, with 12.0% of female and 11.0% of male respondents reporting a history of cutting. Results also indicate that there is a higher prevalence of disordered eating, history of abuse, and depression in those with a history of cutting. Less than 5% of participants indicated having ever utilized campus treatment options. The second stage of the current study involved a grounded theory qualitative analysis of interviews with 7 females and 2 males. The proposed theory maintains that those who engage in cutting do so as a result of overwhelming, intolerable, difficult emotions. The act of cutting is followed by both positive and negative personal reactions,

which led participants to engage in both hiding their cutting from others and seeking help; consequences of these strategies had an effect on future cutting episodes. The epidemiological and qualitative studies together indicate that cutting, and its related behaviors, significantly affect at least 10-12% of the college student population, and that very few of these college students seek help. Thus, it is evident that greater awareness on the part of college campus communities, particularly those agencies designed to provide treatment to college students, is needed.

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ACKNOWLEDGMENTS

I would like to thank all of the students who volunteered to participate in these studies. The response was overwhelming and allowed me to provide information that may help to improve services on this campus. I want to acknowledge the nine men and women in particular who were willing to sit down and talk with me about their histories with cutting. Each was incredibly open and willing to talk about what is a very secretive behavior. I am honored by their willingness to share with me, and I hope the resulting theory and manuscript does justice to their experiences.

The list of individuals who provided significant support, advisement, expertise and, most importantly, laughter, is long. First I would like to thank my advisor, Scott Hamilton. His support has extended far beyond this project alone, and it is without a doubt that without him, I would not be where I am today. His never-ending support, patience, tolerance, caring, sense of humor and expertise has helped me every step of the way as I have pursued my degree. He is a gift to the psychology department, and has been a gift to me for the last few years. Thank you, Scott, for all that you have done.

I also would like to thank my committee members, Dr. Kathryn Rickard, Dr. Jennifer Anderson, and Dr. Russell Cropanzano for their support and willingness to back this project that surprised them when they first received the proposal. I know you all expected something related to eating disorders, and I appreciate your willingness to venture into this new area with me.

Thank you to Joanna Starek, who provided integral assistance and mentoring during the beginning stages of the qualitative study. You have an ability to make sense of

concepts related to this more obscure type of research that made the final project what it is. Without you, I would never have made it past line-by-line analysis!

I owe a huge debt of gratitude to all of the undergraduate students who assisted with this project: Mary Ann Williams, Stacey Huss, Melissa Albrecht, Mike Hoffman and Melissa Green. You all spent hours upon hours of your time assisting me and keeping this project on track. None of us knew the amount of time we would spend together mailing endless lists of surveys and transcribing long, in-depth interviews, but I know we all leave with some good memories of humorous conversations engaged in over mountains of envelopes—there will be moments of those weekends of endless envelope stuffing that none of us are likely to forget!

Mark, thank you for all of your support--you know the words do not exist. Pandi, thank you for staying by my side and supporting me as I have struggled through this project. Your sense of humor has been priceless, as has your devotion to our friendship. In addition to Mark and Pandi, I want to thank Amanda, Larry, Susan, and Sue for being by my side during the most difficult part of my life. I think it is clear that I would not have made it to this point without all of you. I also want to thank you, Ed, for starting this journey with me. Though we have not ended it together, it is without a doubt that your support carried me through many rough times.

Finally, I want to thank my family for continuing to support me as I have made my way through graduate school. Little did we know what we would go through as a family during this time, but we seem to have made it through. Without your willingness to help me as I have worked on this project, it never would have gotten done.

It is without a doubt that projects of this magnitude are not completed alone. Thus, the completion of this project is due to the work and support of all those named and unnamed, and I will not forget that. Without any one of you, there is no doubt in my mind that this project would still be lost in its beginning stages. I owe my success to all of you.

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CHAPTER ONE

INTRODUCTION

"Self-harm is about communication. It is like a scream without sound: painful, distraught, frightening and perplexing" (Collins, 1996, p. 463)

History of Self-Mutilation

Recognition of self-mutilation in the psychiatric and psychological literature has been steadily increasing in recent decades. Indeed, awareness of self-mutilation has followed a course similar to that of eating disorders. The incidence rates for both disorders have been increasing since the 1960's and 1970's (Farber, 1997; Favazza, 1998; Suyemoto, 1998; Walsh, 1987), but only recently has a greater emphasis been placed on identifying patients who engage in self-mutilation. While many individuals with eating disorders came forth as early as the 1970's, triggering a massive amount of research on anorexia nervosa, bulimia nervosa, and related disorders, only recently have individuals engaging in self-mutilation begun to "come out of the closet" (Farber, 1997; Favazza & Conterio, 1988). Favazza (1998) states, "just as anorexia nervosa and bulimia nervosa did several years ago, self-mutilation is making its way into public consciousness" (p. 259).

Accounts of self-mutilation can be traced back to Biblical times. The earliest reference to such behavior can be found in the New Testament Gospel of St. Mark, Chapter 5. This chapter refers to a man who "lived among the tombs, and who 'night and day, cried and cut himself with stones'" (Favazza & Simeon, 1995). The earliest

identified reference in the psychological literature, however, was made by Stroch in 1901. Stroch provided a brief report of a case of self-castration, but did not provide any hypotheses regarding etiology or treatment (Walsh, 1987). In addition, a number of case studies were published during the 19th and early 20th centuries, including one in which a female patient repeatedly slashed herself while living in an asylum. At final count, this patient had 94 pieces of glass, 34 splinters, 4 shoe nails, 1 pin, and 1 needle removed from her arm (Favazza & Simeon, 1995). This type of sensational case study was typical of the early information provided regarding self-mutilation. However, there were no attempts to integrate the information gleaned from these individual case studies, and it was not until the 1930's that researchers began to put forth explanations for this type of behavior.

The first attempt to classify self-mutilative behavior was made by Menninger in 1938 (Darche, 1990; Favazza & Conterio, 1989; Favazza & Simeon, 1995). Menninger made a significant contribution to the psychiatric literature by attempting to differentiate between self-mutilation and attempted suicide (Darche, 1990). Whereas self-mutilation had been previously conceptualized as simply a failed suicide attempt, Menninger classified self-mutilation as religious, neurotic, or psychotic (Favazza & Conterio, 1989), and viewed self-mutilative behaviors as an expression of sexual desire. To this day, a large amount of the data related to self-mutilation has been derived from psychoanalytically-oriented case studies, which has resulted in a limited understanding of the causes and treatments for these behaviors.

By the 1960's, literature regarding self-mutilation began to focus specifically on wrist cutting (Walsh, 1987). In 1967, Grunebaus and Klerman presented a typical profile

for an individual engaging in wrist slashing. According to these researchers, the typical "wrist slasher" is "generally young, attractive, intelligent, even talented, and on the surface socially adept...invariably, their early lives and family relationships have been unstable" (Walsh, 1987, pp. 10-11). Grunebaus and Klerman also reported the sequence of acts that lead up to wrist slashing: first, there is the threat of loss of a significant person. This is followed by increasing, intolerable tension that the patient is unable to verbalize. Finally, the individual feels an irresistible urge to cut, and then he/she enters a state of dissociation during the act of cutting. The authors also noted a distinct lack of pain sensation during the act. Further research was designed to determine whether or not wrist cutting was a distinct syndrome (Walsh, 1987). Although these studies had many methodological flaws, including the failure to differentiate between self-mutilating and suicidal patients, the results indicated that wrist cutting did not represent a distinct syndrome, and that the patient profile put forth by Grunebaus and Klerman was inaccurate (Walsh, 1987).

Although no further attempts were made to portray wrist slashing as a distinct syndrome, other researchers examined self-cutting behaviors. Pao (1969) identified two different types of cutting behaviors, which he classified as either coarse or delicate. He maintained that individuals engaging in coarse self-cutting made a single attempt that was usually life threatening, whereas individuals engaging in delicate self-mutilation typically made superficial cuts, and often repeated the act. In making this distinction, Pao improved upon previous studies by separating self-mutilation from suicidality. Pao reported that 7.7% of 413 new admissions to a psychiatric hospital during a ten-year period from 1957 to 1966 engaged in cutting. Overall, 6.5% (n=27) of the new inpatient

admissions engaged in delicate self-cutting. Only 1.2% of admissions during this same time period involved individuals engaged in coarse cutting. Of those engaged in delicate self-cutting, 85.2% were female, and each had one or more of the following comorbid symptoms: disordered eating, mild mood swings from depression to elation, suicidal rumination, dissociation, and ingestion of sharp objects or intoxicants.

On closer examination, Pao determined that many of the individuals engaged in delicate self-cutting suffered from a lack of maternal handling during infancy, and had experienced frequent changes in the quality and quantity of maternal care. In addition, these patients tended to be inept, isolated and alienated in social settings. They often offered a superficial level of friendship through clowning. Pao's patients reported dissociation during the act of cutting, and typically felt "pleased" after cutting. Pao postulated that this positive feeling might be due to their ability to deny or repress the conflicts that set the stage for cutting. Pao also recognized a lack of pain sensation during cutting, which reinforced his belief that cutting occurred during a "state of altered ego functioning...comparable to fugue" (p. 198). Graff and Mallin (1967) reported similar characteristics in "wrist cutters," who they typified as "an attractive, intelligent, unmarried young woman, who is either promiscuous or overtly afraid of sex, easily addicted and unable to relate to others...She slashes her wrists indiscriminately and repeatedly at the slightest provocation, but she does not commit suicide. She feels relief with the commission of her act" (p. 38).

Research continued to examine self-cutting through the 1970's and early 1980's. Rosenthal, Rinzler, Walsh, and Klausner (1972) described 24 inpatients with a history of self-mutilation. These authors found that 95.8% of these patients cut their wrists, but

more than half cut on multiple locations. In addition, more than half of these patients engaged in other forms of self-mutilation (i.e., self-burning, interfering with wound healing, bone-breaking, etc.). A razor was most frequently used to inflict the wound, but broken bottles, safety pins, plastic knives and phonographic records were also used. When cutting, the patients were most frequently reacting to separation or rejection, and many described a feeling of numbness. They also reported anger, self-hatred and fear. Of the 24 patients, 23 (95.8%) listed their primary symptom as depression, 16 (66.7%) complained of chronic feelings of emptiness, and 15 (62.5%) reported eating problems. In addition to eating problems, almost half had irregular menstrual cycles and frequent amenorrhea, both of which are signs of malnutrition or decreased caloric intake. Almost half of the patients used drugs and alcohol to excess and 96% cut themselves while in a depersonalized state. All of those who cut while in this state used cutting to end the sense of depersonalization.

Also during the 1970's, an English researcher, Morgan, reported cases of "non-fatal deliberate self-harm" (Favazza, 1998). Morgan recognized that suicide was not intended, but he included in this classification self-mutilation, drug overdoses and suicidal gestures. This type of conceptual error was common in early studies; cutting was often tied to suicide attempts, only those who cut their wrists were used, or several types of self-mutilation were collapsed together (Favazza, 1998). Thus, no consistent results could be gleaned from these studies characterized by diagnostic and categorical confusion.

The beginning of modern psychiatric interest in self-mutilation is marked by a study conducted by Pattison and Kahan in 1983. These researchers developed a prototype

for what they termed the "deliberate self-harm syndrome," which included self-mutilation, but not suicide attempts or drug overdoses. They maintained that individuals with the deliberate self-harm syndrome would perform painful, destructive and injurious acts upon their own bodies, apparently without conscious and willful intent. These individuals had no apparent intent to kill themselves, and the behavior was typically brought on by an "impelling impulse with increasing tension" (Pattison & Kahan, 1983, p. 867). Similar to previous researchers, Pattison and Kahan noted a sense of psychic relief following the self-injury. According to the authors, the symptoms of the "deliberate self-harm syndrome" included: (a) a sudden and recurrent intrusive impulse to harm oneself without the perceived ability to resist, (b) a sense of existing in an intolerable situation which one can neither cope with nor control, (c) increasing anxiety, agitation and anger, (d) constriction of cognitive-perceptual process resulting in a narrowed perspective on one's situation and personal alternatives for action, (e) a sense of psychic relief after the act of self-harm, and (f) a depressive mood, although suicidal ideation is not typically present. Following a review of the literature related to self-harm, Pattison and Kahan revealed the following prototype of an individual with the "deliberate self-harm syndrome":

(a) onset in late adolescence;

(b) multiple episodes of self-harm;

(c) multiple types of self-harm behavior;

(d) low lethality;

(e) the behavior continuing over many years;

(f) four predominant psychology symptoms (despair, anxiety, anger, cognitive

constriction);

(g) predisposing factors of lack of social support, homosexuality (men), drug and alcohol abuse, and suicidal ideation (women); and

(h) associated depression and psychosis (p. 870).

In recent years, a physician from the University of Missouri, Dr. Armando Favazza, has published the majority of articles concerning self-mutilation. Favazza has built on previous research regarding classification of self-mutilation, and has developed the classification system most commonly used today. Although other researchers have proposed different names for the group of behaviors that make up self-mutilation, the majority of classification systems are almost identical to that proposed by Favazza.

Defining Self-Mutilation

According to Favazza, self-mutilation can be classified as major, stereotypical, or superficial/moderate. Major self-mutilation involves behaviors that result in significant, potentially lethal damage. Examples include eye enucleation and amputation of body parts. The genesis of these behaviors is often due to severe pathology and/or religious beliefs. Major self-mutilation is rare, and it is typically part of psychosis, intoxication, or transsexualism (Favazza, 1990; Favazza, 1998; Favazza & Rosenthal, 1993; Favazza & Simeon, 1995).

Stereotypical self-mutilative acts include head banging, eyeball pressing, and finger biting. The behaviors are often repetitive and/or rhythmic, and are fairly devoid of symbolism, thought content or affect. Stereotypical self-mutilation is most often seen in individuals with mental retardation, autism, psychosis, Lesch-Nyhan syndrome, Tourette's, and Prader-Willi syndrome (Favazza & Simeon, 1995).

Superficial/moderate self-mutilation includes acts that are of low lethality and result in relatively little tissue damage (Favazza, 1990; Favazza, 1998; Favazza & Rosenthal, 1993; Favazza & Simeon, 1995). Favazza and his colleagues identify three different subtypes of superficial/moderate self-mutilation. The compulsive subtype includes repetitive, ritualistic behaviors that occur many times daily. These behaviors are very similar to those observed in obsessive-compulsive disorder, and include acts such as hair pulling, nail biting, skin pricking, and skin scratching. The episodic subtype involves behaviors often associated with personality disorders, post-traumatic stress disorder, dissociative disorders, and eating disorders, including such specific symptoms as cutting, carving, skin burning, interference with wound healing, needle sticking, bone breaking, and self-punching. Finally, the repetitive subtype includes all the behaviors seen in the episodic subtype, but the individual also becomes preoccupied with self-harm. Individuals engaging in repetitive self-mutilation experience recurrent failures to resist impulses to harm themselves physically, but do not experience suicidal intent. These individuals often develop an identity as a "cutter" or "burner," and many experience significant psychological distress as a result of their inability to curb their self-mutilative behavior. Greater than half of these patients will attempt suicide, usually by overdose, as a result of demoralization resulting from their inability to control their self-mutilation (Favazza & Simeon, 1995).

Most authors now agree that pathological self-mutilation can be defined as "the deliberate, direct destruction or alteration of body tissue without suicidal intent" (Favazza, 1999). Self-mutilation of this type is seen as intentional, thus goal directed, usually non-fatal, and socially unacceptable (Briere & Gil, 1998). Various labels have

been coined to describe this behavior pattern, including repetitive self-mutilation (Favazza, 1992; Favazza, 1999), self-mutilative behavior (Walsh, 1987), self-injurious behavior (Griffin, Williams, Star, Altmeyer, & Mason, 1986; Herpertz, 1995), habitual self-mutilation (Favazza & Conterio, 1989), chronic self-mutilation (Favazza & Conterio, 1988), and non-suicidal physically self-damaging acts (Garrison, Addy, McKeown, Cuffe, Jackson, & Waller, 1993).

Currently, the most studied type of superficial/moderate self-mutilation is trichotillomania. This disorder is listed as one of the "impulse-control disorders not otherwise specified" in the DSM-IV-TR (APA, 2000). Trichotillomania is characterized by recurrent pulling out of one's hair, an increasing sense of tension immediately before pulling out the hair, and pleasure or relief when pulling out the hair (APA, 2000). Although trichotillomania may be the most researched, the most common type of self-mutilation is actually skin cutting and/or burning (Favazza, 1998). Currently, there is no Axis I diagnosis specifically for cutting and burning; instead, these behaviors are typically understood to be symptoms of other Axis I disorders, or more often, as symptoms of an Axis II disorder. However, as research examining self-mutilation has increased, the majority of researchers agree that self-mutilation should be listed as a separate impulse control disorder (Favazza, 1998). In 1993, Favazza and Rosenthal proposed the following diagnostic criteria for repetitive self-mutilation:

(a) preoccupation with harming oneself physically

(b) recurrent failure to resist impulses to harm oneself physically, resulting in the destruction or alteration of body tissue

(c) increasing sense of tension immediately before the act of self-harm

(d) gratification or a sense of relief when committing the act of self-harm

(e) the act of self-harm is not associated with conscious suicidal intent and is not in response to a delusion, hallucination, a transsexual fixed idea, or serious mental retardation

Researchers agree that this type of mutilation most often occurs on the wrist, forearm, or legs, but that almost any body part has been a site for self-mutilation (Briere & Gil, 1998; Daldin, 1990; Favazza, 1992; Favazza, 1998; Herpertz, 1995). Favazza (1992), in a study examining 240 self-mutilative females, found that the most commonly affected body parts were arms (74%), legs (44%), abdomen (25%), head (23%), chest (18%), and genitals (8%). The scars that result from self-mutilation often cause physical disfigurement leading to further social isolation and rejection. Similar to individuals with anorexia nervosa, patients who engage in self-mutilation will often wear long, baggy clothing, and will avoid clothes that reveal skin due to the shame they experience (Favazza, 1999). Individuals suffering from repetitive self-mutilation will often engage in rituals such as tracing areas of their skin or compulsively placing their self-mutilation implements in a special order. They also will often experience withdrawal symptoms if they are restricted from engaging in self-mutilation (Favazza, 1999).

A number of researchers have continued to recognize the marked absence of pain reported by individuals who engage in self-mutilation. Researchers report that 50-67% of individuals who engage in self-mutilation do not experience normal pain sensations (DiBrino, 1998; Favazza, 1998; Herpertz, 1995). Other characteristics of repetitive self-mutilators include a tendency to use multiple methods (75%), high frequency of self-mutilative behaviors (50% have self-mutilated over 50 times), high impulsivity (78%

decide to self-mutilate at the spur of the moment), and an inability to resist the urge once it arises (81% almost always follow the urge) (Favazza & Conterio, 1989; Herpertz, 1995).

Estimated Prevalence

Differences in how self-mutilation has been defined and classified have made it difficult to determine the prevalence of these behaviors in the overall population and in specific groups of individuals. In addition, prevalence rates are difficult to determine due to the fact that self-mutilative acts typically occur in secrecy. Many individuals who engage in self-mutilation do so in privacy, and often mutilate body parts that can be easily hidden. If scars are visible, the individual can frequently explain them as accidental (Briere & Gil, 1998).

The studies that have examined prevalence rates of self-mutilation frequently tend to focus on adult patients in inpatient institutional settings (Walsh, 1987). Incidence rates for adult psychiatric patients have ranged from 4.3% to 19% (Briere & Gil, 1998; Darche, 1990; Lipschitz et al., 1999). In addition, up to 13.6% of adults institutionalized for mental retardation have been reported to engage in self-mutilation (Griffin, 1986). In a clinical sample of adult inpatients and outpatients, 21% reported that they had engaged in self-mutilative behavior within the past 6 months. Overall, 25% of outpatient adults and 19% of inpatient adults reported self-mutilation (Briere & Gil, 1998).

Studies examining self-mutilation in adolescents have also focused on inpatient or residential settings. As many as 40% of adolescent inpatients (Darche, 1990; Suyemoto & Macdonald, 1995) and 86% of adolescents in a residential school for delinquents reported self-mutilative behavior (Walsh, 1987). Of these adolescent inpatients, 60% reported

engaging in repetitive self-mutilation, 86% reported cutting, and 50% utilized multiple methods (DiBrino, 1998; Walsh, 1987).

When non-clinical populations have been surveyed, prevalence rates have varied widely. However, it has been consistently found that females are generally three times more likely to engage in self-mutilation than are males (Darche, 1990; Favazza, 1999). Favazza's first attempt at determining a prevalence rate resulted in an estimate of approximately 750/100,000 per year (Favazza & Conterio, 1988; Favazza & Conterio, 1989). This estimate was obtained by examining the prevalence of related disorders (e.g., post-traumatic stress disorder, borderline personality disorder, histrionic personality disorder, and eating disorders) and accounting for the presence of self-mutilation as a symptom in each of these disorders. In 1990, Favazza revised this estimate to be 400-700/100,000 per year, and in 1993, this estimate was again revised to be 400-1400/100,000 per year (Favazza & Rosenthal, 1993). Suyemoto & Macdonald (1995) provided a somewhat more cautious estimate of 14-750/100,000 per year.

Surveys specifically examining adolescents and young adults have resulted in somewhat higher estimates, indicating that these populations are likely to be at higher risk for engaging in self-mutilative behavior. However, the resulting prevalence rates remain widely variable. Suyemoto and Macdonald (1995) estimated the prevalence in adolescents and young adults to be approximately 1800/100,000 per year. However, in a 1992 survey of college students, Favazza found that 14% reported at least one episode of self-mutilation. A survey of therapists indicated that 47% have seen at least one adolescent who engaged in self-mutilation (Suyemoto, 1998).

Etiology

Theories concerning causal factors related to the development and maintenance of self-mutilation have emerged from many different theoretical orientations. Early theories were primarily psychoanalytic in nature and sexual drives were emphasized. As stated previously, Menninger was the first to propose a theory regarding the etiology of self-mutilation. He maintained that genital self-mutilation was the primary type, and that all other sites for mutilation were representative of genital self-mutilation. As would be expected, he believed that self-mutilation represented a desire to repress sexual desires or to repent for sexual misconduct (Favazza, 1999; Feldman, 1988; Suyemoto & Macdonald, 1995). Menninger also believed that self-mutilation was a type of "partial suicide" in that engaging in this behavior could assist the patient in averting total suicide (Favazza, 1989b; Suyemoto & Macdonald, 1995). Although some authors continue to promote sexual drive theories as etiological explanations for self-mutilation, more recent analytic theories have emphasized other underlying issues.

According to object-relations theory, self-mutilation, particularly cutting, is seen as an attempt to form or to differentiate ego boundaries. Patients often describe the sight of blood as allowing them to establish self-boundaries--where their bodies end and another person's begins (Favazza, 1989b; Suyemoto & Macdonald, 1995). Many individuals who engage in self-mutilation have a tendency to "take on the problems" of other individuals, which can result in an inability to establish and maintain ego boundaries and self/other differentiation. Object-relations theorists also argue that self-mutilation can serve the purpose of reducing or controlling angry feelings. In this model, patients are thought to experience a number of situations in which they feel anger toward

another individual or toward themselves, and therefore use self-mutilation as a means of indirectly or directly expressing this anger (Favazza, 1989b). Anger experiences are thought to be tied to abuse the patient experienced during childhood, and prohibitions against expressing anger directly toward the perpetrator. According to this theory, this leaves the individual with limited choices as to how to deal with the anger, so it is directed inward.

Behavioral and systemic models emphasize the role of the environment, including reinforcement and punishment contingencies related to self-mutilation. Cutting is viewed as being reinforced through external reactions (e.g., shock, sympathy, attention) resulting in secondary gains (Suyemoto & Macdonald, 1995; Suyemoto, 1998). In addition, self-mutilation is reinforced through an internal sense of relief immediately following the act (Suyemoto & Macdonald, 1995). In some social circles, a self-mutilator will be rewarded with attention, status, admiration or envy (Suyemoto, 1998). Indeed, self-mutilation has been repeatedly shown to have a "contagion effect" (Farber, 1997; Favazza, 1989b; Feldman, 1988; Fennig, Carlson, & Fennig, 1995; Rosen & Walsh, 1989). Typically, one or two high status "instigators" have been shown to trigger self-mutilative behaviors in adolescent peer groups (Feldman, 1988; Matthews, 1968; Rosen & Walsh, 1989; Walsh & Rosen, 1985). Rosen & Walsh (1989) have argued that self-mutilation can be thought of as a primitive form of communication. They maintain that acts of mutual self-cutting (e.g. multiple individuals engaging in cutting at the same time) have traditionally been intended to express anger or jealousy, and to demonstrate affection. This dynamic is similar to that seen in patients with anorexia nervosa, many of whom are admired for their ability to "restrain themselves." Also similar to eating

disorders, self-mutilation can be negatively reinforced through allowing the patient to avoid aversive stimuli, including dealing with difficult emotions (Brain, Haines, & Williams, 1998; Briere & Gil, 1998; Favazza, 1989b). However, this theory clearly does not account for all instances of self-mutilation, as many individuals who engage in this behavior are ostracized and shunned by others.

Systemic theorists maintain that self-mutilation can be seen as a symptom of family dysfunction. By designating the individual engaged in self-mutilation as the "identified patient," attention is detracted from systemic problems (Suyemoto & Macdonald, 1995). In addition, many times the child does not understand that he/she is being blamed for inadequacies in the parents, and thus will engage in intolerable self-blame leading to self-mutilation as a form of repenting (Allen, 1995; Darche, 1990; Favazza, 1999; Shapiro, 1987).

The theories that have received the most empirical support conceptualize self-mutilation as serving affect regulation and/or tension reduction functions (Suyemoto, 1998). The affect regulation model maintains that individuals engaging in self-mutilation are using it to express emotion and to communicate feelings of conflict both to themselves and to others (Allen, 1995; Briere & Gil, 1998; Collins, 1996; Daldin, 1990; Darche, 1990). For many patients, it is easier to "show" people their pain than to "tell" them about it (DiBrino, 1998). This behavior is sometimes perceived as "emotional blackmail," forcing others to provide a caring response (Favazza, 1989b; Feldman, 1988). However, self-mutilation is often not manipulative, but instead is a genuine cry for help (Allen, 1995; Feldman, 1988).

In addition, self-mutilation allows patients to feel as though they have control over their emotions. One self-mutilating patient stated, "I knew I would cut again...I loved the control cutting gave me over my body" (Strong, 1998, p. 24). Self-mutilating individuals typically struggle with a sense of being overwhelmed by emotion, and engaging in this physical behavior allows them to express and externalize emotions (DiBrino, 1998). In her 1999 book Skin Game, Kettlewell writes, in reference to the thoughts that would run through her mind prior to cutting, "You might be inclined to go for the razor, too, just to shut her up" (p. 131). Tension-reduction behaviors such as this "include external activities that distract, soothe, or otherwise draw attention away from internally experienced emotional distress, thereby indirectly reducing the impact and duration of these negative experiences" (Briere & Gil, 1998, p. 610).

Anger, anxiety and pain have been most frequently identified as the emotions self-mutilating individuals struggle to express (Allen, 1995; Suyemoto, 1998). As stated previously, if these individuals experienced some type of abuse, they were often given the clear message to repress their emotions, or possibly suffer further repercussions. Therefore, they have a tendency to internalize negative emotion (Haines & Williams, 1997; Suyemoto, 1998; Suyemoto & Macdonald, 1995). Indeed, many self-mutilators will express a sense of relief or relaxation following self-harm (Bennum, & Phil, 1983; Daldin, 1988). Self-mutilation also serves the purpose of terminating depersonalization that often occurs when they become overwhelmed with emotions. The shock of seeing blood reportedly returns many self-mutilators to reality (Favazza, 1989b; Favazza, 1999; Shapiro, 1987).

Linehan (1987) has presented what are considered to be the most empirically supported strategies related to understanding and treating self-mutilation--dialectical behavioral therapy. This cognitive-behavioral approach "views parasuicide [self-mutilation] as problem-solving behavior emitted to cope with or ameliorate psychic distress brought on by negative environmental events, self-generated dysfunctional behaviors, and individual temperamental characteristics" (Linehan, 1987, p. 328). Linehan maintains that three factors contribute to self-mutilative behavior becoming a problem-solving response. First, patients are thought to have low distress tolerance, which provides the patient with high motivation to do something about the problem. Second, the patient is thought to have inadequate functional coping resources including deficiencies in emotional regulation, interpersonal problem solving and self-management skills. Finally, patients tend to have what Linehan calls "parasuicidogenic expectancies," which include beliefs about the value and probable consequences of suicidal behavior. Linehan maintains that these three factors lead to beliefs that an "intolerable, inescapable life problem exists and that parasuicide is the only or the best possible solution" (Linehan, 1987, p. 328).

Although few researchers have attempted to study the understanding individuals engaging in self-mutilation have of their own behavior, those that have have found that many patients are unable to express reasons for their behavior (Brain, Haines, & Williams, 1998; Doran, 1985). Those individuals who do have insight into their behavior cite many of the same causal factors proposed by theorists. In a 1989 study, Favazza identified 12 factors patients believe to be important in causing their self-mutilative behavior. These reasons included tension release, returning to reality, establishing

control, developing a sense of security and uniqueness, influencing others, maintaining negative perceptions of themselves (i.e., believing they deserved it), pressure from multiple personalities, enhancing or reducing sexual feelings, creating a sense of euphoria, venting anger, and relieving a sense of alienation (Favazza, 1989b; Favazza, 1998).

Most patients recognize that self-mutilation is triggered by stressful situations (Favazza, 1999), and many identify tension-reduction as being the primary goal (Bennum & Phil, 1983; Brain, Haines, & Williams, 1998; Briere & Gil, 1998; Favazza, 1989b; Favazza, 1998; Herpertz, 1995; Walsh, 1987). In addition, physiological research has supported this claim. In a 1998 study, Brain, Haines and Williams found that for individuals currently practicing self-mutilation, tension reduction (e.g., decreased EKG, heart rate, respiration and skin conductance level) actually occurred when cutting was imagined. However, for individuals no longer engaging in cutting, imagining the actual act resulted in continued tension, but tension reduction occurred when imagining events immediately following self-mutilation. Other patients have reported that self-mutilation allows them to "control their mind when it is racing" (72%), "feel relaxed" (65%), "feel less depressed" (58%), "feel real again" (55%), and "feel less lonely" (47%) (Favazza, 1989b, p. 286). Only 13% express a desire to die (Walsh, 1987). However, up to 66% of these patients indicate that the relief provided by self-mutilation lasts only a few hours (Favazza, 1998). As one patient stated, "...in the long run, it doesn't alleviate the psychic pain, it just distracts from it" (Strong, 1998, p. 43). Clearly, cutting is a temporary fix.

Not only is the relief obtained from self-mutilation temporary, it is detrimental in that the majority of patients feel as though their self-mutilation is out of control (Briere &

Gil, 1998; Bennum & Phil, 1983), and 80% wish they could stop (Briere & Gil, 1998). The "addictive-like" nature of self-mutilation supports the idea that these behaviors serve multiple functions, and primarily assist the individual in affect regulation and tension reduction. In the words of one patient, "cutting substitutes the pain inside with a physical pain I can control, which is easier to handle. The pain is now real, tangible. It can be seen" (Strong, 1998, p. 43).

Factors Related to the Development of Self-Mutilation

Research has recently been focused on factors that seem to increase the risk for engaging in self-mutilation. A number of environmental factors have been identified as leading to an increased chance of developing this behavior. When early histories of individuals engaging in self-mutilation were reviewed, it became clear that many patients had similar backgrounds. Frequently, these individuals had a negative relationship with their mother, often characterized by maternal deprivation; many see their mothers as being cold and nagging (Favazza, 1990; Feldman, 1988; Graff & Mallin, 1967; Suyemoto, 1998; Suyemoto & Macdonald, 1995; Walsh, 1987). Nosphitz (1994) argues that when a child does not develop a close, empathic bond with the mother, a negative self-ideal develops. He goes on to claim that children that develop a negative self-ideal are more likely to feel as though they are bad or tainted, which can lead to a tendency for self-destructiveness. These children will often speak of "hurting inside" and feeling "soiled" or "awry." When one patient was asked by her therapist to envision the inside of her body, she stated, "...all I could envision was this void of darkness so empty that I felt like throwing up. I cried because I knew it would always be inside me—this empty sadness that would never go away, that could never be explained" (Strong, 1998, p. 25).

Growing up with the belief that he/she is "bad" will sometimes lead children to be unable to tolerate success. As Noshpitz (1994) states,

> Every positive experience, every encounter with pleasure, runs full tilt into the inner (usually unconscious) voice which tells them: 'You don't deserve this. This is not for the likes of you. You are fooling people, cheating people. You make them think that you are worthwhile, when you know you are not. Now do something to spoil what you have achieved, go ahead, do it' (p. 338).

He maintains that inflicting pain upon oneself leads to a sense of inner punishment, and the stronger the negative self-ideal, the more violently patients are likely to act towards themselves.

In a similar vein, children who experience these feelings often have poor ego boundaries. The have a tendency to blame themselves for problems in another person's life; and to "take on" other people's problems. Part of this dynamic is due to the belief that they are so bad that they can cause any misfortune and that they must atone for their wrongdoings, which for some will lead to engaging in self-mutilation (Noshpitz, 1994). Other researchers have supported this argument, finding that many times families of self-mutilators will have high enmeshment and weak boundaries (Senior, 1988).

It has also been found that a high number of individuals engaging in self-mutilation report a history of childhood abuse or neglect (Briere & Gil, 1998; Collins, 1996; Darche, 1990; Favazza, 1998; Favazza, 1999; Favazza & Conterio, 1989; Favazza & Rosenthal, 1993; Ghaziuddin, Tsai, Naylor, & Ghaziuddin, 1992; Lipschitz et al., 1999; Shapiro, 1987; Suyemoto & Macdonald, 1995; Walsh, 1987). Estimates of the prevalence of childhood sexual and physical abuse in those engaging in self-mutilation range from 50-75% (Collins, 1996; Favazza, 1998; Favazza & Conterio, 1989; Ghaziuddin et al., 1992; Shapiro, 1987). Experiencing sexual abuse often leads to higher

levels of anger, more sleep disturbances and higher degrees of body discomfort. In addition, it is likely to lead to higher levels of depression characterized by excessive guilt and shame. Raine (1998) writes, "[shame] results in the disruption of ongoing behavior, confusion in thought, and an inability to speak...The state of shame is so intense and has such a devastating effect that individuals presented with such a state must attempt to rid themselves of it" (p. 130-131). Many individuals will relieve this guilt and shame through an act of self-harm (Collins, 1996; Darche, 1990).

Self-mutilation can relieve feelings of guilt and allow individuals to express the overwhelming emotions they feel as a result of past abuse. Depending on the circumstances surrounding the abuse, the child may feel responsible, which increases the experience of self-hate and worthlessness. The child who is unable to talk about the abuse remains powerless and may feel that the only way to express him/herself is to direct the anger inward. Thus, self-mutilation may actually become a relatively effective coping mechanism (Shapiro, 1987).

Most research has focused on abuse and its connection to self-mutilation, while ignoring the effects of neglect. Although it has been recognized that parental deprivation is common in the histories of individuals engaging in self-mutilation, it has rarely been explored in any depth. In general, neglect is thought to be less harmful or detrimental because the consequences are not as overt or obvious. However, Strong (1998) states that even though neglect does not appear as bad as abuse, neglect can actually have stronger effects on development. Often parents mean well, but are too wrapped up in their own problems to recognize the needs of their children, so the children begin to shut down. In addition, parents push children to perfection in hopes of living out their own dreams

through their children. In a 1999 study, Lipschitz et al. built upon this idea and examined the role of both physical and emotional neglect in adolescent inpatients engaging in self-mutilation. They reported that both childhood sexual abuse and neglect were significantly associated with self-mutilation in these adolescents. In their sample, 31% of the adolescents reported experiencing neglect. The most harmful type of neglect was emotional neglect. Indeed, physical neglect was not found to be associated with self-mutilation whereas emotional neglect was highly correlated. In other words, a failure to provide adequate food, shelter and clothing does not appear to have as much impact as does the failure of caretakers to love, encourage, and support their children.

Another result of abuse and neglect is an inability to form close personal relationships with others. A large number of self-mutilators report inadequacies in relating to others, which results in a lack of social support and social isolation (Briere & Gil, 1998; DiBrino, 1998; Doran, 1985; Favazza, 1999; Garrison et al., 1993; Graff & Mallin, 1967). These individuals often indicate that they do not feel understood by anyone and see themselves as a burden to others (DiBrino, 1998; Favazza, 1989a; Favazza, 1999). Favazza and Conterio (1989) found that 67% of individuals engaging in self-mutilation felt misunderstood by everyone, and 75% saw themselves as a burden. Adolescents engaging in self-mutilation tend to be distrustful and skeptical of human relationships; they often have few friends and avoid dating situations (Walsh, 1987). Tantam (1992) proposed that self-mutilation might be: (a) a response to conflict in one relationship while others are satisfactory, or (b) a response to acute exacerbation of longer-standing and more pervasive problems in relationships.

Although it is unclear exactly what types of relationship problems are related to self-mutilation, it is clear that a fear of abandonment or interpersonal loss plays a significant role (DiBrino, 1998; Favazza & Rosenthal, 1993; Rosen, Walsh, & Rode, 1990; Suyemoto, 1998). For many individuals, real or perceived rejection is a common precipitant to self-mutilative behavior (Favazza & Rosenthal, 1993). Fifty-six percent of individuals engaging in self-mutilation report that rejection triggered their behavior (Herpertz, 1995). Rosen, Walsh, and Rode (1990) specifically examined the role of staff terminations in triggering self-mutilation in a residential facility. They determined that self-mutilation did, in fact, increase as the date of termination of staff approached. Interestingly, most of the mutilation occurred between the time that the termination was announced and the time that the staff actually left. This indicated that self-mutilation was most closely tied to anticipated loss.

Individuals who resort to self-mutilation are often unable to express themselves clearly, particularly when they are attempting to communicate emotions. They also have a tendency to not understand what others say to them (Favazza, 1999; Favazza & Rosenthal, 1993; Feldman, 1988; Rosen, Walsh, & Rode, 1990). Favazza and Conterio (1989) report that 73% of individuals engaging in self-mutilation report not being able to verbally express their feelings. These individuals tend to find it easier to communicate their pain through acts of self-harm.

Finally, a number of other factors have been shown to be related to the development of self-mutilation. Some of these include childhood illness or surgery, family history of alcoholism and violence, home instability, body alienation, perfectionistic tendencies, and dissatisfaction with body image (Briere & Gil, 1998;

Favazza, 1990; Favazza, 1999; Favazza & Rosenthal, 1993; Walsh, 1987). As will be discussed in the next section, many of these characteristics overlap with those found in individuals with other Axis I and Axis II disorders.

Related DSM-IV-TR Diagnoses

Unfortunately, self-mutilation is most often associated with borderline personality disorder, and many professionals believe that self-mutilation is simply a symptom of this disorder (Favazza, 1998; Feldman, 1988; Suyemoto & Macdonald, 1995). While it is true that self-harm is a symptom of borderline personality disorder, one does not imply the other. Mental health professionals often engage in circular reasoning related to these two disorders; if a patient self-mutilates, she has borderline personality disorder, and if she has borderline personality disorder, she self-mutilates. This type of circular reasoning has made it difficult to distinguish between these two syndromes and has led to erroneous assumptions about individuals engaging in self-mutilation and those with borderline personality disorders.

Favazza (1998) found that only 48% of non-hospitalized self-mutilators actually met the diagnostic criteria for borderline personality disorder. Therefore, another 52% were engaged in self-mutilation, but did not fulfill the other criteria necessary to receive a borderline personality disorder diagnosis. Herpertz (1995) found similar numbers when he examined inpatients. In his sample of self-mutilators, only 52% were diagnosable as having borderline personality disorder. In addition, this study showed that individuals with borderline personality disorder are actually more likely to attempt suicide. Many therapists will see a self-mutilating patient as borderline due to the "testing" (e.g.,

engaging in certain behaviors to determine whether or not the therapist will remain in the relationship) he/she may engage in. However, Strong (1998) maintains,

> It is perfectly reasonable for those who have been abused and neglected by the people they loved and trusted to have difficulty trusting a therapist, to doubt the depth of his or her care and concern, to expect to be abused and rejected if they reveal the horror of who they believe themselves to be (p. 163).

Other personality disorders also seem to be related to self-mutilation. Several studies have found that individuals with antisocial personality disorder, histrionic personality disorder and narcissistic personality disorder engage in self-mutilation (Favazza, 1989a; Favazza, 1989b; Feldman, 1988). However, Herpertz (1995) found that 22% of individuals engaging in self-mutilation do not meet diagnostic criteria for any personality disorder, and Ghazuiddin et al. (1992) found that 59% of self-mutilating adolescents did not receive a personality disorder diagnosis. Just as disordered eating or sleeping can be both a symptom of other disorders and its own distinct disorder, self-mutilation can be part of a personality disorder or a disorder by itself. Although many individuals who engage in self-mutilation appear to have personality disorders, the symptoms of the personality disorder will often dissipate when the self-mutilation stops (Favazza, 1990).

A significant amount of research has also recognized a connection between self-mutilation and dissociative identity disorder and/or post-traumatic stress disorder (Favazza, 1989a; Favazza, 1989b; Feldman, 1988; Suyemoto & Macdonald, 1995; Zlotnick et al., 1997). Common defense mechanisms found in trauma survivors include both dissociation and self-mutilation. Zlotnick et al. (1997) found that 19 of 48 (40%) trauma survivors exhibited high levels of dissociation and concomitant self-mutilation. Tantam and Whittaker (1992) and Favazza (1989b) both reported that 34% of individuals

with dissociative identity disorder engaged in self-mutilation. As stated previously, patients that dissociate during self-mutilation often report that the self-harm serves the purpose of ending the dissociative experience.

Both mood and anxiety disorders have been hypothesized to be linked to self-mutilation (DiBrino, 1998; Favazza, 1989a; Feldman, 1988; Suyemoto & Macdonald, 1995). Although it seems relatively clear that self-harm is closely tied to high levels of anxiety, the data regarding self-mutilation and mood disorders is less clear. Ghazuiddin et al. (1992) found that 66% of adolescent females engaging in self-mutilation received a major depressive disorder or dysthymia diagnosis and another 8.3% received an adjustment disorder diagnosis. Pattison and Kahan (1983) found that 45% of self-mutilators were depressed. Bennum and Phil (1983) compared self-mutilators and depressives on expression of hostility in order to determine if the two disorders were related. They expected that both groups would be similar in that they would be more depressed and have an equivalent tendency to express hostility intrapunitively. Their results supported these hypotheses--both groups had equally high levels of depression and self-focused hostility, and were significantly different from a normal control group. Additionally, Roumasset (1990) found that the majority of self-mutilators actually fall within the severely depressed range on the Beck Depression Inventory. They seem to be highly self-critical, evidenced by an extreme level of intrapunitiveness, feelings of worthlessness, guilt, and low self-esteem. These individuals also scored high on the Beck Anxiety Inventory. However, Acker (1995) found that individuals engaged in self-mutilation do not tend to have MMPI-2 profiles dominated by high Depression or Psychasthenia scales. Suyemoto (1998) also maintains that the relationship between

depression and self-mutilation is still quite controversial. Therefore, it is unclear as to whether or not depression is closely related, though the majority of the research implies that it is.

Those who believe that depression and self-mutilation are closely linked jump to the conclusion that suicide is also tied to self-mutilation. In fact, many patients who engage in self-mutilation are treated as if they are suicidal when seen in the emergency room or when admitted to an inpatient psychiatric hospital as a result of self-inflicted wounds (Daldin, 1988). As mentioned previously, early researchers failed to differentiate between suicide attempts and self-mutilation, thus creating a great deal of confusion as to whether these were similar or distinct constructs. It is now clearly understood that these behaviors are not the same; they have different functions and associated features (Favazza, 1998; Strong, 1998; Suyemoto, 1998) and only rarely do the two behaviors overlap. Indeed, the prevalence of cutting is 30 times greater than attempted suicide and 140 times greater than "successful" suicide (Strong, 1998).

Whereas the individual attempting suicide is motivated to end all feelings, the individual engaging in self-mutilation is actually attempting to feel alive and feel better (Dycian, Fishman, & Bleich, 1994; Favazza, 1998). Most individuals who practice self-harm are able to distinguish between suicidal thoughts and cognitive processes associated with self-mutilation. In the words of one patient, "I don't want to die this time, I just want to hurt" (Allen, 1995, p. 243-244). Pattison and Kahan (1983) found that only 29% of their sample of self-mutilators actually experienced suicidal ideation. However, even though the cognitive and motivational antecedents to self-mutilation and suicidal actions are different, a relationship between self-harm and suicide does exist. Many individuals

engaging in self-mutilation will eventually make suicide attempts, but the most common method is by drug overdose, not cutting (Favazza, 1998; Favazza, 1999). Typically this is as result of feeling unable to control acts of self-harm. It is likely that self-mutilation and suicide actually fall at different ends of the same continuum; a continuum that has self-inflicted injury with a non-lethal weapon at one end, and suicide at the other (Dycian, Fishman, & Bleich, 1994).

As researchers began to more closely examine the histories and current behaviors of individuals who self-mutilate, a strong relationship between self-harm and eating disorders began to emerge (DiBrino, 1998; Doran, 1985; Favazza, 1989b; Suyemoto & Macdonald, 1995; Tantam & Whittaker, 1992). Typical eating disordered behaviors (i.e., starving, bingeing, purging, overexercising, etc.), while harmful, are not usually considered to be "direct forms" of self-harm (Favazza, DeRosear, & Conterio, 1989). Most researchers classify these behaviors as more indirect forms, since self-harm is not the primary goal, but occurs indirectly as the behavior continues (Favazza, 1998). Anorexia nervosa is characterized by: (a) a refusal to maintain a body weight over a minimally normal weight for age and height, resulting in a body weight 85% of that expected, (b) an intense fear of gaining weight or becoming fat, even though underweight, (c) a disturbance in the way that body weight, size or shape is experienced, and (d) amenorrhea in females. Bulimia nervosa is characterized by: (a) recurrent episodes of binge eating (characterized by a sense of lack of control over eating a large amount of food in a discrete period of time), (b) recurrent, inappropriate compensatory behavior in order to prevent weight gain, (c) a minimum average of two episodes of binge eating and inappropriate compensatory behaviors per week for the past three months, (d)

self-evaluation unduly influenced by body shape and weight, and (e) the disturbance does not occur exclusively during episodes of anorexia nervosa (Garner & Rosen, 1994).

The estimates of comorbidity between eating disorders and self-mutilation are somewhat variable. Prevalence rates of eating disorder diagnoses in those who self-mutilate range from 8.3-80% (Darche, 1990; Cross, 1993; DiBrino, 1998; Farber, 1997; Favazza, DeRosear, & Conterio, 1989; Favazza, 1998; Strong, 1998), whereas estimates of self-mutilation occurring in those with eating disorders range from 9.2-40.5% , depending on the eating disorder diagnosis (Farber, 1997; Favazza, 1989b; Favazza, DeRosear, & Conterio, 1989). More specifically, around 35% of individuals with anorexia nervosa and approximately 25-40.5% of those with bulimia nervosa have been found to engage in some form of self-mutilation (Favazza & Conterio, 1988; Favazza, 1989b; Jacobs & Isaacs, 1986; Mitchell et al., 1986).

In many respects, the functions of anorexia nervosa, bulimia nervosa, and self-mutilation are quite similar (Doran, 1985; Farber, 1997; Parkin & Eagles, 1993; Parry-Jones & Parry-Jones, 1993; Warren, Dolan, & Norton, 1998). The behaviors involved in all these disorders serve to reduce tension (Brown, 1993; Farber, 1997; Parkin & Eagles, 1993; Parry-Jones & Parry-Jones, 1993; Strong, 1998; Warren, Dolan, & Norton, 1998). Moreover, self-mutilation can be seen to serve a purgative function similar to that observed in bulimia nervosa. This seems to be most true for serious types of mutilation such as blood-letting, but more generally, patients have described a sense of releasing emotions, tension, or frustration through their wounds (Farber, 1997; Parkin & Eagles, 1993; Parry-Jones & Parry-Jones, 1993; Warren, Dolan, & Norton, 1998). All of these disorders can also serve the function of avoiding negative emotions or situations.

Individuals with eating disorders have long been recognized as using their disorder to avoid disturbing thoughts, and the same can be said for self-mutilation. Like focusing on food, focusing on the next act of self-mutilation can serve to distract the individual from other distress-inducing thoughts (Cross, 1993; Farber, 1997; Santonastaso, Favaro, Olivotto, & Friederici, 1997; Troop, 1994). In addition, both eating disorders and self-mutilation seem to be highly related to affective and dissociative disorders (Demitrack et al., 1990; Farber, 1997; Strong, 1998). Finally, studies are being currently conducted to examine a possible physiological similarity between these two disorders. Initial results seem to indicate that both eating disorders and self-mutilation may be biologically reinforced through the release of natural opiates (Strong, 1998). Together, all of these similarities have provided further support for the notion that eating disorders may represent another form of self-mutilation for some individuals (Strong, 1998).

Also related to eating disorders and self-mutilation are drug and alcohol use and abuse (Favazza, 1999; Suyemoto & Macdonald, 1995; Tantam, 1992). In one group of bulimics abusing laxatives, 25% also abused alcohol and 21.4% abused other drugs (Mitchell et al., 1986). In a group of self-mutilating adolescents, 75% also abused alcohol (Scott & Powell, 1993). Approximately 25-40% of substance abuse patients report a history of trauma, and as has already been established, trauma is closely related to eating disorders and self-mutilation. In fact, common defense mechanisms for victims of trauma include dissociation, self-mutilation, and substance abuse (Zlotnick et al., 1997). Favazza (1988) reported that approximately 57% of individuals engaging in self-mutilation had taken an overdose of drugs at some point. In a separate study, Favazza (1998) found that

25% of alcoholic women engaged in cutting, and 16% reportedly engaged in disordered eating.

Based on the diversity in the types of related disorders, many researchers have pushed to have self-mutilation designated as a separate Axis I disorder (Favazza, 1999; Herpertz, 1995; Pattison & Kahan, 1983). Favazza (1990) makes a valid point when he argues that, although self-mutilation can be a symptom of another disorder, it often stands alone, thus creating the need for a separate disorder. If a separate Axis I disorder did exist for self-mutilation, it could be used much like current eating disorder diagnoses--one can diagnose disordered eating as part of another disorder, of if full criteria is met, the individual can receive two diagnoses; one for which disordered eating is a symptom, and one for a specific eating disorder.

Self-Mutilation as an Impulse-Control Disorder

As research examining the comorbidity of different disorders has progressed, investigators have begun to recognize the role of impulse control in self-mutilation, eating disorders, and substance abuse. All of these behaviors seem to be highly related to an inability to resist certain impulses--impulses to eat, use alcohol and other drugs, and harm oneself (Lacey & Evans, 1986). In addition, all of these disorders have an addictive component. Clearly addiction has been tied to substance abuse, but individuals who engage in self-mutilation or disordered eating also admit to the addictive nature of their behavior. Once they begin, it is hard to stop because the behaviors, negative as they are, serve an adaptive purpose. Farber (1997) maintains that much like drug and alcohol addiction are failed attempts to maintain self-regulatory functioning, those who chronically binge-purge and self-mutilate are trying to regulate mood and affect.

Walsh (1987) specifically looked at self-mutilation in adolescents and found that 80% of those who self-mutilated had an eating disorder. Indeed, having an eating disorder was found to be the most powerful predictor of self-mutilative behavior. In addition, these individuals also had higher alcohol and drug use when compared to non-mutilating peers. Similar findings result when individuals with bulimia are examined. Favazza (1999) reported that 75% of bulimics with multiple impulsive behaviors reported a history of self-mutilation, 35% reported alcohol dependence, and 22% reported drug abuse. Additionally, Garner (1994) found that 43% of bulimics, 39% of bulimic anorexics, and 19% of restricting anorexics engage in multiple impulsive behaviors. Finally, a high number of patients receiving treatment for substance abuse exhibit dissociative symptoms, impulsivity, and self-mutilation (Zlotnick, 1997). Favazza (1998) reported that 25% of alcoholic women engage in self-mutilation and 16% have an eating disorder.

When reasons for engaging in these behaviors are examined, the similarities become clear. Many individuals engaged in self-mutilation will use substances in an attempt to decrease their sense of inner pain, alienation and self-hatred (Garner, 1994; Noshpitz, 1994). In addition, self-mutilation and bulimia serve a purgative function in that they both result in tension relief for many patients (Cross, 1993; Garner, 1994; Lacey & Evans, 1986).

Bulimia nervosa seems to be most related to self-mutilation, which further supports an impulse control relationship (Yellowlees, 1985). The bingeing and purging behaviors associated with bulimia nervosa are clearly related to an inability to control an impulse. However, when anorexia nervosa and substance abuse are compared, a similar

"dependence" is noted. Clearly, substance abusers are likely to become dependent upon the substances used, but individuals with anorexia nervosa also seem to become dependent on the physiological effects of starvation. Although the physiological substrate underlying this dependence remains unclear, it does seem that neurobiological changes occur during the course of anorexia nervosa that lead to an "addiction" of sorts (Lacey & Evans, 1986).

In addition, the backgrounds of individuals involved in all these behaviors tend to be similar. Both eating disorders and self-mutilation occur more frequently in females, and both typically begin in adolescence and end by the early 20s. The acts of bingeing/purging, dieting, and cutting are all typically performed in privacy. Individuals engaging in either self-mutilation or disordered eating are likely to have had early difficulties with identifying, verbally expressing and regulating all forms of physical tension, and tend to have an inability to articulate their emotions. Therefore, both individuals with eating and self-mutilative disorders feel a sense of tension that cannot be soothed or communicated (Cross, 1993). Much like a bleeding wound can be used to communicate pain, so can the weight loss associated with starvation (Farber, 1997). Not surprisingly, eating disorders and self-mutilation often co-occur in individuals with a borderline personality disorder diagnosis (Farber, 1997).

Dissociation is also extremely common in individuals with an eating or self-mutilative disorder (Cross, 1993). Again, dissociation seems to be most closely tied to bulimia nervosa, and somewhat less to anorexia nervosa. It has been proposed that bulimic behaviors might be a form of dissociation that reduces the awareness of intolerable feelings following a traumatic experience (Farber, 1997; Santanastaso et al.,

1997). In addition, fasting, bingeing, and self-induced vomiting may lead to an alteration in consciousness defined as dissociation (Santonastaso et al., 1997). In order to examine the relationship between dissociation and eating disorders, Santonastaso et al. (1997) surveyed a group of 491 college females. They found that three of the women could be diagnosed with anorexia nervosa, three with bulimia nervosa, and 21 with a "partial syndrome" or subclinical eating disorder. When these women were interviewed, the researchers identified that a mediating factor (i.e., past abuse) created a higher risk for dissociation in women with eating disorders. Similar to findings for self-mutilation, these researchers determined that eating disordered behaviors might represent defense mechanisms that manifest themselves as a form of dissociation.

Based on all these similarities, some have argued that not only should self-mutilation be considered an impulse control disorder, but that there should also be a separate diagnosis for a multi-impulsivist disorder (Favazza, 1992; Lacey & Evans, 1986). Perhaps one of the strongest indicators of the appropriateness of this type of diagnosis is the tendency for there to be symptom substitution between disordered eating, self-mutilation, and substance abuse (Farber, 1997; Favazza, 1992; Favazza, & Rosenthal, 1993; Lacey & Evans, 1986). Often patients will move from one type of behavior disorder to another as they move towards recovery, which can take 10 to 15 years (Favazza & Rosenthal, 1993). Clinicians are warned against "taking away" one's self-mutilation or eating disorder (Levenkron, 1998). One therapist states,

> ...with cutters I don't want to take away something they feel to be necessary until they're ready to let go of it. Who am I to presume that they can manage without this behavior? If you view cutting as an attempt at a self-cure, then take away that mechanism, they might become psychotic or suicidal (Strong, 1998, p. 172).

In addition to increasing the risk for psychosis or suicidal ideation, removing one's means for dealing with dissociation, emotions or tension before there has been sufficient change in the underlying neurosis can lead to replacement of the target symptom with one that serves the same purpose. In fact, many individuals who self-mutilate will present for treatment when they are engaged in another phase of the disorder (i.e., with symptoms of disordered eating or substance abuse). In addition, when less severe behaviors, such as bingeing and purging, no longer relieve psychic distress, the individual may move to more severe behaviors including self-mutilation or suicide attempts.

Treatment Issues

Clearly, self-mutilation is an exceedingly complex syndrome which is difficult to conceptualize and perhaps even more difficult to treat. Clinicians are often unsure how to classify the behavior, and thus are unsure as to how best to treat the patient engaging in self-mutilation. As Frances (1987) states, "Of all disturbing patient behaviors, self-mutilation is the most difficult to understand and treat...The typical clinician treating a patient who self-mutilates is often left feeling a combination of helpless, horrified, guilty, furious, betrayed, disgusted, and sad" (p. 316).

Unfortunately, self-mutilative behaviors tend to evoke many countertransference issues in therapists, causing them to feel anxious, avoidant, angry and helpless (Farber, 1997). Other therapists will view the behavior as senseless, repugnant, frightening, and mysterious (Favazza, 1989a), and many react with horror, disgust, or bewilderment (Strong, 1998). Additionally, the patient will often be seen as attention seeking, manipulative, masochistic or perverse. A good example arose recently in the chart of one

of this researcher's inpatients--the clinician who interviewed a female adolescent who engaged in extreme self-mutilation noted that she was "a sick little pup...her prognosis is poor to grave." This patient was just entering treatment and already the therapist had given up on her.

Therapist's prognostic perceptions often fall on either end of the continuum from "counsel of despair" to "naive therapeutic optimism" (Allen, 1995). Therapists tend to either label these patients as personality disordered and give up, or believe that anyone can help them. This results in many individuals engaging in self-mutilation receiving poor psychological services. Medical professionals may also mistreat these patients. Emergency room doctors who encounter patients with self-inflicted wounds will often view the individual as repulsive and may go so far as to suture the wounds without anesthetic (Favazza, 1989b). This leads to many patients disguising their self-mutilation as an actual suicide attempt in order to receive more humane treatment (Farber, 1997; Favazza, 1989b). However, since suicidality and self-mutilation have different emotional, cognitive, and motivational antecedents, individuals that report self-mutilation as a suicide attempt often will not receive the appropriate treatment.

Based on current therapeutic formulations, treatment for self-mutilation is quite similar to that for eating disorders. Most importantly, the therapist needs to be cognizant of his/her reactions to the self-mutilative behaviors and to the patient engaging in those behaviors. Then, the therapist will need to try to understand the underlying mechanisms of the disorder and the factors that are maintaining it. Just as eating disorders are not about food, self-mutilation is not really about injuring oneself. Instead, these disorders are about masking pain and dealing with painful memories, thoughts, or feelings. The

"knee jerk" reaction of many clinicians to immediately and forcefully stop the individual from engaging in cutting is about as helpful as force-feeding an anorexic--these interventions treat the symptoms but not the disorder. The focus on symptom reduction rather than the underlying emotional pain can, in fact, be damaging to the patient and counter-therapeutic. Strong (1998) states,

> To treat only the symptoms—by force feeding or hiding all sharp implements—will generally only set up a power struggle between parent and child, patient and therapist. If the coping strategy one has depended on for so long is suddenly taken away, a cutter or anorexic or bulimic will feel even more overwhelmed and out of control as years of suppressed emotions come roaring to the surface (p. 119).

Therefore, instead of focusing on the symptom, therapy should focus on increasing the patient's ability to articulate emotions and needs and teaching the patient more adaptive strategies for communicating and channeling feelings (Suyemoto & Macdonald, 1995). The ultimate goal is to replace self-mutilation with more adaptive problem solutions (Linehan, 1987).

Treatment principles that can lead to accomplishing this ultimate goal are relatively straightforward. Tantam and Whittaker (1992) recommend that the early stages of treatment focus on developing and strengthening the therapeutic relationship. As has been previously stated, individuals engaging in self-mutilation often have a history of abuse or neglect. Therefore, they are likely to have significant distrust that will carry over into the therapeutic relationship. They are likely to initially treat the therapist as if he/she is the neglectful, abusive person, which will impede the development of a compassionate and non-critical therapeutic relationship. Therefore, the therapist will need to focus on being understanding and remaining calm. Self-mutilation should be reframed as an expression of feeling, and threats and promises should be avoided. The therapist will

need to make a commitment to the client and reassure the client that he/she will "stick with" her. Finally, the therapist should leave responsibility for change with the client. After the relationship has been established, therapy should focus on breaking the habit, dealing with withdrawal symptoms, and increasing the client's determination to change. Finally, change should be maintained through rewarding new behaviors, minimizing hospitalization, resolving emotional conflicts, and increasing the client's openness to intimacy. Favazza (1999) adds that the client and therapist should closely analyze the events that precipitate episodes of self-mutilation, note where the self-mutilation occurs, and identify the goals, benefits and negative consequences of self-mutilation.

Unfortunately, the frightening nature of self-mutilation can often lead a therapist to hospitalize patients unnecessarily. However, it seems clear that hospitalization is not an effective means for reducing the behavior or dealing with the underlying psychological and emotional issues. Excessive restriction of self-mutilating individuals will often lead to an increase in the behavior (Tantam, 1992). Even if patients do not have access to a weapon, they can pick old wounds or use unusual objects (i.e., plastic silverware, screws, nails, etc.) to try to harm themselves. The following quote illustrates this point:

> ....by taking away her freedom and control and not leaving her a single venue to express her feelings, they are only driving away her self-injury further underground. This kind of attempt to control the disorder from the outside is no more likely to be successful than attempts to stop an alcoholic from drinking by locking the liquor cabinet. Unable to cut for the time being, (she) is now punching and pinching herself to inflict pain (Strong, 1998, p. 121).

Not only is hospitalization unhelpful, environmental reactions will often lead to an increase in self-mutilative acts (Tantam, 1992). Therefore, most clinicians familiar with self-mutilation recommend against hospitalization (Farber, 1997; Favazza, 1999;

Tantam, 1992). Since the behavior is generally misunderstood, patients are often exposed to a divided staff (e.g., staff that do not agree on the appropriate treatment of self-mutilation), and are likely to receive treatment that is ineffective or even harmful. Often hospitalization will frighten patients and make them feel even more alienated and misunderstood (Farber, 1997). Therefore, if hospitalization is absolutely necessary, it is recommended that it be brief and that the patient's primary therapist draft clear policies concerning how hospital staff should treat the patient and restrictive actions to be avoided (Favazza, 1999).

When patients have been asked about prior therapeutic experiences, they clearly state that outpatient treatment is most effective. Favazza (1989b) reported that 42% of self-mutilating individuals who received inpatient treatment indicated that it did not help at all, but only 24% stated that outpatient treatment was unhelpful. Forty-seven percent reported that outpatient treatment was a little helpful, and 29% said it helped a lot. The median number of outpatient visits for this sample was 75. Tantam (1992) reports that approximately 50% of patients will improve after 5 years of treatment.

Since self-mutilation is such a difficult disorder to treat, it is recommended that therapists have no more than two self-mutilating patients in their caseload, and that treatment should involve a multi-disciplinary team. Using a team approach allows for greater continuity should one practitioner need to discontinue his/her involvement and it distributes the sense of responsibility between multiple professionals (Favazza, 1999). Currently, it does not appear that communities are ready to deal with the influx of self-mutilating patients that has occurred in recent years. Our current awareness of self-mutilation parallels that of eating disorders in the mid-1980s (Favazza & Conterio, 1988),

and community mental health centers are feeling the pressure of increasing patient needs and demands. To date, only one inpatient treatment center focusing on the treatment of self-mutilation is in existence in the United States (i.e., the Hartgrove Hospital in Chicago) (Favazza, 1989b).

Self-mutilation, Disordered Eating and Substance Use in College Students

As stated previously, to date there has been only one study examining self-mutilation in a population of college students. However, there has been considerable research regarding the prevalence of behaviors that seem to be related to self-mutilation in college students. The majority of the previous research has clearly indicated that college students report a high level of alcohol and drug use, and that college students are at an increased risk for developing eating disorders. Feigleman, Gorman and Lee (1998) reported that 44% of college students engage in binge drinking and the SIUC/Core Institute (2000) reported that only 12% of college students have never used alcohol. Overall, 43-46% reported having used marijuana at some point in their lifetime (Feigleman, Gorman, & Lee, 1998; SIUC/Core Institute, 2000), and 59% reported having used nicotine. On the CSU campus in particular, data indicate that 77.1% of CSU students had used alcohol within the last month, 25.3% had used marijuana, and 36.1% had used tobacco (SIUC/Core Institute, 2000). In terms of disordered eating, research on the CSU campus has indicated that 44% of CSU undergraduates engage in disordered eating (Hoyt, Hamilton, & Rickard, 1999).

Despite the high use of drugs on college campuses, studies have shown that only 20% of students who felt they had an alcohol or drug problem had ever sought help (Feigleman, Gorman, & Lee, 1998). Offer & Spiro (1987) also provided data indicating

underutilization of services by college students. They followed high school students who went on to college and assessed the level of emotional disturbance these students exhibited. The results indicated that, in high school, 17% of the males and 21% of the females reported emotional disturbance. When these students were again assessed during their first year of college, the results indicated that 20% of the freshman class exhibited emotional disturbances, indicating that the emotionally disturbed high school students were equally likely to pursue college. However, only 20-30% of the emotionally disturbed college students sought help for their problems. Therefore, only 5-6% of college students are utilizing the services available on most college campuses.

It seems that a student's willingness to seek help was less associated with the level of disturbance than with the characteristics of the person offering help. If left alone, many students will never make the effort to initiate and carry out contact with a professional. This clearly raises many concerns for campus treatment facilities in terms of how best to serve students. It is clear that many students need assistance with adjusting to and remaining in college as 30% of students will drop out completely, another 20% will drop out temporarily, and half of the dropouts will leave during their freshman year.

Based on these findings regarding behaviors that have been shown to be related to self-mutilation, and those regarding the underutilization of services provided to college students, it is likely that there is a significant number of students engaging in self-mutilation and that the majority of these students are not seeking help from the available campus resources. However, research has yet to indicate the prevalence of self-mutilation in a college population, so it is likely that many colleges and universities are unaware of the prevalence of this behavior on their campuses.

The Present Study

As is indicated in the prior review of the literature, most of the data related to self-mutilation has been derived from either psychoanalytically oriented case studies or studies of special populations (e.g., inpatients, patients with specific diagnoses, etc.). In addition, there have been many methodological problems with the available studies, including use of small sample sizes, criteria over-inclusion, or reliance upon a single survey item. The majority of previous research has not differentiated between types of self-mutilation (e.g., cutting, burning, bone breaking, etc.), instead grouping all types together. Finally, very little research has focused on non-patient populations, and this researcher is aware of only one study using a college sample.

The purpose of the present study was to expand upon the literature that is currently available addressing the prevalence of self-mutilation, specifically cutting, in non-patient samples, specifically college students, and the experiences of individuals who have at some point engaged in cutting. In addition, since there continues to be no diagnostic category for self-mutilation, the present study sought to examine disorders related to cutting in an attempt to further clarify the need for either a uni-impulsivist or multi-impulsivist diagnosis, as proposed by Favazza (1992) and Lacey and Evans (1986). These issues were addressed through a two-stage process. Stage 1 consisted of an epidemiological study of students enrolled at a large mid-western university. A survey was used to examine the prevalence of cutting, disordered eating, substance use/abuse, depression, and abuse/neglect. Stage 2 consisted of a qualitative study concerning the experiences of individuals who have engaged in cutting. Comorbidity of other disorders was also examined during this stage, but interviews primarily focused on: (a) the

students' experience of cutting, and (b) the students' perceptions of what was most helpful in their recovery.

Based on previous findings and theories related to self-mutilation, it was expected that there would be a higher incidence of disordered eating, depression and substance use/abuse in college students who engaged in cutting. In addition, it was expected that cutting, disordered eating and depression would be more common in female students than male students. The limited information regarding etiological factors related to cutting would indicate that this behavior would be more common in younger students and in students with a history of abuse or neglect. Finally, it was expected that the majority of students displaying the assessed behaviors would have seldom or never utilized psychological and medical services available on campus.

CHAPTER TWO

STUDY ONE: METHOD

Participants

Participants for this study represented a random sample of all undergraduate students over the age of 18 enrolled at Colorado State University (CSU) during the Spring semester of the 2000-2001 academic year. CSU is a land-grant institution and a Carnegie Doctoral/Research University Institution. It consists of 8 colleges and 55 academic departments offering undergraduate and graduate programs in most areas of the arts and sciences. Of the 17,874 undergraduate students over the age of 18 enrolled at CSU, 4,000 were randomly selected to receive the present survey. More specifically, 1000 students, including an equal number of males and females were selected from the freshman, sophomore, junior and senior classes. Four thousand students were selected due to the fact that power analyses indicated that a total of 500 students in each strata was necessary in order to result in less than a 5% margin of error. Data concerning the demographics for the sample used for data analysis and comparison to population demographics will be presented later (see Results section).

Measures

Impulsive Behaviors Survey (IBS). Due to the fact that this type of study has not been previously conducted on a college campus, the survey used was designed by the researcher specifically for this study (see Appendix A). A review of previous

epidemiological studies examining prevalence of mental disorders indicated that the use of survey data is uncommon. Few survey-based epidemiological studies have been conducted, and it does not appear that any have addressed mental health issues on college campuses. The epidemiological studies that have been conducted are typically of a very large scale, are supported by numerous grants, and involve structured interviews with individual participants, typically using the Composite International Diagnostic Interview (CIDI), the Diagnostic Interview Schedule (DIS) or the Revised Clinical Interview Schedule (CIS-R) (Bijl, Ravelli, & van Zessen, 1998; Boyle et al., 1996; Danielson, Moffitt, Caspi, & Silva, 1998; Ferdinand et al., 1995; Katz et al., 1995; Kessler et al., 1994; Newman et al., 1996; Offord et al., 1996).

The survey instrument used for this study included 59 questions designed to assess the prevalence of cutting behavior, disordered eating, drug and alcohol use, depressive symptomotology, and history of abuse/neglect. In addition, the survey was designed to assess a number of demographic variables, including age, ethnicity, height, weight, GPA, current living arrangements, participation in sports and/or sororities/fraternities, and past history of suicide attempts.

There were six sections to the survey. The first section included the demographic variables listed above. The second section was related to past history of physical and sexual abuse and emotional neglect. The third section was related to cutting and was completed only by those participants who indicated that they had at some point either cut their wrists or another body part *without* the intention of committing suicide. If participants answered yes to either of those items, they were classified as "having a history of cutting" and were asked to respond to questions regarding the reason they first

tried cutting, their age when they first cut, the length of time since their last episode, the number of times they had cut, the number of scars they had, whether or not the cuts required stitches and if/where they had previously sought treatment for cutting.

The fourth section of the survey was related to disordered eating. Seven diagnostic questions were adapted from the DSM-IV-TR (APA, 2000) criteria for anorexia nervosa and bulimia nervosa. Participants were asked if they currently restrict their food intake, fear gaining weight, have a regular menstrual period, fear being out of control while eating a large amount of food, engage in vomiting or laxative use to prevent weight gain, or fast in order to prevent weight gain. In addition, participants were asked to indicate how many hours they exercised each week, whether they had ever been diagnosed with anorexia nervosa or bulimia nervosa and if/where they had sought treatment for an eating disorder. The questions were designed to assess symptoms of anorexia nervosa and bulimia nervosa[1]. To date, survey data has only been used to identify individuals with disordered eating who might be at risk for developing anorexia nervosa or bulimia nervosa. After consultation with the campus Eating Disorders Team, which is comprised of a medical doctor, a nutritionist, and two psychologists who specialize in eating disorder assessment and treatment, an answer of "yes" to any of the following was used to identify students who engage in disordered eating:

- Do you *feel out of control* while eating a large amount of food?
- Do you make yourself throw up in order to prevent weight gain?

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[1] Survey data cannot be used to diagnose an eating disorder because an in-depth history is needed to make an accurate diagnostic determination.

- Do you use laxatives in order to prevent weight gain?
- Do you fast/skip meals in order to prevent weight gain?

The first two questions of this section of the survey ("Do you restrict your food intake in order to lose weight", and "Do you fear gaining weight or becoming fat") were not used to assess disordered eating due to a "yes" response being relatively common in our society, and not necessarily indicative of an eating disorder. The third question, "Do you have a regular menstrual period" was also not used since there are multiple causes for irregular menses in women.

The fifth section of the survey was related to depression and included 10 diagnostic questions based directly upon the DSM-IV-TR (APA, 2000) criteria for a major depressive episode. In addition, participants were asked to indicate if/where they had ever sought treatment for depression. Based on DSM-IV-TR criteria, participants were classified as depressed if they responded in the following manner:

- Answered yes to either: "I feel sad and depressed" or "I do not enjoy activities as much as I used to," and
- Answered yes to any five of the following items:
  - "I have lost or gained weight recently"
  - "My appetite has increased or decreased recently"
  - "I am sleeping more or less than I used to"
  - "I feel more tired/fatigued recently than usual"
  - "I feel more guilt recently than usual"
  - "I have more difficulty concentrating than usual"
  - I have recently considered committing suicide," and

- Answered yes to: "Are any of the above symptoms causing significant problems in your day to day life"

All three of the above criteria must have been met in order for a participant to be classified as depressed.

Finally, the sixth section of the survey was related to drug/alcohol use. Many of the questions were adapted from a substance use survey used by CSU's Center for Drug and Alcohol Education (CDAE). The substances assessed were selected due to the CDAE's identification of these substances as being those that are most commonly used by students at CSU and on other college campuses. In addition, participants were asked to indicate whether they had ever been arrested on a drug or alcohol related charge, and if/where they had ever sought treatment for their substance use. In order to reduce the large amount of data that resulted from the drug-related questions, a number of composite variables were created. Participants indicated on the first drug-related question whether they currently used, had used in the past, or had never used each of the following substances: alcohol, cocaine, ecstasy, marijuana, nicotine and speed. The students were classified as engaging in "any current drug use" if they indicated they were currently using at least one of the above-listed drugs. Participants were classified as engaging in "poly drug use" if they indicated current use of two or more of the substances. The inverse of the percentage of participants who indicated never using each substance was used to determine the percentage of participants who had "any lifetime prevalence" of substance use. The second drug-related question prompted participants to indicate how often they had used each of the substances in the past six months using the following scale: no use, one time per month, one to three times per week, four to six times per week

and daily. From this question, one new variable was created. Participants were classified as engaging in heavy drug use if they indicated using any of the substances four or more times per week. In addition, the prevalence of daily use was assessed.

Procedure

The Institutional Review Board of Colorado State University reviewed the present study during the Fall 2000 semester, and the project was approved in December 2000. The project was approved for 4000 undergraduate students aged 18 and older. The need for a signed informed consent form was waived due the fact that the survey was to be mailed, thus a consent letter was deemed to be sufficient, obviating the need for the participants' signatures.

In order to identify students to be included in the sample, a list of all enrolled undergraduate students was obtained from the University's Registrar's office. Students were divided into the eight previously mentioned groups (i.e., male/female by year in college) and then five hundred students from each of the groups were randomly selected to receive the IBS.

One week prior to mailing the survey, an initial contact letter was sent to alert selected students that they would be receiving the IBS (See Appendix B). This letter emphasized the importance of the present study and informed students that their responses would be used to determine means for improving services provided by such campus agencies as the University Counseling Center and the Hartshorn Health Service. The directors of both of these agencies provided their signed support for the project.

One week following the mailing of the initial contact letter, the survey materials were sent to selected participants. The survey packet included a consent letter explaining

the IBS, a return envelope, and a separate postcard with an identification number (see Appendix B). No incentives for completing the survey were provided. In addition, a list of campus treatment resources was included. The postcard was the only material upon which an identification number was located, and participants were asked to return the postcard separately from the IBS to indicate if they had completed the survey or did not wish to participate. The separate return of the postcards allowed the survey to remain anonymous, while also allowing the researcher to determine which participants responded to the first mailing so that a second mailing could be directed only towards non-responding students. Four weeks following the initial mailing, a follow-up mailing was sent to all participants who did not return the postcard. This mailing included a follow-up letter, the Impulsive Behaviors Survey, return envelope and postcard, and the list of campus treatment resources (see Appendix B). Again, no incentive for completing the survey was included.

CHAPTER THREE

STUDY 1: RESULTS

Data were analyzed in a series of steps designed to determine the representativeness of the sample, prevalence of the measured behaviors, comorbidity of behaviors and student access rates for campus treatment options. Results are presented in order of increasing complexity and as they relate to the proposed hypotheses. Although disordered eating and substance use are recognized as indirect forms of self-harm, the major thrust of the present study was related to cutting behaviors. Thus, the results related to disordered eating, depression, and substance use are presented first and followed by a more thorough analysis of data related to cutting and comorbidity of the behaviors.

Representativeness of the Sample

Margin of error estimates were computed in order to determine the accuracy of the resulting data. For the overall sample, the maximum margin of error was 2.27, indicating that all percentages reported have an accuracy range of +/- 2.27%. In addition, margin of error estimates were computed for the males and females since they will be examined separately in some analyses. The maximum margin of error for males was 3.69, whereas that for females was 2.88.

Demographic data for the campus population as a whole was obtained from the University's Office of Budgets and Institutional Analysis (OBIA). OBIA publishes the demographic data for the student population each semester; thus, the Spring 2001 figures

were used for comparison to the final sample obtained in this study (Colorado State University OBIA, 2001). Population and sample statistics regarding gender, ethnicity, student status and year in school are presented in Table 1. The sample matched the overall student population on most variables. However, the sample of students responding to the present survey were most significantly underrepresented in terms of men and seniors. Additionally, some minority groups appear to be underrepresented, but this is likely a result of differences in how ethnicity was measured by OBIA and the current investigator (i.e., OBIA results included all major ethnic groups, but did not include a category for multiracial students). The data collected for the present study included students who classified themselves as "multiracial" and also included a category for "other," but due to the fact that there was no comparable category from the OBIA data, these two categories were collapsed and designated as "other."

Demographics

The sample of responding participants consisted of 1941 students (i.e., 1206 females and 735 males), representing a return rate of 48.5%. Demographic data for the full sample, and for males and females separately, are presented in Table 2. Overall, the number of students responding to the survey in each class (i.e., freshman, sophomore, junior, and senior) was roughly equivalent, indicating that while gender was not equally distributed, year in school was, both overall and within each gender category (see Table 3).

With regard to religion, most students identified themselves as either protestant or catholic, and a large number identified themselves as agnostics. The most commonly identified religions under "other" were Wiccan and Mormon/LDS. Most of the

Table 1

Demographic Characteristics of Current Sample as Compared to Overall Student Population at CSU

	University Overall %	Responding Sample %
Gender		
Males	47.9	37.9
Females	52.1	62.1
Ethnicity		
African American	1.8	0.5
Asian American	2.7	2.1
Caucasian	84.7	87.7
Hispanic/Latino	5.6	4.2
Native American	1.2	0.4
Other*	3.9	5.2
Student Status		
Part-time	9.4	12.6
Full-time	87.4	90.6
Class		
Freshmen	20.6	25.8
Sophomore	23.0	24.1
Junior	23.2	25.5
Senior	33.2	24.6

*Note. The "other" category for the "university" included students who identified themselves as either "international" or "other." The "other" category for the "responding sample" included all students who identified themselves as "multiracial" or "other."

Table 2

Demographic Characteristics of the Responding Sample

	Full Sample (n = 1941)		Males (n = 735)		Females (n = 1206)	
	n	%	n	%	n	%
Ethnicity						
African-American	9	0.5	2	0.3	7	0.6
Asian-American	40	2.1	13	1.8	27	2.2
Caucasian	1698	87.7	654	89.1	1043	86.8
Hispanic/Latino	82	4.2	23	3.1	59	4.9
Native American	7	0.4	4	0.5	3	0.2
Multiracial	62	3.2	23	3.1	39	3.2
Other	38	2.3	15	2.0	23	1.9
Year in School						
Freshman	500	25.8	169	23.0	331	27.5
Sophomore	466	24.1	179	24.4	287	23.9
Junior	494	25.5	198	27.0	295	24.5
Senior	477	24.6	188	25.6	289	24.0
Grade Point Average						
3.5 – 4.0	579	29.8	25.2	25.2	393	32.6
3.0 – 3.4	630	32.5	32.4	32.4	392	32.6
2.5 – 2.9	481	24.8	27.5	27.5	279	23.2
2.0 – 2.4	186	9.6	10.9	10.9	106	8.8
Below 2.0	57	2.9	4.1	4.1	27	2.2
Religious Affiliation						
Protestant	701	36.6	252	35.0	449	37.6
Catholic	405	21.1	151	21.0	254	21.3
Jewish	17	0.9	7	1.0	10	0.8
Buddhist	12	0.6	7	1.0	5	0.4
Agnostic	419	21.9	164	22.8	255	21.4

Table 2 (cont'd).
Demographic Characteristics of the Responding Sample

Atheistic	141	7.4	73	10.1	68	5.7
Islamic	2	0.1	1	0.1	1	0.1
Other	216	11.4	65	9.0	152	12.7
Type of Residence						
House/Apartment	1196	61.7	462	62.9	733	61.0
Dormitory	608	31.4	226	30.7	382	31.8
Fraternity/Sorority	36	1.9	14	1.9	22	1.8
Parents' Home	98	5.1	33	4.5	65	5.4
Relationship Status						
Single w/o partner	948	49.0	420	57.2	528	44.0
Single w/ partner	738	38.1	228	31.1	509	42.4
Single living w/ partner	134	6.9	43	5.9	91	7.6
Married	106	5.5	41	5.6	65	5.4
Separated/Divorced	8	0.4	1	0.1	7	0.6
Widowed	1	0.1	1	0.1	0	0.0
Student Status						
Full-time	1750	90.6	663	90.7	1086	90.5
Part-time	182	9.4	68	9.3	114	9.5
Employment Status						
Full-time	152	7.9	61	8.3	91	7.6
Part-time	1037	53.6	377	51.6	660	54.8
Not Employed	747	38.6	293	40.1	453	37.6
Sexual Orientation						
Gay/Lesbian	24	1.2	15	2.1	9	0.8
Heterosexual	1871	96.9	711	97.3	1159	96.7
Bisexual	35	1.8	5	0.6	30	2.5

Table 3

Cross-tabulation of Gender by Year in School for the Responding Sample

	Gender	
	Male	Female
Freshman	169	331
Sophomore	179	287
Junior	198	295
Senior	188	289

respondents indicated that they lived off-campus in a house or apartment and another large percentage reported living in on-campus housing. Very few indicated that they lived in fraternity or sorority houses or at home with their parents. In terms of relationship status, the majority of responding students indicated that they were single. However, when examining male and female respondents separately, a difference in relationship status was found. Whereas 57.2% of men indicated being single without a partner and 31.1% reported being single with a partner, these two categories were more equivalent for females (44.0% and 42.4%, respectively). Very few participants were married, separated/divorced, or widowed. Nearly all participants (96.9%) identified themselves as heterosexual. A greater percentage of males reported being gay as compared to females, whereas a greater percentage of females identified themselves as bisexual.

As would be expected, the majority of respondents were full-time students, with less than 10% attending school part-time. In addition, the majority of both male and female students indicated working at least part-time with only 38.6% reportedly being unemployed. In spite of the fact that many students were working part-time and attending school full-time, the majority of respondents had a GPA of 2.5 or above, with only 12.5% falling below this mark.

Prevalence Rates

The prevalence rates of cutting, disordered eating, depression and drug use were assessed, in addition to the reported frequency of past physical and sexual abuse, emotional neglect, and suicide attempts. The overall results for the full responding sample, as well as for male and female respondents, are summarized in Table 4.

Table 4

Prevalence of Assessed Behaviors for the Responding Sample

	Full Sample (n = 1941)		Males (n = 735)		Females (n = 1206)	
	n	%	n	%	n	%
Abuse/Neglect	439	22.6	94	12.8	345	28.6
Physical Abuse	184	9.5	57	7.8	127	10.5
Sexual Abuse	231	11.9	22	3.0	209	17.4
Emotional Neglect	166	8.6	49	6.7	117	9.7
Suicide Attempt	154	7.9	53	7.2	101	8.4
Cutting (Overall)	224	11.6	80	11.0	143	12.0
Wrist Cutting	107	5.5	26	3.6	80	6.7
Cutting Other Body Areas	192	10.0	74	10.1	118	9.9
Disordered Eating	559	28.3	102	13.9	457	37.9
Depression	143	7.4	43	5.9	100	8.3
Current Drug Use (Any)	1348	69.6	541	73.8	806	66.9
Alcohol	1262	65.1	504	68.7	757	62.8
Cocaine	56	2.9	26	3.5	29	2.4
Ecstasy	63	3.3	25	3.4	38	3.2
Marijuana	346	17.8	155	21.1	190	15.8
Nicotine	391	20.2	171	23.3	219	18.2
Speed	43	2.2	13	1.8	30	2.5
Other	115	5.9	55	7.5	59	4.9
Polysubstance Use	353	18.2	153	20.9	199	16.5
History of Use (Any)	1591	82.0	607	82.6	983	81.6
Alcohol	1564	80.7	595	81.1	968	80.4
Cocaine	290	14.9	125	17.0	164	13.6
Ecstasy	383	19.7	161	21.9	221	18.0
Marijuana	1004	51.8	349	54.4	604	50.2
Nicotine	859	44.2	399	47.5	509	42.2
Speed	291	15.0	112	15.3	178	14.8

Abuse, Neglect and Suicide Attempts. Overall, 22.6% of the sample reported a history of some type of past abuse and/or neglect, with the majority of these respondents being female. Physical abuse was defined as being "repeatedly hit, punched, and/or slapped by a friend or family member," and sexual abuse was defined as being "forced to engage in sexual acts against your will." Thus, sexual abuse included both incest and stranger or date rape. The most common type of abuse reported by males was physical, whereas for females the most common type of abuse was sexual. With respect to neglect, which was defined as "your parents were not able to meet your emotional needs," females reported more neglect than males, and the overall percentage of respondents reporting neglect was less than 10%. The rates for past suicide attempts were roughly equivalent for males and females, with 7.9% of the current sample reporting at least one previous suicide attempt.

Disordered Eating. As illustrated in Table 4, 28.8% of the students responded in a manner consistent with disordered eating. The gender by disordered eating chi-square indicated a significant relationship between these two variables, $\chi^2_1 = 129.63$, $p < .000$, $\phi = .26$. As expected, disordered eating was significantly more common in females (37.9%) than in males (13.9%). The prevalence of positive responses to each of the four questions that comprised the survey section on disordered eating, in addition to those related to a past history of abuse/neglect, are presented in Table 5. These results are presented in terms of those who met criteria for disordered eating only. With respect to abuse/neglect, participants who were classified as exhibiting disordered eating reported higher rates of abuse and neglect than did the full sample. Of the disordered eating subsample, 14.0% reported physical abuse, 20.3% reported sexual abuse, and 13.6% reported emotional

Table 5

Prevalence of Characteristics Related to Disordered Eating

	Disordered Eating (overall) n = 559		Males with Disordered Eating n = 102		Females with Disordered Eating n = 457	
	n	%	n	%	n	%
History of physical abuse	78	14.0	14	13.7	64	14.0
History of sexual abuse	113	20.3	6	5.9	107	23.4
History of emotional neglect	76	13.6	16	15.7	60	13.1
Restrict food to lose weight	411	73.5	66	64.7	46	75.5
Fear gaining weight or getting fat	505	90.3	77	75.5	428	93.7
Feel out of control when eating large amount of food	346	62.0	57	55.9	289	63.4
Throw up to prevent weight gain	80	14.3	4	3.9	76	16.7
Use laxatives to prevent weight gain	34	6.1	3	2.9	31	6.8
Fast/skip meals to prevent weight gain	395	70.8	69	67.6	326	71.5
Previously diagnosed with an eating disorder						
Anorexia Nervosa	26	4.7	0	0.0	26	5.8
Bulimia Nervosa	19	3.5	0	0.0	19	4.2
Other	3	0.5	0	0.0	3	0.7
Never been diagnosed	502	91.3	102	100.0	401	89.3

neglect. In the full sample, these rates were 9.5%, 11.9%, and 8.6%, respectively. The prevalence of physical abuse and emotional neglect in those with disordered eating was relatively equivalent between genders, whereas sexual abuse was significantly more common in females (23.4%) than males (5.9%). In addition, all of the symptomatic behaviors were more prevalent in females than males, indicating that more females had multiple symptoms than did males. Strikingly, of all the males who met criteria for disordered eating, not a single one had been previously diagnosed with an eating disorder. In females, 10.7% had previously been diagnosed with anorexia nervosa, bulimia nervosa or a related eating disorder.

Depression. As Table 4 illustrates, 7.4% of the sample were classified as being currently depressed as determined by study criterion. The gender by depression chi-square analysis revealed a significant relationship. Overall, a greater percentage of females (8.3%) were depressed than males (5.9%), $\chi^2_1 = 4.01$, $p < .05$, $\phi = .05$. Table 6 presents the prevalence of abuse and neglect, in addition to past suicide attempts, in those currently meeting criteria for depression. Overall, 25.2% of those who were classified as currently depressed had attempted suicide in the past. In addition, 34.3% of the depressed students indicated recently considering suicide. Rates were essentially equivalent across sexes with 34.9% of depressed males and 34.0% of depressed females recently considering suicide.

Rates of abuse and neglect were considerably higher in those who were depressed as compared to the overall sample. The reported prevalence of past physical abuse, sexual abuse, and emotional neglect in the subsample of depressed respondents was 18.2%, 25.9%, and 23.1%, respectively. In the full sample, the rates were 9.5%, 11.9%, and

Table 6

History of Abuse/Neglect and Suicide Attempts in the Depressed Subsample

	Overall Depressed n = 143		Depressed Males n = 43		Depressed Females n = 100	
	n	%	n	%	n	%
Physical Abuse	26	18.2	9	20.9	17	17.0
Sexual Abuse	37	25.9	6	14.0	31	31.0
Emotional Neglect	33	23.1	11	25.6	22	22.0
Suicide Attempt	36	25.2	11	25.6	25	25.0

8.6%. The trend toward females experiencing greater amounts of sexual abuse seen in the previous subsamples remained, whereas rates of physical abuse and emotional neglect were relatively similar across genders.

Drug and Alcohol Use. As illustrated in Table 4, 82% of the current sample reported a lifetime prevalence of any substance use, and 69.6% indicated current substance use. As expected, alcohol was the most commonly used substance, followed by nicotine and marijuana. There was a relatively low incidence of cocaine, ecstasy and speed use, with less than 5% of the respondents indicating current use of these drugs. However, the lifetime prevalence of use of each of the substances was relatively high, with over 80% of the students indicating prior or current use of alcohol and 51.8% reporting prior or current use of marijuana. Surprisingly, more students reported a history of marijuana use than nicotine use. Approximately 15-20% of the participants indicated using cocaine, ecstasy and/or speed either currently or in the past.

Chi-square analysis revealed a significant relationship between gender and current substance use. More male (73.8%) than female (66.9%) college students were currently using at least one of the substances listed, $\chi^2_1 = 10.13$, $p < .01$, $\phi = .07$. A greater percentage of men reported current alcohol, cocaine, marijuana, and nicotine use. In addition, men reported a higher lifetime prevalence of cocaine, ecstasy, marijuana and nicotine use. Lifetime prevalence of alcohol and speed use was similar between genders.

In order to determine the specific drugs being currently used and the level of use, those participants who were classified as "current users" were separated from the remaining sample. The prevalence of use for the subsample of current users, and for male and female users, is presented in Table 7. Over 93% of the overall substance using

Table 7

Usage Patterns of Specific Substances by the Substance Using Subsample

	Overall Users (n = 1348)		Male Users (n = 541)		Female Users (n = 806)	
	n	%	n	%	n	%
Alcohol	1260	93.5	503	93.0	756	93.8
Cocaine	56	4.2	26	4.8	29	3.6
Ecstasy	63	4.7	25	4.6	38	4.7
Marijuana	345	25.6	155	28.7	189	23.4
Nicotine	391	29.0	171	31.6	219	27.2
Speed	43	3.2	13	2.4	30	3.7
Other*	115	8.5	55	10.2	59	7.3
Polyuse	353	26.2	153	28.3	199	24.7

*Note. "Other" category included substances such as mushrooms, acid, LSD, etc.

sample reported currently using alcohol. The next most commonly used substances were nicotine (29.0%) and marijuana (25.6%). Relatively few of the substance-using subsample reported current use of cocaine, ecstasy and speed (all less than 5%). Overall, men reported equal or greater use than women in all drug categories, with the exception of speed. Men (28.3%) also reported greater poly substance use than did women (24.7%), $\chi^2_1 = 5.78$, $p < .05$, $\phi = .06$.

In terms of daily drug use, nicotine was the drug most commonly used with 16.5% of the substance use subsample reporting daily use. The other two substances used on a daily basis were marijuana (5.4%) and alcohol (2.0%). A similar pattern was seen when heavy use (i.e., use of the substance four or more days per week) was assessed. Overall, 19.1% of sample reported heavy use of nicotine, 9.1% reported heavy use of marijuana, and 8.0% reported heavy use of alcohol.

Cutting. As indicated in Table 4, the overall prevalence of cutting was 11.6%. The demographic characteristics of the students who indicated a history of cutting are presented in Table 8. Chi-square analyses indicate that there were no significant differences in cutting rates based on year in school (i.e., freshman through senior). Overall, loglinear and chi-square analyses indicated that there were no significant relationships between the demographic characteristics of the subsample of students who engaged in cutting and the overall sample.

Tables 4 and 8 also provide information regarding prevalence rates and demographic characteristics separately for males and females who engage in cutting. The gender by cutting chi-square analysis revealed no relationship between cutting and student sex, $\chi^2_1 = .45$, $p > .05$. The prevalence of cutting for females and males was

Table 8

Demographic Characteristics of Respondents with a History of Cutting

	Students Engaged in Cutting (n = 224)		Males Engaged in Cutting (n = 80)		Females Engaged in Cutting (n = 143)	
	n	%	n	%	n	%
Ethnicity						
African-American	0	0.0	0	0.0	0	0.0
Asian-American	3	1.3	1	1.3	2	1.4
Caucasian	194	87.0	67	84.8	126	88.1
Hispanic/Latino	7	3.1	2	2.5	5	3.5
Native American	2	0.9	2	2.5	0	0.0
Multiracial	11	4.9	6	7.6	5	3.5
Other	6	2.7	1	1.3	5	3.5
Year in School						
Freshman	61	27.2	16	20.0	45	31.5
Sophomore	53	23.7	20	25.0	33	23.1
Junior	66	29.5	28	35.0	37	25.9
Senior	44	19.6	16	20.0	28	19.6
Grade Point Average						
3.5 – 4.0	58	25.9	21	26.3	36	25.2
3.0 – 3.4	69	30.8	20	25.0	49	34.3
2.5 – 2.9	67	29.9	30	37.5	37	25.9
2.0 – 2.4	21	9.4	8	10.0	13	9.1
Below 2.0	9	4.0	1	1.3	8	5.6
Religious Affiliation						
Protestant	82	37.1	29	37.2	53	37.3
Catholic	30	13.6	7	9.0	23	16.2
Jewish	1	0.5	0	0.0	1	0.7
Buddhist	0	0.0	0	0.0	0	0.0

Table 8 (cont'd).
Demographic Characteristics of Respondents with a History of Cutting

Agnostic	62	28.1	21	26.9	41	28.9
Atheistic	15	6.8	7	9.0	8	5.6
Islamic	0	0.0	0	0.0	0	0.0
Other	31	14.0	14	17.9	16	11.3
Type of Residence						
House/Apartment	139	62.3	55	68.8	83	58.5
Dormitory	73	32.7	22	27.5	51	35.9
Fraternity/Sorority	4	1.8	2	2.5	2	1.4
Parents' Home	7	3.1	1	1.3	6	4.2
Relationship Status						
Single w/o partner	100	44.8	50	62.5	50	35.2
Single w/ partner	93	41.7	19	23.8	73	51.4
Single living w/ partner	20	9.0	7	8.8	13	9.2
Married	8	3.6	2	2.5	6	4.2
Separated/Divorced	1	0.4	1	1.3	0	0.0
Widowed	1	0.4	1	1.3	0	0.0
Student Status						
Full-time	204	91.1	72	90.0	131	91.6
Part-time	20	8.9	8	10.0	12	8.4
Employment Status						
Full-time	19	8.5	5	6.3	14	9.8
Part-time	120	53.6	41	51.3	79	55.2
Not Employed	85	37.9	34	42.5	50	35.0
Sexual Orientation						
Gay/Lesbian	4	1.8	3	3.8	1	0.7
Heterosexual	203	91.4	73	92.4	129	90.8
Bisexual	15	6.8	3	3.8	12	8.5

12.0% and 11.0%, respectively. The rate of cutting bodily areas besides the wrists was approximately equal for males and females, whereas the rate of wrist cutting was almost two times higher in females than males. The difference in rate of wrist cutting between the sexes was significant, $\chi^2_1 = 10.65$, $p < .01$, $\phi = .22$. Participants were asked to estimate the approximate number of times they had cut and the number of scars they have on their bodies. Table 9 provides descriptive statistics for males and females regarding these indices. There was a sex difference in terms of the number of times males and females have cut, $F(1, 164) = 4.32$, $p < .05$, $\eta^2 = .03$. As Table 9 illustrates, the number of episodes for females ranged from 1 to 500 ($M = 19.30$, $SD = 56.09$), and for males from 1 to 100 ($M = 8.32$, $SD = 15.60$). There was no significant difference in the number of scars males and females reported.

For both males and females, there was a large positive skew in the distribution of reported number of cutting episodes. As Table 9 indicates, the modal number of episodes for both males and females was one, with 23% of males and 22.4% of females cutting only one time. In addition, the median number of episodes was three for males and four for females. In terms of scarring, the modal number of scars for both males and females was zero, with the median being one.

In addition, there appears to be a gender difference in terms of year in college. Whereas a greater percentage of freshman and sophomore females reported engaging in cutting than males, a greater percentage of upper-level male students reported engaging in cutting than females. In addition, there appears to be a sex difference in terms of relationship status in individuals who engage in cutting. Whereas a greater percentage of male students who reported engaging in cutting reported being single without a partner, a

Table 9

Descriptive Statistics Related to Cutting Behaviors

	Range	M	SD	Mdn	Mode
Overall Cutting					
Times Cut	1 - 500	19.30	56.09	3.00	1.00
Number Scars	1 - 100	3.19	9.15	1.00	0.00
Male Cutting					
Times Cut	1 - 100	8.32	15.60	3.00	1.00
Number Scars	1 – 27	2.82	4.82	1.00	0.00
Female Cutting					
Times Cut	1 - 500	25.51	68.55	4.00	1.00
Number Scars	1 - 100	3.41	10.87	1.00	0.00

greater percentage of female students who reported engaging in cutting reported being single with a partner. When the relationship status categories are collapsed into partnered (single with partner, single living with partner, and married) versus non-partnered (single without partner, separated/divorced, and widowed), this gender difference is clearly illustrated. Of the men who had a history of cutting, 65.1% were not partnered, whereas in women with a history of cutting, 64.8% were partnered. Chi-square analysis revealed that the relationship between sex and relationship status was significant, $\chi^2_1 = 18.28$, $p < .001$, $\phi = .29$.

As stated previously, if participants answered "yes" to either of the diagnostic questions for cutting, they were asked to complete an additional nine questions. Table 10 provides the responses to these additional nine questions. Overall, only 3.6% of the students with a history of cutting ever needed stitches, whereas 53.1% had cuts that resulted in scars. When asked what influenced them to cut the first time, the majority (55.5%) of participants indicated "it just happened." Females seemed to be more influenced by knowing others who engaged in cutting than were males, with 16.3% of females indicating that they influenced to cut because they "knew someone who did it."

The largest percentage of students with a history of cutting indicated that they first cut between the ages of 13 and 15. Another large percentage first cut between the ages of 16 and 18. Only 13.4% began cutting after high school. However, males were more likely to begin cutting after the age of 18 than were females, with 17.5% reporting first cutting at age 19 or above compared to 11.3% of females.

The majority of participants indicated that it had been over eight weeks since they had last cut. Only 5.4% reported cutting within the past week, with females making up

Table 10

Prevalence of Cutting Related Characteristics

	Students Engaged in Cutting (n = 224)		Males Engaged in Cutting (n = 80)		Females Engaged in Cutting (n = 143)	
	n	%	n	%	n	%
Cutting Location						
Wrist	106	47.3	26	32.5	79	55.2
Other	190	84.8	73	91.3	117	81.8
Needed Stitches	8	3.6	4	5.0	4	2.8
Resulted in Scars	119	53.1	44	55.0	75	52.8
Reason for Cutting						
Heard about it	7	3.2	2	2.6	5	3.5
Knew someone	29	13.2	5	6.4	23	16.3
Just happened	122	55.5	48	61.5	74	52.5
Other	62	28.2	23	29.5	39	27.7
Age at time of first episode						
<10	4	1.8	1	1.3	3	2.1
10-12	21	9.4	9	11.3	12	8.5
13-15	100	44.8	32	40.0	67	47.2
16-18	68	30.5	24	30.0	44	31.0
19-21	25	11.2	10	12.5	15	10.6
22-24	2	0.9	2	2.5	0	0.0
25+	3	1.3	2	2.5	1	0.7
Time since last episode						
1-3 days	10	4.5	1	1.3	9	6.3
4-6 days	2	0.9	0	0.0	2	1.4
1-2 weeks	6	2.7	3	3.9	3	2.1
3-4 weeks	8	3.6	4	5.2	4	2.8

Table 10 (cont'd)
Prevalence of Cutting Related Characteristics

5-8 weeks	4	1.8	0	0.0	4	2.8
Over 8 weeks	190	86.4	69	89.6	120	84.5
Number of friends who cut						
None	116	52.3	44	56.4	72	50.3
1-5	102	45.9	32	41.1	69	48.3
6 +	4	1.8	2	2.6	2	1.4

Note. Number of people who cut their wrists and other body parts is greater than overall number of individuals engaged in cutting due to the fact that some participants cut multiple sites.

the majority of this group. In order to differentiate those who were cutting frequently from those who had not cut for a somewhat longer time period, those who had cut within the past two weeks were classified as cutting "recently." Overall, 8.1% of the cutting subsample had cut recently; 5.2% of males and 9.8% of females. Thus, 86.8% of the participants who reported cutting behavior had not cut for at least three weeks.

Correlational Analyses

Due to the fact that there is limited information regarding the correlates of cutting behaviors, correlational analyses of these data initially included all demographic variables and those related to the five major experiences/behaviors assessed: abuse/neglect, cutting, disordered eating, depression, and substance use. All of the behaviors/experiences were dummy coded (1 = yes, 2 = no). Correlational analyses using the Pearson's r indicated that most of the variables were not significantly related to these behaviors, or at least were not related consistently. However, it should be noted that using correlational analyses on dummy coded variables attenuates the resulting correlation coefficient. In other words, variables that are dummy coded result in weaker relationships than would continuous variable; thus, the resulting coefficients for this study are conservative. Only variables with a correlation coefficient of .10 or above were determined to be of practical significance, as these relationships would account for one percent or more of the variance.

Those variables that were consistently related are presented in Table 11. Overall, all of the forms of abuse and neglect were significantly related, indicating that a number of participants experienced multiple forms of abuse/neglect. These variables were more strongly correlated in males than in females. In addition, past history of sexual abuse and

emotional neglect was more highly related to cutting in males, whereas physical abuse was more highly related to cutting in females. Drug use was not highly related to any of the variables listed, and was only mildly related to disordered eating.

Table 11

Relationship Between Assessed Behaviors and History of Abuse/Neglect

Subscale	1	2	3	4	5	6	7	8
				Overall (n = 1941)				
1. Physical Abuse	--	**.19**	**.26**	**.13**	**.10**	.08	.04	.04
2. Sexual Abuse		--	**.16**	**.16**	**.16**	**.12**	.01	-.00
3. Emotional Neglect			--	**.15**	**.10**	**.15**	.01	.04
4. Cutting				--	**.11**	**.14**	.06	.05
5. Disordered Eating					--	**.22**	.09	.09
6. Depressed						--	.02	.05
7. Any Current Drug Use							--	**.31**
8. Poly Substance Use								--
				Males (n = 735)				
1. Physical Abuse	--	**.22**	**.35**	**.11**	.08	**.12**	.03	.06
2. Sexual Abuse		--	**.28**	**.22**	**.11**	**.16**	-.07	.01
3. Emotional Neglect			--	**.19**	**.14**	**.19**	-.01	.01
4. Cutting				--	**.14**	**.18**	.03	.05
5. Disordered Eating					--	**.22**	**.12**	**.11**
6. Depressed						--	.00	.03
7. Any Current Drug Use							--	**.31**
8. Poly Substance Use								--
				Females (n = 1205)				
1. Physical Abuse	--	**.19**	**.22**	**.14**	.09	.06	.05	.03
2. Sexual Abuse		--	**.12**	**.15**	**.12**	**.11**	.06	.01
3. Emotional Neglect			--	**.13**	.08	**.13**	.03	.06
4. Cutting				--	.09	**.13**	.07	.05
5. Disordered Eating					--	**.22**	**.10**	**.11**
6. Depressed						--	.04	.06
7. Any Current Drug Use							--	**.31**
8. Poly Substance Use								--

Note. All correlations greater than .10 are in bold type.

The following variables were not significantly related to the behaviors measured: current grade point average, age, and being a member of a collegiate athletic team. Participant gender was only related to disordered eating, with females being more likely to meet criteria for disordered eating. Both being a member of a fraternity/sorority and year in school was related to current drug use; members of fraternities/sororities were more likely to use substances, as were upper-level students.

Comorbidity of Behaviors

In order to determine the comorbidity of cutting, disordered eating, substance use and depression, a series of loglinear analyses were conducted. Loglinear analyses were used due to the fact that all of the variables in question were nominal with two levels. Prior to conducting any analyses, it was determined that if all variables were included, there would be a total of 512 combinations, which would be too complex to analyze. Thus, to begin, two separate hierarchical loglinear analyses were completed in order to determine if any variables could be combined. The first hierarchical analysis examined sexual abuse, physical abuse and emotional neglect. The results of this analysis indicated that physical abuse and emotional neglect were highly correlated, thus they could reasonably be combined. The second hierarchical analysis included cutting, disordered eating, substance abuse and depression. The results of this analysis indicated that depression and disordered eating were highly correlated and could reasonably be combined.

The next step in the analysis was to conduct a general loglinear analysis combining the variables used in the prior analyses, with the addition of sex. Whereas in a hierarchical loglinear analysis a dependent variable is not identified, in a general

loglinear analysis, one of the variables can be designated as a dependent variable. Thus, cutting was identified as the dependent variable, and sexual abuse, emotional neglect, disordered eating, current substance use and sex were independent variables. This type of analysis allows for identifying variables that would predict cutting. The general loglinear analysis was interpreted by examining the z-scores for the difference between the observed numbers and the predicted numbers in each cell, which resulted in an estimated parameter. As each variable had only 2 levels, z-scores closest to 2.0 were chosen for further analysis. Results indicated that there were no interactions between variables that reliably predicted cutting. Thus, only the significant main effects were further analyzed using chi-square analyses.

Overall, the prevalence of disordered eating, depression and substance use was higher in students with a history of cutting than in students without a history of cutting. Overall, 45.5% of students with a history of cutting also were identified as having disordered eating, whereas only 26.7% of students without a history of cutting were identified as having disordered eating, $\chi^2_1 = 34.19$, $p < .001$, $\phi = .13$. When males and females were examined separately using a complex chi-square analysis, results revealed that, for both males and females, there was a significantly greater percentage of disordered eating evident in those with a history of cutting than those without, $\chi^2_{1(male)} = 19.20$, $p < .001$, $C = .16$, $\chi^2_{1(female)} = 18.71$, $p < .001$, $C = .13$ (see Table 12).

With regard to depression, 17.4% of the students with a history of cutting were classified as depressed, in comparison to only 5.9% of the students without a history of cutting, $\chi^2_1 = 38.67$, $p < .001$, $\phi = .14$. The gender by cutting by depression chi-square revealed significant results for both males and females (see Table 12). Males with a

Table 12

Percentage of Participants Engaging in Multiple Behaviors

Comorbid Behaviors	% of Cutting Students	% of non-Cutting Students
Disordered Eating		
Males	30.0	12.0
Females	54.5	35.8
Depression		
Males	17.5	4.3
Females	17.5	6.9
Current Substance Use		
Males	78.2	73.4
Females	76.1	65.7
Disordered Eating and Current Substance Use		
Males	25.0	9.8
Females	42.0	26.1
Disordered Eating, Current Substance Use, and Depression		
Males	5.0	1.8
Females	11.2	3.6

history of cutting were over four times as likely to also be depressed than were males without a history of cutting, $\chi^2_1 = 22.86$, $p < .001$, $C = .17$. Females with a history of cutting were more than two times as likely to be depressed than were females without a history of cutting, $\chi^2_1 = 18.59$, $p < .001$, $C = .12$.

Current drug use was less significantly tied to cutting than were the other behaviors. However, drug use was relatively more prevalent in those with a history of cutting than those without a history of cutting, $\chi^2_1 = 6.363$, $p < .05$, $\phi = .058$. Overall, 76.9% of students with a history of cutting were currently using substances and 68.6% of those without a history of cutting were currently using. Further analyses indicated that there were no differences in the prevalence of alcohol, ecstasy and speed use, but that the significant differences were in terms of cocaine, marijuana and nicotine use. In addition, poly drug use was more common in those with a history of cutting than those without. When males and females were examined separately (see Table 12), the sex by cutting by current drug use chi-square analysis indicated there was only a significant effect for females, $\chi^2_1 = 6.08$, $p < .05$, $C = .07$.

Chi-square analyses were also used to determine the prevalence of three or more behaviors in male and female participants. The gender by cutting by disordered eating by any current drug use chi-square revealed a significantly higher rate of comorbidity of behaviors in both males and females with a history of cutting than in those without a history of cutting (see Table 12). Males with a history of cutting were more than two times more likely to also engage in disordered eating and substance use than those without a history of cutting, $\chi^2_1 = 16.06$, $p < .001$, $C = .15$. Females with a history of cutting were more than one and a half times more likely to engage in disordered eating

and substance use than were those without a history of cutting, $\chi^2_1 = 15.59$, $p < .001$, C = .11. When depression was added to these analyses, similar effects were revealed for females, but not for males (see Table 12). For females, those with a history of cutting were over three times more likely to also be depressed and engaged in disordered eating and substance use than females without a history of cutting, $\chi^2_1 = 16.719$, $p < .001$, C = .118.

Finally, the co-occurrence of a history of abuse and neglect and a history of cutting was assessed using chi-square analyses. Results indicate that there were higher rates of physical abuse, sexual abuse and emotional neglect in those who had a history of cutting than in those who did not. Overall, 26.5% of the students with a history of cutting had also experienced sexual abuse; only 10.2% of those without a history of cutting had experienced sexual abuse, $\chi^2_1 = 46.75$, $p < .001$, $\phi = .16$. In addition, 19.6% of those with a history of cutting also had a history of physical abuse whereas only 8.0% of those without a history of cutting experiences physical abuse, $\chi^2_1 = 31.25$, $p < .001$, $\phi = .13$. Finally, 20.1% of those with a history of cutting reported experiencing emotional neglect, whereas only 7.1% of those without a history of cutting experienced emotional neglect, $\chi^2_1 = 42.29$, $p < .001$, $\phi = .15$.

The same basic steps were followed to determine variables that could predict the prevalence of disordered eating, depression, and current substance use. For the students who were identified as having disordered eating, 20.3% had a history of sexual abuse, as compared to only 8.6% of those without disordered eating, $\chi^2_1 = 50.66$, $p < .001$, $\phi = .16$. In addition, 14.0% of these students had a history of physical abuse whereas only 7.5% of those without disordered eating did, $\chi^2_1 = 18.76$, $p < .001$, $\phi = .10$. Finally, 13.6% of the

students identified as having disordered eating had a history of emotional neglect while only 6.6% of those without disordered eating did, $\chi^2_1 = 24.89$, $p < .001$, $\phi = .11$.

Not surprisingly, the same general pattern was shown for those students classified as depressed. Overall, 18.2% of these students reported experiencing physical abuse; only 8.8% of the non-depressed students reported physical abuse, $\chi^2_1 = 13.62$, $p < .001$, $\phi = .08$. In addition, 25.9% of the students classified as depressed had experienced sexual abuse, as compared to only 10.8% of those not classified as depressed, $\chi^2_1 = 28.64$, $p < .001$, $\phi = .12$. Finally, 23.1% of the students classified as depressed reported a history of emotional neglect, whereas only 7.4% of those not classified as depressed indicated having experienced emotional neglect, $\chi^2_1 = 41.60$, $p < .001$, $\phi = .15$.

None of the variables measured were related to current substance use; the rates of abuse seen in those currently using substances were similar to those seen in students who were not currently using substances (23.6% and 20.4%, respectively).

Use of Campus Treatment Options

Results indicated that very few participants reported having sought treatment for cutting, disordered eating, depression and/or substance use, and less than 5% of all participants indicated utilizing treatment through either the University Counseling Center or the University Health Service (see Table 13). Students were most likely to seek treatment for depression and least likely to seek treatment for disordered eating. Of those students who had been treated through one of the agencies listed, the most frequently accessed setting was an off-campus therapist or group.

Table 13

Usage Rates of Treatment Options for Assessed Behaviors

	Cutting		Disordered Eating		Depression		Substance Use	
	n	%	n	%	n	%	n	%
Never been treated	194	91.1	516	96.8	64	58.7	1243	93.5
University Counseling Center	2	0.9	3	0.6	3	2.8	10	0.8
University Health Center	0	0.0	1	0.2	2	1.8	2	0.2
Off-campus therapist or group	11	5.2	12	2.3	33	30.3	61	4.6
Psychiatric Hospital	1	0.5	1	0.2	3	2.8	3	0.2
Medical Hospital	5	2.3	0	0.0	4	3.7	11	0.8

CHAPTER FOUR

STUDY ONE: DISCUSSION

Limitations of the Research

In examining and discussing the results of this study, it is useful to make note of the limitations. Although the sample size is large, it predominantly consisted of Caucasian, non-Hispanic, heterosexual, single, full-time students from one large land-grant institution; thus the results are only easily generalizable to campuses with similar student populations. In addition, the respondents were primarily female, and overall the respondents could be characterized as high achieving, as evidenced by their current GPAs. Finally, there was no way to determine if the respondents were more or less likely to have a history of the assessed behaviors than were those who chose not to respond. Thus, the prevalence rates reported are far from definitive and are subject to the same limitations as those seen in any type of survey-based epidemiological study.

Strengths of the Research

Although the above-mentioned limitations are present, there are also many strengths to the present research. As compared to previous research related to self-mutilation, the present study was targeted towards a single type of self-mutilation, cutting. Whereas other studies have been muddled by combining a number of behaviors and then trying to present etiological theories based on the diverse behaviors, the present study provides information specific to the most common type of self-mutilation and its

comorbid behaviors. In addition, the size of the sample of students who completed the survey was large and representative of the overall student population, allowing for low margins of error and ease of generalizability to CSU as a whole.

Prevalence Rates

Previous research regarding cutting, disordered eating, and substance use has indicated that adolescents and young adults are at the greatest risk for engaging in these behaviors (Favazza, 1999; Suyemoto & Macdonald, 1995). Thus, prevalence rates of these behaviors on a college campus are extremely important in directing colleges and universities in determining appropriate prevention and intervention strategies.

As stated previously, the majority of prevalence studies related to self-mutilation have been directed towards patient samples. In these studies, it has been reported that anywhere from 4.3% to 25% of adult inpatients and outpatients engage in cutting (Briere & Gil, 1998; Darche, 1990; Lipschitz et al., 1999). The data regarding prevalence of cutting on the CSU campus are consistent with those reported by Favazza (1992), which is the only other study that used college students. Favazza found that 14% of college students have a history of at least one episode of self-mutilation. It is important to note that Favazza's study did examine multiple forms of self-mutilation, not cutting alone. However, since the majority of self-mutilators do engage in cutting (Walsh, 1987), it is likely that the majority of his sample consisted of students with a history of cutting. The other difference from Favazza's study was that his study included primarily female students, whereas the present study included a large sample of both male and female students. Whereas prior studies have indicated that self-mutilation is primarily a female behavior, the present study found no differences between male and female college

students in the prevalence of cutting. Overall, 11.6% of the respondents reported having cut at least one time. Whereas previous researchers have found that cutting is three times more likely to occur in females than males (Darche, 1990; Favazza, 1999), these results indicate that there is a roughly equivalent rate between the sexes, as 11% of males and 12% of females reported a history of cutting.

Perhaps this lack of a gender-related difference in the rate of cutting is due to the fact that the present study was not only directed towards individuals engaging in repetitive self-mutilation. Instead, the current results involved individuals who had cut anywhere from 1 to 500 times. The largest percentage of respondents reporting a history of self-mutilation indicated that they had cut only one time, and the median and number of episodes for males and females was three and four, respectively. This indicates that, as compared to patient samples, the majority of students with a history of self-mutilation did not engage in severe, repetitive cutting behaviors. In addition, the majority of the respondents with a history of cutting indicated that it had been over two months since the last cutting episode, again indicating that the severity of the behavior in this sample was significantly less than would be seen in patient samples. Only 5.6% of the cutting subsample indicated having cut within the past week, and the majority of these participants were female. Another 6.3% of the respondents with a history of cutting indicated that they had cut within the past month, and the majority of these respondents were male. Females were much more likely to have had multiple episodes of cutting than were males, but the overall modal and median numbers were equivalent across the sexes. Overall, the frequency of cutting episodes is significantly less than has been seen in the

typical patient sample, where it has been reported that over 50% have self-mutilated more than 50 times (Favazza & Conterio, 1989; Herpertz, 1995).

Females were also much more likely to have a larger number of scars than were males, which would indicate that they cut more frequently and/or more severely. In addition, since women reported a larger range in terms of the number of scars, and a higher prevalence of wrist-cutting, it is possible that women are more likely to be identified as engaging in self-mutilation as a result of easily visible scars. Finally, there is a high likelihood that males are less likely to report self-mutilation as it is seen as primarily a female behavior.

Previous researchers have proposed that the self-mutilating individual has a history and pattern of behaviors significantly different from that of a non-mutilating individual. It has been proposed that individuals engaging in self-mutilation are most likely more intelligent than the average person (Graff & Mallin, 1967; Walsh, 1987). However, the results of this study do not indicate any differences in the level of performance, either in terms of school performance or employment status. Thus, it does not seem as though school and work pressures are as related to self-mutilation as one might expect. This supports the notion that self-mutilation is more closely tied to personality characteristics and ability to cope than specific school stressors alone. However, it should be noted that the college population as a whole is likely to be more intelligent than average, thus resulting in a restricted range of intelligence. It is possible that had this study included participants who had chosen not to attend college that differences related to intelligence level would be revealed.

Whereas there were no differences in demographic characteristics between students who did and did not self-mutilate, there were some differences between men and women with a history of cutting. Although the genders were similar in terms of a number of characteristics, they differed most significantly in terms of year in school and current relationship status. Overall, the group of females with a history of self-mutilation was dominated by freshmen and sophomores, whereas the group of males with a history of self-mutilation was dominated by juniors and seniors, indicating that females were more likely to have started cutting at an earlier age. Indeed, males were more likely than females to have begun cutting after the age of 18. Although it is unclear why this phenomenon exists, it is possible that the development of cutting is tied to developmental stages during early and later adolescence. It has been clearly documented that males develop at a later age than do females, and interaction between the genders is likely to occur more frequently during later adolescence. Thus, it is possible that males are "learning" this behavior from their female counterparts during the later adolescent years.

With regard to relationship status, an interesting pattern in the current data emerged. Males who reported engaging in self-mutilation were more likely to be single without a partner than were females. In fact, over 65% of the males with a history of self-mutilation reported being without a partner while 64.8% of females with a history of self-mutilation reported being partnered. Although there was insufficient data to easily understand this phenomenon, it is possible that men are more upset by their relationship status, and being single contributes to their self-mutilation. Indeed, previous research at CSU has illustrated that men who are single are significantly more dissatisfied with their dating status than are single women (Hoyt & Kogan, 2000). The gender difference may

also be explained by proposing that females with a history of self-mutilation are either more distressed by their current relationships or are more willing to have an intimate partner who might see their scars. This last proposition would be consistent with the idea that males are less likely to disclose their cutting due to it being seen as primarily a female behavior.

Another interesting sex difference resulted when examining the bodily areas on which individuals had cut. Whereas previous research has indicated that 95.8% of inpatients had cut on their wrists (Rosenthal et al., 1972), the results of the current study indicate that cutting other bodily areas was more prevalent, and that 32.1% of the individuals with a history of self-mutilation had cut on both their wrists and other bodily areas. When males and females were examined separately, it became evident that males were much more likely to cut on other bodily areas whereas females were more likely to cut on their wrists. In addition, a greater percentage of females reported cutting both their wrists and other bodily areas than did males. These results again support the notion that cutting may be seen as more of a female behavior because females are more likely to cut in multiple and more visible areas.

In terms of describing the "typical" student with a history of cutting, it appears that the majority of students cut other bodily areas besides their wrists, very few will cut severely enough to require stitches, approximately half will cut deeply enough to result in scars, and most will have not cut within the past two months. In addition, most students will have limited insight into why they began cutting. Over 50% of the students stated that cutting "just happened" the first time, indicating that they are not sure why they chose cutting over another behavior. Another 28% of the students provided alternative

reasons for first engaging in cutting, and the majority of these responses included feeling states (i.e., anger, sadness, etc.). Females were more likely to have been influenced by someone else who cut, which also is consistent with the idea that females are more likely to disclose the behavior than are males. However, the results of this study indicate that the average college student with a history of cutting does not have any friends who cut, thus possibly leading to a sense of loneliness or isolation in terms of the cutting behavior (i.e., feeling like they are the only one who does it). Relatively few individuals stated that they first engaged in cutting as a result of hearing about the behavior, which makes sense due to the fact that cutting is not widely recognized by media sources.

If cutting is seen as a behavior similar to disordered eating or drug/alcohol use, it would be expected that many individuals would first engage in cutting during difficult life transition periods, such as adolescence, or the transition to college. Overall, the greatest percentage of students with a history of cutting indicated that they had first cut between the ages of 13 and 18, or during the transition from junior high to high school. Overall, another 12.2% indicated first cutting during the typical college years (19-24). As stated previously, whereas only 0.7% of females began cutting after the age of 18, 5.0% of males began cutting at the age of 19 or above. Thus, based on the current data, it appears the average college student engaging in cutting will have already had a history of cutting prior to entering college.

Disordered Eating and Depression. As these variables are highly related, they will be discussed together. Based on the criterion used in the present study, 28.8% of the respondents reported disordered eating, and 7.4% were depressed. As would be expected, females were much more likely to display disordered eating than were males. Females

were also slightly more likely to be depressed than were males. However, it should be noted that 13.9% of the responding males met criteria for disordered eating, illustrating that these behaviors are not simply "female problems." Overall, the majority of respondents meeting criteria for disordered eating indicated that they restricted food to lose weight and feared gaining weight or getting fat. In addition, a high percentage indicated engaging in fasting in order to prevent weight gain. Significantly fewer participants reported purging behaviors, with only 14.3% reporting having thrown up and 6.1% reporting the use of laxatives. Females were much more likely to engage in multiple disordered eating behaviors, and specifically were more likely to engage in purging.

With regard to diagnoses, 10.7% of females, and none of the males had previously received an eating disorder diagnosis. Of those who had received a diagnosis, 5.8% had been diagnosed with anorexia nervosa, 4.2% with bulimia nervosa, and only 0.7% had been diagnosed with a subclinical eating disorder (i.e., eating disorder that does not meet full DSM-IV-TR criteria for either anorexia nervosa or bulimia nervosa). This is surprising because previous research at CSU, and at universities across the nation, has shown that the majority of college students exhibiting eating disordered behaviors do not meet criteria for either anorexia nervosa or bulimia nervosa, but instead have behaviors consistent with a subclinical eating disorder (Hoyt & Ross, 2000). Thus, the results of the present study indicate that the majority of students with disordered eating either had not sought help for disordered eating or were not diagnosed by the professionals from whom they did seek help. In addition, it is interesting to note that although 13.9% of the male respondents met criteria for disordered eating, not a single one had ever been diagnosed with an eating disorder. This would indicate that either these male students are not

reporting their behaviors, or when professionals see these students, they are not assessing them for disordered eating. This would be consistent with the societal notion that eating problems are specific to females. It is not surprising that males would not report their behaviors and/or cognitions related to disordered eating as they are more likely to be scorned or not validated by those whom they tell. However, the lack of communication about these issues in males likely increases a sense of loneliness and isolation in those males who display these characteristics.

Consistent with previous research related to past abuse and subsequent disordered eating, the current results indicate that those students meeting criteria for disordered eating have a higher level of past abuse or neglect. Previous research regarding the correlation between abuse and disordered eating has been inconclusive. However, the data from this study clearly indicate that, in particular, women with disordered eating are more likely to have a history of sexual abuse than are those not displaying disordered eating. Although this is far from indicating a cause and effect relationship, it does show that past abuse is significantly related to the development of disordered eating. It appears that a history of abuse and/or neglect is even more strongly related to disordered eating for males, as the rates of abuse and neglect were approximately two times higher for the males with disordered eating than in the full sample of males.

With regard to depression, a similar pattern emerged. Overall, males who met criteria for depression were over two times as likely to report a history of abuse and/or neglect than were the full sample of males. For both males and females, a history of emotional neglect was highly related to current depression. It appears that the trauma resulting from feeling unloved or uncared for results in lasting emotional effects that can

lead to depression. Indeed, many of the messages individuals who have been neglected have received can be easily internalized and lead to later feelings of low self-worth, incompetence and unloveableness. In addition, it is likely that the sense of loss of control and shame resulting from physical and sexual abuse results in excessive guilt and shame that leads to depression. For some depressed college students, the effects can be quite severe. The results of this study indicate that approximately 25% of those students meeting criteria for depression had previously attempted suicide, and 34.3% had recently considered attempting suicide. In comparison, 6.6% of the non-depressed sample reported a previous suicide attempt, and 2.8% had recently considered making a suicide attempt.

Drug and Alcohol Use. Not surprisingly, the majority of the respondents (69.6%) indicated currently using at least one of the substances assessed, and only 18% had never tried alcohol or any other drugs. Consistent with the data provided by the SIUC/Core Institute, the results of the present study indicate that alcohol, tobacco, and marijuana are the most commonly used substances on campus. Very few respondents indicated current cocaine, ecstasy or speed use, and the use of these substances was highly correlated, indicating that if a respondent used one, they were more likely to use others. However, a relatively high percentage of participants indicated a lifetime prevalence of use of these three substances, indicating that it is not uncommon for college students to have experimented with illicit drugs.

Surprisingly, many of the prevalence rates resulting from this study conflict with those resulting from the 1999 Core Drug and Alcohol Survey conducted at CSU (SIUC/Core Institute, 2000). With regard to current use of the assessed substances, the

results of this study revealed lower prevalence rates than those presented by the Core Institute. Whereas the Core study resulted in current use estimates of 77.1% for alcohol, 36.1% for nicotine and 25.3% for marijuana, the present study indicated that only 65.1%, 20.2% and 17.8%, respectively, of the students reported current use of these substances. The reported usage rates of substances other than those listed above were relatively equivalent between the Core study (15.1%) and the present study (14.3%). When compared to the nationwide results provided by SIUC/Core Institute, the results of the present study indicate that CSU students use all of the substances assessed, with the exception of cocaine and ecstasy, less than do students on the average college campus.

With regard to the lifetime prevalence of use of the assessed substances, again the results of the present study conflicted with those presented by the SIUC/Core Institute study. The Core Institute study conducted on the CSU campus indicated that 87.6% of the respondents had a lifetime prevalence of alcohol use, 62.4% had a lifetime prevalence of nicotine use, and 54.6% had a lifetime prevalence of marijuana use. The results of the present study indicated that these lifetime prevalence rates were 80.7%, 44.2% and 51.8%, respectively. Interestingly, the results of the present study indicate that more students report a lifetime prevalence of marijuana use than nicotine use. This phenomenon is difficult to explain, but it may be a result of the common misperception that marijuana has less negative health effects than does nicotine. With regard to other illicit drug use, the SIUC/Core Institute results indicated that 16.3% of CSU students have a lifetime prevalence of speed use, 11.0% have a lifetime prevalence of ecstasy use, and 8.4% have a lifetime prevalence of cocaine use. The results of the present study indicate higher lifetime prevalence rates for all of these substances. The data of the

present study indicate that the prevalence rates were 16.3%, 19.7%, and 14.9%, respectively. It should be noted that the SIUC/Core Institute study was conducted in 1999 and consisted of 410 students. It is possible that usage rates changed over the year between the Core study and the present study. This is most likely to account for the increase in ecstasy/MDMA use as that drug, in particular, has recently increased in popularity. Other differences are likely accounted for by differing sample sizes, and the fact that the Core survey was completely drug and alcohol related whereas the present study had drug and alcohol use as only one of four major behaviors assessed. This increases the likelihood that the Core survey respondents possibly over-represented the level of substance use on campus, whereas the respondents to the present study may under-represent the level of use.

Consistent with the SIUC/Core Institute (2000) study, the results of the present study indicate that males are engaged in greater substance use than are females. Whereas males and females engage in almost equivalent rates of alcohol use, males reported higher marijuana, cocaine, and nicotine use. Overall, 26.2% of the substance using respondents indicated poly drug use, with men engaging in slightly more poly drug use than women. The most heavily used drugs were nicotine, marijuana, and alcohol, with prevalence rates of 19.1, 9.1%, and 8.0%, respectively. Again, a surprising result is that more students reported heavy marijuana use than heavy alcohol use, with 5.4% of the sample reporting daily marijuana use and 2.0% reporting daily alcohol use. These results indicate that while alcohol is the most commonly used substance on the CSU campus, in terms of number of students who have tried or currently use it, there is cause for greater concern for those who are using marijuana as they seem to be using it more frequently,

and it has many negative health effects (i.e., cancer, depression of the central nervous system, etc.).

Finally, both year in school and sorority/fraternity membership were significantly related to current substance use. As would be expected, as year in school increased, so did the prevalence of drug and alcohol use. This is easily explained by alcohol being legal for students age 21 and older, thus increasing the likelihood these students will be able to more easily gain access to this substance. It also is not surprising that fraternity and sorority members were more likely to engage in the use of substances since alcohol and other drugs are often easily found at Greek functions.

Comorbidity of Behaviors

Correlational analyses indicated that of all the demographic variables assessed, those most closely related to cutting, disordered eating, depression, and substance use were physical and sexual abuse and emotional neglect. Again, it should be noted that the resulting correlation coefficients are conservative due to the use of dummy coded variables. In addition, cutting, disordered eating, and depression were all interrelated. Substance use was only associated with disordered eating, and this relationship occurred only when the sexes were examined separately. In addition, the types of abuse/neglect were moderately correlated, indicating that some students had a history of multiple types of abuse and/or neglect. There was a stronger relationship between cutting and sexual abuse and emotional neglect in males, whereas in females, there was a stronger relationship between cutting and physical abuse.

Although loglinear analyses indicated that there were no interactions between variables that would reliably predict cutting, chi-square analyses revealed several

possible relationships. The prevalence of disordered eating, depression, substance use and poly substance use was more common in students with a history of cutting than in those who had never engaged in cutting. In developing the prototype of an individual who engaged in "deliberate self-harm," Pattison and Kahan (1983) indicated that predisposing factors included drug and alcohol abuse and depression. This assertion was supported by the current data, which indicated that 78.2% of males and 76.1% of females with a history of cutting reported current drug use. An even more interesting finding was that the difference in substance use rates between students with and without a history of cutting was only significant for females. As shown previously, a larger percentage of the overall respondents were engaged in current substance use, and for males the rate was relatively equivalent for those who did and did not engage in cutting. However, for females it appears current substance use is significantly related to cutting, indicating that current substance use is more prototypical for the female student engaged in cutting than for the male student.

With regard to depression, previous researchers have reported that 45-66% of the self-mutilating patients they studied met criteria for depression (Ghazuiddin, et al., 1992; Pattison & Kahan, 1983). The present study resulted in a significantly lower comorbidity rate, with only 17.4% of the students with a history of cutting currently meeting criteria for depression. Depression and cutting were more highly related for males than females, although the relationship was significant for both sexes. These results indicate that while depression is related to cutting in college students, there are clearly many students who engage in cutting that, according to self-report, who do not meet diagnostic criteria for depression.

Previous estimates of eating disorder diagnoses in those who engage in self-mutilation have ranged from 8.3-80% (Darche, 1990; Cross, 1993; DiBrino, 1998; Farber, 1997; Favazza, DeRosear, & Conterio, 1989; Favazza, 1998; Strong, 1998). Again, it should be noted that the students who participated in the present study did not receive an in-depth assessment, and thus could not be diagnosed with an eating disorder. However, the results indicate that 45.5% of the students who engaged in cutting also engaged in disordered eating. This result was significant for both males and females, with 30.0% of males and 54.5% of females with a history of cutting also reporting disordered eating.

The results presented thus far indicate that many students who engage in cutting also report engaging in one additional maladaptive behavior. Further analyses indicated that this trend remained consistent when three or more behaviors were assessed. Although the co-occurrence of three or more behaviors became increasingly smaller, the strength of the relationships did not weaken. Both male and female students with a history of cutting were more likely to engage in both disordered eating and substance use than were students who had never engaged in cutting. The relationship was somewhat stronger for males than females, indicating that males are more likely to engage in multiple impulsive behaviors than were females.

When depression, which is not seen as being related to difficulties with impulse-control, was added to the analysis, a significant effect was obtained for females, but not for males. This is interesting considering depression is more closely tied to cutting in males than in females. Overall, 11.2% of females engaged in cutting also met criteria for

disordered eating, depression, and current substance use, whereas only 5.0% of males meet criteria for all three behaviors.

Estimates of the prevalence of past abuse in patients who self-mutilate range from 50-75% (Briere & Gil, 1998; Collins, 1996; Darche, 1990; Favazza, 1998; Favazza, 1999; Favazza & Conterio, 1989; Favazza & Rosenthal, 1993; Ghaziuddin, Tsai, Naylor, & Ghaziuddin, 1992; Lipschitz et al., 1999; Shapiro, 1987; Suyemoto & Macdonald, 1995; Walsh, 1987). In addition, Lipschitz et al. (1999) found that 31% of adolescent inpatients engaging in self-mutilation have a history of emotional neglect. The results of the present study indicate that 26.5% of the students who had a history of cutting had reported past sexual abuse, 19.6% reported past physical abuse, and 20.1% reported past emotional neglect. Overall, sexual abuse and emotional neglect were most strongly related to cutting. Sexual abuse is the type of abuse most likely to lead to a sense of shame, guilt and self-blame, and emotional neglect often leads to children "shutting down" emotionally (Strong, 1998). Both behaviors demonstrate a failure on the part of important individuals in showing their love, encouragement and support, which, as stated earlier, can be linked to the development of depression, low self-esteem, and an inability to develop close relationships with others (Briere & Gil, 1998; DiBrino, 1998; Doran, 1985; Favazza, 1999; Garrison et al., 1993; Graff & Mallin, 1967). In addition, individuals who have grown up in homes characterized by sexual abuse and emotional neglect often do not learn how to express their emotions. Thus, it is not surprising that some of these individuals have a tendency to direct their anger and sadness inward, and to express themselves through actions instead of words, as they may never have learned the words to express themselves.

A history of abuse and neglect was also significantly related to disordered eating and depression, but it was not related to substance use. However, there was somewhat of a "restricted range" regarding substance use since so many of the respondents reported current use of at least one of the substances assessed. However, the fact that both cutting and disordered eating were related to past abuse/neglect supports the notion that some individuals develop these maladaptive behaviors patterns as a result of a chaotic and unhealthy childhood.

Use of Campus Treatment Options

Perhaps one of the most interesting results of this study is that very few of the respondents who reported experiencing depression and/or engaging in cutting, disordered eating, or substance use had ever received treatment in one of the available campus agencies. Students were most likely to have been treated for depression, which is possibly the least stigmatizing "disorder" assessed. Over 90% of those students who engaged in cutting, disordered eating, or substance use had never sought treatment, and less than 3% had received treatment from a campus agency. Of the students who had sought treatment, the majority had received treatment from an off-campus therapist or group. Although this seems surprising, there may be some relatively straightforward explanations. First, some of the students may have received treatment for and resolved their "disorder" prior to attending CSU. In addition, there are limited resources on the CSU campus for some of the behaviors assessed. The counseling center has only two therapists who specialize in the treatment of disordered eating, thus many of the students presenting with these behaviors are referred off-campus (S. MacQuiddy, personal communication, July 12, 2001). In addition, the counseling center generally does not treat students with substance

use problems, so these students are referred to either the Health Center or to an off-campus therapist. With regard to cutting, none of the counseling center therapists indicated specializing in self-mutilation, and due to the fact that this behavior is not widely recognized on campus, it is likely that there are few medical professionals who are highly skilled in working with this difficult population.

What this study clearly illustrates is the need for greater awareness on the CSU campus regarding students who engage in cutting. Very few of the students with a history of cutting have sought treatment for this behavior, and previous research has shown that it is difficult to stop cutting without some form of treatment. Favazza and Rosenthal (1993) indicated that, particularly for those individuals engaging in multiple behaviors, treatment could take 10 to 15 years. Although the results of the present study indicate that the majority of students with a history of cutting have not cut within the past two months, this is far from showing that these students have been "cured." All of the behaviors assessed (cutting, disordered eating and substance use) have been previously demonstrated to increase during times of personal stress and decrease during other times. Thus, it is likely that many of the students who have not cut recently are at extremely high risk for cutting again when facing stressful life circumstances. In addition, it is possible that cutting has an "addictive" component for some individuals, which would make stopping the behavior without outside support very difficult. Thus, increasing campus awareness and improving treatment options would be beneficial in reducing future episodes.

Review of Hypotheses

The first hypothesis was that there would be a higher prevalence of disordered eating, depression and substance use in students with a history of cutting. This hypothesis was supported, especially for females. Results indicated that males with a history of cutting reported higher rates of disordered eating and depression than did males without a history of cutting. There was no difference in cutting status related to male substance use. All three behaviors were significantly more prevalent in females with a history of cutting than in females without a history of cutting.

The second hypothesis was that cutting, disordered eating and depression would be more common in females than in males. With regard to cutting, this hypothesis was not supported. There was no significant difference in the rate of cutting for male and female respondents. However, females did report cutting more often than did males. In addition, the hypothesis was supported in that females were more likely to meet criteria for disordered eating and depression than were males.

The third hypothesis was that cutting would be more common in younger students and in students with a history of abuse and/or neglect. With regard to student level, the results differ for males and females. Whereas females with a history of cutting were more likely to be freshmen or sophomores, males with a history of cutting were more likely to be juniors or seniors. With regard to past abuse/neglect, the hypothesis was supported. Abuse and neglect were significantly more common in students with a history of cutting than in students without.

The final hypothesis was that the majority of students displaying the assessed behaviors would have seldom or never utilized campus treatment options. This

hypothesis was very strongly supported, with over 90% of the students who reported one or more of the assessed behaviors never having received treatment, and 97% never utilized campus treatment options.

CHAPTER FIVE

STUDY TWO: METHOD

The Grounded Theory Method

The purpose of a grounded theory study is to develop an explanatory framework that adequately describes a particular phenomenon based on the experiences and opinions of those who have lived the phenomenon (Creswell,1998). Thus, the researcher is interested in not only learning about the individuals' lived experiences, but also about the event(s) that precipitated and mediated both the situation and the individuals' reactions. A basic tenet in formulating a research question based on a grounded theory model involves ensuring that the questions are broad enough to allow the researcher flexibility to adequately explore the phenomenon in question (Strauss & Corbin, 1990). The initial research question is then shaped and becomes more focused as a result of information gleaned from early interviews.

Interviewer Bias

In conducting a grounded theory study, it is important that the researcher recognize that he/she is inextricably linked with the data and his/her perspectives (i.e., biases, preconceptions, and personal experiences) related to the phenomenon in question, if not identified, will bias the final theory. In this type of study, the researcher is the instrument used for both data collection and data analysis; thus, his/her biases may affect

the final outcome. Patton (1990) identified several ways in which the researcher may influence the findings in a qualitative study:

1. The researcher is incompetent.
2. The presence of the researcher may elicit reactions from participants.
3. The researcher will have certain subjective biases.
4. There may be changes in the researcher during the course of the interviews.

Each of these issues will be addressed directly in order to consider the effect of the researcher on the present study. With regard to the competence of the investigator, the primary issue is related to whether she was capable of eliciting information about a sensitive, and typically secretive, topic. For the present study, the primary investigator (PI) was a doctoral student in counseling psychology with three and a half years of clinical interviewing experience. In addition, I had experience working with patients with a history of self-mutilation, both in inpatient and outpatient settings. I was used to talking with adolescents and young adults about their self-mutilation and had developed the skills necessary to interview individuals engaging in self-mutilation and observe their wounds and scars without portraying a negative reaction. Finally, I had been recently accepted as a doctoral intern after completing the Internship Readiness Competency exam, which indicated that the graduate faculty had determined that I possessed the interviewing skills necessary to complete my training as a counseling psychologist.

The second area to be addressed is related to the impact that my presence may have had on the participants' responses. As noted, the topic the participants were asked to discuss was a very sensitive one, and a topic about which most individuals strive to be

secretive. However, based on participants' comments, it seemed as though they were not negatively affected by talking to me about their history of self-mutilation. The majority of participants indicated that it was a satisfying experience to have someone recognize their behavior and accept it as the coping mechanism that they were using at that point in their lives. Most participants indicated receiving primarily negative reactions from those who knew of their self-mutilation, thus they appreciated being able to talk about their experiences without feeling ashamed. One participant in particular indicated that she felt comfortable enough talking with me about this topic that she was willing to remove her long-sleeved coat that she typically wore to cover her scars. Overall, it appeared that engaging in an interview regarding self-mutilation helped participants to feel less alone in their behavior and almost all participants thanked me at the end of the interview as they were pleased to learn that someone cared about what they had experienced, and they perceived that I understood why they had used self-mutilation to cope in their lives.

The third area to address is the researcher's subjective biases towards the phenomenon. With regard to the present study, I engaged in a bracketing interview in order to identify the biases I possessed regarding self-mutilation. In short, a bracketing interview consists of a peer asking the PI the same questions the investigator intends to ask the participants. In addition, the peer follows up with probing questions, which can help the investigator to develop probes to be used during the interview with participants. In addition to engaging in a bracketing interview, I took time to reflect upon my own history of maladaptive coping, my history of working with individuals who had engaged in self-mutilation, and how these two factors influenced my understanding of self-mutilation. Finally, to minimize the risk of influencing the responses provided, interview

questions were phrased in an open-ended manner and participants were asked to describe their experiences in a way that did not impose expectations of certain responses. In addition, responses were summarized and rephrased back to the participants during the interviews in order to promote clarification and correction of the interviewer's understanding of participants' experiences.

The final area to address is that related to changes in the researcher's perspective during the course of the study. Due to my experience with eating disorders and working with individuals engaged in self-mutilation, none of the participants spoke of events or thoughts related to self-mutilation that were surprising. However, at the same time that this study was being conducted, I was experiencing a significant trauma in my own life that led to significant emotional pain and thoughts and utilization of some less severe maladaptive coping mechanisms. This experience heightened my awareness and understanding of individuals who find themselves unable to cope with stressful life events. Overall, however, I believe the change in myself was positive in that it increased my ability to empathize with individuals experiencing significant life stressors and the use of maladaptive coping mechanisms.

Participants

Research participants were six female and two male students between the ages of 19 and 27. A ninth interview was completed with another female student, but the resulting audiotape could not be transcribed due to poor recording quality. Table 14 provides participant pseudonyms, demographic information, and data regarding precipitants to cutting. Year in school for the eight participants ranged from high school senior to college senior, and the participants' majors varied. All participants were

Caucasian, non-Hispanic, and all were single. Each of the participants had a history of cutting more than one time. The number of years since first engaging in cutting ranged from one to nine. The precipitating events, as described by participants, included school, family and work stressors that led to difficult emotions (see Table 14 for additional demographic information). Data collection was terminated at nine participant interviews due to the fact that no new themes were emerging, and the criteria for saturation of categories was satisfied (see Strauss and Corbin, 1998).

Procedure

Sampling. Participants were recruited through two separate methods. Individuals with a history of cutting who were willing to be interviewed after completing the survey utilized in Study 1 indicated their interest in participating in Study 2 on the postcard described previously. Participants' ID numbers were matched with the original database of student names, and these students were contacted at the phone number they had listed with the University's Registrar's Office. This resulted in the recruitment of five of the nine participants. The second method for recruitment involved placing an advertisement in the Colorado State University Collegian (see Appendix C). Readers were asked to contact the researcher if they were interested in participating in an interview regarding their cutting behaviors. Three participants responded directly to the advertisement, and a fourth participant was shown the advertisement by a parent and contacted the PI to set up an interview.

Table 14. Participant Demographics and Contextual Factors Related to Participants' Experiences

Name	Age, Ethnicity, Relationship Status	Student Status, Major	Age When First Cut	Precipitating Event/Emotion(s)	Approximate Number of Episodes/Number of Years
Jay	27, Caucasian, Single	College Senior, Education	25	Overwhelming sadness	3 episodes/2 years
Scott	22, Caucasian, Single	College Junior, Chemical Engineering	21	Failure; sense of unreality	Numerous episodes/1 year
Stacy	19, Caucasian, Single	College Freshman, Human Development	16	Death in the family; overwhelming grief	Numerous episodes/3 years
Angelique	21, Caucasian, Single	College Junior, Psychology	12	Sadness	Numerous episodes/9 years
Anna	18, Caucasian, Single	High School Senior, attending college next year	12	Developmental transitions; failure	Numerous episodes/6 years
Sara	21, Caucasian, Single	College Junior, Art	20	Punishment; need for control	10-20 episodes/1 year
Ashley	19, Caucasian, Single	College Freshman, Math	19	Isolation; sadness	Numerous episodes/1 year
Jen	20, Caucasian, Single	College Junior, undecided	11	Neglect; anger	Numerous episodes/1 year

Note. Numerous episodes is defined as more than the participants could reasonably estimate

Participants were contacted by the primary researcher, who explained the purpose of the study, discussed confidentiality, and arranged an interview time.

Data Collection. Participants were interviewed by the PI in a private office on the CSU campus. The length of the interviews ranged from 30 to 100 minutes. All interviews were audiotaped and then transcribed by one of three undergraduate research assistants. Prior to initiating the interview, participants were provided with an informed consent sheet (see Appendix C) and verbally informed of the purpose of the interview. In addition, participants were told that they could refuse to answer any questions and that they could terminate the interview at any time. Before audiotaping began, participants were asked basic demographic questions in order to reduce the chances that their identity would become known to individuals other than the researcher (i.e., in case the transcribers would be able to identify the student participants majoring in psychology).

Due to the emotional nature of the interviews, and the possibility that talking about cutting and difficult life experiences could "trigger" participants to feel a desire to cut again, all participants engaged in a debriefing conversation at the end of the interview. This conversation was not audiotaped. The debriefing was used to identify any thoughts or feelings that were triggered during the interview and actions that could be taken to deal with these thoughts and feelings (i.e., contact their therapist, identify and engage in positive coping skills, etc.). All participants indicated that they did not intend to engage in cutting as a result of the interview.

All interviews were conducted from an interview-guided approach (Patton, 1990). Glaser (1992) suggests that the researcher never directly ask the interviewee the questions of interest as this might limit the possible outcomes of the research by establishing future

responses in a predetermined format. The questions, therefore, were asked in a general manner, such that the participants were able to provide open responses specific to their own experiences. A set of standard questions was asked of each participant, but these questions served only as a guideline for the interview. This type of semi-structured interview format allowed the researcher to ask spontaneous questions that were specifically relevant to that participant's experiences. In addition, it allowed for deepening of the level of processing and sharing.

Another type of question, typically referred to as a probe, is designed to explore a given topic more in-depth, and it allows the researcher to draw forth an elaborative and associative response (Guba & Lincoln, 1981). Three types of interviewer-cued probes were used in the present study. First, clarification probes allowed the interviewer to obtain more information about, and to confirm, a previous response. For example, if the interviewee stated that her friends made fun of her, the interviewer tried to obtain more details of this incident. Second, questions such as "why?" and "in what ways?" are considered critical awareness probes in that the interviewee was asked to reflect upon, evaluate, or give an example of a particular topic. Finally, probing for the level of emotional intensity is an important component in understanding the depth of the interviewee's experiences.

Three basic subject areas were covered in each interview, and a total of eight questions related to these subject areas were used. Whereas no psychological interpretations or psychotherapeutic interventions were made, the structure of the interview was quite similar to that of a clinical intake interview. In other words, follow-

up questions were utilized to help participants more fully explore each topic. The three basic subject areas and related questions were as follows (see Appendix D):

1. Participants were asked to describe their experiences with cutting, including when they first cut, what were the precipitating events/emotions, and what they felt like before, during and after engaging in cutting. Due to the fact that the participants had engaged in multiple episodes of cutting, they were asked to describe differences and similarities between episodes in order to assist the PI in understanding what event(s) led to cutting episodes.
2. Participants were asked to identify what actions taken by friends, families and professionals had assisted them in their treatment, and what actions had a negative impact on their cutting. These responses included both observable actions (i.e., removing cutting paraphernalia, offering assistance) and emotional reactions (i.e., fear/shock reaction, empathic responses).
3. Finally, participants were asked what advice they might have for others engaging in cutting. This was another attempt at elucidating the helpful events that had occurred in participants' recovery, or their hopes of what others could have done for them.

Data Analysis. Following transcription of the interviews, the data were analyzed according to grounded theory strategies. The primary researcher carefully reviewed each transcript, and "meaning units," or significant statements made by the participants representing a particular concept, were recorded as part of "open coding." During open coding, the interviews were dismantled, sentence by sentence, in order to label the phenomena and identify words and phrases that adequately described the data. Following

completion of this stage, the resulting codes were categorized and organized to describe the different dimensions of the data. In addition, those codes that did not pertain to the phenomenon of cutting were discarded.

In the next stage, i.e., axial coding, the retained codes were transformed into conceptual interpretations that were consistent with traditional psychological terminology. This was achieved by identifying connections between categories and subcategories. Strauss and Corbin (1990) provide a structure for this step, in which a paradigm model is created by "denoting causal conditions, phenomena, context, intervening conditions, action/interaction strategies, and consequences" (p. 99). Initially, this phase of the data analysis was conducted on a case-by-case basis, until four of the eight interviewers had been fully analyzed. This allowed the researcher to identify an early means for constructing categories and subcategories.

All following interviews (i.e., five through eight) were used to confirm and disconfirm this initial model. This step is part of the final stage of analysis, called selective coding. In this stage, a final model of both the cutting phenomenon and the role of others in increasing and decreasing cutting behaviors was proposed. This phase was an abstract level of analysis and required the investigator to comb through all of the interviews. Each time disconfirming data was identified, the initial model was adapted to incorporate these data. Through this constant comparative analysis, the model became grounded in the original data source (i.e., the participant interviews). Thus, the final proposed theoretical model is consistent with the responses of all participants. This was confirmed by creating a check sheet including all of the categories that resulted in the

final model. At that point, all eight interviews were reviewed one final time to be sure each of the themes included in the model were present in all interviews.

Throughout the data analysis, the primary researcher consulted with another Ph.D. psychologist interested and experienced in qualitative analyses. In addition, the primary researcher's advisor and five other colleagues provided additional commentary regarding the developing model. These seven individuals assisted the primary researcher in detecting instances of disconfirming evidence through challenging and supporting the developing conclusions.

Validity. Within grounded theory, there are several validity checks inherent to each stage of data analysis (Strauss & Corbin, 1990). Specifically, at each stage there is a constant checking and rechecking to ascertain whether the code or phenomenon is actually reflected in the words of the participants. For example, during the open coding phase, a second reader was used when there was confusion regarding the interpretation of statements from one of the transcripts. If there was confusion, the primary investigator asked the second reader to read the transcript and offer his/her interpretation of the meaning of the text. If there was a discrepancy in interpreting a statement from the transcript, the difference in understanding between the two readers was discussed. Ultimately, the code reflected their mutual understanding of the meaning of the statement made by the participant.

A second phase of verification of the data occurs during the axial coding phase where there is an attempt to look for incidents and events in the data which either refute or support the understanding of the phenomenon. This process is referred to as a "negative case analysis." It is understood that the discrepancies in the data provide the

variation necessary to fully understand the complexity of the phenomenon being studied. Thus, if the researcher does not look for data that varies from the original proposed theory, the analysis will be incomplete. This was addressed through rereading all of the interviews following the design of the original theoretical model. This allowed the PI to identify any themes that were in support of, and any that contradicted, the model. The theory was revised accordingly, which resulted in three revisions to the original model.

Finally, during the selective coding phase, it was necessary to see whether the statements made in the model had enough breadth to describe each person's experience. If one person's story did not fit the model, the model was re-formulated to include that person's experience. This process is referred to as verifying the analysis against the data, and it provides an internal validity check.

As recommended by Lincoln and Guba (1985) and Howe and Eisenhart (1990), three additional procedures were employed to ensure the validity of the data analysis. First, as previously mentioned, the PI engaged in a bracketing interview to identify her biases. Second, the data were compared against other literature regarding self-mutilation in order to provide a greater context in which to understand these results. Finally, during the selective coding phase of the data analysis, the investigator talked with one of the participants to obtain feedback about the emerging model and to ask if she felt it adequately reflected her experiences.

CHAPTER SEVEN

STUDY TWO: RESULTS

Categories resulting from open and axial coding are presented in relationship to the results of selective coding, following the outline designed by Strauss and Corbin (1990). Initially, results regarding the development and phenomenological aspects of cutting are presented (see Figure 1). The recommendations directed towards individuals currently engaging in cutting that were provided by the participants follow.

Contextual Factors

Strauss and Corbin (1998) define contextual factors as the "specific sets of conditions (patterns of conditions) that intersect dimensionally at this time and place to create the set of circumstances or problems to which persons respond through actions/interactions" (p. 132). The participants' responses clearly indicated that the primary contextual factor leading to the utilization of cutting was experiencing *multiple potentially negative or stressful events.* In many cases, the average adult would perceive the experienced situation (i.e., abuse, neglect, isolation) as both negative and stressful. However, some participants experienced events negatively that others would experience neutrally or even positively (i.e., transition to adolescence, loss of a relationship, etc.), depending on their outlook. Research related to stress theories have indicated that what is most significant is not necessarily the event, but the way the individual perceives the event (Lazarus, 1999). Thus, any event that could be perceived negatively was

determined to set the stage for the development of cutting behaviors. All participants spoke of multiple stressful events when talking about what led to engaging in cutting. Jen illustrates some of these potentially negative events:

> It started when I was in sixth or seventh grade and it was just after my dad had left; he had been abusive. And I think I was just angry. My mom would send me away for periods of time, but she would always make me come home after 90 days so she could get social services money for having me as a dependent....I think after my dad having beat me, I just, I never wanted to hurt anyone the way I had been hurt, so I just took out all of my aggressions on myself....

Other perceived stressful events reported by the participants included the loss of friendship, intimate and/or family relationships (either by discord or death), school- and/or work-related tasks, life transitions (i.e., adolescence, beginning junior high, high school, or college), and early sexual relationships. Anna stated:

> Looking back, I think it was a lot of stuff. My parents were getting divorced, they weren't getting a divorce until I was in ninth grade, but I could tell their marriage was crap so I think that affected me a lot more than I could see. And I was in junior high and that's a hellish time for pretty much everyone....I didn't know who I was, I didn't know what I was supposed to be, I wasn't sure of my friends....

Ashley explained:

> I've been having really hard problems with friends. One of my best friends that I have been friends with since sophomore year in high school, we just recently stopped being friends because of an incident that happened. And that was something that was really hard to go through...to find new friends and to find people that I can get along with as well as I got along with her.....I have other friends I can call on the phone, or my mom or my sister, but it's just not the same as with someone that knows you that well.

Although abuse and/or neglect were not uncommon in the life histories of the participants, not all had experienced such clearly identifiable trauma. Sarah stated:

> I guess I'm not like a lot of cutters. I wasn't abused as a child. And, I haven't really gone through any trauma or anything. I think that I would have to say it sort of began because I was dealing with an eating disorder and then I think that it

> sort of started becoming an issue because it started to look appealing. It was something else to try.....And I guess I would just want people to know that trauma is not the only reason. For most people there's a lot of guilt attached to cutting like there is with bulimia. I don't tell anyone about that. But yet at the same time you sort of engage in the actions and everything without thinking of consequences. I don't know, it's like looking for another way to cope with things.

Mediating Factors

Mediating factors are defined as the internal characteristics that influence an individual's perception of the contextual factors. Thus, for the current study, the mediating factors are the personal characteristics that led participants to perceive the potentially stressful events negatively. As stated previously, stress theory research has indicated that what is most important in determining the significance of individual events is the perception of the person experiencing the event. Thus, for example, one person might experience the ending of a relationship negatively due to the sadness and loneliness he/she experiences, whereas another person may view the ending of a relationship positively because he/she saw the relationship as being a negative event in his/her life. Four mediating factors were identified.

Negative thought patterns. Whereas not all participants identified their thought patterns as negative, it was clear from their comments that all had engaged in negative thinking patterns prior to and during cutting episodes. Scott referred to the negative self-talk and catastrophic thinking patterns in which he engaged:

> I fear I'm going to be a failure if.....I have to get good grades because if I get bad grades than I'll flunk the class.....it just spirals downward.

Other participants talked about feeling like they were inferior to or inadequate in comparison to their sibling and/or peers, which significantly decreased their sense of self-

esteem. Overall, all participants indicated feeling negatively about themselves throughout their lifetimes.

In addition, a number of participants directly or indirectly referred to a tendency to blame themselves for negative events in their lives. This led many to believe that they deserved punishment, and cutting was just one way in which they punished themselves. As expected, some participants engaged in multiple self-harming behaviors. Sarah stated:

> I believed that I deserved punishment.....sort of when my eating disorder doesn't work for me to cope. I guess what cutting was for me was sort of a way to get the attention that I wanted by being really thin, which I'm just having a hard time with.....I wouldn't really engage in cutting as a way to get back at someone else; it was more of a way to punish myself. Feeling that I deserved punishment for not having control of the situation or for just making ill choices.

Both male participants indicated that alcohol use played a significant role in their cutting. In addition, Sarah and two additional women indicated engaging in disordered eating and/or substance use. Sarah went on to indicate that, in many ways, her eating disorder and cutting behaviors were interchangeable and could be used to confuse family and professionals:

> I guess it kind of switched off like, if they gave me attention for [cutting] then that would give me time to engage in my eating disorder....they'd be all worried about my cutting and I'd be out of control with my eating disorder.

Perceived lack of control over self and/or world. Above, Sarah referred to a sense of being out of control with her behaviors. All of the other participants also made reference to feeling out of control over some part of their lives. Often, participants indicated feeling as if they had no control over their own emotions, or that they had no control over how their lives were playing out due to the fact that many were adolescents when they first engaged in cutting. Referring to her mother's using her, Jen stated:

> She sent me away to live with strangers or relatives, whoever she could find that would take me. But after [my abusive] father left, she still sent me away, and I am not exactly sure why. I always had that question....I hated that people told me I had no options.

Thus, cutting provided a sense of control in the participants' lives. Effects of taking away this sense of control are discussed later.

Perceived lack of social support. Based on the interviews conducted, it was impossible to determine whether or not support systems actually existed for the participants. Thus, what was deemed important was the participants' perceptions of support and their willingness to utilize support systems that might have been in place. Each of the eight participants indicated feeling isolated from their friends and/or family. For some, chaotic home environments in which parents were either abusive or neglectful triggered this. Whereas a history of physical or sexual abuse was not present for the majority of the participants, almost all spoke of experiencing some type of emotional abuse or neglect. In addition, most of the participants indicated not having a strong network of friends whom they trusted. Some believed they had no friends, and others indicated having friends, but for one reason or another, chose not to reach out to them. Jay stated:

> And, the part of that that makes it difficult is that people who get into this type of self-mutilation, they don't feel they have anybody that they can talk to. They may have their best friends in the world but when you are, you know, doped up or drunk, you don't think about the people who care about you. You don't think about how much you need to talk to this person or how much this person does care because at that point right there, nobody can help you. The only person that can fight your demon is you because you are the only one in your world at that time.

Jay clearly recognized the existence of a support system on which he could have relied. However, Jen, who was moved around often as a result of her chaotic home environment, stated:

> I didn't have a lot of friends then; in fact, I don't know that I had any friends. That probably would have helped a lot.....

Each participant indicated feeling very alone prior to and during cutting episodes. They did not believe they had anyone to help them, thus they looked only to themselves for solutions. In a time of potential stress, a sense of isolation seemed to significantly impact the participants' perception of events as stressful.

Poor communication skills/difficulty expressing emotions. The final identified factor influencing and creating the tendency for participants to interpret events as stressful was their inability to express their emotions about these difficult events. For some, this was likely the result of abuse and being told that they could not talk about what was happening to them in their own homes. However, for others it appeared as if they never learned the skills for expressing negative emotions, either because their parents expressed them poorly (i.e., anger expressed through frightening rage) or did not allow them to be expressed at all. Many participants spoke of emotions building up inside of them in such a way that they became intolerable or overwhelming. Because these individuals could not directly express their emotions, many resorted to cutting, and other maladaptive behaviors, as a means for expressing themselves. Sarah stated:

> Sometimes the cutting is a way to bring all of my feeling to the surface and vocalize them.

It became clear that many of the participants were using cutting as a means for expressing physically those things they could not verbalize. Jen spoke of using her cutting as a means for communicating her desire to leave her chaotic home.

> I think the reason I chose to cut my wrists as opposed to some other part of my body is, for one thing, they are right there. But for another thing, I was trying to get away. I wanted to get away from my family.....I wanted them to take me away. I just wanted to go away. I didn't want people to feel sorry for me, I just wanted to go sometimes.

Many participants spoke of feeling ambivalence about others seeing their wounds and/or scars. Jen clearly differentiated between the times when she was trying to communicate with her cutting, and the times when it was more of a private event.

> There were also times I wanted to be left alone, so I cut myself in places that people would not see, but some of the time, I did want people to notice....

Similarly, Sarah spoke of how she used cutting as a means of communication:

> And I internalize my feelings and I guess it's a way to show other people that I have pain. And I can choose to show people or not.

Other participants spoke of accomplishing the same goals through disordered eating and/or substance use. All of these behaviors represent a means for communicating what they are unable to express verbally. In short, these participants were making the emotional pain physical.

All participants referred to the four factors above in relation to how they came to using cutting as a means for coping. These four factors are those that seem to make the individual perceive a situation as stressful. Theoretically, an individual who did not think as negatively, did not feel out of control, perceived that he/she had social support and felt capable of expressing him/herself verbally was less likely to perceive events as negative

and/or stressful as he/she would be able to view the situation realistically due to the support of others and a sense of personal well-being.

Causal Conditions

The next step in the theory construction was to determine what happens when an individual experiences a potentially negative event and possesses the personal characteristics that lead him/her to perceive the situation as stressful. Strauss and Corbin (1990) defined causal conditions as the "sets of events or happenings that influence the phenomenon" (p. 131). Thus, the causal conditions for cutting are those that lead directly to the decision to engage in cutting.

Overwhelmed by intolerable, difficult (perceived negative) emotions. It was clear in the responses of all participants that they each experienced strong emotional reactions to the perceived stressful events they had experienced. In addition, the role of multiple stressful events became clear; as the participants experienced more and more stressful events, they became increasingly overwhelmed by difficult emotions. As one might expect, the specific emotions experienced varied from one participant to the next. However, all of the emotions expressed could be labeled as difficult and were perceived as negative. As Sarah stated:

> By the cutting, you try to avoid every feeling. Every feeling sort of becomes something you don't want to cope with.

Almost all participants spoke of experiencing loneliness, sadness/grief, and depression prior to cutting episodes. Jay spoke of his sense of being overwhelmed by depression:

> It was a mass depression in the middle of the afternoon and I just kind of got really drunk. I was depressed about some things, and I have a history that I haven't spoken with a doctor about yet of past psychological problems and most

> of them have to do with my childhood. It came to a point where I had all I could stand and I couldn't stand no more and I just did something that I had never done before. For some reason it gave me a sense of satisfaction that I hadn't had.

In addition, a sense of inferiority or inadequacy was common. Many participants indicated feeling as if they were not "good enough" or that they did not measure up to siblings or peers. Many seemed to feel as if they were "flawed" or "bad," often in a way that others could not see or understand. Jay explained:

> When you've had a history of things that have caused you to be hurt deep inside, you've had a history of things that have caused you to make you feel that you are less of a person than what you actually are.....when I look in the mirror, I see that I am a very attractive man, but yet when I step back from the mirror my conscious mind, or the person inside doesn't remember what the person outside looks like. So, it's me walking up to a mirror to realize, to remember what I look like because the face of the person on the inside isn't like that face of the person on the outside. And when you spend your life being demeaned and just emotionally beaten up, if you don't walk around with the mirror all of the time you forget exactly what the rest of the world sees that you don't see right off the bat.

For many participants, this sense of being inadequate led to significant anger towards themselves or someone else. However, as stated earlier, these individuals never learned how to express their anger in an adaptive way. Thus, they often resorted to cutting themselves as a means of alleviating the anger they felt. Anna spoke of her anger and dislike towards herself:

> A lot of it was just to punish myself for not being good enough and I didn't like who I was, I didn't like my body, I didn't like anything about me. So [cutting] was just one more way to deal with it.

Other emotions experienced by the participants prior to cutting included helplessness and hopelessness, distrust, a sense of being unloved or insignificant, and/or misunderstood, and many felt confused by not only their emotional experience, but also by their lives in general. In addition, almost all spoke of experiencing significant shame

and guilt about something in their lives. For some it was related to the abuse they had received, for others it was related to their general sense of self-hatred and low self-concept.

Although the emotions experienced varied, it was clear that, for all participants, they eventually became overwhelming. As Jay indicated:

> I guess once again to quote Popeye, 'I've had all I can stands I can't stands no more.'

Interestingly, some participants responded somewhat differently to being overwhelmed by emotions. Whereas some felt incapacitated, others responded to feeling overwhelmed by becoming numb, or seemingly devoid of all emotion. In addition, some began to question reality and indicated feeling as if they could no longer differentiate reality from non-reality. Scott, who reported experiencing dissociation, indicated that he started cutting as a means for "feeling something again." He went on to say:

> It was kinda weird because I started cutting just because it was kind of a thing to bring me back to reality. Sometimes I wasn't really aware if I was awake or if I was asleep. I was really out of it for quite a while.

Therefore, it seems cutting is used to both numb the emotions of those who feel consumed by them, and to return feelings for those who feel numb.

Need for action/agency. Once overwhelmed by difficult emotions, all participants indicated a need to put an end to the intolerable way they were feeling. Whether they felt consumed or numbed by emotions, all participants indicated feeling a need to change the way they felt. As Sarah indicated earlier, cutting can be used to "try to avoid every feeling." Jen spoke of the sense of being overwhelmed by sadness and the need to end it:

> I was usually really emotional. I couldn't deal with all my problems after a while. And I just wanted things not to hurt anymore. And I don't know, I guess cutting just got me through for a little while. And, I guess it just sort of felt real weird,

> and afterwards I felt a little better. The sadness didn't feel so bad, for a while anyway.

Ashley also spoke of the need for action:

> I just wanted to do something to make it better...It just something, like, I just wanted to do something. It just seemed like the best possibility, I guess.

Viewing cutting as the "easiest" or "most effective" solution. Individuals who are motivated to put an end to feeling overwhelmed by difficult emotions can choose many options to achieve this goal. Thus, what leads individuals to engage in cutting is the belief that cutting will be either the easiest or the most effective means for ending emotional pain. Many participants spoke of trying other means, but finding them to be ineffective. For the individual who identifies cutting as a means for coping, he/she eventually determines that it will be the best solution to end their pain. Thus, it is the solution that comes to mind when in the moment of pain, even though they may realize it is not the best solution once the moment of intense pain has passed.

A number of participants referred to how easy it was to engage in cutting. They indicated that it is easy to identify and obtain instruments to use for cutting. They used such easily accessible implements as paper clips, scissors, knives, and razor blades. Sarah referred to the ease of finding something with which to cut:

> I don't remember the first time that I started cutting....it was fairly easy for me to get a hold of, it's fairly easy for anyone to get a hold of something to cut with. It sort of is a way to numb from your feelings and a way to kind of check back into reality.

Sarah also referred to the effectiveness of cutting. As she indicated, and as was revealed earlier, cutting was found to be effective in numbing overwhelming, difficult feelings and/or ending emotional numbness.

How did these participants discover cutting, however? Two indicated that they "just tried it" on impulse, that they did not know anyone else who had done it, and that they had never heard before of anyone doing it. Indeed, these two participants believed for a long time after beginning cutting that they were the only ones who had ever done such a thing. However, the majority indicated that they either had friends who engaged in cutting, or they had heard of it through the media. For many, it was seen as a last resort. As Jay explained:

> .....at that point you feel like you've got nothing left to lose. You know, you think 'Hey, maybe this will help me temporarily, so I don't have to feel anymore shit for the rest of the day.'

However, all of the participants indicated that, eventually, cutting was seen as the most effective means for dealing with emotional pain. Sarah spoke of the appeal of cutting:

> .....cutting sort of became appealing because, sort of like dealing with food and eating, it's something that's always there that you can turn away from when you want and turn to when you want to....also what's really powerful is that you can keep it a secret. No one else has to know.

The Phenomenon of Cutting

What became clear through the interview process was that cutting is a complex phenomenon. Strauss and Corbin (1990) define a phenomenon as "the repeated patterns of happening, events, or actions/interactions that represent what people do or say, alone or together, in response to the problems and situation in which they find themselves" (p.131). Each of the eight participants was intimately aware of the emotions and thoughts that accompanied the act of cutting, and they possessed the experience that allowed them to share this phenomenon with the interviewer.

All of the factors that have been discussed to this point are related to what precedes the act of cutting. As stated earlier, the participants used instruments such as

broken glass, paperclips, exacto knives, razor blades and scissors to inflict wounds upon themselves. For each participant, the typical cutting episode involved multiple cuts. The number and depth of the cuts was reportedly determined by the intensity of emotions experienced. For instance, Ashley stated:

> Sometimes [I cut] more than others. Like sometimes if I am not really feeling my best then I do it a few times, and then there are other times when I just feel like I am going insane....So, sometimes it is more than others.

For some, the number of cuts, or the pattern of cuts, was significant. For instance, Anna indicated that each cutting episode followed a similar pattern:

> It would usually be multiple times in a row. But not any number and....usually my first cut would be the deepest and then they would get more shallow after that.

Anna went on to talk about the significance of the amount of blood, or depth of the cut. She explained:

> ....if I didn't get enough blood I'd be disappointed in myself.....it was individual, I wanted to see a certain amount of blood out of each individual wound, not an overall quantity.

Angelique and Sarah spoke of similar feelings. Angelique stated:

> .....I do it however many times that I was going to do it. And then I would clean it and then there's this obsession with having to see it bleed. Like if it does not bleed enough then it is not worth my time.

Sarah stated:

> Sometimes if I was cutting, I'd be going over in my head, 'Is this enough, is this enough.'

Finally, Scott indicated ritualistic behaviors related to the number of cuts made:

> I was so sick and tired of screwing up, so I was like, 'Maybe if I just count the number of times I make a mistake at the end of the day and cut that many times.....'

During the act of cutting, three main themes were consistent throughout all eight interviews. All of the participants indicated that cutting resulted in a sense of emotional release, a sense of control, strength and/or action, and a decreased pain sensation.

Sense of emotional release. For those participants who reported feeling numbness, cutting resulted in decreased numbness and ability to "feel real again." As Scott stated:

> ....I'd be awake, but I could not really tell if I was, so that is why I did that....to figure out....you know, if I felt that pain, probably I'd be awake....I'd feel some pain and it kinda brought me back to reality.

For those who felt consumed by difficult emotions, there was a sense of tension release or "emotional purging." Feelings of loneliness, depression, sadness, grief and anger were reduced or completely eradicated. Jay stated:

> The first time I did it I was very emotionally distressed and then during [cutting] there was this sense of satisfaction...

Ashley, whose cutting was triggered primarily by anger resulting from peer relationship problems, spoke of the sense of relief that came during cutting:

> Actually, during the cutting you're just taking out your emotions. 'I'm pissed, I hate this, I'm so mad that this happened, I wish this would just all go away'.....And by doing that, it just takes pressure off of you and you are like, "Oh my gosh, I feel so much better.' You can just go conquer the world and it was great....it's hard to explain the feeling.

Indeed, the sense of relief is so strong that, for some, it can lead to an addiction of sorts. Stacey, who began cutting after experiencing the traumatic death of multiple family members, stated:

> It comes from inside and I just have to release it and I don't know any other way and I couldn't stop doing and I still can't actually. I still can't stop doing it, it just helps me so much that I don't know what else to do.

Sarah spoke of similar feelings:

> I don't know, like sometimes it starts out really specific but then sort of just anything that you feel overwhelmed with, cutting becomes something that looks appealing, becomes appealing to do again. It's hard to stop once you start.

Sense of control, strength and/or action. Prior to cutting, the participants experienced a need to engage in some action to reduce their emotional distress, and they chose cutting. It was clear in the words of all eight participants that, during and following the act of cutting, a sense of successful action was experienced. Whereas prior to engaging in cutting the participants were dealing with intangible, emotional pain, following cutting their pain was tangible. They could see it, and if they chose, others also could see it.

Often, individuals engaging in cutting are perceived as manipulative in that they are seeking attention through their actions. Although this is true at some level (see previous results regarding cutting as a means of communication), overall, the participants' responses indicated that they were not simply seeking attention from others. Thus, they were engaging in a type of "unintentional attention-seeking behavior." As stated previously, many participants felt ambivalence about showing their wounds or scars. When they did show their wounds or scars, it often was an attempt to allow others to see the pain they could not express verbally.

The sight of wounds and/or blood also provided a sense of action for those who believed they deserved punishment. They indicated that, as a result of cutting, they had tangible proof that they had punished themselves for self-defined transgressions. Scott stated, "It just feels like I am doing something, sort of like a punishment."

A number of participants referred to the sense of control gained through cutting. Sarah found cutting comforting as a result of the sense of control it provided her:

> It was a way for me to feel like I was in control and powerful....It's something that can be both comforting and punishment. And I guess I always used it more as something to punish [myself with], but at the same time it was a comfort to me because I was feeling like I was taking control and it was a way for me to cope.

However, in addition to feeling a sense of control as a result of cutting, all of the participants also indicated that they felt in control while cutting. They all made specific distinctions between cutting and a suicide attempt. For instance, Jay indicated that cutting was a means of avoiding suicide:

> I think there was a point where I was actually contemplating slitting my wrists and it was just one of those things where I was like coming to the edge of the cliff.....I asked myself, does it feel like more of a rush standing on the edge or actually knowing full well you are about to jump and I guess it was more of a rush for me to stand on the edge of the cliff and tease myself than actually take that necessary step..... I guess to quote the Molly Hatchet song, "It was flirting with disaster rather than actually throwing myself full well into it."

Jay later commented:

> The only reason that you feel that you need to go that next step, to actually slit your wrists, you don't really want to die, you just want the pain to go away forever. You are so tired of the pain, and that is why you've got to go talk to somebody. You've just got to go talk to somebody. It's the hardest damn thing in the world, but it's that first step that is the hardest. Once that step is taken...you know, you start to feel a little better.

Angelique also distinguished between the two:

> I never cut with an intent to end things permanently. I think of them separately. When I cut I cut. I would never sit down and say, 'OK, I'm going to cut,' and then decide 'oh, I think I'll commit suicide now.' You know, it's just not that way.

Finally, Sarah spoke of the relationship between suicide and cutting:

> I've had thoughts when I would be cutting. Like, you know, if you cut deeper, if you cut more, you could do suicide, but that's never been a goal of mine.

Indeed, the majority of the participants indicated that if they were to attempt suicide, they would do so using other means, primarily drug overdose or carbon monoxide inhalation.

Decreased pain sensation. The final phenomenological aspect of cutting that was consistent for all participants was a pain sensation that was significantly less than one would expect. As Jay indicated:

> You know, there was pain there but it was more like a very mild pain. It wasn't like excruciating pain, and it was just enough that there was a sting there that seemed to take my mind off of what I was thinking about.

Classifying their conceptualization of the pain sensation is difficult. They did not seem to perceive pain as positive in the sense that someone who is masochistic would. However, they also did not perceive the pain they experienced as negative. For instance, Anna stated:

> The pain never bothered me....and I think it might have [hurt], obviously is hurts, it had to, but it didn't feel like it hurt. The pain was kind of like an indicator that I was doing something.

Ashley revealed:

> I mean, it's kind of like you like the pain, so it is not really like pain.

Finally, Stacey spoke of a lack of pain and the resulting sense of action:

> I was cutting and when I first cut, it didn't hurt, and when it started bleeding, it felt like I was releasing something. I just felt so much better.

Following the act of cutting, participant reported both positive and negative feelings and thoughts. These positive and negative feelings and thoughts refer to the individuals' perceptions of cutting and the aftereffects of cutting, not necessarily to whether cutting was worsened or improved.

Perceived positive results to cutting. Clearly, the primary reinforcing factor that followed cutting was a sense of efficacy, success and/or short-term relief. As has already been illustrated, the act of cutting results in immediate and immense relief from

overwhelming emotions, either by numbing the experience of emotions, or terminating the sense of numbness resulting from overwhelming emotions. Ashley stated:

> After, you just feel better. It's hard to explain the feeling. You just feel so much relief, I don't really know why.

Scott spoke of the positive effects of being distracted from the intense emotional pain he was experiencing prior to cutting:

> It took my mind off of being so sad. I kind of was like, 'Okay, now I can go to sleep'.....cause I actually felt pain afterwards when I cut, so it kind of took my mind off of it.

Stacey, who experienced incapacitating depressive episodes following the death of two family members, also spoke of the perceived increased ability to function or cope following engaging in cutting:

> I never got out of bed, I was so depressed and I started doing that, and after doing it for a few days, I felt like a whole self. And you are like, 'oh this is what it feels like to be happy again,' and so it wasn't necessarily a good thing, but it helped me to move on ....

In addition, five of the eight participants referred to lasting positive effects resulting from being able to see and/or feel wounds and scars. Ashley and Stacey were two of the participants that felt longer lasting positive effects resulting from scars and wounds. Ashley seemed to perceive her scars and wounds as comforting, and she indicated that she was less likely to cut again if she still had visible wounds:

> I mean, sometimes just looking at scars will help me like feel a little bit better. You know, just by seeing it and like knowing that they are there.....And like sometimes when they are not there, it kind of makes me feel uneasy, like something's missing.

Referring to her cuts, Ashley stated:

> They are probably there for a week and a half at most, so I can look back and be like, 'Oh, I remember last week when I did this' and it reminds me of that good

> feeling. And so that's helpful because then it doesn't make me want to do it again.

Stacey seemed to view her scars as more of a sign of having successfully survived difficult moments. She explained:

> After I cut myself, I sit there for a minute and when I start bleeding, I just feel like all this pain is being released out of my body and I see that. And then it's just a reminder, I look at it, I look at my scars sometimes and it just reminds me of everything.

Perceived negative results of cutting. Most participants referred to negative emotions resulting from having engaged in cutting. As has been already illustrated, many individuals engaged in cutting are ashamed of their behavior and feel guilt for engaging in cutting. The participants often labeled themselves as "bad" or "abnormal" because of cutting. For instance, Sarah stated:

> There was a big part of me that was numb and feeling like I deserved that. But then there was also still a part of me that knew that [cutting] was not a normal thing to be doing.

Sarah went on to say:

> I mean, it is effective but there's also a part of me that regrets that I'm not going to be able to walk around with shorts on for a long time, and I have scars now, all over, and they have stories but it's really not something I'm proud of anymore. I think twice before I cut now and it's harder because I know that what I'm doing has such an impact.

All of the participants indicated experiencing fear following cutting. Most feared that someone would discover their wounds and scars, and they were all frightened of the reactions people would have. They feared being rejected, ridiculed, humiliated, stigmatized and labeled. For instance, Stacey feared people would see her as a "cutter," and not recognize her other important personal characteristics. In reaction to her sister labeling her as an "obsessive-compulsive cutter," Stacey said:

> It's kinda weird, I do cut myself but it's not who I am. Like, I wouldn't want to be labeled as a cutter. I am other things too, I'm a volleyball player, I'm a student, I'm a friend.....it's just one of the many roles that I have, I guess.

Many of the participants also feared being hospitalized if their cutting was discovered.

As a result of these negative emotions and fears of being judged or hospitalized, all of the participants indicated being secretive about cutting. For all eight, cutting was always conducted alone, never in front of another individual. Typically the participants would close themselves into a private room, and make every attempt to not be discovered. Following cutting they would wear long sleeves or long pants to cover their cuts. Some would conceal their cuts with Band-aids and tell others that they "had just gotten a small cut from somewhere." Cuts that were discovered were often explained through stories in which the participants were injured in an accident. Some of the stories included injuries resulting from falling off of bicycles or skateboards, being scratched by a cat or dog, being cut while putting dishes in the dishwasher, and peeling vegetables with slippery knives.

One of the participants indicated that she would not engage in cutting until she had developed a viable story to explain her wounds. In the one instance in which she cut without an explanation, she resorted to creating a severe scar, which she explained as resulting from a serious bicycle accident. As would be expected, this secretiveness and need to create stories tended to lead the participants to isolate themselves after having cut in order to decrease the chances of being discovered.

The final negative result of cutting that all participants experienced was an eventual return of the emotional pain that led to the act of cutting. Although cutting provided a temporary sense of relief, the results were never permanent. In fact, many

times the positive feelings lasted only a very short time period before negative emotions returned. As Scott explained, in reference to how he felt following the positive emotions he experienced while cutting:

> I just kind of stopped what I was doing and went in the bathroom and rinsed my forearms off and they were bleeding kind of nicely and...I can't say that I really felt a lot better after that. The pain was still there. The emotional pain was still there and I just had these new little lines in my arms that were put there because I thought they were going to solve something and they really didn't solve anything.

Scott also referred to how he would care for his wounds after he completed cutting. Overall, the level of aftercare varied between participants. Some indicated that they never put any type of ointment or bandage on their wounds, whereas other reported significant aftercare including repeated applications of antiseptic creams and bandages. All participants indicated that they would at least wash the blood off of the wounds and avoid cutting that area until it had healed to a certain extent.

Strategies for Managing and Coping with Cutting

Clearly there are two basic choices of what to do to cope with cutting—telling someone, or hiding it. Each of the participants indicated engaging in both of these behaviors, depending on the person with whom they were interacting at that time. The initial reaction of all participants was to hide the wounds, as they feared the reactions of others. In addition, some chose to hide their cuts in order to protect their friends or families. A larger number of the participants refused to disclose their cutting to their family, particularly their parents. Reasons for this varied from wanting to protect their family to not trusting their parents to react positively. In addition, many did not trust their peers to react in a positive way. The participants also worried about the fear and sadness

their friends and/or family would experience if they knew of his/her cutting, which either delayed or prevented disclosure.

Although all of the participants initially hid their cuts, they all eventually told at least one person about their cutting. A dominant theme in the decision to disclose cutting centered on a sense of trust in the person to whom the participants were disclosing. In addition, some referred to a sense of closeness that they hoped would develop as a result of their disclosure. What was consistent across all participants was the importance and difficulty of telling the very first person. Jay explained:

> The absolutely hardest part of it is telling that first person. You feel so embarrassed and you feel so angry with yourself like, 'Why did I do this to myself? I can't believe that I would sit down, take a razor blade and start cutting myself.' So I felt so angry about this and it actually made me feel a little better when I took those steps to talk to people who cared about me.

Some participants were motivated to seek help when they determined that cutting was not what they wanted to be doing. Angelique was one of the participants who sought therapy:

> You have to want to go to therapy....I just had the need to stop it. I was just sick of trying to make up excuses, and I have other things to be doing. I didn't want to be expending all of that energy focusing on [cutting].

Not all of the participants had received therapy. Some had chosen to disclose their cutting to friends, families, teachers or school counselors, but refused psychological treatment.

Consequences of the Chosen Strategies

Although there was considerable variation among participants, all of them referred to both positive and negative consequences for both disclosing and hiding their behavior. The information discussed in the next part of this section (consequences of seeking help) refers to the positive and negative actions engaged in by friends, family members, and/or professionals as a result of hearing about one of the participants'

cutting. The consequences discussed in the second part of this section (consequences of hiding the behavior) refer to positive and negative events for the person hiding the behavior.

Consequences of Seeking Help. As stated, all of the participants eventually revealed their cutting to friends, family, and/or professionals. Sometimes the disclosures resulted in more positive consequences than others, but all of the participants received some positive reactions as a result of disclosing their cutting. They indicated that the most helpful reactions consisted of empathy and understanding, offers of support and help, and acceptance. Ashley referred to both the value of trying to understand and offers of support:

> It's hard for people to understand that and to know what you are going through. So saying, 'I understand, what can I do to help you.' And not, 'this is what I can do to help you'.....asking me what I want them to do, instead of them telling me what they want to do.

Many spoke of the importance of others reacting calmly. However, some of the participants were able to understand that presenting a calm reaction was difficult for the person to whom they were disclosing. Angelique, who was very frightened of disclosing her cutting, referred to the importance of a calm and empathic reaction from her therapist:

> ....Somehow [my therapist] was listing out some stuff and self-mutilation came up, and I was like, 'I cut myself.' And she goes, 'OK, well I'm not going to throw you out the window, it's OK.' She could obviously tell I was terrified. She just remained calm. She was just kind of like, 'OK. You know, we'll see what we can do.'

Taking into consideration the fears that individuals engaging in cutting have about disclosing, they indicated that it was helpful when the people they disclosed to were nonjudgmental, sincere and willing to try to understand the reasons they engaged in the

behavior. Stacey recognized that cutting is often difficult to understand, but referred to the importance of trying to understand and being available:

> Well, my roommate right now is my cousin Angie, and we were both really close to Michael. Last summer my uncle died, her dad, he was killed in an explosion at his plant. She doesn't cut herself, but we have a lot of the same feelings. Sometimes we'll talk about it, and she's really good, she doesn't freak out, because she knows I do it now, and she's just there for me and she understands more than anyone else ever has..... I think that is what I've wanted all along, is for someone to just listen to me and understand....just be there, I've never had that before.....

Participants indicated responding very positively to people who encouraged communication about either the cutting or their feelings, and they felt rewarded by those who offered emotional intimacy as a result of disclosing. Finally, the participants highly valued those who indicated the participant could contact them any time, particularly when he/she felt like cutting, and those who provided tangible evidence of their support through letters and cards. Ashley stated:

> She was there for me and she said, 'Anytime you ever get the urge to do that, just call me.' She's written me letters that when I'm feeling sad and depressed I can read them and they do help.....she's really good at talking and listening. I mean it wasn't like, 'Oh my gosh, you have a problem!" It was like, 'How can we help you.'

Stacey commented:

> This summer I was really depressed and I would feel like cutting and he had his phone line to his room and he was like, 'Just call me if you ever want to cut yourself.' And I would be in the bathroom, and once I was about to, but then I called him and said, 'Shawn, I have a knife in my hand.' He lives next door, so five seconds later he's banging on my window and we sat down and talked about it and I just sat there with the knife and he looked at it and asked, 'Why do you want to do that?' And I couldn't tell him why.
>
> The above reactions applied to friends, family members, and professionals.

However, the participants also spoke specifically of the helpful things that professionals

did to help them overcome cutting. Primary in each participant's mind was identifying and exploring the underlying emotional pain that led to cutting. Sarah stated:

> By being able to talk about it if I want to.....talking more about the feelings that surround it and the intensity and the energy and the urges that I felt--why I needed to cut.

Jen referred to similar feelings:

> Yeah, um, I don't know, I think to some extent [my therapist] sort of tried to see what was causing it. A lot of people would just throw a bunch of options at me, things I could do.....but she didn't try to change me. She tried to change the situation.

Ignoring these underlying thoughts and feelings was one of the most negative and frustrating experiences for most of the participants. In addition, the need for recognizing individual differences in the etiology and phenomenology of cutting in planning any interventions was stressed.

The participants revealed specific interventions that they found beneficial. For instance, Anna referred to the importance of her therapist encouraging her to consider the consequences of her behavior. In addition, she indicated that her therapist tried to help her accept responsibility for her behavior. Sarah referred to the need for professionals to watch for the development of other maladaptive behaviors designed to accomplish similar goals (i.e., disordered eating, substance use, sexual promiscuity). Along with this, the participants indicated that it was helpful when professionals were willing to conduct visual checks for new wounds and old scars. In addition, participants indicated that setting reasonable goals was helpful in reducing cutting. Finally, the participants indicated that professionals who helped them to develop new, more adaptive coping skills were most effective. Participants varied in their opinions of using contracting (i.e.,

"promising" not to cut for a certain period of time). Anna explained this in relationship to developing new coping skills:

> I think the contracting thing, to a certain extent, is important because it does get you to stop, but along with it needs to go a way to deal with it instead, not just 'How about you stop for a week, and then come back to me next week and see how it goes!' [Some therapists] just kind of throw you out there back into the world saying, 'Don't do it.' So, contracting would be a good thing, a good tool, if it is used with ways to deal with things.....whatever it is, you need to help that person find that individually.

Some of the coping skills developed included physical activity, relaxation skills, and emotional expression through art, writing and talking.

The final benefit of seeking help was related to finding others who also engaged in some type of self-mutilation. Through sharing their stories, many of the participants learned that their friends or peers also engaged in the behavior. Many of those who met others spoke of the relief they felt in response to finding others who also self-mutilated. Sarah summed up the benefits of sharing her secret cutting behaviors with others:

> I guess I became pretty attached to her because she was the first one I ever had, and I guess it's sort of like that therapist bond that can happen. She presented other options for me to do, and just by her reassuring me that I'm a valuable person, that I didn't have to use cutting and her acknowledging my pain was helpful for me. And, I don't know, my knowing that other people go through it is helpful.

Sarah also provided recommendations for those who suspect someone they know of cutting:

> If someone has seen cuts on someone else, come up and talk to them and be like, 'You must be in a lot of pain to feel that you need to hurt yourself and to do that to yourself. What's going on right now?' Maybe sit and see if they want to talk about anything that's going on or, um, you don't want to have the sort of reaction like, it's something that they are doing with intention to hurt someone else, or you don't want to tell them that they're a bad person or horrible for doing that to themselves.

Sarah also referred to some of the negative consequences of disclosing cutting to others. All of the participants referred to negative reactions they had received from friends, family members and/or professionals. Many referred to the discomfort they felt upon seeing awkward or visibly negative reactions from those whom they told. In the most extreme cases, they spoke of friends and family reacting with disgust or anger, which sometimes led to a tendency to engage in shaming behaviors.

Jay stated:

> It's not easy if someone patronizes a person that has self-mutilated...they just need to know that the person who makes the comment is the one that is an insensitive jerk and really needs to think about what they say, because it's already hard enough for the person who does the self-mutilation to wake up every morning and know that they've done this to themselves. That's already enough pain for them without having to hear it from one of their peers.

Some participants felt rejected by those they had told, and others felt as though they were ridiculed for cutting. To the participants, all of these reactions demonstrated a clear lack of empathy and understanding, which was very difficult for all of the participants. Some reported that friends, family and/or professionals went so far as to resort to "guilt-tripping" those engaged in cutting.

Other negative reactions included intense questioning of the details of cutting, while avoiding the underlying pain. Along the same lines, many of the individuals to whom participants disclosed had a tendency to focus entirely on the symptoms of cutting, while not addressing how the participants were feeling or what events had led to cutting. For instance, Stacey spoke of a therapist who told her to do other less harmful behaviors when she felt like cutting. One of the suggested interventions was to put ice on her wrists. Stacey commented:

> "When it's already numb, it's easier to cut.....so it didn't help me very much."

In reaction to focusing primarily on the symptoms of cutting, a number of participants indicated that friends, family members, or professionals had engaged in "controlling" interventions. These included taking away or hiding instruments used for cutting, confining the participants alone in private rooms, and disclosing the cutting to other individuals (i.e., sharing the information like a rumor through the family). Participants had the following responses to their cutting instruments being removed (before new coping skills had been developed):

> .....I don't think that someone else stepping in attempting to control the situation is particularly useful in most cases. I don't know, in some it might be, but I know if someone right away tried to take my control, it would only make the desire to cut stronger.
>
> I was a smart kid, I would have found some way around it. You can cut yourself with almost anything.....There is no way they could take everything away from you.
>
> If I didn't have a razor blade, I'd use a paperclip and it just scratches as much as anything. I was desperate.
>
> I would have been really pissed. I would have been really mad, but then I'd be like, 'Oh, that's OK, they're a dime at the hardware store.' You know, it's not like I'm going to be spending a fortune. So, I mean I'd be upset, but it would be more of an inconvenience; it wouldn't ruin my life or anything like that.
>
> It kind of upset me because then it was like, 'Well, what do I do now?' You know, 'What happens if I get that urge again?'....So when she did do that I found other ways; I had another pair of scissors in other places or my roommate's scissors. There are other ways that you can get around it. But that was upsetting that they did that and I was kind of mad.....then you want to do it even more because it's not available to do and so then you are like, 'Well, I've got to find something else'..... after she took them away from me, when I was down in Denver I got more and brought them back up with me.

On the other end of the spectrum, some of the participants referred to individuals who simply ignored or minimized the cutting behaviors. Some referred to those to whom they had disclosed ignoring them whereas others referred to peers who had seen the scars,

but refused to talk about them with the participants. As one might expect, the participants were hurt by those who knew about the cutting, but gave the impression that either they did not think it was "a big deal" or they did not care. Sarah explained:

> Things aren't talked about like, I have friends that confronted me, about the scars on my legs and I know that after going through all of that time in classes and on a day to day basis, still no one would come and talk to me. No one said anything. If someone looked, they looked away as fast so I think it is something that people do not understand and so they don't talk about it. It doesn't help any like that, but that's just how it is.

However, some also recognized that there was a fine line between "confronting" them about their cutting and asking in a caring manner. Overall, the participants responded negatively to those whom they felt were overly confrontational in their approach (e.g., Sarah's father would grab her arm and force her to show her scars/wounds), and were somewhat less upset by those who would simply fail to address the scars.

With regard to specific interventions, participants spoke of not wanting to be labeled as a "cutter" by their friends, family members or professionals. In addition, they reacted negatively to those who attempted to convince them of why they should not engage in cutting, as they perceived this as evidence that the person to whom they disclosed did not understand and did not seem willing to try to understand. Participants also indicated that simple advice giving was not helpful. They differentiated this from attempts to increase their coping skills in one primary way. They indicated that advice giving did not help them to address the underlying issues that led to their cutting, thus it was difficult to implement the recommended strategies. Anna explained it this way:

> She didn't want to deal with the issue, she wanted to give me all these coping methods, but I didn't know what I was coping with so I was like 'Whatever' and I finally just ditched and didn't have to go to her until I tried to kill myself.

Thus, Anna indicated that therapists should do the following instead:

> And also, trying to figure out why you do it, because that never was really asked....I never really had to figure out why I did it and what were the problems and why I could not get through them.

The final two negative reactions that the participants referred to were related to the ways in which others perceived their cutting. As has already been addressed, the participants indicated that their cutting was not simply a direct attempt to get attention; thus, they were offended by people who responded by indicating that they perceived cutting as only a means for getting attention. Participants were also upset by those who perceived their cutting as a suicide attempt. As stated earlier, all participants clearly indicated that they had never engaged in cutting with the goal of suicide.

Consequences of hiding cutting. As indicated by the participants, there are both positive and negative consequences to hiding cutting from friends and family. However, the term "positive" is used loosely, and refers simply to the perceptions of the individual who is cutting and is not ready to terminate the behavior. Thus, the positive consequences are few. First is the ability to avoid the feared negative responses that the participants had regarding telling others about their cutting. For instance, Stacey made the decision to keep her cutting secret because of the negative reactions she feared:

> I never before felt that it was wrong, I felt it was okay, but after I watched that movie, everyone's opinion on it was that cutting is bad. I was like, 'everyone thinks cutting is bad. Oh no, I'm bad!'

Stacey later stated:

> I never went to the psychologist because I felt like she would tell me that something was wrong with me, and I didn't want that. I think sometimes that's why people don't try and get help because they feel like something is wrong with them and they are a freak, and they are doing something wrong, so they don't want anyone to know. I never even heard of people cutting themselves before I started doing it. I didn't know people did it.

By keeping it secret, participants protected themselves from any of the negative consequences of disclosing. In addition, hiding their cutting allowed the participants to continue using the behavior as a coping skill. Nobody could try to take control over them and remove the behavior, thus they were not faced with the panic that some referred to upon receiving controlling interventions.

Participants spoke of few, but important, negative consequences of hiding their cutting. For one thing, they indicated that having to constantly hide their behavior increased their sense of isolation and loneliness. In addition, hiding cutting did not allow anyone to help them. They were left on their own to deal with their difficult emotions, and they had no assistance in developing new coping skills. Jay commented:

> By hiding this from them, hiding certain parts of my life from them ....it does them no good and it does me no good.

Outcomes for the Individual Engaged in Cutting

The final stage of the theory resulting from the current investigation relates to the outcomes for the participants as a result of the positive and negative consequences they received for both seeking help and hiding the behavior. With regard to seeking help, participants indicated both positive and negative outcomes. However, in terms of hiding cutting, only negative outcomes for the participants were identified.

Outcome of Seeking Help. As a result of receiving positive consequences to disclosing cutting, participants indicated that they developed increased trust and honesty, improved communication skills, and increased insight or understanding of their own behavior. In addition, seeking help and receiving positive consequences resulted in the development of a more substantial support network, which decreased the participants'

sense of loneliness and isolation. Sarah referred to her reaction to discovering a friend who also self-mutilated:

> But when I first, initially, found out that she did it, it was this feeling of, 'Oh my god, you know.' Suddenly the whole idea of, 'I'm not alone,' really comes right in your face. And it was just nice knowing there was somebody that I could relate to.

Jen, who admitted she had few friends when she first began cutting, stated the following to explain her connection to her therapist:

> [Friends] probably would have helped a lot, and I think that's why this counselor was an inspiration for me.

Finally, participants spoke of developing more positive, adaptive coping skills, improved self-esteem, and eventually developing a sense of pride regarding their ability to survive difficult times in their lives. Sarah explained:

> I've been able to talk about it more and I think I feel less guilty about it, although the awareness really hasn't helped stop my behaviors. But, it allowed me to see that I don't have to feel the guilt that I do.

Jay referred to his ability to move on after disclosing his cutting:

> I think the thing is that most of the people that I know, when you tell them that you've done something like this .....especially living in a place like Fort Collins which doesn't seem to have the crime or drug problems, it's just a happy joy, joy old world. When you bring something like this into their world all of the sudden they are like, 'oh my god,' because this is the kind of thing that they see on 20/20....a lot of people don't know what to say. But I felt that I had the need to do this because by talking about this I can move on, basically. And that's the hardest thing about it, is just saying, 'OK, I'm going to make the conscious effort that if someone, if I feel that some is worthy of this information I'm going to tell them.' And if I tell them, then the chances are they are going to sympathize with me, they are going to make me feel better, and therefore I can move on.

As a result of receiving negative consequences to disclosing their cutting, participants referred to experiencing decreased trust and openness and increased

secretiveness and lying. Jay commented about his reaction to peers reacting negatively to his disclosure:

> For people that I don't really know it's a way to kind of say, 'Hey, I'm going to share something with you and I would like it if you would give me the respect that I need with the kind of information that I'm giving you.' When they just kind of say ....'pff, OK,' that really bothers me. It makes me feel like I'm being taken for granted and that's when it comes back to hurting again....I got very angry. The reason I got very angry is because you are taking the chance with something that is very personal to you..... So, my dealing with this particular person has not so much worsened, but hasn't gotten better.....I just avoid her.

Stacey commented:

> The other day there was this television show called 'Secret Cutting,' and I was watching it with some of my friends from across the hall. One of my best friends, Jason, just goes off. He's like, 'That's so sick and wrong, I don't see how people could do that, twisted morbid people,' and I'm just like, 'I'm never telling you I guess.' It's hard because people don't even understand why, they just judge them easily.....

In reference to another friend, Stacey stated:

> She sat by me during the funeral, and she was like, 'You gotta be strong,' and she held my hand and we went to church together. And then she thought I was weird or she just didn't understand, so we kinda stopped hanging out as much.

With regard to her father, Stacey said:

> I was like, 'Hug me!' He's like, 'Freak!' It was hard because I love my dad, and I was 'daddy's little girl.' We are about five months into a year that we haven't talked to each other.

Angelique also referred to her reactions to receiving negative consequences to disclosing. She had the following recommendation for those to whom individuals engaged in cutting disclose:

> Don't freak out. I mean, I think that it is important that you don't start wigging out on me because I'm not going to tell you anything like that.

Angelique later commented, with regard to simply being given advice for stopping cutting:

> I'd laugh at her. I mean, I'd be like, 'Yeah, whatever.' Or I'd say, 'OK' and then just never speak again to her. Because you know, she doesn't want to listen, obviously if she's telling you, 'Just don't do this'....that's not the way it is.

Participants indicated that some of the negative reactions led them to engage in more severe or more frequent cutting as a result of beginning to feel disappointed, helpless and hopeless. Anna noted, in reference to her therapist, whose only intervention was to develop a contract:

> It worked with my friends because they had less of a clue of what was going on than I did, but he was a therapist, he was supposed to know what was going on. So for him to say, 'How about you promise me you won't?' I was like, 'Can't you give me more than that?' It was frustrating.

Finally, they indicated that they were more likely to justify their cutting as a suicide attempt if they had received negative consequences of disclosing their cutting. This resulted in ineffective treatment strategies being utilized.

Outcome of hiding cutting. With regard to the final outcome of those who chose to hide their cutting behaviors, it was clear that there were only negative results. The fact that hiding the behavior increased isolation/loneliness, allowed them to continue the behavior without intervention, and made it impossible for others to help them led to a continuation or worsening of cutting.

Effect on future cutting episodes. Figure 1 provides information regarding the way all of the above factors interact to lead to the maintenance of, or increase in, cutting behaviors. The overall process is seen as being circular, and as the person continues the cycle, he/she spirals into increasingly severe cutting behavior. Figure 2, however, depicts how receiving positive consequences to seeking help result in gradual improvement in cutting. It is not expected that cutting will terminate completely following one positive

Figure 2. Factors Leading to the Maintenance or Worsening of Cutting

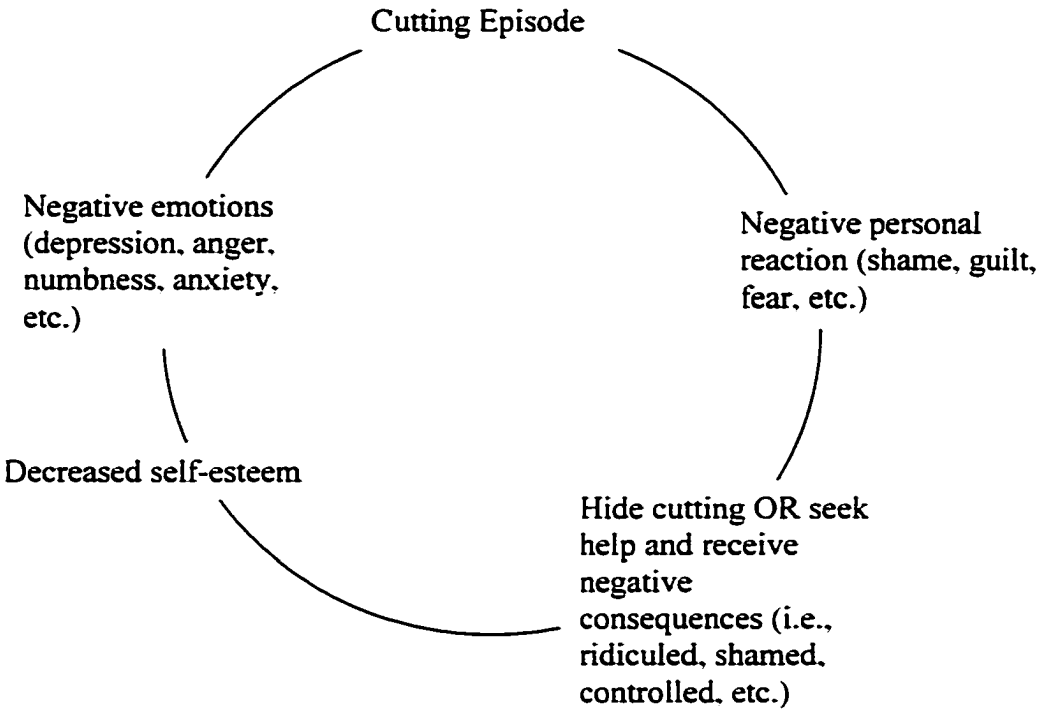
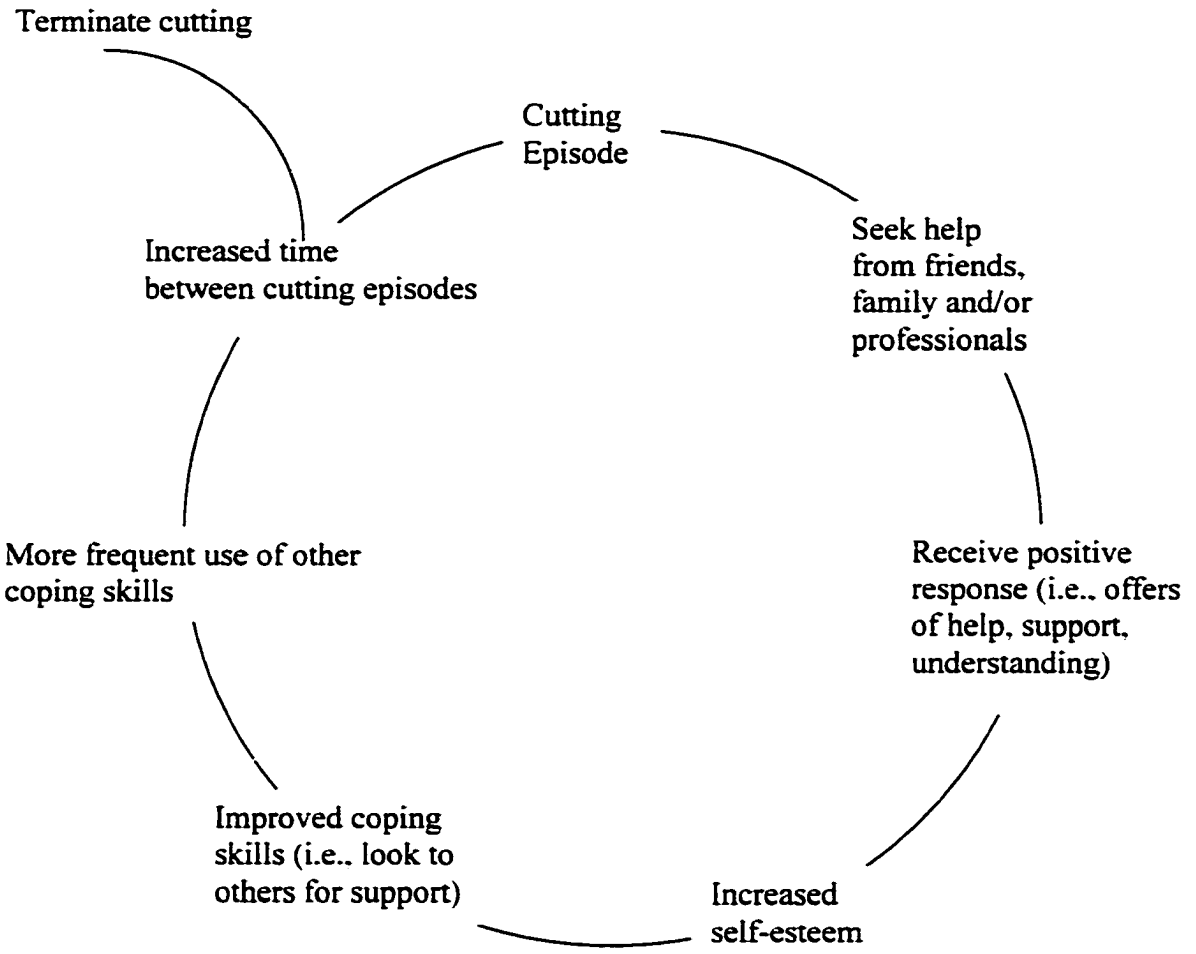


Figure 3. Factors Leading to the Gradual Improvement from Cutting



response, but instead that it will gradually improve until cutting is no longer seen as a desirable coping strategy.

Advice for Others Engaging in Self-Mutilation

Each of the participants indicated that one of the reasons they agreed to be interviewed was due to a desire to help others who were engaging in self-mutilation. Overall, the participants strongly recommended developing means for distraction, in addition to beginning to use writing, drawing or talking as a means of emotional expression. They emphasized the importance of developing a support network of friends, family and professionals. They recommended planning in advance to avoid triggers or deal with "anniversaries" of negative events. The participants also recommended looking to the future for hope, but at the same time taking recovery day by day. In addition, the following comments were provided by participants:

> In order to keep from getting in this type of cycle the first thing you need to have is somebody you trust enough who you can talk to....You can't expect someone to come bursting in the room coming to save you because you're the only one that knows that you have the problem; it's not like two people in a fight and everybody around them sees this fight going on. When the fight is inside you, nobody knows. You can't look at somebody and see that they are just absolutely struggling with something or agonizing over something especially, when they've make a practice of hiding it.

> And the funny thing is once I start writing I feel like I've gone from this very angry, depressed, little scared boy that's in the corner that is getting kicked around to, 'It's time for me to stand up. I'm sick of this pain. I want to be strong, I want to be everything that I want.' And usually after I'm done I feel a little bit better and if I don't I'll go pick up my guitar and I'll try to put it to music.

> The worst thing that someone can do if they're feeling depressed is just sit down and deny it. It is absolutely the worst thing and it's tough because when you are depressed and you are thinking about something like cutting yourself. The only thing you want to do is sit there and dwell in it. What you need to do at that point is get up and walk outside.... sometimes getting up and moving around, just the act of moving helps. You now have to focus on where you are walking to, not how you feel.

I just want them to see that there are other things to do, there really are. I know at the time it's hard to see that over all the problems, but there are bad situations, and a lot of times you can get out of them....they just don't know that there are other things to do.

You need to tell someone and you need to reach out because they won't necessarily be the one to do so. And you know when you are at the point where you just want to die or when it is too much, and when it has become too serious, you need to tell them that you cut. You are the only one that is ever going to make it stop. They can give you coping skills and medicine and all they want, but if you do not make the decision to stop, then it won't.

CHAPTER SEVEN

STUDY TWO: DISCUSSION

Limitations of the Research

Clearly, the limitations of a qualitative study need to be addressed. The primary limitation is related to the sample size utilized. The present study is based on interviews with five women and two men, all Caucasian, between the ages of 18 and 27. Thus, overall, it is difficult to determine the generalizability of results based on eight interviews to the overall population. In addition, the results cannot be easily generalized to individuals of different ethnicities. Finally, seven of the eight participants were college students, and the eighth intended to pursue a college education, thus possibly limiting the ability to generalize the results to individuals not pursuing a college education.

Strengths of the Research

One of the benefits of qualitative research is the fact that the experiences of a few individuals can be studied with greater depth than is common with quantitative studies, therefore allowing for a deeper understanding of a specific phenomenon. Although the results of the present study are not assumed to be representative of every individual engaging in cutting, the methodological rigor with which the study was conducted has resulted in a strongly supported theory related to cutting and the outcomes based on the reactions of others. The proposed theory is based in the interviews of all eight participants; thus, all eight participants' experiences fit the final theoretical model. In

other words, the model was confirmed by 100% of the participants, which is something that is difficult to achieve with quantitative research. Therefore, although the research is based on only eight participants, it is likely to fit for most individuals engaging in cutting.

Review of the Theoretical Model

Following is the overarching theoretical model supported by the interviews of all eight participants. Although the specific stressors or emotions and reactions experienced vary between participants, this basic theoretical model describes all of their experiences. Thus, it is proposed that this model would be representative of the majority of individuals who engage in cutting.

When an individual experiences an event that *could* be interpreted negatively, and they have personality characteristics that result in them perceiving said events negatively, overwhelming, intolerable difficult emotions result. When these emotions are combined with a need for action and the individual views cutting as the "easiest" or "most effective" solution, the individual will engage in cutting.

During the act of cutting, the individual experiences a sense of emotional relief, a sense of control/strength/action, and a decreased pain sensation. Following the act of cutting, the individual experiences both positive and negative internal reactions. They feel both a sense of efficacy/success/short-term relief (positive) and negative emotions, increased secretiveness/isolation and the eventual return of the emotional pain (negative). Although there are more negative consequences than positive, in the moment of pain, the positives outweigh the negatives.

As a result of the consequences of cutting, all individuals engage in both seeking help from friends/family/professionals and hiding the behavior. Both actions have negative and positive consequences. For instance, seeking help can result in positive reactions including empathy, understanding and offers of support, or negative reactions of judging, shaming, labeling and ridiculing. Hiding the behavior can be positive in that it allows the individual to avoid possible negative responses to disclosure, and it allows for the continuation of the behavior as a coping strategy. However, it is negative in that the individual allows him/herself no chance for receiving help. Finally, the negative consequences of both hiding the behavior and of seeking help, in addition to the "positive" consequences of hiding the behavior, result in increased or continued cutting by re-triggering negative emotions experienced prior to first engaging in cutting. Only the positive consequences of seeking help result in an improvement in cutting due to a reduction in negative thoughts and emotions.

The Phenomenon of Cutting

In many ways, the phenomenological aspects of cutting described by the participants are consistent with those found by other researchers. As early as 1967, Grunebaus and Klerman reported that those who engaged in cutting experienced intolerable tension coupled with an inability to verbalize emotions (Walsh, 1987). They also referred to the decreased lack of pain sensation, though they attributed it to dissociation during the act of cutting. In 1969, Pao referred to the perceived sense of isolation that many individuals engaged in self-mutilation experienced. He also noted that these individuals felt "pleased" after cutting. Graff and Mallin (1967) also reported a

sense of relief following cutting. The results of the present study support all of these previous findings.

The individuals interviewed referred to intolerable emotions prior to the act of cutting, emotions that they felt unable to adequately verbalize. All of the participants indicated that they did not feel pain, as it is normally thought of, during the act of cutting. Finally, they all felt "better" after having engaged in cutting.

However, the current study also presents results that vary from those presented previously. For instance, Graff and Mallin (1967) indicated that those who engaged in cutting were almost always women, and that these women would cut their wrists as a reaction to the "slightest provocation." Results of the present study clearly indicate that it is not only women that engage in cutting, and that those who do cut are responding to overwhelming emotions resulting from numerous perceived stressful events (both proximal and distal). The events were perceived stressful as a result of personal characteristics, including a perceived lack of support from friends and/or family, negative self-concept, a sense of being out of control and impaired communication skills, particularly as they are related to the communication of emotions.

In 1967, Grunebaus and Klerman (in Walsh, 1987) attributed the decreased pain sensation seen in those engaging in cutting to dissociation during the act of cutting. Whereas two of the participants referred to dissociation prior to or during the act of cutting, the majority did not attribute the lack of pain sensation to an altered state of consciousness. Instead, it became clear that part of the reason that the physical pain was perceived as being decreased was the fact that the participants did not view the pain negatively. They did not describe the sensation they felt in the way that physical pain is

typically described. They saw the pain as being "positive" in that it provided proof that they were alive and engaging in an activity designed to decrease the negative emotions they were experiencing.

The present study provides a more thorough description of both the positive and negative personal consequences of engaging in cutting. It was clear in the words of all of the participants that, prior to cutting, they were experiencing significant emotional distress, including feelings of anger, depression, loneliness, shame and guilt. They described these emotions as intolerable and they clearly felt a need to do something to reduce the emotional pain they were experiencing. The participants indicated trying other coping skills, including talking to others, drug use, self-starvation, and bingeing/purging, but found these strategies to be inadequate. Thus, they eventually resorted to engaging in cutting, as they came to see this as being the easiest and/or most effective intervention.

What is important to note is that, although cutting seems like a completely negative behavior, the responses of the participants illustrated that it can actually be perceived as adaptive. In other words, the need to do something about feeling such intolerable, overwhelming emotions is normal and adaptive. There are few people who genuinely "want" to feel bad. We all feel a need to do something about the negative emotions we feel. In this way, cutting is adaptive. However, cutting is also clearly maladaptive in that, while it is effective in the short-term, it does not provide long-term "solutions." In addition, the fact that it is harmful to the individual makes it maladaptive.

The participants described how they would typically feel during and following cutting. During the act of cutting, and shortly thereafter, they clearly felt a sense of relief and control, which confirmed their belief that cutting was an effective means for coping.

However, they also described many negative reactions following cutting. They tended to feel negatively about themselves for utilizing cutting, which increased their tendency to isolate themselves and be secretive. In addition, they all noted that the emotional pain they were feeling eventually returned. Thus, cutting was seen as a very effective strategy for short-term relief, but they recognized that it did not result in long-term relief. Interestingly, although there were many more negative reactions following the act of cutting, the intense relief of emotional pain clearly outweighed the negative consequences when individuals chose to utilize cutting as a coping modality.

Comparison to Previous Theories

It should again be noted that previous theories related to self-mutilation have been directed towards multiple forms of self-harm, including cutting, burning, bone breaking and interfering with wound healing. However, as was stated previously, the majority of those engaging in self-mutilation are utilizing cutting, so one can assume that theories related to self-mutilation in general should closely represent the characteristics of cutting.

In recent years, two authors have proposed theories related to repetitive self-mutilation. Pattison and Kahan (1983) reported the symptoms of the "deliberate self-harm syndrome" and revealed a prototype of the typical individual presenting with this syndrome. In many ways, the current results support the descriptions provided by Pattison and Kahan, who indicated that the syndrome most often has an onset in late adolescence and is characterized by sudden and recurrent intrusive impulses to harm oneself without the perceived ability to resist, a sense of existing in an intolerable situation which one can neither cope with nor control, increasing anxiety, agitation and anger, and constriction of cognitive-perceptual process resulting in a narrowed

perspective on one's situation and personal alternatives for action. They indicated that, following self-harm, there is a sense of relief. Participants in the present study reported a greater range of perceived negative emotions prior to the act of cutting, but this is the only significant difference between the two models.

In 1993, Favazza and Rosenthal also proposed criteria for a repetitive self-mutilation diagnosis. Their criteria included a preoccupation with harming oneself physically, a recurrent failure to resist impulses to harm oneself physically, and an increasing sense of tension immediately preceding the act of self-mutilation. They also noted a sense of relief following self-mutilation, and they differentiated between self-mutilation and suicide. Again, the results of the present study are consistent with the diagnostic criteria proposed by these authors.

The present study confirms and expands upon previous research related to self-mutilation. It has been repeatedly shown that individuals who engage in cutting and other forms of self-harm feel intolerable tension prior to the act, and then a sense of relief upon commission of the act. This study goes further to also describe the negative thoughts and emotions following cutting and the actions taken to receive help by those engaging in cutting.

Participants' Strategies for Coping with Cutting

The present study also expands upon previous research in that it examines the effects of friends, family members and professionals on the continuation or reduction of cutting behaviors. Although it seems it could go without saying that individuals who engage in cutting have the option of either telling others about their behaviors or keeping their behaviors secret, these decisions are actually moderated by a number of factors.

Each of the participants engaged in both strategies, depending on with whom they were interacting. It became clear that all of the participants feared making their parents and other family members aware of their cutting. The participants were most likely to disclose to peers, and they varied in terms of their willingness to tell professionals (i.e., teachers, school counselors, doctors or therapists). The first voluntary disclosure was often made to a peer, whereas, for others, cutting was first brought to the family's attention following a severe cutting episode that resulted in seeking medical attention. Not all of the participants had sought therapeutic intervention, and of those who did, some chose to hide their cutting from the professional. In general, the decision to hide or disclose cutting was based on the participants' perception of the individual's willingness to understand and provide support.

Those who chose to hide their cutting indicated that this decision was most often based on the belief that others would not understand, and would not try to understand why they had engaged in cutting. In addition, the participants reported significant feelings of shame and guilt, which particularly influenced their willingness to disclose to family members. Some chose to hide their behaviors after hearing negative reactions from peers or family members after they had heard, through media sources, of others engaging in cutting. Participants hid their cutting from professionals when they perceived that the professional did not understand cutting, was not sure of how to deal with cutting, or was frightened by cutting. In addition, they chose to hide their cutting from anyone who they believed would be overly confrontational or controlling as a result of disclosure.

Those who chose to disclose their cutting often did so as a result of feeling overwhelmed by the negative emotions following cutting. In addition, some chose to

disclose through making their wounds and/or scars visible in an effort to communicate their emotional pain. All of the participants indicated feeling isolated and alone, and they struggled to verbally communicate their emotions. Some initially tried to cope with their emotional pain through alcohol use, while others engaged in disordered eating. For some, the location of cutting was related to the desire for communication. These individuals would cut on their wrists or arms, or other easily visible areas, and then wear clothing that revealed their wounds in an effort to communicate their pain. Others cut on more easily covered areas, or wore concealing clothing, in an effort to keep their cutting secretive. What is important to note is that even those who chose to make their cutting visible did not seem to be doing so in a manipulative manner. In other words, they did not seem to be simply looking for attention, which is how they are often perceived. Although they were seeking attention on some level, they were doing so in order to receive help, not simply to obtain sympathy or pity. They found themselves unable to verbally communicate their pain and their needs, thus they resorted to communicating physically. Therefore, they seemed to be engaging in a type of "unintentional attention-seeking behavior."

Intervention Strategies

Previous research has asked professionals about their opinions regarding effective treatment strategies, but this author knows of no other studies that addressed the opinions of those actually engaging in cutting--those who would be most aware of the effects others have on them. Previous research has shown that many professionals react negatively to their patients who engage in cutting (Farber, 1997; Favazza, 1989a; Strong, 1998). The participants in the present study confirmed that they have received many

negative reactions upon disclosure of their cutting. However, the majority of the negative reactions they received seemed to come from friends and family, and less often from professionals. Participants spoke of friends and family who physically recoiled at the sight of wounds or scars or even the mention of cutting. In addition, they were often ridiculed or labeled, judged, and/or accused of ulterior motives (i.e., attention-seeking or suicide attempt). Some were subjected to controlling interventions, including being isolated, having their cutting instruments removed (without learning new coping skills) and being unnecessarily hospitalized against their will. Finally, the most negative interactions resulted when the person to whom they disclosed made no attempts to understand the behavior or the underlying pain the participants were feeling. This was the most common mistake made by professionals, and was a very common response of peers and/or family. The participants made it clear that simply focusing on the symptom of cutting, while ignoring the underlying pain, was not only unhelpful, but also detrimental to future willingness to disclose.

As has been recognized in previous research, many times individuals react negatively to cutting as a result of perceiving it as a suicide attempt. However, all of the participants made a clear distinction between suicide and cutting, indicating that they are separate entities. Their responses supported the differentiation made in Dycian, Fishman and Bleich (1994) and Favazza (1998), where cutting is seen as an attempt to eliminate the emotional pain the individual is experiencing, thus averting the need for suicide. Although many of the participants indicated feeling suicidal, they indicated that they did not cut themselves in order to attempt suicide. Instead, they were more likely to attempt suicide through more passive means such as carbon monoxide poisoning or drug

overdose, which supports the findings of Favazza (1999). Dycian, Fishman and Bleich (1994) referred to a possible continuum of behaviors that has self-mutilation on one end and suicide on another. The present study supports the notion of this continuum in that the participants' responses indicated that they would most likely seriously consider and attempt suicide when cutting proved to no longer be effective in coping with their difficult emotions (see quote by Jay, p. 129).

With regard to positive interventions or reactions, the participants seemed to be most comforted by calm, non-judgmental, empathic responses illustrating that the person to whom they disclosed was supportive. They referred primarily to verbal support through encouragement of communication and statements indicating that they were available whenever the participant needed. In addition, the participants responded positively to physical comforting and others providing visible, tangible caring through cards and letters.

Although the participants found verbal expression of their thoughts and emotions difficult, they seemed to want others to help them do this. Most of the participants referred to the importance of being encouraged to explore what thoughts and emotions led to the need to cut. Although some found limited focus on the actual cutting behavior helpful (i.e., contracting not to cut), they stressed that understanding the reasons for cutting and developing new coping skills was most important. With regard to specific interventions, they had higher expectations of professionals than friends and family. Thus, they were more disappointed and frustrated when professionals were unable to provide basic empathy, exploration and teaching of new coping skills.

Many referred to knowing others who engaged in cutting. This seemed to be both positive and negative, depending on the situation. Many were happy to know of and talk with others who engaged in cutting and other types of self-mutilation, as the participants believed these individuals had a greater understanding of what they were going through. In addition, they felt comforted by knowing that they were not the only one who engaged in such behaviors, thus reducing their feelings of being "crazy." However, the knowledge of others engaging in self-mutilation could be negative in that it does seem to have somewhat of a "contagion" effect. In other words, sometimes hearing of others' self-mutilation would trigger the participants to do it themselves. The participants were able to learn of new ways or locations to cut, and at times could use the awareness of others who cut as a means for developing an identity as a "cutter." Thus, it appears the benefits of the awareness of others engaging in self-mutilation need to be realistically addressed.

How Cutting Improves and Worsens

As stated, no previous research has focused on the effect that interactions with others has on the individual who engages in cutting. However, the participants in the present study seemed to clearly indicate that the responses they received did have an affect on future cutting episodes. Unfortunately, it appears that a number of common, perhaps automatic, responses can lead to either the continuation or worsening of cutting behaviors. However, other, more positive responses, seem to help the individual slowly reduce the incidence of cutting.

What became apparent was that, regardless of the consequences of hiding the behavior, the overall outcome of hiding cutting was the maintenance or increase of the behavior. Although at times the participants found hiding their cutting to be positive in

that they could continue to utilize it as a coping skill, and they could avoid the feared negative reactions from others, it actually was not positive in the long run because the participants had no chances for receiving help in learning new, more adaptive coping skills. In addition, receiving the negative consequences to choosing to disclose their cutting resulted in negative outcomes for the individual. In other words, the present results indicate that if an individual engaged in cutting is ridiculed, ignored, labeled, shamed or controlled, the cutting behavior will remain consistent or increase. It was clear that, although removing the instruments that have been used for cutting is likely an automatic and seemingly logical response, it was perceived as being overly confrontational or controlling by those engaged in cutting. This is logical if the fact that these individuals are perceiving cutting as their easiest and/or most effective coping skill is taken into account. Essentially, when this coping strategy is removed, without being replaced by a more adaptive one, the individual engaging in cutting perceives that he/she has no means for coping. Unfortunately, this can lead to increased suicidality due to the perceived inability to cope. In addition, it appears that the individual is likely to perceive this action as showing that the person intervening is more concerned about the behavior than the individual's internal emotional pain.

Thus, the next step was to determine why, specifically, these negative reactions would lead to an increase and continuation of cutting. Although the participants were not always able to draw a direct connection between experiencing negative responses from others and later cutting episodes, it became clear to the researcher that receiving the negative responses seemed to trigger the negative emotions that immediately precede cutting. For instance, when the individual received shaming messages from the person to

whom he/she disclosed, feelings of inadequacy and failure increased. The individual was more likely to perceive him/herself as "bad" and/or deserving of punishment, which increased their level of self-hatred and anger. In addition, at times the individuals would become angry with the person who responded negatively, but because he/she struggled to verbalize emotions, he/she was likely to internalize the anger and take it out on him/herself through cutting or other harmful behaviors.

Thus, a cycle seems to develop in which cutting is initially triggered by perceived stressful events leading to perceived negative emotions. As the individual receives negative responses, he/she seems to experience an increase in negative self-concept, feel more out of control, feel less supported, and less able to verbally express his/her emotions. All of these factors are identified as those that increase one's tendency to perceive potentially negative situations as stressful. Thus, it appears that the individual is more likely to perceive future events as stressful, triggering the intolerable, overwhelming, perceived negative emotions that immediately precede cutting. As the number of perceived stressful events increase, so do the cutting episodes.

So, then the question remains concerning how this cycle is interrupted and reversed. As had been found in previous research, and confirmed by the present study, individuals engaging in cutting typically feel misunderstood, lonely and isolated. Whether or not they do have a support system, they perceive that they do not, thus they are unable to talk about their emotional pain with others. However, once they choose to disclose their cutting, and they receive positive responses from these individuals, they begin to feel more understood and supported. In other words, if they receive calm, empathic reactions and offers of further support, they tend to be more open about their

thoughts and feelings. Thus, they begin to develop the coping skill of emotional communication. This means they can begin to gain an understanding of the underlying thoughts and events that lead to overwhelming intolerable emotions, and they can begin to express these emotions to those who have proved they can be trusted. In addition, if the individual has someone that can help them to identify other adaptive coping skills, he/she begins to be less dependent on cutting.

It is important to note that one should not expect immediate, or even expedient, termination of the cutting behaviors. Much as the individual engaged in cutting seems to "spiral down" into worsening cutting as a reaction to negative consequences, he/she can be thought of as "spiraling up" in the improvement in cutting episodes. In other words, cutting is not likely to end immediately, but instead is likely to slowly decrease as new coping skills emerge. For a period of time, the individual will likely continue to use cutting while also experimenting with new coping skills. As he/she begins to learn that the more adaptive coping skills result in less negative consequences, he/she will eventually transition to relying on more adaptive coping strategies, and eventually cutting will no longer seem like the easiest or most effective solution.

Implications for Friends and Family

It seems clear that the most important thing for friends and family to keep in mind is the need for a calm, empathic response. This is not to say one should hide his/her fears from the individual engaged in cutting. It is helpful to share these fears and concerns with the individual, but only if it is done in a supportive and caring manner. Thus, statements such as "I am concerned about your cutting because I do not want you to hurt yourself" are more beneficial than those that insinuate blame, guilt or shame (i.e., "What is wrong

with you? Why are you trying to scare us?"). Confrontational and controlling responses are not recommended, as they are often interpreted as showing a lack of understanding, and a lack of desire to understand. Clearly, if the individual has harmed him/herself to the extent that he/she needs medical attention, this should be sought even if he/she is resistant. However, if the injuries are not life-threatening, it appears that less intrusive interventions are more effective due to the individual's desire to have control over who does and does not know about the behavior. Efforts should be made to provide the individual with professional help, and offers of support and caring are necessary.

With regard to removing the instruments used for cutting, results indicate that this is most effective if done after discussing it with the individual engaged in cutting. Simple removal of the instruments is often perceived as controlling. However, if it is discussed with the individual engaging in self-mutilation, it is likely that he/she will see the benefit in the removal of the instruments, if he/she is ready to "give up" cutting as a coping strategy. As the participants stated, it is impossible to remove all sharp objects from the individual's reach, and even if they are removed, they are easy and inexpensive to locate or purchase. Given the option, however, many individuals engaging in cutting will likely choose to remove all "sharps" if they are allowed control (i.e., they hand the "sharps" to someone instead of having that person search the room and find them). This allows the individual to feel in control of his/her actions and indicates a sense of trust in the person to whom they are giving the instruments. Thus, they are more likely to come to that person the next time they feel like cutting.

It is also important to recognize the stress that friends and family can experience upon learning of a loved one's self-harm. It is logical and expected that one would

experience a fearful, or even angry, response to someone they love intentionally harming him/herself. However, it is clear that showing these emotions directly to the individual engaging in self-mutilation can frighten him/her and discourage him/her from further disclosure. Thus, it is recommended that friends and family also find support, either professionally or through other means, to assist them in dealing with their emotions. One should be careful to not disclose the fact that a friend or family member is engaging in cutting to people that he/she does not want to have know. Thus for many, professional support might be the most effective outlet.

Implications for Professionals

Logically, it is professionals that most people will depend on to treat something as serious as cutting. Most friends and family will realize that it is beyond their abilities to try to help someone end cutting behaviors, thus they often will encourage the individual to seek professional help. However, professionals must keep in mind that cutting is a very secretive behavior, and many individuals will not present with concerns specifically about cutting. In others words, they may come in to a professionals office and indicate that they are experiencing loneliness, depression, anxiety, etc., but withhold information about cutting. Thus, the first recommendation for professionals is to begin asking in the first session about cutting and other self-mutilative behaviors. This will show the patient that you are aware that these behaviors occur, and that you are willing to talk about them.

As with family and friends, the results indicate that the most important factors in the professional's response to an individual's disclosure of cutting are calmness, empathy, and understanding. However, as stated previously, most individuals engaged in cutting will look to professionals for a greater level of help than they expect from peers

and family members. Thus, it is important for the professional to have an understanding of the etiological factors that lead to cutting. All professionals working with someone engaging in cutting should familiarize themselves with the research that has been conducted related to etiological and phenomenological factors and recommended treatment interventions. An understanding of the difference between self-mutilation and suicide is key, as is the awareness that individuals will often engage in multiple self-harming behaviors. One of the most detrimental actions a professional can take is to focus too much on the symptom of cutting while ignoring the underlying emotional pain. Thus, it is recommended that contracting and other behavioral techniques be intertwined with more affective and interpersonal strategies such that the individual can work to decrease cutting while increasing self-understanding.

Due to the fact that one of the basic characteristics of someone who engages in cutting is an inability to communication emotions, it is important that professionals take a somewhat more directive approach early in treatment. Although this will not be true for all patients engaging in cutting, many will be unsure of what to say, either due to lack of insight or fear of emotional disclosure, and they may respond more readily to specific questions and assistance with exploration. In addition, patients should be encourage to increase their emotional expression through mediums that are helpful for them, including writing, drawing, painting, music, dance, and other artistic expressions. As the participants indicated, it is important for the professional to help the individual engaged in cutting identify coping skills that are effective for him/her, and not simply provide a list of behaviors that have been helpful for others.

Finally, the participants indicated that contracting was helpful, if it consisted of individual-specific, increasing, realistic goals. In addition, the professional will likely be more effective if he/she makes him/herself available to the patient for when he/she feels like cutting. In other words, contracts should begin with shorter time periods, and are most effective if the professional indicates that the client can contact him/her when he/she feels like cutting. As the patient begins to gain control over his/her cutting, higher goals can be set—the professional and the patient should work together to develop reasonable goals. Based on the demanding nature of supporting someone engaging in cutting, it is recommended that professionals limit themselves to 1-2 patients who are seriously engaging in cutting.

"Cutter" as a Label

One final result is important to address directly—the use of the term "cutter" as a label of an individual who engages in cutting. A conscious effort has been made throughout this manuscript to avoid using the term "cutter." This is partially due to the overall societal tendency to not differentiate between the individual with a mental disorder and the disorder itself. In other words, it is common to hear the terms "schizophrenic," "anorexic," "bulimic," "borderline," etc. However, rarely, if ever, is an individual with cancer referred to as a "cancer-ic." Research has increasingly addressed the effect of labeling on individuals with mental disorders. The participants in the current study also referred to the negative effects labeling can have. For instance, Stacey specifically referred to the negative reaction she had when a family member said she was a "cutter." Stacey made the point that although she cuts, it is not who she is, and that she has many other characteristics. Labeling can also be negative in that some individuals

engaging in cutting are doing so partially in an attempt to develop an identity. It seems clear that this is not a positive identity to possess, thus identifying as a "cutter" should not be encouraged or supported through use of the same language. Although it is noted that the phrase "individual engaging in cutting" is much longer and requires more effort to say, it does differentiate between the individual and the behavior, which is a very important distinction.

CHAPTER EIGHT

INTEGRATIVE DISCUSSION

The present study is the first known study to use both quantitative and qualitative methods to determine the prevalence and phenomenological aspects of cutting in college students. In addition, the present study expands upon previous research by examining a large number of female and male students, and exploring the positive and negative effects others can have on those utilizing cutting as a coping strategy.

Relationship to Previous Research

In summary, the present results confirm and expand upon many previous research findings. The most significant difference was in the rate of cutting seen in men and women. Otherwise, however, the present results do not conflict significantly with previous findings.

With regard to prevalence, cutting occurs much less frequently in college students than in patient populations. In addition, cutting seems to be less severe in college students, indicated by fewer episodes, less need for medical attention, and less scarring. Cutting is commonly inflicted upon arms and wrists, but is also seen on other bodily areas, and many engaging in multiple episodes of cutting will cut themselves on multiple bodily areas.

Cutting is more common in individuals experiencing depression and disordered eating, and a history of abuse and/or neglect is common. It is clear that cutting typically

begins in late adolescence, is triggered by intense, perceived negative emotions, and is effective in that it results in a sense of relief. As previous research has shown, cutting serves to "numb out" some individuals' emotions, and it serves to return feeling, or end a sense of numbness, in other individuals. It serves multiple purposes and is effective in that the individual engaging in cutting feels an increased ability to cope immediately following the act, which reduces the likelihood of feelings of hopelessness and helplessness leading to suicide. Individuals engaging in cutting are not making suicide attempts, and often will not benefit significantly by inpatient hospitalization.

Implications for College Campuses

The rate of cutting, defined as having a history of at least one episode of cutting, seems to be almost equivalent between male and female college students. This was a very surprising result, and one that is most likely not recognized on the average college campus. Many campuses are unaware of the rate of cutting in female students, and certainly have not been aware of the relatively high rate of cutting seen in male students. Obviously, these results could have a number of implications for college campuses across the United States.

The question that almost automatically springs from these results is this: What should college officials and agencies do in reaction to these results? Clearly, the answers are broad and variable. It seems clear that most college students with a history of cutting first engaged in the behavior prior to joining the campus community. Thus, college campuses are generally left with only the ability to engage in intervention, not prevention, strategies. Taking this into account, along with the previous research indicating that college students often do not seek help easily, it seems that one of the

major steps campuses could take would be to provide education and outreach related to cutting. The present study does not indicate that any group of individual in particular are at higher risk for cutting, thus intervention strategies should be directed towards the campus as a whole.

One of the recommendations of the participants was to initiate a "Self-Mutilation Awareness Week." Although this could just seem like another awareness week to add to an already long list, there are many benefits of such recognition. As has been stated repeatedly, cutting is a very secretive behavior, and many who do it actually believe that they are one of the very few people who does. Thus, increased awareness of the behavior could serve to decrease the feelings of isolation and loneliness that individuals engaging in cutting experience. In addition, increasing the overall population's awareness of the behavior could help others to react more positively and effectively when they learn of a loved one's cutting behaviors. The present study indicates that the reactions of those to whom cutting is disclosed strongly affect future disclosures and acts of cutting. Thus, increasing the public's awareness and understanding could have a significant positive effect on the rate of future cutting episodes.

The major fear this will bring up for most campus communities is likely the belief that implementing a "Self-Mutilation Awareness Week" will actually increase the number of people engaging in self-mutilation. And, on a very small level, this could be true. However, if one looks at previous research regarding discussions related to sexual activity, contraceptive devices, suicidality and other "touchy subjects," it is clear that, for most people, simply talking and learning about a behavior will not increase the incidence. In other words, simply asking someone if they feel like killing him/herself will not lead a

non-suicidal person to commit suicide. Along the same lines, research has shown that talking about contraceptive devices does not increase sexual activity in students. Thus, for the average person, it can be expected that talking and increasing awareness about self-mutilation will not make someone who had never considered it engage in it. In addition, research has shown that, if the tendency for cutting to result in a "contagion" effect is addressed directly, the behavior is less likely to then become "contagious."

At this point, the awareness of cutting seems to be at the level of awareness eating disorders was at approximately 20-30 years ago. Due to the lack of awareness and understanding, when many people hear of cutting they are repulsed and shocked, and often make comments similar to, "WHO would do that?" Based on this sample, it appears that, statistically speaking, one out of every ten college students have at some time engaged in cutting. And when these students hear the response of, "WHO would do that?" they feel increased shame and guilt, and they are less likely to disclose their behavior. However, the results of the interviews clearly indicate that it is the communication about cutting and underlying emotions and thoughts that is most needed for these individuals. Thus, college students could benefit from knowing that the people who engage in cutting are all around them—that one out of ten of their friends, male and female, are likely to have tried cutting, and thus are at increased risk for doing it again.

College campuses could also improve services by educating physicians, nurses, therapists, and counselors about cutting and effective means for dealing with it. The typical individual with a history of cutting is not going to walk into a practitioner's office and easily disclose their behavior. Thus, it is recommended that practitioners begin to ask directly about these behaviors, which will normalize them and allow the student to see

that the practitioner is willing to talk about them. Practitioners should make themselves aware of the etiological and phenomenological aspects of cutting so they can display a calm, empathic response upon disclosure. They should learn to differentiate between cutting and suicide, and react accordingly. Finally, practitioners that participate in outreach activities should begin to address these behaviors and encourage those engaging in cutting to seek treatment.

This study also clearly illustrates the relationship between past abuse, disordered eating, depression and cutting. As previous research has proposed, students should be monitored for utilizing multiple self-harm behaviors as coping mechanisms. Thus, those students who have been identified as dealing with disordered eating and/or depression should also be assessed for self-mutilation, and the tendency for "symptom substitution" to occur should be addressed. It seems clear that, for many students, these coping mechanisms develop as a result of abuse and neglect earlier in life. Thus, students should be encouraged to explore and understand their reactions to the negative events in their childhoods. However, it also should not be assumed that students living with self-harm were abused or neglected as children—the relationship is far from definitive. Clearly, individual differences in the etiology of cutting should be fully explored.

Directions for Future Research.

Due to the fact that this was the first large epidemiological study examining cutting on a college campus, it would be beneficial if similar studies were conducted on other college campuses across the United States. This study clearly illustrates that cutting, in addition to disordered eating, depression and substance use, are significant issues on this campus, and it is likely that this is true for other campuses. In addition, further

examination of the seemingly related behaviors assessed in this study should be conducted in order to more fully illuminate the relationships that are present. Based on previous studies, and on this one, it appears that disordered eating and cutting are related, both in terms of etiology, and most likely in terms of the phenomenology of the behaviors. Thus, if one is to apply what is known about disordered eating to cutting, it is likely that the behavior is most easily treated in its less severe stages. Previous research has focused primarily on patient samples, which implies individuals that are seriously engaged in cutting. The present study indicates that the level of cutting present in college students is less severe; thus, interventions and/or prevention in this setting may prove to help students before cutting becomes more serious.

With regard to qualitative analyses, the proposed theory should be retested using other individuals with a history of cutting. In order to test its validity for college students, the study should be replicated on other college campuses. In addition, in order to test its overall validity, the study should be replicated using different populations, including patient samples and more demographically diverse samples. The theory should be continually revised based on further results until it seems to fit for all interviewees.

Overall, both studies could be replicated focusing on other means of self-harm. For instances, differences in those who engage in burning or bone breaking could be assessed. In addition, the study could be extended to examine individuals who engage in more socially acceptable self-harm, including those who participate in body piercing and tattooing. We are far from understanding the etiological and phenomenological natures of all types of self-harm, thus further research can point in numerous directions.

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Appendix A

Impulsive Behaviors Survey

This survey asks you a number of questions related to depression, self-harm, alcohol/drug use, and eating. Please respond to the questions on this survey as honestly as you can, and try to answer each question. Please do not put your name anywhere on the survey. We want your answers to remain completely anonymous, and at no time will your answers be traced back to you. Thank you for your participation in this study.

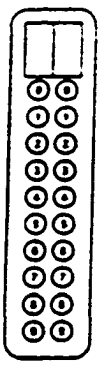
MARKING INSTRUCTIONS

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.

CORRECT: ● INCORRECT: ⊘ ⊠ ◒ ◯

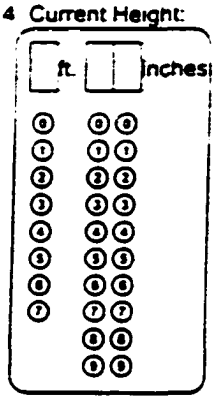
1. Sex:
   - ○ Male
   - ○ Female

2. Age:

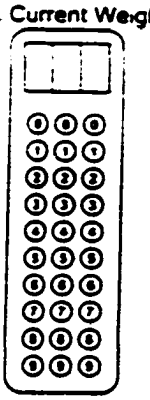


3. Ethnicity:
   - ○ African American/Black
   - ○ Asian-American
   - ○ Caucasian (non-Hispanic)
   - ○ Hispanic/Latino
   - ○ Native American
   - ○ Multiracial: _____
   - ○ Other: _____

4. Current Height:



5. Current Weight:



6. Year in school:
   - ○ Freshman
   - ○ Sophomore
   - ○ Junior
   - ○ Senior

7. Current GPA:
   - ○ 3.5-4.0
   - ○ 3.0-3.4
   - ○ 2.5-2.9
   - ○ 2.0-2.4
   - ○ Less than 2.0

8. Religious Affiliation:
   - ○ Protestant (Baptist, Lutheran, Methodist, Episcopal, etc.)
   - ○ Catholic
   - ○ Jewish
   - ○ Buddhist
   - ○ Agnostic (no specific identification)
   - ○ Atheist (no religious beliefs)
   - ○ Islam
   - ○ Other: _____

9. Type of Residence:
   - ○ House/Apartment
   - ○ Dorm
   - ○ Sorority/Fraternity
   - ○ Parents' home

10. Relationship Status
    - ○ Single without steady boyfriend/girlfriend or partner
    - ○ Single with steady boyfriend/girlfriend or partner
    - ○ Single living with steady boyfriend/girlfriend or partner
    - ○ Married
    - ○ Separated/divorced
    - ○ Widowed

11. How many credits are you currently taking:
    - ○ 1 - 11
    - ○ 12 or more

12. Are you currently employed:
    - ○ Employed full-time
    - ○ Employed part-time
    - ○ Not employed

13. What is your sexual orientation?
    - ○ Gay/Lesbian
    - ○ Heterosexual
    - ○ Bisexual

Please answer the following questions with either "yes" or "no"

	YES	NO
14. Are you a member of a sorority/fraternity?	○	○
15. Are you a CSU athlete?	○	○
16. Have you ever been physically abused (i.e., repeatedly hit, punched, and/or slapped by a friend or family member)?	○	○
17. Have you ever been sexually abused (i.e., forced to engage in sexual acts against your will)?	○	○
18. Were you emotionally neglected as a child (i.e., your parents were not able to meet your emotional needs)?	○	○
19. Have you ever attempted suicide?	○	○

Please answer the following questions with either "yes" or "no"

	YES	NO
20. Have you ever deliberately cut your wrists without the intention of committing suicide?	○	○
21. Have you ever deliberately cut any part of your body besides your wrists without the intention of committing suicide?	○	○

Please answer the following questions only if you answered yes to question 20 or 21. Otherwise, skip to question #31.

	YES	NO
22. Have you ever had to get stitches to close these cuts?	○	○
23. Do you have scars on your body which are the result of cutting yourself?	○	○

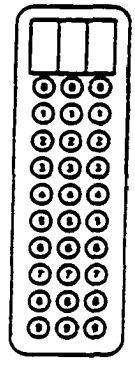
24. What influenced you to cut yourself the first time?
- ○ Heard about it
- ○ Knew someone who did it
- ○ Just happened
- ○ Other: _____

25. How old were you when you first cut yourself?
- ○ < 10
- ○ 10 - 12
- ○ 13 - 15
- ○ 16 - 18
- ○ 19 - 21
- ○ 22 - 24
- ○ 25+

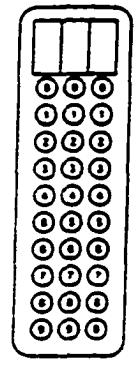
26. How long has it been since you last cut yourself?
- ○ 1 - 3 days
- ○ 4 - 6 days
- ○ 1 - 2 weeks
- ○ 3 - 4 weeks
- ○ 5 - 8 weeks
- ○ over 8 weeks

27. How many of your friends cut themselves?
- ○ 0
- ○ 1 - 2
- ○ 3 - 5
- ○ 6 - 8
- ○ 9 - 11
- ○ 12+

28. About how many times have you cut yourself?



29. How many scars do you have on your body due to cutting?



30. Have you ever been treated for cutting (please mark all that apply)?
- ○ Never been treated
- ○ CSU University Counseling Center
- ○ CSU Health Center (Psychiatrist, Doctor, or Nurse Practitioner)
- ○ Off-campus therapist or group
- ○ Psychiatric Hospital
- ○ Medical Hospital

Please answer the following questions with either "yes" or "no"

Do you:	YES	NO
31. Restrict your food intake in order to lose weight?	○	○
32. Fear gaining weight or becoming fat?	○	○
33. Have a regular menstrual period (women only)?	○	○
34. *Feel out of control* while eating a large amount of food?	○	○
35. Make yourself throw up in order to prevent weight gain?	○	○
36. Use laxatives in order to prevent weight gain?	○	○
37. Fast/skip meals in order to prevent weight gain?	○	○

38. If female, how long has it been since your last period?
- ○ Less than one month
- ○ One month
- ○ 2-3 months
- ○ 4-8 month
- ○ 9-12 month
- ○ Over 12 months

39. Approximately how many hours do you exercise each week?
- ○ None
- ○ 1-3
- ○ 4-7
- ○ 8-10
- ○ 11-14
- ○ 15+

40. Have you ever been diagnosed with an eating disorder?
- ○ Anorexia Nervosa
- ○ Bulimia Nervosa
- ○ Other: _____
- ○ Never been diagnosed

41. How many of your friends have an eating problem?
- ○ 0
- ○ 1 - 2
- ○ 3 - 5
- ○ 6 - 8
- ○ 9 - 11
- ○ 12+

42. Have you ever been treated for an eating disorder (please mark all that apply)?
- ○ Never been treated
- ○ CSU University Counseling Center
- ○ CSU Health Center (Psychiatrist, Doctor, or Nurse Practitioner)
- ○ Off-campus therapist or group
- ○ Psychiatric Hospital
- ○ Medical Hospital

Please answer the following questions with either "yes" or "no"

	YES	NO
43. In general, I feel sad and depressed?	○	○
44. I do not enjoy activities as much as I used to	○	○
45. I have lost or gained weight recently	○	○
46. My appetite has increased or decreased recently	○	○
47. I am sleeping more or less than I used to	○	○
48. I feel more tired/fatigued recently than usual	○	○
49. I feel more guilt recently than usual	○	○
50. I have more difficulty concentrating recently than usual	○	○
51. I have recently considered committing suicide	○	○
52. Are any of the above symptoms causing significant problems in your day to day life?	○	○

53. Have you ever received treatment for depression (please mark all that apply)?
- ○ Never been treated
- ○ CSU University Counseling Center
- ○ CSU Health Center (Psychiatrist, Doctor, or Nurse Practitioner)
- ○ Off-campus therapist or group
- ○ Psychiatric Hospital
- ○ Medical Hospital

54. Please indicate which of the following drugs you are currently using (i.e., within the past month) or have used regularly in the past. Mark both current and past if they both apply. Mark "never" if you have never used the drug.

	CURRENTLY USING	USED IN THE PAST	NEVER USED
Alcohol	○	○	○
Cocaine	○	○	○
Ecstasy (Ex)	○	○	○
Nicotine	○	○	○
Marijuana	○	○	○
Speed	○	○	○
Other: _____	○	○	○

55. Within the past six months, about how often, on average, have you used each of the following drugs (mark one for each line)?

	DID NOT USE	1X/MONTH	1 - 3X /WEEK	4 - 6X /WEEK	DAILY
Alcohol	○	○	○	○	○
Cocaine	○	○	○	○	○
Ecstasy (Ex)	○	○	○	○	○
Nicotine	○	○	○	○	○
Marijuana	○	○	○	○	○
Speed	○	○	○	○	○
Other: _____	○	○	○	○	○

56. Please indicate whether your use of the following drugs has increased, decreased, or stayed about the same over the past six months. (Mark one for each line)

	INCREASED	ABOUT THE SAME	DECREASED	NO USE
Alcohol	O	O	O	O
Cocaine	O	O	O	O
Ecstasy (Ex)	O	O	O	O
Nicotine	O	O	O	O
Marijuana	O	O	O	O
Speed	O	O	O	O
Other: _____	O	O	O	O

57. At what age did you first use? (Mark one for each line)

	NEVER USED	UNDER 10	10 - 11	12 - 13	14 - 15	16 - 17	18 - 20	21 - 23	24 - 26	27+
Alcohol	O	O	O	O	O	O	O	O	O	O
Cocaine	O	O	O	O	O	O	O	O	O	O
Ecstasy (Ex)	O	O	O	O	O	O	O	O	O	O
Nicotine	O	O	O	O	O	O	O	O	O	O
Marijuana	O	O	O	O	O	O	O	O	O	O
Speed	O	O	O	O	O	O	O	O	O	O
Other: _____	O	O	O	O	O	O	O	O	O	O

58. Have you ever been arrested on a drug or alcohol related charge?
- O Yes
- O No

59. Have you ever been treated for drug/alcohol use (mark all that apply)?
- O Never been treated
- O CSU University Counseling Center
- O CSU Health Center (Psychiatrist, Doctor, or Nurse Practitioner)
- O Off-campus therapist or group
- O Psychiatric Hospital
- O Medical Hospital

Thank you again for completing this survey. Please check to be sure you have answered all of the questions, and then return this form in the enclosed envelope. Please remember to mail the enclosed postcard *separately* so that you do not receive another copy of this survey. If you have questions about this research or would like a copy of the results when they are available this summer, please contact Wendy Bowers at 491-6762.

Appendix B

Study 1 Forms

Initial Contact Letter

Informed Consent Letter

Follow-up Letter

INITIAL CONTACT LETTER

Dear Student:

You have been randomly selected to participate in a project related to self-harm in college students. In approximately two weeks you will be receiving a survey in the mail. The survey will address questions related to cutting, eating and drug/alcohol use. Receipt of this survey in no way means that we think you engage in any cutting or drug/alcohol use. Only one previous research study has looked at all of these issues on college campuses, thus we know very little about how often these behaviors occur or their severity. This lack of information makes it difficult for campus agencies to know what services might be beneficial to offer students. Therefore, we are asking you to help us with this project as this will help us to determine the need for various services on the CSU campus. As a student here at CSU, your input is vital in helping us to improve the current services and initiate new services.

The survey asks for detailed personal information, both in terms of your background and your current behaviors. It is reasonable to have a concern about confidentiality when providing such information. We have taken step to ensure that the information you provide will be kept **strictly confidential.** There will be no identifying information on the surveys (i.e., you will not be asked you put your name or ID number on the survey). There will be a postcard included with the survey, and we will ask you to return that postcard *separately* from the survey. The postcard will have an ID number on it, but it will never be associated with your survey, and the ID will only be used to determine if we need to send out another survey if you do not respond. **Your anonymity will be preserved at all times.** Further, when the data from the survey are analyzed, only summary statistics will be reported.

The success of this type of project depends on the respondents. As stated, you were randomly selected as 1 of 4000 students representing the student body as a whole. In order for the survey to provide accurate results, a high rate of return is necessary. Thus, we would like to encourage you to take 10-15 minutes to complete the survey. Recognizing the commitment of time and effort that we are requesting of you, we hope you will find it worthwhile to complete the survey. Your willingness to participate in this project will be greatly appreciated! Thank you for considering this request.

Sincerely,

Wendy Bowers, M.S.
Department of Psychology
Center

Charles Davidshofer, Ph.D.
Director, University Counseling

Scott Hamilton, Ph.D.
Professor, Department of Psychology

Stephen Blom
Director, Hartshorn Health Service

INFORMED CONSENT LETTER

Dear Student:

You were contacted approximately two weeks ago regarding the enclosed survey. As you may remember, this survey is the basis for a project on self-harm in college students. The survey will address questions related to cutting, eating and drug/alcohol use. Receipt of this survey in no way means that we think you engage in any cutting or drug/alcohol use. Only one previous research study has looked at all of these issues on college campuses, thus we know very little about how often these behaviors occur or their severity. This lack of information makes it difficult for campus agencies to know what services might be beneficial to offer students. Therefore, we are asking you to help us with this project as this will help us to determine the need for various services on the CSU campus. As a student here at CSU, your input is vital in helping us to improve the current services and initiate new services

The enclosed survey asks for detailed personal information, both related to your background and your current behaviors. We have taken steps to ensure that the information you provide will be kept **strictly confidential. Your anonymity will be preserved at all times.** There is no identifying information on the surveys (i.e., you should not put your name or ID number on the survey). There is a postcard enclosed, and we would like you to return that postcard *separately* from the survey. The postcard has an ID number on it, but it will never be associated with your survey, and the ID will only be used to determine if we need to send out another survey if you do not respond. If you do not want to complete the survey, simply return the postcard only. Further, when the data from the survey are analyzed, only summary statistics will be reported. Questions about participants' rights may be directed to Celia S. Walker at (970) 491-1563.

It is expected that the survey will take only 15-20 minutes to complete. Due to the nature of some of the questions and the possibility that responding to these questions will cause possible stress or anxiety, a list of campus professionals that specialize in the areas addressed has been included with your survey.

The success of this type of project depends on you, the respondent. We are hoping you will choose to participate in this project as we believe it will help the campus community to address problems that currently exist on campus. This project has the support of the University Counseling Center and the Hartshorn Health Center as they too would like to increase awareness of problems on the CSU campus. We recognize the commitment of time and effort that we are requesting of you, and we hope you will find it worthwhile to complete the survey. Your willingness to participate in this project will be greatly appreciated. Please feel free to contact Wendy Bowers at 491-6762 with any questions about this project. In addition, if you would like to receive information regarding the results of this project, please feel free to contact me. Thank you for considering completing this survey.

Sincerely,

Wendy Bowers, M.S.
Department of Psychology

Charles Davidshofer, Ph.D.
Director, University Counseling Center

Scott Hamilton, Ph.D.
Professor, Department of Psychology

Stephen Blom
Director, Hartshorn Health Service

FOLLOW-UP LETTER

Dear Student:

You received the enclosed survey approximately four weeks ago, and our records indicate that you did not complete the survey. We apologize if our records are incorrect, and if you have completed and returned the survey, please discard the enclosed copy. However, if you did not complete the survey, we would like to ask you to consider completing it at this time. As you may remember, this survey is the basis for a project on self-harm in college students. The survey will address questions related to cutting, eating and drug/alcohol use. Receipt of this survey in no way means that we think you engage in any cutting or drug/alcohol use. Prior to this survey, only one study has looked at all of these issues on college campuses. Therefore, we currently know very little about how often these behaviors occur or about their severity. This lack of information makes it difficult for campus agencies to know what services might be beneficial to offer students. That is why we are writing you to ask you to assist with this project by completing the enclosed survey.

The enclosed survey asks for detailed personal information, both related to your background and your current behaviors. We have taken steps to ensure that the information you provide will be kept **strictly confidential.** There is no identifying information on the surveys (i.e., you should not put your name or ID number on the survey). There is a postcard enclosed, and we would like you to return that postcard *separately* from the survey. The postcard has an ID number on it, but it will never be associated with your survey, and the ID will only be used to determine if we need to send out another survey if you do not respond. **Your anonymity will be preserved at all times.** Further, when the data from the survey are analyzed, only summary statistics will be reported. Questions about participants' rights may be directed to Celia S. Walker at (970) 491-1563.

It is expected that the survey will take only 15-20 minutes to complete. Due to the nature of some of the questions and the possibility that responding to these questions will cause possible stress or anxiety, a list of campus and community professionals that specialize in the areas addressed has been included with your survey.

The success of this type of project depends on you, the respondent. We are hoping you will choose to participate in this project as we believe it will help the campus community to address problems that currently exist on campus. This project has the support of the University Counseling Center and the Hartshorn Health Center as they too would like to increase awareness of problems on the CSU campus. We recognize the commitment of time and effort that we are requesting of you, and we hope you will find it worthwhile to complete the survey. Your willingness to participate in this project will be greatly appreciated. Please feel free to contact Wendy Bowers at 491-6762 with any questions about this project. In addition, if you would like to receive information regarding the results of this project, please feel free to contact me. Thank you for considering completing this survey.

Sincerely,

Wendy Bowers, M.S.
Department of Psychology

Charles Davidshofer, Ph.D.
Director, University Counseling Center

Scott Hamilton , Ph.D.
Professor, Department of Psychology

Stephen Blom
Director, Hartshorn Health Service

Appendix C

Study Two Forms

Recruitment Postcard

Recruitment Advertisement

Informed Consent

RECRUITMENT POSTCARD

ID: _xxxx___

Please mail this postcard **separately** from your completed survey. If you have chosen not to complete the survey, please return this postcard only. Thank you for your participation.

If you currently engage in cutting and are interested in participating in a one-on-one interview for a project planned for later this semester, please mark the line below. If you mark this box, we will contact you at the phone number listed with the registrar's office. Please call Wendy Bowers at 491-6762 if you would prefer to be contacted at a different number or if you have any questions.

_____ Yes, please contact me to set up an interview.

RECRUITMENT ADVERTISEMENT

Researchers in the CSU Department of Psychology are seeking participants for a research study related to the experiences of individuals who have a history of cutting behaviors. The research is being conducted by Scott Hamilton, PhD and doctoral candidate Wendy Bowers. The research involves a 1-2 hour interview with Wendy Hoyt, during which participants will be asked to share any thoughts they have about why they began cutting and what factors helped and hindered their recovery from cutting. The goal of this project is to increase awareness of the lived experiences of individuals who suffer from cutting, and results will be used to educate health care professionals about effective treatment strategies. In addition, the information shared may be used by campus agencies to determine the need for additional services for students who engage in cutting. If you have a history of cutting and are willing to share your story, please contact Wendy Hoyt at 491-6762. Your participation will remain confidential.

COLORADO STATE UNIVERSITY
INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

TITLE OF PROJECT: Qualitative Study of Cutting Behaviors

NAME OF PRINCIPAL INVESTIGATOR: Scott B. Hamilton, Ph.D.

NAME OF CO-INVESTIGATOR: Wendy Bowers, M.S.

CONTACT NAME AND PHONE NUMBER FOR QUESTIONS/PROBLEMS: Wendy Bowers 491-6762

PURPOSE OF THE RESEARCH:
This study is a research project designed to learn about the lived experiences of individuals who have survived a history of cutting behaviors. Overall, little is known about how individuals who have engaged in cutting understand their own reasons for cutting, what types of things helped and hindered their recovery, and what advice they would have for people currently involved in cutting. In addition, cutting is misunderstood by a wide number of professionals, and it is hoped that hearing the experiences, thoughts, and feelings of actual individuals who have engaged in this behavior will help professionals to work more effectively with future patients.

PROCEDURES/METHODS TO BE USED:
You will be asked to complete a one-on-one interview with the co-investigator, Wendy Bowers. This interview will be audiotaped, which will allow for future transcription and analysis. You will be asked prior to the beginning of the interview to select a pseudonym, or fake name, by which you will be identified at all times. This will allow your true
identity to remain confidential. It is expected that the interviews will last anywhere from 45 to 120 minutes, depending on how much information you choose to share. I have a set of questions I will ask you, but I also will ask you follow-up questions based on comments you have made. I will ask you to tell me about your experience with cutting, when and why you started, what types of interventions have helped or hindered your recovery, and what recommendations you might have for others who engage in cutting. You have the right to refuse to answer any questions. In addition, you can choose to end the interview at any time. There is the possibility that I will call you at a later date to see if you are willing to engage in one or two follow-up interviews if I identify more questions I would like you to answer. It is up to you as to whether or not you do any follow-up
interviews. You will not receive any compensation for your participation.

RISKS INHERENT IN THE PROCEDURES:

There is a possibility that talking about your history with cutting will bring up some negative emotions/reactions on your part. It is recommended that you only engage in this study if you have shared your history with others and are comfortable talking about your past. However, if any issues do arise, we can talk about them during the interview, and I can provide you with referrals to professionals who would be able to provide further counseling. Although all measures will be taken to maintain your confidentiality, there are limits to confidentiality mandated by law. If
you report any type of child or elder abuse, or if you report being in imminent danger of harming yourself of someone else, I will be required to report this to the proper authorities.

It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

BENEFITS:
You will possibly receive the benefits of increased self-understanding regarding your past behaviors. It is our hope that the information you provide can be used to educate future patients and their treatment providers, friends and families so that the patients can receive the greatest amount of support and understanding possible.

CONFIDENTIALITY:
Your confidentiality will primarily be protected through the use of pseudonym you identify at the beginning of the interview. You will always be referred to by this pseudonym, any resulting transcripts include only the pseudonym, and I, as the interviewer, will be the only person aware of your true identity. The tapes made during the interviews will be erased following transcription, and the transcriptions will be kept in a locked filing cabinet.

LIABILITY:

The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

Questions about participants' rights may be directed to Celia S. Walker at (970) 491-1563.

PARTICIPATION:

Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing __2__ pages.

_____
Participant name (printed)

_____ _____
Participant signature Date

_____ _____
Witness to signature (project staff) Date

Appendix D

STUDY TWO QUESTIONS

1. Please tell me about your experiences with self-mutilation/cutting.
2. When did you begin cutting?
3. What was going on in your life when you began cutting?
4. Please describe what you felt like before, during and after cutting. What were your thoughts and feelings?
5. How long did you engage in cutting?
6. What helped you to decrease/terminate your cutting behavior?
7. What factors contributed to an increase/worsening of your cutting behavior?
8. What advice would you give to someone else who has started cutting?