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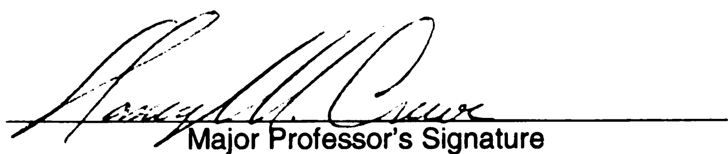

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PERFECTIONISM AMONG WOMEN SEEKING HELP FOR DELIBERATE SELF-HARM AND/OR EATING DISORDERS: A COMPARATIVE STUDY

By

Anne Elisabeth Kubal

A DISSERTATION

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ABSTRACT

PERFECTIONISM AMONG WOMEN SEEKING HELP FOR DELIBERATE SELF-HARM AND/OR EATING DISORDERS: A COMPARATIVE STUDY

By

Anne Elisabeth Kubal

Deliberate self-harm (DSH) or self-injury is defined as the deliberate destruction or alteration of one's own body, performed without suicidal intent. Anecdotal reports have suggested that perfectionism is a common characterological trait among individuals who engage in DSH, but the relationship between DSH and perfectionism has not been studied empirically. As a preliminary means of exploring the contribution of perfectionism in the development and maintenance of DSH, the primary goal of the present study was to explore the prevalence and nature of perfectionism within a DSH population compared to an eating disorder population and a comorbid eating disorder/DSH population. Both theoretical and empirical links have been established between DSH and eating disorders, and between eating disorders and perfectionism. A secondary goal of this study was to explore the possibility that within DSH, eating disorder, and comorbid eating disorder/DSH populations, individuals who self-identify as survivors of childhood abuse or neglect exhibit differential rates of interpersonal, intrapersonal, and self-presentational dimensions of perfectionism as compared to individuals who do not self-identify as survivors of childhood abuse or neglect. Due to the controversies surrounding a single definition of perfectionism and the unique aspects of this construct assessed by various perfectionism measures, multiple measures of

perfectionism were utilized in an attempt to more fully understand the relationships between perfectionism, DSH, and eating disorders.

Multivariate analyses of variance were conducted to examine commonalities and differences between groups. The results support the importance of examining trait perfectionism from a multidimensional perspective and support the importance of examining self-presentational styles of perfectionism as an important component of perfectionistic behavior. Commonalities and differences in trait and self-presentational perfectionism are discussed in terms of implications for clinical practice. Based on the results of this study, directions for future research are suggested.

This dissertation is dedicated to Dr. Joan Pfaller (1953-2003). With wisdom, guidance, and generosity of spirit, she modeled the type of psychologist I strive to be. She is missed.

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There are numerous individuals I would like to acknowledge. First and foremost, I want to express deep gratitude to the women who participated in this research and openly shared their struggles and experiences. This study would have been impossible without their generosity. I also want to express gratitude to the therapists who assisted with data collection and trusted me to protect the welfare of their clients.

I wish to thank all of the individuals who provided me with guidance throughout the development and completion of this project. Without the encouragement of Karen Conterio and Dr. Wendy Lader, this project may have never come to fruition. I am deeply indebted to them for their encouragement and support. I wish to thank Dr. Ken Rice, who fostered my interest in research in general and my interest in the study of perfectionism in particular. Dr. Nancy Crewe, my advisor and dissertation committee chair, deserves special thanks for her mentorship, advice, and encouragement. I would also like to thank Dr. John Carlson, Dr. John Kosciulek, and Dr. Tom Novak, my remaining committee members, for their support and guidance. Finally, I am deeply indebted to my family and cohort members for their unending support and encouragement; without them, I would not have succeeded.

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CHAPTER 1

Introduction

Deliberate self-harm (DSH) constitutes a poorly understood and understudied psychological phenomenon. Although DSH has been documented as early as Biblical times, the psychological community has only recently begun to recognize it as a serious problem that affects many people throughout their lifetimes (Smith, Cox, & Saradjian, 1999). Scant attention has been given to deliberate self-harm within the empirical literature.

Deliberate self-harm can be defined as purposeful injury to the body without the intent to commit suicide. The term excludes individuals who self-injure due to psychotic disorders or organic disorders, such as developmental disabilities. The most common forms of DSH include skin cutting and skin burning (Conterio & Lader, 1998). However, DSH methods can range from scratching until one bleeds to breaking bones. Approximately 75% of individuals who self-harm engage in more than one method (Conterio & Lader, 1998).

There is a paucity of empirical literature specifically examining DSH. The majority of existing research focuses on one of three populations: suicidal patients in psychiatric treatment, individuals seen in emergency wards for medical care, and epidemiological studies. Minimal attention has been directed to the study of DSH among individuals specifically seeking non-crisis psychological treatment. Furthermore, the majority of studies provide no theoretical framework from which to understand DSH behaviors and do not differentiate between DSH and suicide attempts. Conceptually,

DSH and suicidality must be distinguished: Deliberate self-harm does not involve an expressed wish to die. According to van der Kolk, Perry, and Herman (1991), "The literature has suggested that self-injurious behavior is quite distinct from suicide attempts in intent, lethality, age at onset, sex ratio, and interpersonal meaning" (p. 1665). DSH is best understood as a maladaptive coping strategy employed to manage psychological tension (Conterio & Lader, 1998; Himber, 1994; Shearer, 1994; Strong, 1998). It is viewed as a maladaptive method of regulating mood and emotion.

In the United States, DSH rates are increasing, but actual prevalence is difficult to determine due to underreporting and misdiagnosis (Conterio & Lader, 1998). Current estimates are that 1,400 out of 100,000 people in the general population engage in some form of self-injury (Conterio & Lader, 1998). Within a psychiatric population, between 4% and 10% of patients are estimated to injure themselves intentionally (Paul, Schroeter, Dahme, & Nutzinger, 2002). The majority of self-harm behaviors begin during adolescence, and clinical data indicate that approximately two-thirds of those who seek treatment for self-harm are female (Favazza & Conterio, 1989; Simeon & Hollander, 2001).

Despite the growing awareness of DSH within the psychological literature, there is no generally accepted treatment paradigm and significant gaps still exist in the empirical research. Recent research has identified both interpersonal and intrapersonal psychological factors associated with DSH, including poor self-esteem, depression, hopelessness, substance abuse, poor problem-solving skills, insecure attachment, poor body image, eating disorders, and a history of childhood trauma, including physical

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abuse, sexual abuse, and emotional abuse or neglect (Alderman, 1997). Yet, it remains unclear how these factors interact and increase the risk for DSH behaviors.

The empirical evidence suggests that DSH is of heterogeneous etiology, overwhelmingly linked to interpersonal stress (Dallam, 1997), and a unitary etiological formation is unlikely (Favazza, 1996). Among the general population, adolescent females with a history of child abuse, childhood trauma, and/or eating disorders represent specific at-risk groups. Research has consistently found links between DSH and childhood abuse, DSH and other forms of childhood trauma, and between DSH and eating disorders. For example, in one study of 240 repetitive, female self-harmers, 54% of the sample described their childhood as "miserable" when given a choice of adjectives (Favazza & Conterio, 1989). In the same study, approximately two-thirds of the participants reported histories of childhood abuse: 29% of participants reported both sexual and physical abuse, 17% reported only sexual abuse, and 16% reported only physical abuse (Favazza & Conterio, 1989).

Physical and sexual abuse during childhood and adolescence have also been found to be reliable predictors of the frequency and severity of self-cutting, one of the most common methods of DSH (van der Kolk et al., 1991). Furthermore, van der Kolk et al. (1991) found that childhood sexual abuse survivors were more likely than physical abuse survivors to engage in DSH. Despite these strong correlations, many individuals who engage in DSH behaviors do not have abuse histories (Alderman, 1997). However, because the empirical literature base has focused so heavily on experiences of early deprivation and abuse as etiological factors precipitating DSH, therapists often make the erroneous assumption that there must be a history of physical abuse, sexual abuse, or

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other childhood trauma in the background of all clients who engage in DSH (Selekman, 2002). To the contrary, several researchers have found no evidence of childhood sexual or physical abuse among individuals engaging in DSH (Brodsky, Cliotre, & Dulit, 1995; Zweig-Frank, Paris, & Guzder, 1994). Childhood abuse and trauma is neither a necessary nor sufficient condition in the development of DSH. Thus, it appears that characterological variables may influence the impact of childhood abuse in the development of DSH behaviors.

Deliberate Self-Harm and Eating Disorders

The link between DSH and eating disorders has been highlighted in historical cases, anecdotal reports, and is beginning to receive increased attention in the empirical literature. Although strong correlations between DSH and eating disorders have been found in the limited existing literature, the level of comorbidity varies greatly by study. For example, Sansone, Levitt, and Sansone (2003) estimated the prevalence of DSH within an eating disorder population at 25%, regardless of the specific eating disorder diagnosis or treatment setting. Farber (2000) estimated the prevalence of DSH among individuals with bulimic behavior to be between 8.9% and 26.6%, but reported between 57% and 93.3% of the DSH population to have associated eating disordered behavior. In contrast, based on an examination of several studies, Favazza (as cited in Conterio & Lader, 1998) estimated that 40.5% of bulimics and 35% of anorexics engage in DSH. Other studies have found that up to 61% of those who engage in DSH suffer from a comorbid eating disorder (Paul et al., 2002).

Both DSH and eating disorders are remarkably similar in terms of sex ratio, age of onset, and psychological correlates (Farber, 2000). Common psychopathological

factors underlying both DSH and eating disorders include poor body image, low self-esteem, high levels of impulsivity and obsessive compulsive behavior, and greater dissociation. Comorbid DSH and eating disorders have also been found to be sequelae of childhood trauma and abuse (Cross, 1993, Farber, 1997, Miller, 1994). Because of these similarities, several researchers have considered DSH and eating disorders to be different manifestations of the same underlying deficits in self-care capacities and emotional regulation (Conterio & Lader, 1998; Favazza, 1996; Miller, 1994).

The high comorbid rates of DSH and eating disorders may also be explained as a function of borderline personality disorder. Self-injurious behavior is one of the nine diagnostic criterion of borderline personality disorder, and binge eating is listed as an area of impulsivity included under another diagnostic criterion of borderline personality disorder. However, using borderline personality disorder as an exclusion criteria, Paul et al. (2002) still found more than a 30% lifetime occurrence rate of DSH among an eating disorder population. Comorbid DSH and eating disorders are also common among those diagnosed with posttraumatic stress disorder (Herman, 1992; Shapiro & Dominiak, 1992; van der Kolk et al., 1991; Vanderlinden & Vandereycken, 1997) and dissociative disorders (Bliss, 1980; Herman, 1992; Shapiro, 1987; van der Kolk et al., 1991; Vanderlinden & Vandereycken, 1997). As suggested by Farber (2000), "There is a remarkably strong empirical association between eating-disordered behavior and self-mutilation that has major implications for understanding self-harm processes (p. 35).

Further research is needed to explore the association between DSH and eating disorders, and to understand the variables which uniquely and interactively contribute to the comorbidity of these two forms of self-abuse. The differential rates of DSH among

childhood abuse and trauma survivors suggest the presence of mediating and moderating variables in the etiology of DSH, and the similar psychopathological correlates between DSH and eating disorders suggest that characterological variables influencing the development of eating disorders may serve similar functions in the adoption of DSH as a coping strategy. Perfectionism constitutes such a variable.

Perfectionism

A recent proliferation of empirical studies have identified perfectionism as a multidimensional construct with positive and negative aspects on both a personal and interpersonal level. Increasingly recognized as a significant predictor of psychological adjustment, theorists have yet to agree on a single definition of perfectionism, but instead have focused on delineating different subtypes and dimensions of perfectionism in relation to psychological adjustment. For example, Hamachek (1978) originally distinguished between normal perfectionism and neurotic perfectionism, whereas Terry-Short, Owens, Slade, and Dewey (1995) distinguished between positive and negative perfectionism. Both normal and positive subtypes of perfectionism involve the setting of high personal standards and appear to be driven by achievement strivings. In contrast, neurotic and negative perfectionism subtypes appear to be driven by a fear of failure.

Hewitt and Flett (1991), recognizing the limitations of conceptualizations of perfectionism which focus solely on intrapsychic qualities and self-directed perfectionistic cognitions, outlined three dimensions of perfectionism based on the source and target of perfectionistic expectations: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. Self-oriented perfectionism involves excessively high self-standards; other-oriented perfectionism involves holding

others to unrealistically high standards; and socially prescribed perfectionism involves the perception that others hold unrealistically high standards for oneself. Self-oriented perfectionism, an intrapersonal dimension, is generally described as adaptive in nature. Other-oriented and socially prescribed perfectionism, both interpersonal dimensions, are typically described as maladaptive in nature.

The recognition of the complex nature of perfectionism has led to the development of several multidimensional perfectionism scales and increased use of multivariate cluster analyses to empirically distinguish between "adaptive" and "maladaptive" perfectionism. Adaptive perfectionism, characterized by high personal standards and a preference for order and organization, has been linked to achievement orientation, conscientiousness, academic adjustment, self-efficacy, positive affect, high self-esteem, and social ease. In contrast, maladaptive perfectionism, characterized by concerns about making errors, self-doubt concerning one's own behavior, and an overly critical relationship with one's parents, has been linked to depression, anxiety and worry, suicide risk, low self-esteem, hopelessness, and eating disorders.

Perfectionism and Eating Disorders

An increasing amount of literature has focused on the role of perfectionism in the development and maintenance of eating disorder symptomatology. In fact, the quest for body perfection is considered a core feature of anorexia nervosa, bulimia nervosa, and other eating-disordered behavior. Initial research in this area, based on a unidimensional conceptualization of perfectionism, supported the proposition that perfectionism is a common premorbid personality characteristic within an anorexic population (Dally, 1969; Hamli, Goldberg, Eckert, Casper, & Davis, 1979). Research also supported a relationship

between perfectionism and bulimia nervosa. The early research linking perfectionism to eating disorders was strengthened by later studies which found higher incidences of perfectionism within eating disorder populations when compared to control groups (Goldner, Cockell, & Srikameswaren, 2002). Yet, the empirical findings have not been unequivocal.

Several researchers have found no significant differences in the levels of perfectionism within an eating disorders population when compared to a general psychiatric population (Hurley, Palmer, & Stretch, 1990) or a weight-preoccupied control group (Garner, Olmstead, Polivy, & Garfinkel, 1984), and Blouin, Bushnik, Braaten, & Blouin (1989) found comparable levels of perfectionism in an eating disorder group and a diabetic group. One explanation for these findings may be related to differences in levels of perfectionism related to specific diagnostic subtypes of eating disorders. However, while some authors have advocated the position that anorexics and bulimics can be distinguished on the basis of characterological variables (Casper, 1983), others have posited that perfectionism is a key characteristic of both disorders (Beebe, 1994; Heatherton & Baumeister, 1991; Slade, 1982).

The differential findings may be best understood in relation to the manner in which perfectionism was measured in each study. Given the complex etiology of eating disorders, unidimensional models of perfectionism may not be sophisticated enough to capture the true relationship between perfectionism and eating disordered behavior. For example, using a multidimensional measure of perfectionism, Hewitt, Flett, and Ediger (1995) found a significant relationship between self-oriented perfectionism and eating disorder symptoms, whereas socially prescribed perfectionism was significantly related to

issues of low self-esteem and appearance concerns, issues which are prevalent in an eating disorders population. Although continued research is needed to further clarify the relationship between different dimensions of perfectionism and eating disorder symptomatology, this line of research may help delineate the relationship between eating disorders and DSH.

Problem Statement

Anecdotal reports suggest perfectionism is a common characterological trait among individuals who engage in DSH, but the relationship between DSH and perfectionism has yet to be studied empirically. However, both theoretical and empirical links have been established between DSH and eating disorders, and between eating disorders and perfectionism. Therefore, it is reasonable to assume that perfectionism may constitute a yet unstudied vulnerability factor in the development and maintenance of DSH.

An examination of perfectionism within a DSH population may help explain the differential rates of DSH among survivors of childhood abuse and trauma, help explain the high comorbidity between DSH and eating disorders, and lead to advances in the treatment of DSH. A clinically relevant aspect of perfectionistic behavior involves perfectionistic self-presentation, or a general inability to display one's own imperfections to others. While this form of self-protection may help an individual maintain self-esteem and avoid criticism, it can lead to increased feelings of isolation, prevent an individual from seeking treatment, and undermine the therapeutic alliance if and when treatment is sought (Flett & Hewitt, 2002).

Research Questions

As a preliminary means of exploring the contribution of perfectionism in the development and maintenance of DSH, the primary goal of the current study is to explore the prevalence and nature of perfectionism within a DSH population compared to an eating disorder population and comorbid eating disorder/DSH population. A secondary goal is to explore the possibility that within a DSH population, eating disorder population, and comorbid eating disorder/DSH population, individuals who self-identify as survivors of childhood abuse or neglect will exhibit differential rates of interpersonal, intrapersonal, and self-presentational dimensions of perfectionism as compared to individuals who do not self-identify as survivors of childhood abuse or neglect. Due to the controversies surrounding a single definition of perfectionism and the unique aspects of this construct assessed by various perfectionism measures, multiple measures of perfectionism will be utilized in an attempt to more fully understand the relationships between perfectionism, DSH, and eating disorders. The following research questions will be addressed:

1. Within a DSH population, does the prevalence of intrapersonal, interpersonal, and self-presentational dimensions of perfectionism differ from an eating disorder population or a comorbid eating disorder/DSH population?
2. Within DSH, eating disorder, and comorbid eating disorder/DSH populations, do individuals who self-identify as a survivor of childhood abuse or neglect exhibit differential rates of intrapersonal, interpersonal, and self-presentational dimensions of perfectionism compared to individuals who do not self-identify as a survivor of childhood abuse or neglect?

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These research questions will be addressed by examining self-oriented perfectionism, socially prescribed perfectionism, other-oriented perfectionism, total perfectionism, and self-presentational styles of perfectionism within the populations of interest.

Hypotheses

No differences in the prevalence of intrapersonal, interpersonal, and self-presentational dimensions of perfectionism are expected between a DSH, eating disorder, and comorbid eating disorder/DSH population. No hypothesis is offered regarding the secondary goal of this study, as this goal is intended to be exploratory in nature.

CHAPTER 2

Literature Review

The purpose of this chapter is to review the literature relevant to the hypothesized role of perfectionism in deliberate self-harm (DSH). The paucity of research linking perfectionism and DSH necessitates the inclusion and integration of multiple bodies of research drawn from the DSH, perfectionism, and eating disorders literature. Therefore, the first section of this chapter reviews conceptual shifts in the understanding of DSH, diagnostic dilemmas associated with DSH, characteristics of the DSH population, and known risk factors associated with DSH. Because perfectionism is hypothesized to represent an additional, yet unstudied, risk factor in the development of DSH, the next section of this chapter reviews the definitional and conceptual difficulties inherent in the study of perfectionism. These difficulties are illustrated in the third section of this chapter, which reviews the empirical research that has explored the role of perfectionism in the development and maintenance of eating disorders. Fourth, the empirical, theoretical, and diagnostic links between eating disorders and DSH will be discussed. Established empirical links between perfectionism and eating disorders, in conjunction with empirically established links between eating disorders and DSH, support the importance of exploring the role of perfectionism in DSH. However, as evidenced in the fifth and final section of this chapter, evidence for the role of perfectionism in DSH has thus far been limited to anecdotal evidence. The present study is designed to address this gap in the literature.

Deliberate Self-Harm

Deliberate self-harm (DSH), or the deliberate destruction of one's own body tissue that is severe enough to cause tissue damage but is performed without conscious suicidal intent, is currently conceptualized as a maladaptive coping strategy employed to regulate emotion and manage affect. It is considered to be a subtype of pathological self-mutilation, separate from culturally sanctioned self-mutilation rituals and culturally sanctioned practices such as tattooing and body piercing. Pathological self-mutilation has been documented and discussed in the clinical literature since the inception of the field of psychiatry. However, empirical examination of DSH as a specific form of pathological self-mutilation has been hampered by conceptual confusion, linguistic confusion, and controversy surrounding the identification of DSH behaviors as a symptom of other psychological disorders versus a distinct syndrome in itself. A review of the current empirical literature suggests these issues are far from resolved, and continued research is needed in order to understand the interrelationships of previously identified risk factors in the development of DSH, including eating disorders and perfectionism.

Conceptual Shifts in the Understanding of DSH

DSH as suicidal behavior. Initial psychological understandings of pathological self-mutilation were problematic. Self-mutilating behaviors were conceptualized as subtypes of suicidal behavior. Freud, for example, viewed all self-destructive behavior as a manifestation of the thanatos, the death instinct, and self-mutilation was considered a derivative of suicidal impulses. As a result, self-mutilation was not clinically distinguished from suicidal behavior either conceptually or empirically. Menninger (1938) was the first to hypothesize that self-mutilative behaviors served a self-protective

function, positing that pathological self-mutilation represented a "partial suicide" to prevent "total suicide" by focusing the suicidal impulse on a specific part of the body. By sacrificing one part of the body, the body as a whole was saved. Menninger (1938) used the term focal suicide to differentiate nonsuicidal mutilation from true suicide attempts, and further categorized self-mutilation based on the origin of the suicidal impulse: neurosis, psychosis, organic disease, religious ceremony, and social convention. Menninger (1938) viewed self-mutilation on a continuum ranging from psychologically healthy, culturally approved behaviors (i.e. nail trimming, hair cutting) to pathological self-destructive behaviors. Each form of self-mutilation was conceptualized as a compromise formation resulting from conflict between the "aggressive destructive impulses aided by the superego" and "the will to live (and love)" (Menninger, 1938, p. 285). Yet, the conceptual shift from viewing pathological self-mutilation as suicidal behavior to viewing it as a life-sustaining, albeit paradoxical behavior, distinct from suicide, did not appear in the empirical literature until the 1970s.

DSH as a distinct syndrome. According to Favazza (1996), "The origin of the modern concept of self-mutilation started in 1964 when Stengel wrote about the differences between suicide and attempted suicide, which included any type of self-harm that threatened life" (p. 270). The research that followed helped solidify the distinction between suicide and pathological self-mutilation, and also began to examine subtypes of pathological self-mutilation. For example, Graff and Mallin (1967) studied individuals who engaged in wrist cutting who reported tension relief after cutting, concluding that this group could be distinguished from suicide attempters. Similar findings were reported by Grunebaum and Klerman (1967), Nelson and Grunebaum (1971), and Rosenthal,

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Rinzler, Walsh, & Klausner (1972). Pao (1969) labeled this phenomena "delicate self-cutting," and also argued that "delicate wrist-cutters" were distinct from suicide attempters. Ross and McCay (1979) further supported the distinction, referring to self-mutilation as "counterintentional" to suicide.

Other researchers focused on broader categories of self-harm. Kreitman et al. (1969) introduced the term "parasuicide" to describe both direct and indirect forms of self-harm, such as self-mutilation and overdoses, which mimicked suicide attempts in behavioral terms but were not intended as suicide attempts (as cited in Kreitman, 1977). The term "non-fatal deliberate self-harm" was introduced by Morgan (1979) to describe various forms of self-harm in the absence of suicidal intent. Finally, drawing on the work of Morgan (1979), Pattison and Kahn (1983) reviewed 56 published cases of non-fatal deliberate self-harm, excluding cases involving alcohol and drug abuse, and proposed a deliberate self-harm syndrome as a separate diagnostic syndrome distinct from suicide. According to Pattison & Kahn (1983):

> The psychological symptoms of deliberate self-harm include 1) sudden and recurrent intrusive impulses to harm oneself without the perceived ability to resist; 2) a sense of existing in an intolerable situation which one can neither cope with nor control; 3) increasing anxiety, agitation, and anger; 4) constriction of cognitive-perceptual processes resulting in a narrowed perspective on one's situation and personal alternatives for action; 5) a sense of psychic relief after the act of self-harm; and 6) a depressive mood, although suicidal ideation is not typically present. (p. 867)

Drawing on previous research, Pattison and Kahn (1983) proposed a classification system for identifying DSH within a larger context of self-destructive behaviors based on three variables: direct versus indirect forms of self-destruction, degree of lethality, and repetitiveness. Direct self-destruction implies conscious intent to harm oneself with an awareness of the consequences of one's actions. In contrast, indirect self-destruction implies no conscious intent, with either no awareness of the consequences of one's actions or a disregard for possible consequences (Pattison & Kahn, 1983). Pattison and Kahn (1983) state that direct self-destructive acts typically occur within a short time frame, whereas indirect self-destruction, such as substance dependence, typically occurs across a sustained time period. The lethality variable indicates the probability of death resulting from the self-destructive act, ranging from a low probability to a high probability. Finally, the repetition variable distinguishes between single episodes of self-destructive behavior versus repetitive or multiple episode behaviors. Within this classification schema, Pattison and Kahn (1983) describe DSH as a disorder of impulse control that represents "a distinctive class of self-destructive behavior, which is distinguished by direct self-harm behavior, with low lethality, in a repetitive pattern" (p. 870). Favazza (1996) credits Pattison and Kahn's (1983) proposed DSH syndrome as the "concept that marks the beginning of modern interest in self-mutilation" (p. 252).

DSH as a subtype of pathological self-mutilation. Expanding on the DSH syndrome prototype described by Pattison and Kahn (1983), Favazza and colleagues (Favazza &Rosenthal, 1990; Favazza & Rosenthal, 1993; Favazza & Simeon, 1995) outlined a more complex classification of direct, nonsuicidal self-harm under the rubric of self-mutilation. The two major categories of self-mutilation are described as culturally

sanctioned self-mutilation (i.e. cultural rituals and practices) and deviant-pathological self-mutilation. Deviant-pathological mutilation is divided into three types based on degree of tissue damage: major, stereotypic, and moderate/superficial.

Major self-mutilation represents a category of behaviors which are encountered infrequently but cause significant tissue damage. Examples include castration, limb amputation, and eye enucleation (Favazza & Rosenthal, 1993). Although not associated with any specific mental disorder, psychotic individuals preoccupied with religion and/or sexuality appear to be at a higher-risk for major self-mutilation.

Stereotypic self-mutilation, in contrast, is "monotonously repetitive and may even have a rhythmic pattern" (Favazza, 1996, p. 237). The most commonly cited example of stereotypic self-mutilation is head banging. Stereotypic self-mutilation is commonly observed as a symptom or associated feature of mental retardation, autism, Lesh-Nyham syndrome, deLange syndrome, Retts disorder, neurocanthosis, Tourette syndrome, and obsessive compulsive disorder (Favazza & Rosenthal, 1993; Favazza, 1996). Stereotypic self-mutilation is often referred to as self-injurious behavior (SIB) in the empirical literature, and appears to lack any symbolic meaning in regards to emotional expression. Moderate/superficial self-mutilation, on the other hand, represents the third category of deviant-pathological self-mutilation and is typically viewed as a symbolic means of emotional expression related to tension reduction and emotional regulation. Common moderate/superficial self-mutilation behaviors include low lethality cutting, burning, skin carving, skin picking, and skin scratching.

Moderate/superficial self-mutilation is divided into three subtypes based on repetition of the behaviors: compulsive, episodic, and repetitive (Favazza & Rosenthal,

1993; Favazza, 1996). As implied by the terminology, compulsive moderate/superficial self-mutilation is repetitive and ritualistic in nature; episodic moderate/superficial mutilation occurs occasionally; and repetitive moderate/superficial self-mutilation occurs repeatedly over a sustained period of time. Specific examples of compulsive self-mutilation include hair pulling and other psychodermatological conditions. Severe symptoms may be treated by a dermatologist or family physician, but individuals with mild symptoms rarely seek professional help (Favazza, 1996). Episodic self-mutilation differs from repetitive self-mutilation in that individuals who engage in superficial/moderate self-mutilation on an occasional basis tend not to incorporate self-injury as a component of self identity and do not become preoccupied with self-injuring (Favazza, 1996). In contrast, individuals engaging in repetitive self-mutilation often describe an addictive quality to their self-injury. Repetitive self-mutilation, as described by Favazza and colleagues (Favazza & Rosenthal, 1993; Favazza, 1996), is consistent with the DSH syndrome prototype described by Pattison and Kahn (1983). In fact, Favazza and Rosenthal (1993) also argue for a distinct diagnosis for those individuals who engage in repetitive superficial/moderate self-mutilation. They proposed a Repetitive Self-Mutilation (RSM) syndrome to be listed on Axis I in the American Psychiatric Association's Diagnostic and Statistical Manual for Mental Disorders, under "impulse control disorder not otherwise specified."

In summary, although a conceptual shift in understanding pathological self-mutilation had emerged by the 1970s, multiple terms had been introduced to describe the same phenomena, including: focal suicide, delicate self-cutting, parasuicide, symbolic wounding, local self-destruction, intentional injury, self-injurious behavior, self-abuse,

deliberate self-harm, and episodic or repetitive self-mutilation (Favazza, 1996). Many of these terms continue to be used throughout the literature, often interchangeably, to describe a continuum of self-destructive behaviors ranging from minor tissue damage requiring no medical attention to attempted suicide. The wide variation in how these terms are operationally defined and the inconsistent use of different terms creates difficulties when attempting to compare results across studies. Therefore, for the sake of clarity, the term deliberate self-harm will be used throughout the remainder of the literature review to indicate deliberate destruction or alteration of body tissue severe enough to cause tissue damage (i.e. scarring), but performed without suicidal intent. This term incorporates Favazza and Rosenthal's (1993) definition of episodic and repetitive superficial/moderate self-mutilation without the negative connotation so often associated with the behavior. The term excludes individuals who self-injure to psychotic disorders or organic disorders such as developmental disabilities.

Diagnostic Dilemmas Associated with Deliberate Self-Harm

Differences between DSH and suicidal behavior. The issue of a separate diagnostic category for DSH remains unresolved, in part, because DSH has historically been viewed as a variant of suicidal behavior, and is often argued to be a feature of various Axis I and Axis II disorders rather than a distinct disorder in itself. While it should be noted that individuals who engage in DSH are at an increased risk for suicide (Conterio & Lader, 1998; Favazza & Rosenthal, 1983; Kahn & Pattison, 1983), a substantial body of research supports the distinction between suicidal behavior and DSH. Walsh and Rosen (1988) summarize this distinction by contrasting 10 common characteristics shared by suicidal individuals, as outlined by Shneidman (1985), with 10

common characteristics shared by individuals who engage in DSH. The distinctions are as follows (Walsh & Rosen, 1998): 1) Suicide is viewed as a means to escape unendurable psychological pain; acts of DSH are a means to reduce intermittent, escalating psychological pain to a more endurable level. 2) Suicidal acts typically arise from frustrated psychological needs; acts of DSH typically arise from a low frustration tolerance in combination with deferred psychological needs. 3) Suicide represents a final solution to problems with no foreseeable solution; DSH represents a temporary solution to alleviate distress immediately. 4) Suicide leads to a cessation of consciousness; DSH leads to an alteration in consciousness, often helping an individual return from a state of depersonalization or dissociation. 5) The primary emotional states associated with suicide include hopelessness and helplessness; the primary emotional states associated with DSH involve intrapersonal and interpersonal isolation. 6) Suicide is associated with feelings of ambivalence; DSH is associated with feelings of resignation. Individuals engaging in DSH often view their self-harm as a necessary survival tool. 7) Constriction and dichotomous thinking characterizes the cognitive states associated with suicide; fragmentation, including dissociation and depersonalization, characterizes the cognitive state of self-harmers. 8) Among completed suicides, 80% have communicated their intention prior to the act (Schneidman, 1985, as cited in Walsh & Rosen, 1998). In contrast, DSH is typically not made known to others until the act has been committed, and may be employed as a means of eliciting desired responses from others. 9) Suicidal acts function as a means of escape; DSH acts serve the functions of psychological reintegration, social reinvolvement, and return to emotional equilibrium. 10) Finally, while both suicide and

DSH may represent extensions of other coping responses evident in one's life, DSH is adaptive in that it is life-sustaining, whereas suicide precludes the further development of alternative coping strategies. The difference in functions of DSH and suicidal behavior have been further supported by qualitative studies that report individuals' perceived reasons for engaging in DSH. The qualitative evidence clearly supports the hypothesis that DSH does not represent suicidal behavior, but instead serves as a maladaptive coping strategy employed to regulate emotion and reduce tension (Conterio & Lader, 1998; Himber, 1994; Shearer, 1994; Strong, 1998).

DSH and personality disorders. The distinction between suicide and DSH is now widely accepted and acknowledged. However, instead of a distinct diagnosis, DSH is often viewed as an associated feature of personality disorders, especially borderline personality disorder, a diagnosis which has also become controversial (Farber, 2000). "Recurrent suicidal behaviors, gestures or threats, or self-mutilating behavior" is one of the nine diagnostic criteria for borderline personality disorder, and constitutes the only reference to DSH in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychological Association, 1994, p. 654). The relationship between DSH and borderline personality disorder has been supported in the literature by numerous studies (Brodsky et al., 1995; Dulit, Fryor, Leon, Brodsky, & Frances, 1994; Sansone, Wiederman, & Sansone, 1998; Zweig-Frank et al., 1994), but recognizing DSH exclusively as a symptom of borderline personality disorder ignores the wide range of other Axis I and Axis II disorders also associated with DSH in the absence of borderline personality disorder (Favazza & Rosenthal, 1993). DSH has been documented among individuals diagnosed with histrionic personality disorder, narcissistic personality

disorder, dissociative disorders, mood disorders, anxiety disorders (including PTSD and obsessive compulsive disorder), and eating disorders.

Characteristics of the DSH Population

While an argument has been made that the incidence of DSH is on the rise (Pipher, 1994), there is a paucity of epidemiological data regarding the DSH population. Given the secretive nature of the behavior, reported increases in DSH rates may reflect a growing awareness and identification of the phenomena rather than an actual increase in the number of individuals engaging in DSH behaviors. Currently, the "typical profile" of a self-injurer is based primarily on the characteristics of individuals seeking treatment. The "typical" self-harmer seen in treatment is a middle class or upper middle class Caucasian female, of average or above average intelligence with a history of trauma (Conterio & Lader, 1998; Miller, 1994; Selekman, 2002).

Consistent with the general use of psychological services, approximately two-thirds of individuals seeking treatment for DSH are female (Favazza & Conterio, 1989; Simeon & Hollander, 2001). Several studies indicate DSH is more common among women than men (Boudewyn & Liem, 1995; Favazza & Rosenthal, 1990; Suyemoto, 1998). Yet, other studies report the frequency and method of DSH is not significantly associated with gender (Gratz, 2001; Pattison & Kahn, 1983).

Reported gender differences may be a function of the context from which study participants are drawn. The majority of studies examining DSH among males focus on a prison population, while the clinical research literature draws heavily on the use of female participants (Turner, 2002). Given that males are more likely to externalize aggressive impulses and act out, while females tend to internalize and direct aggression

inward, females may indeed be at greater risk for chronic, repetitive DSH, whereas males appear to be at greater risk for major acts of self-mutilation and completed suicide (Barnes, 1985). However, the multiple definitions of DSH used within the empirical literature, combined with the lack of behaviorally-based, empirically validated instruments assessing DSH prevent firm conclusions from being drawn regarding gender differences in DSH.

Research indicates that DSH typically begins in adolescence or early adulthood, with initial acts often occurring around the time of puberty (Favazza, 1998; Favazza & Rosenthal, 1993; Pattison & Kahn, 1983). Among females, initial acts of DSH often coincide with the onset of menstruation (Nichols, 2000; Rosenthal et al., 1972). In fact, some evidence suggests girls who reach puberty early are at greater risk for DSH (Eccles, Barber, Josefowiew, Malenchuk, & Vida, 1999). The frequency and intensity of DSH acts usually waxes and wanes but may become habitual and assume an addictive-like quality (Favazza & Rosenthal, 1993). Although isolated incidences of DSH may occur across the life span, the frequency of DSH usually decreases by the late twenties and chronic DSH is uncommon after age 35 (van der Kolk, Perry, & Herman, 1991). Favazza & Rosenthal (1993) indicate that many individuals cease to employ DSH as a coping strategy after 10 to 15 years of self-harming.

Individuals who engage in DSH are at an increased risk for suicide, but suicide attempts typically occur by means other than DSH (i.e. overdosing), and only a small percentage complete suicide (Conterio & Lader, 1998; Favazza & Rosenthal, 1993; Kahn & Pattison, 1983). The clinical course of DSH typically involves multiple episodes of low lethality using multiple methods; approximately 75% of individuals employ more

than one method of DSH (Conterio & Lader, 1989). In one study of habitual self-harmers, Favazza and Conterio (1988) found the most common methods of DSH, in order of prevalence, were cutting, burning, self-hitting, interference with wound healing, hair pulling, and bone breaking. Other methods include scratching until skin abrasions occur, facial skinning, head banging, and ingestion of sharp objects (Conterio & Lader, 1998).

According to Conterio and Lader (1998), common characteristics among the DSH population include the following: 1) "Difficulties in various areas of impulse control, as manifested in problems with eating behaviors or substance abuse;" 2) "A history of childhood illness, or severe illness or disability in a family member;" 3) "Low capacity to form and sustain stable relationships;" 4) "Fear of change;" 5) "An inability or unwillingness to take adequate care of themselves;" 6) "Low self-esteem, coupled with a powerful need for love and acceptance from others;" 7) "Childhood histories replete with trauma or significant parenting deficits, which lead to difficulties internalizing positive nurturing;" and 8) "Rigid all-or-nothing thinking" (pp. 138-140). These characteristics are reflected in the identified risk factors for DSH.

Risk Factors in the Development of DSH

Multiple risk factors have been implicated in the development of DSH, but the majority of empirical research has focused on specific historical factors related to interpersonal distress. In contrast, proximal risk factors have received less attention. Because DSH is of heterogeneous etiology, continued research is needed not only to determine the relative contribution of each identified risk factor, but also to investigate how these risk factors may interact to increase the risk for DSH behaviors.

Child abuse and trauma. Significant emphasis has been placed on the etiological role of child abuse in DSH. Child abuse can be defined as "any behavior directed toward a child by a parent, guardian, caregiver, other family member, or other adult, that endangers or impairs a child's physical or emotional health and development" (National Council on Child Abuse and Family Violence, 2000). The four major categories of child abuse include physical abuse, sexual abuse, emotional abuse, and neglect.

Research has consistently demonstrated a link between different types of childhood abuse and deliberate self-harm (Romans, Matin, Anderson, Herbison, & Mullen, 1995; Shapiro, 1987; Simeon & Hollander, 2001). DSH behaviors have been noted in abused and neglected children as young as two to five years of age (Rosenthal & Rosenthal, 1984). In an early study by Green (1978), 41% of 59 maltreated children studied engaged in DSH behaviors. Simpson and Porter (1981), in a study of hospitalized self-harmers, age 5 to 19, reported that 13 out of 20 subjects had a history of physical abuse and 9 out of 20 reported sexual abuse. Among adolescents, an age most associated with the onset of DSH, the relationship between abuse and DSH is even more striking. For example, Kendall-Tackett, Williams, and Finkelhor (1993) reviewed studies of adolescent sexual abuse survivors and found that DSH was a common problem in this population. DSH was reported in 71% of the adolescent sexual abuse survivors. Furthermore, Walsh and Rosen (1988) reported that adolescent self-harmers were significantly more likely than a clinical comparison group of adolescent non-self-harmers to have a history of childhood sexual or physical abuse. Although the above studies are limited by small sample sizes, larger studies involving older subjects have yielded similar results. In one of the largest studies of DSH (240 subjects), 29% of subjects reported

both sexual and physical abuse, 17% reported only sexual abuse, and 16% reported only physical abuse (Favazza & Conterio, 1989).

Similarly, van der Kolk et al. (1991) found that childhood sexual abuse, childhood physical abuse, and neglect were strongly associated with self-destructive behavior in adulthood, including both DSH and suicide attempts. Among the DSH group studied, 79% reported trauma histories involving at least one of the following types of traumas: witnessing domestic violence, physical abuse, and sexual abuse (van der Kolk et al., 1991). The relationship between childhood physical abuse and DSH has been reported in additional studies (Simpson & Porter, 1981; Walsh & Rosen, 1998), but interestingly, Van der Kolk et al. (1991) reported that childhood sexual abuse survivors were more likely than physical abuse survivors to engage in self-harm.

Given the multitude of studies linking child abuse to DSH, therapists may be tempted to conclude that most individuals who engage in DSH come from an abusive background. Yet, several researchers have found no evidence of childhood sexual or physical abuse among individuals engaging in DSH (Brodsky et al., 1995; Zweig-Frank et al., 1994). Selekman (2002) cautions that, particularly among adolescents, the presence of DSH does not necessarily indicate a history of trauma or abuse. Furthermore, not all childhood abuse survivors engage in DSH. For instance, estimates of the prevalence of DSH among intrafamiliar sexual abuse survivors range from 17% (Briere & Zaidi, 1989) to 58% (de Young, 1982). Based on a review of studies dating from 1988 to 1998, Santa Mina and Gallop (1998) concluded that "the link between trauma and self-harm or suicide is strongest when the abuse has been of long duration, the perpetrator has been known to the victim, and force and penetration have occurred" (p. 798). A study

conducted by Turell and Ainsworth (1998) found five variables that differentiated sexual abuse survivors who self-harmed from abuse survivors who did not self-harm. Sexual abuse survivors who self-harmed evidenced 1) greater dissociation/depersonalization; 2) somatization and increased medical concerns; 3) greater body image distortions; 4) increased history of anorexia and/or bulimia; and 5) an increased likelihood of physical and/or physiological abuse in one's family of origin.

The majority of studies examining the relationship between childhood abuse and DSH are limited by inconsistent definitions of abuse, self-harm, and, in general, small sample sizes and a reliance on retrospective victim reports of abuse. However, despite methodological limitations, the empirical evidence supports the etiological role of childhood abuse in the later development of DSH. The lack of a conceptual framework in most of the studies further impedes the current understanding of the relationship between childhood abuse and DSH; whether childhood abuse represents a general risk factor or specific risk factor remains unknown. Several theorists and researchers have postulated that childhood abuse alone does not predicate DSH; rather, it is childhood abuse in the context of pathological family relationships that predisposes individuals to adopt DSH as a coping strategy (Favazza, 1989; Selekman, 1992; Tatum & Whittaker, 1992). For example, van der Kolk et al. (1991) indicate that while histories of childhood sexual or physical abuse are significantly associated with initiation of DSH, disruptions in attachment, such as neglect, appear to play a role in the maintenance of the behavior. Yet, compared to childhood sexual and physical abuse, the roles of neglect and emotional abuse, as well as other potential risk factors, have received less systematic empirical attention.

Dissociation. Dissociation has been identified as an important proximal risk factor for DSH. Although the defense mechanism of dissociation is commonly associated with childhood abuse histories, dissociative processes can occur in the absence of an abuse history. Brodsky et al. (1995) reported a strong association between dissociation and DSH independent of child abuse history. According to Favazza (1989), individuals who engage in DSH "often report that emotional deadness, the diminished ability to experience normal sensations, estrangement from the environment, and an altered perception of time result in feelings of unreality" (p. 139). DSH represents a means to manage dissociative processes. It can be used either as a grounding technique to prevent dissociation, or used to allow one to enter a dissociative state to escape emotional pain (Turner, 2002).

Childhood Illness and Surgeries. An early history of surgical procedures and medical illnesses are common in the DSH population. Rosenthal et al. (1972) reported the majority of self-harmers experienced serious illnesses, surgeries, or accidents before age 12; no similar experiences were reported within a matched control group. Rosenthal et al. (1972) therefore concluded that the experience of early surgical procedures and medical interventions may serve as prototypes for later acts of DSH. Similarly, Walsh & Rosen (1988) reported that adolescent self- harmers were significantly more likely than non self-harmers to have experienced major surgery during childhood, or suffered from a chronic or serious childhood illness. Walsh & Rosen (1988) suggested that "body image problems associated with childhood illness serve as a foundation for profound body alienation in [self-harming] adolescents" (p.63).

Body alienation. Although the role of trauma associated with childhood illness or surgery is less clear than the role of childhood abuse, body alienation may represent a common factor underlying various types of trauma that predisposes an individual to target one's own body for self-inflicted harm. Friedman, Glasser, Laufer, Laufer, and Whol (1972) hypothesized that the concept of body alienation, or the feeling that one's body is a separate entity from one's real self, may explain why some individuals target their own body for self-harm. Body alienation is a common characteristic among abused children (Goodwin, Simms, & Bergman, 1979). A link between childhood illness and body alienation has also been established (Hughes, 1982).

Abrupt body changes that occur during puberty may increase a sense of body alienation and reinforce the feeling of loss of control over one's own body, especially for individuals with a history of traumatic intrusions on the body due to abuse, illness, or surgeries (Walsh & Rosen, 1988). DSH is often viewed as an attempt to reestablish a sense of bodily control (Conterio & Lader, 1998; Farber, 2000; Favazza, 1989; Favazza & Rosenthal, 1993). According to Farber (2000), "Girls are more prone than boys to body alienation in adolescence because their attitudes toward their bodies are more readily influenced by powerful, complex, and confusing bodily experiences" (p. 297). Thus, the concept of body alienation provides partial insight into the development of DSH during adolescence and the common belief that DSH is more common among females than males.

DSH represents one method to express feelings of body alienation. In fact, Walsh & Rosen (1988) found that self-harming adolescents were significantly more likely than adolescents who did not self-harm to exhibit carelessness in their physical appearance,

distress over sexual identity, and to have eating disorders, each of which was hypothesized to be an expression of feelings of body alienation. Among the variables studied, the strongest correlation was found between DSH and eating disorders (Walsh & Rosen, 1988). The relationship between DSH and eating disorders will be discussed in greater detail at a later point in this chapter.

Disruptions in parent-child attachment. Disruption in the parent-child relationship during childhood is another common characteristic among the DSH population. Childhood abuse, chronic childhood illness, and early hospitalizations certainly have the potential to negatively influence child-parent bonds. Residence in a total care institution, loss of a parent, parental alcoholism, and parental depression represent additional identified risk factors that suggest the etiological role of disrupted parent-child relationships (Briere & Gill, 1998; Walsh & Rosen, 1988). Yet, only one empirical study has specifically examined the quality of parent-child attachment as it relates to later development of self-harm. Gratz, Conrad, & Roemer (2202) found that insecure parent-child attachment was significantly associated with frequency of DSH within a nonclinical college population. Related studies, while limited, imply that quality of parent-child attachment as an etiological factor in DSH deserves increased attention. For example, Romans et al. (1995) reported a significant association between DSH and interpersonal problems in one's family of origin. Additionally, Favazza and Conterio (1989) reported that the majority of self-harmers have been raised by families characterized by anger and double messages, where expression of feelings are discouraged and presenting a strong appearance is valued. According to Conterio and Lader (1998), "The common ties that bind these [family] experiences are an atmosphere

of severe anxiety and the inability of the parents to respond appropriately to the child's emotional needs" (p. 49).

In studies of nonhuman primates, self-injurious behavior was found to be a common reaction to disruptions of parental caretaking and attachment (Mineka & Suomi, 1978, as cited in van der Kolk et al., 1991). Similarly, adults who engaged in DSH, who had also experienced disruptions in the development and maintenance of parental attachment relationships, were found to have difficulty controlling their DSH behaviors, and experienced difficulty taking advantage of interpersonal resources (van der Kolk et al., 1991). Moreover, Linehan (1993) has noted that the majority of adults who deliberately self-harm come from invalidating home environments, characterized by insecure attachment relationships. As a result, children who come from these environments internalize the way that they have been treated and develop a negative self-view. To date, the relationship between attachment and DSH has existed almost exclusively at a theoretical level. Empirical evidence specifically linking quality of parent-child attachment relationships and DSH is lacking.

In review, research has identified multiple risk factors associated with DSH. Proximal risk factors have been minimally addressed, although a strong argument has been made regarding the role of body dissatisfaction, body alienation, and dissociation. The majority of research has focused on specific historical factors that appear to increase the likelihood of DSH, including child abuse and trauma, chronic childhood illness, early surgeries or hospitalizations, and residence in total care institutions. Parental alcoholism has also been identified as a contributing risk factor. Theoretically, each of these identified risk factors has the potential to negatively impact the development of secure

child-parent attachment, thus impacting the characterological development of the child. Disruptions in parent-child attachment relationships are assumed to play an etiological role in the development of DSH, but the empirical literature has minimally addressed this theoretical proposition.

Perfectionism

Case reports and anecdotal evidence suggest perfectionism represents an additional characterological risk factor in the development of DSH which has failed to receive empirical attention (Levenkron, 1998; Strong, 1998). The clinical importance of investigating perfectionism within this population is supported by research: Perfectionism has demonstrated a significant association with difficulties establishing a strong working alliance and poor treatment outcome (Blatt & Zuroff, 2002). Strong (1998) states, "Self-injurers are often bright, talented, creative achievers—perfectionists who push themselves beyond all human bounds, people-pleasers who cover their pain with a happy face" (p. 18).

The relationship between perfectionism and DSH has not been studied empirically, but high comorbid rates of DSH and eating disorders, in conjunction with the empirically established relationship between perfectionism and eating disorders, suggests perfectionism may represent a characterological vulnerability in the development of DSH. As will be evident in the following review of the perfectionism literature, it must first be acknowledged that perfectionism represents an inherently complex psychological construct, and various researchers have employed different conceptualizations of the construct throughout the literature base.

Defining Perfectionism

Historically, perfectionism has been defined in the psychological literature as a unidimensional construct involving irrational beliefs; early literature heavily emphasized the negative aspects of perfectionism. For example, Burns (1980) described perfectionists as "those whose standards are beyond reach or reason, people who strain compulsively and unremittingly toward impossible goals, and who measure their own worth entirely in terms of productivity and accomplishment" (p. 34). Recently, however, the psychological literature has recognized positive aspects of perfectionism as well, and also recognized that perfectionism includes interpersonal components in addition to intrapersonal components.

The complex, multidimensional nature of perfectionism is reflected in the lack of a consensus regarding an operational definition for the construct. Various terms have been introduced to delineate psychologically healthy and psychologically unhealthy aspects of perfectionism, including normal versus neurotic perfectionism (Hamachek, 1978), positive versus negative perfectionism (Terry-Short et al., 1995), and adaptive versus maladaptive perfectionism. Yet, attempts to distinguish psychologically healthy and psychologically unhealthy aspects of perfectionism has only fueled the definitional debate.

Hewitt argues that defining perfectionism in terms of adaptiveness and maladaptiveness represents an oversimplification of the construct (as cited in Benson, 2003). Similarly, Frost argues that differentiating perfectionists into two categories based on the presumed adaptiveness or maladaptiveness of perfectionistic traits fails to take into

the account the role of contextual factors; contextual factors may help determine whether specific perfectionistic behaviors are adaptive or maladaptive (as cited in Benson, 2003). Given the continued debate over the qualitative differences between the two types of perfectionists, several researchers have taken an alternative approach to conceptualization and examined perfectionism in terms of intrapersonal and interpersonal dimensions, thus allowing consideration of contextual factors. Empirical evidence has emerged that interpersonal and intrapersonal dimensions of perfectionism differentially relate to psychological distress (Hewitt & Flett, 1991).

Multidimensional Conceptualizations of Perfectionism

Much of the multidimensional perfectionism research has been derived from the conceptualizations of perfectionism put forth by two separate groups of researchers. Hewitt & Flett (1991) delineate one intrapersonal dimension of perfectionism--self-oriented perfectionism--and two interpersonal dimensions of perfectionism—other-oriented perfectionism and socially prescribed perfectionism—based on the source and target of perfectionistic expectations. Self-oriented perfectionism involves excessively high standards of performance that arise from and are directed toward oneself. In general, self-oriented perfectionism has been considered adaptive in nature. However, recent empirical studies have shown some support for a diathesis-stress model of perfectionism based on the hypothesis that adaptive aspects of perfectionism can become maladaptive under stressful conditions, especially when individuals are faced with ego-involving situations that threaten the self (Flett & Hewitt, 2002). In other-oriented perfectionism, others are the target for one's excessively high standards and perfectionistic expectations. In contrast, socially prescribed perfectionism involves the

belief that others hold oneself to excessively high standards and expect perfection. Other-oriented and socially prescribed perfectionism have generally been presented as maladaptive dimensions of perfectionism within the clinical literature. Socially prescribed perfectionism has been reported to have the broadest association with psychopathology (Enns & Cox, 2002), while other-oriented perfectionism has been linked to indexes of interpersonal hostility (Hill, McIntre, & Bacharach, 1997).

Frost, Martin, Lahart, & Rosenblate (1990), while not explicitly outlining an interpersonal dimension of perfectionism, include parental expectations and parental criticism as two important interpersonal components in the measurement of perfectionism. Key intrapersonal components, as identified by Frost et al. (1990), include excessively high personal standards, personal emphasis on order and organization, heightened concern over personal mistakes, and pervasive doubts about one's actions.

Complementary to the aforementioned conceptualizations of perfectionism, self-presentational perfectionism is beginning to receive empirical attention as a clinically relevant interpersonal aspect of perfectionistic behavior. Self-presentational perfectionism refers to a perfectionist's need to actively display a flawless image in interpersonal situations and avoid disclosures of imperfection. In the context of therapy, self-presentational perfectionism has the potential to undermine the working alliance and resulting treatment progress due to the client's reluctance to disclose personal aspects of the self (Flett & Hewitt, 2002).

Table 1 summarizes the similarities and differences among the multitude of conceptualizations of perfectionism that appear throughout the literature.

Table 1
Conceptualizations of Perfectionism

Term	Definition
Normal perfectionism	Striving for reasonable or realistic standards; results in self-satisfaction and increased self-esteem
Neurotic perfectionism	Striving for excessively high self-standards; driven by fear of failure and fear of disappointing others
Positive perfectionism	Perfectionistic behavior arising from positive reinforcement and approach tendencies
Negative perfectionism	Perfectionistic behavior arising from negative reinforcement and avoidance tendencies
Self-oriented perfectionism*	Excessively high personal standards originating from and directed toward the self
Other-oriented perfectionism*	Excessively high standards for and perfectionistic expectations of others
Socially prescribed perfectionism*	Belief that others hold oneself to excessively high standards
Adaptive perfectionism	Positive perfectionistic behaviors that include high personal standards, organization, self-oriented perfectionism, and other-oriented perfectionism
Maladaptive perfectionism	Negative perfectionistic behaviors that include socially-prescribed perfectionism, concern over mistakes, doubts about actions, parental expectations, and parental criticism
Perfectionistic self-presentation*	Need to actively display a flawless image in interpersonal situations and avoid disclosures of imperfection

Note. Conceptualizations of perfectionism addressed in the current study indicated by *.

In summary, perfectionism is currently understood as a multidimensional construct with significant implications for psychological health. Although multiple conceptualizations of perfectionism exist throughout the empirical literature, it is widely accepted that perfectionism represents a relatively stable personality trait that can serve as a vulnerability to psychological distress. While case reports and anecdotal evidence suggest that perfectionism is a vulnerability factor in DSH, this link has yet to be studied empirically. Related empirical evidence, however, suggests the probability of this relationship. Specifically, perfectionism has been implicated in the development and maintenance of eating disorders, and a high comorbidity of eating disorders and DSH has been documented.

Perfectionism and Eating Disorders

Although perfectionism has been linked to a wide range of healthy and unhealthy psychological indexes, the following section focuses exclusively on empirical findings relevant to the role of perfectionism in the development and maintenance of eating pathology. First, limitations of the early empirical research examining the relationship between perfectionism and eating disorders will be reviewed. The mixed results obtained from early studies relying on a unidimensional conceptualization of perfectionism provide compelling evidence for the need to study perfectionism from a multidimensional perspective in order to fully understand the relationship between perfectionism and eating disorders. Second, studies employing multidimensional conceptualizations of perfectionism will be reviewed. Separate consideration will be given to studies distinguishing between adaptive and maladaptive perfectionism and studies which examine intrapersonal and interpersonal dimensions of perfectionism. Finally, evidence

will be presented that perfectionistic self-presentation constitutes a clinically relevant aspect of perfectionism in the treatment of individuals with eating disorders.

Limitations of Early Research Examining Perfectionism in Eating Disorder Populations

Early research examining the relationship between perfectionism and eating pathology concentrated on the prevalence of perfectionistic tendencies among eating disorder populations, and numerous studies concluded that individuals with eating disorders display elevated levels of perfectionism compared to non-eating disordered populations (Bastiani, Rao, Weltzin, & Kaye; Bourke, Taylor, & Crisp, 1995; Garner, Olmstead, & Polivy, 1983a, 1983b; Rosch, Crowther, & Graham, 1991; Srinivasagam et al., 1995; Thompson, Berg, & Shatford, 1987; Toner, Garfinkel, & Garner, 1986). Alternatively, other researchers found no evidence of elevated perfectionism scores among eating disorder populations when compared to non-eating disorder populations. For example, Garner et al. (1984) reported no significant differences in perfectionism between a weight-preoccupied control group and a group of individuals diagnosed with anorexia nervosa. Blouin et al. (1989) found no significant differences in perfectionism among individuals diagnosed with bulimia and individuals diagnosed with diabetes, but perfectionism scores were elevated among bulimics compared to normal controls. Finally, Hurley et al. (1990) found no significant differences in perfectionism among a clinical eating disorder group and a group of individuals diagnosed with other psychological disorders, suggesting elevated perfectionism scores may be characteristic of general psychopathology and not specific to eating disorder populations. The mixed results obtained from the above studies are made more difficult to understand because of the atheoretical nature of the studies. Additional limitations include the use of

correlational data and overreliance of the 6-item Perfectionism subscale embedded within the Eating Disorders Inventory (EDI; Garner, Olmstead, & Polivy, 1983a; Garner, 1991).

The Perfectionism subscale of the EDI (EDI-P) has been historically viewed as a unidimensional measure of global, trait perfectionism that exclusively focuses on cognitive and behavioral aspects of self-directed, or self-oriented perfectionism (Ackard & Peterson, 2001). Joiner and Schmidt (1995), however, established that the EDI-P is actually a multidimensional measure. Using confirmatory factor analyses, Sherry, Hewitt, Besser, McGee, and Flett (2003) supported the multidimensional nature of the EDI-P, concluding that among the six items contained in the subscale, 3 items measured self-oriented perfectionism and 3 items measured socially prescribed perfectionism. Structural equation modeling demonstrated that self-oriented perfectionism (SOP) and socially prescribed perfectionism (SPP), as assessed by the EDI-P, independently related to eating disorder symptomatology (Sherry et al., 2003). Interestingly, Sherry et al. (2003) also found that for women and not men, moderational analyses revealed that the predictive value of EDI-SOP for eating disorder symptoms was dependent on the level of EDI-SPP.

This finding highlights two significant limitations of previous studies relying on the EDI-P with disregard for the multidimensional nature of perfectionism. First, when utilized as a unidimensional assessment of perfectionism, the EDI-P may confound results because the intrapersonal and interpersonal dimensions of perfectionism are collapsed into a singular, global measurement of perfectionism. Second, this finding suggests that correlational analyses alone may not be sophisticated enough to discriminate the true contribution of perfectionism in the development and maintenance

of eating pathology. For example, in testing a diathesis-stress model of bulimia using the EDI-P, Joiner, Heatherton, Rudd, and Schmidt (1997) found that self-esteem moderated the interactional effects of perfectionism and body dissatisfaction in the development of bulimic symptoms. In other words, it is not only reasonable to assume that various psychological factors moderate or mediate the relationship between perfectionism and eating disorders, but as suggested by the findings of Sherry et al. (2003), intrapersonal and interpersonal dimensions of perfectionism may interact to predict eating pathology. There is limited data supporting the latter hypothesis, as the specific relationships between different dimensions of perfectionism and eating disordered behavior have only recently begun to receive empirical attention with the advent of comprehensive multidimensional perfectionism measures.

An additional and final limitation of studies using the EDI-P was highlighted by Sutander-Pinnock, Woodside, Carter, Olmstead, & Kaplan (2003). In a longitudinal study focusing on the relationship between perfectionism and treatment outcome among anorexics, Sutander-Pinnock et al. (2003) reported that the EDI-P was significantly associated with illness status. Individuals diagnosed with anorexia nervosa were assessed for perfectionism upon admission to an inpatient eating disorders program, discharge, and at a median of 15.9 months post-discharge. EDI-P scores were found to be sensitive to illness status, whereas the Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) was less dependent on illness status. Although no other studies were found which replicated this finding, it suggests that more comprehensive measures of perfectionism can perhaps expand the current understanding of the relationships between different dimensions of perfectionism and eating pathology.

Adaptive and Maladaptive Perfectionism within Eating Disorder Populations

In general, the limited literature examining the relationship between eating pathology and multidimensional perfectionism has taken two different approaches. The first approach has involved distinguishing between adaptive and maladaptive, or normal and neurotic perfectionism. The second approach has involved examining the unique relationships between specific intrapersonal and interpersonal dimensions of perfectionism and eating pathology. Within this literature base, some researchers have argued that characterological differences exist among those diagnosed with anorexia nervosa and those diagnosed with bulimia nervosa (Casper, 1983), while others have argued that perfectionism is a key personality trait implicated in both disorders (Beebe, 1994; Heatherton & Baumeister, 1991; Slade, 1982).

Ashby, Kottman, & Schoen (1998) focused attention on perfectionism within a clinical eating disorder population compared to a control group of undergraduate women. Using the Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) and the Almost Perfect Scale (APS; Slaney, Ashby, & Trippi, 1995), no significant differences were found between the two groups on a factor representing adaptive perfectionism; however, significant differences were found on a factor representing maladaptive perfectionism. Significant relationships between maladaptive perfectionism and heightened levels of body dissatisfaction, feelings of ineffectiveness, interpersonal distrust, and difficulty responding to emotion, as measured by the Eating Disorders Inventory (EDI; Garner, Olmstead, & Polevy, 1983b) led the authors to conclude that individuals with eating disorders may be maladaptive perfectionists.

Mitzman, Slade, and Dewey (1994) specifically designed a measure, the Neurotic Perfectionism Questionnaire (NPQ), to assess maladaptive aspects of perfectionism assumed to be involved in eating disorder symptomatology. Neurotic perfectionism was conceptualized as maintaining excessively high standards which are driven by a fear of personal failure and a fear of disappointing others. Mitzman et al. (1994) found that the NPQ successfully discriminated between individuals with eating disorders and those without eating disorders, but the scale has been used infrequently by researchers.

In the largest study to date to examine perfectionism among eating disorder subjects, the hypothesis that perfectionism represents a phenotypic trait in the development of anorexia was tested in an international, multiple site study (Hamli et al., 2000). A total of 322 anorexics diagnosed with restricting, purging, and binge eating subtypes completed the Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) and the Perfectionism subscale from the Eating Disorders Inventory-2 (Garner, 1991). Across anorexic subtypes, anorexics evidenced significantly higher EDI-2 Perfectionism subscale scores compared to normative data for the instrument. Additionally, across subtypes, anorexics evidenced significantly higher MPS perfectionism scores than a healthy comparison group. An analysis of subscale scores on the MPS revealed significant differences between anorexics and healthy controls on all subscale scores except perfectionistic strivings for organization, generally considered an adaptive aspect of perfectionism. The purging without binge eating subtype subjects demonstrated significantly higher Parental Criticism subscale scores than the restrictive type.

Overall, greater perfectionism was associated with greater eating pathology and a diminished motivation to change. Although this study did not specifically address

adaptive and maladaptive aspects of perfectionism, previous research involving factor analysis found that the MPS subscales Concern Over Mistakes, Doubts about Actions, Parental Expectations, and Parental Criticism loaded on to a maladaptive perfectionism factor, while Personal Standards loaded on to an adaptive perfectionism factor (Frost et al., 1990, Slaney et al., 1995). Based on these factor loadings, the Hamli et al. (2000) study suggests anorexics may differ from a non-eating disorder population on both adaptive and maladaptive aspects of perfectionism.

Other researchers have examined the potential interaction of perfectionism and other psychological variables associated with eating disorders, such as low self-esteem and body dissatisfaction. Perfectionism has been assumed to negatively influence body esteem, or body satisfaction, thus contributing to the development and maintenance of eating pathology through its interaction with negative body image perceptions. Several studies have found an inverse association between perfectionism and body image (Hewitt et al., 1995; Terry-Short et al., 1995). A study by Davis (1997) supports this association, suggesting that negative body esteem is most evident in neurotic/maladaptive perfectionism. However, Davis (1997) relies on the Self-Oriented Perfectionism (SOP) subscale of the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991) to measure normal/adaptive perfectionism and the Neurotic Perfectionism Questionnaire (NPQ; Mitzman et al., 1994) to measure neurotic/maladaptive perfectionism. Goldner et al. (2002) suggest that the SOP subscale was never intended to measure purely adaptive aspects of perfectionism and the NPQ has been criticized for confounding perfectionism with neuroticism, thus rendering Davis' (1997) results questionable.

In conclusion, empirical evidence suggests maladaptive perfectionism may be a prominent characteristic among individuals with eating disorders. The role of adaptive perfectionism is less clear, suggesting continued research is needed. These findings further suggest an alternative approach to conceptualization of perfectionism, which focuses on the source and target of perfectionistic expectations rather than the presumed adaptiveness or maladaptiveness of perfectionism, can supplement the current understanding of the role of perfectionism in eating disorders.

Intrapersonal and Interpersonal Dimensions of Perfectionism in Eating Disorder Populations

A second approach to specifying the relationship between perfectionism and eating pathology involves examining specific relationships between intrapersonal and interpersonal dimensions of perfectionism and eating pathology. Research has found elevated levels of self-oriented perfectionism and socially prescribed perfectionism in eating disorder populations; but, in general, has failed to find significant differences in other-oriented perfectionism between eating disorder populations and nonaffected populations. Self-oriented perfectionism and socially prescribed perfectionism have both been implicated in disorders that involve self-concept, and self-concept is central to the development of eating disorders. According to Hewitt and Flett (2002):

> The important facets of self-oriented perfectionism include strong motivations for the self to be perfect, maintaining unrealistic self-expectations in the face of failure, stringent self-evaluations that focus on one's own flaws and shortcomings, and generalization of unrealistic expectations and evaluations across behavioral domains. (p. 256)

In contrast, "socially prescribed perfectionism entails the perception that others impose unrealistic demands and perfectionistic motives for oneself and will be satisfied only when those demands are met" (Hewitt & Flett, 2002, p. 256-257). Thus, for socially-prescribed perfectionists, one's self-concept is heavily influenced by the perceived perceptions of others.

One significant limitation concerning the research on self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism in eating disorders involves a heavy reliance on nonclinical samples. A second significant limitation involves the lack of prospective studies. For example, in a cross-sectional study of 363 Canadian middle school girls, hierarchical multiple regression was used to examine risk and protective factors associated with disordered eating during early adolescence (McVey, Pepler, Davis, Flett, & Abdolell, 2002). In addition to high self-oriented perfectionism, low competence ratings for appearance, low paternal social support, and highly valued peer social acceptance were all significantly associated with disordered eating. Socially prescribed perfectionism, high value on physical appearance, competence in social acceptance by peers, and maternal support were not significantly related to disordered eating. Yet, the mean age of participants (12.9 years), cross-sectional design, limited geographic region, and use of a nonclinical sample limits the generalizability of the results.

Pratt, Telch, Lobouvie, Wilson, & Agras (1999) investigated self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism in a community sample of 127 adult women with binge eating disorder. No significant differences in perfectionism were found between the binge eating group and a

comparison group of 32 bulimic women of normal weight. While both the binge eating group and the bulimic group evidenced significantly higher self-oriented perfectionism scores compared to a control group of 60 obese, non-eating-disordered women, self-oriented perfectionism did not significantly relate to any of the eating pathology measures. As a result, Pratt et al. (1991) concluded that self-oriented perfectionism is not specific to binge eating disorder symptoms, but is indicative of general psychiatric symptomatology.

No differences were found between the three groups on other-oriented perfectionism scores or socially prescribed perfectionism, but socially prescribed perfectionism was significantly associated with variables associated with binge eating disorder, including general psychiatric symptom severity, weight concern, shape concern, eating concerns, binge eating, and low self-esteem. Yet, again, the use of a non-treatment-seeking community sample limits the generalizability of the results; replication in a clinical population would strengthen the results as significant differences may exist between women who seek treatment as those who do not.

Hewitt et al. (1995) examined the relationship between self-oriented perfectionism (SOP) socially prescribed perfectionism (SPP), other-oriented perfectionism (OOP), and eating pathology in a nonclinical sample of 81 college women. Results indicated that SOP related only to anorexic attitudes and behaviors, whereas SPP was broadly associated with disordered eating patterns, self-esteem, and concerns about appearance. As a side note, this finding may help explain the lack of significant relationship between self-oriented perfectionism and eating pathology in the Pratt et al. (1991) study, because anorexics were not included among participants in the Pratt et al.

(1991) study. OOP demonstrated an unexpected significant relationship with body image avoidance, and the authors speculated that a need for others to be perfect may have implications for revealing one's own body (Hewitt et al., 1995). Hewitt et al. (1995) concluded that SOP may motivate eating disorder symptoms, such as a drive for thinness and dieting behaviors, but social aspects of perfectionism play a central role in associated features of eating disorders such as concerns about appearance and low self-esteem. Stated differently, the strong need to conform to the perceived ideals of perfection of others may set the foundation for eating pathology, but self-imposed standards of perfection may specifically lead to eating disordered behaviors.

In review, research using multidimensional measures of perfectionism clearly supports the continued investigation of the relationship between perfectionism and eating disorders. A previously addressed, maladaptive perfectionism is proposed to represent a prominent characterological trait of individuals with eating disorders. Elevated levels of socially prescribed perfectionism reported within eating disorder populations supports this proposition, as SPP is generally considered maladaptive in nature. However, research has not substantiated a significant relationship between other-oriented perfection, also considered maladaptive in nature, and eating disorders. The differential findings between SPP and OOP may be best understood in relation to self-concept (i.e. the mental image one has of one's self). SPP and eating disorders each appear to be centrally related to self-concept and one's own behavior, whereas OOP is predominantly concerned with the mental image one has of others and others' behavior.

Self-concept also plays a pivotal role in self-oriented perfectionism. Although SOP is generally considered adaptive, and elevated levels of SOP have been reported in

eating disorder populations, the role of adaptive perfectionism in eating disorders is unclear. The diathesis-stress model of perfectionism suggests a plausible explanation for both the presence of elevated levels of SPP in eating disorder populations and the uncertainty concerning the role of adaptive perfectionism. The diathesis-stress model of perfectionism suggests that perfectionism can be adaptive in some situations, but can become maladaptive under stressful situations. Specifically, previously adaptive aspects of perfectionism are likely to become maladaptive when individuals are faced with ego-involving situations that threaten one's self-concept. In order to protect one's self-esteem, the evaluative component of one's self-concept, certain individuals may adopt a self-presentational style that promotes the appearance of perfectionism (Goldner et al., 2002).

Perfectionistic Self-Presentation within Eating Disorder Populations

Hewitt et al. (1995) also examined perfectionistic self-presentation, an aspect of perfectionism previously unexplored in the eating disorders literature. A significant association was found between perfectionistic self-presentation (i.e. "needs to present to others an image of perfection or avoid revealing imperfection in the self") and anorexic tendencies, bulimic tendencies, concerns about social reactions to one's appearance, and concerns about evaluations of one's appearance. Perfectionistic self-presentation not only showed unique variance in the prediction of body image avoidance and self-esteem, but was revealed to be the best predictor of various dimensions of self-esteem among all dimensions of perfectionism analyzed. The authors hypothesized that perfectionistic self-presentation may represent an attempt to compensate for low self-esteem. Although this study focused on a nonclinical population, similar results have been reported elsewhere.

For example, in a study of 100 female college students, Pliner and Haddock (1996) reported that extremely weight concerned participants, in comparison to women who were not excessively concerned about their weight, set unrealistically high standards for others, set lower standards for themselves in the absence of external standards, and were more strongly influenced by feedback. Pliner & Haddock (1996) supported the hypothesized relationship between perfectionistic self-presentation and self-esteem, suggesting that the excessively weight concerned women set lower goals for themselves in order to maintain self-esteem.

Similar conclusions have been drawn from a clinical population. Compared to a psychiatric control group and a normal control group, Geller, Cockell, Hewitt, Goldner, and Flett (2000) found that a clinical anorexic group scored significantly higher on a measure of anger suppression and four interpersonal cognitive schemas assessed by the Silencing of Self Scale (STSS; Jack & Dill, 1992). The four cognitive schemas assessed included the tendency to present a compliant outer self while suppressing anger and hostility, inhibition of self-expression to avoid interpersonal conflict, the tendency to place others' needs before one's own needs, and the tendency to judge the self by external standards. Controlling for global functioning, depression, and self-esteem, the anorexic group continued to exhibit significantly elevated scores compared to the control groups on subscales measuring the tendency to give priority to others' need and inhibition of self-expression. Subscale scores for each of the four cognitive schemas and anger suppression scores demonstrated significant correlations with self-oriented perfectionism, socially prescribed perfectionism, and perfectionistic self-presentation, but did not significantly relate to other-oriented perfectionism. A significant relationship was

also found between inhibited expression of feelings, an interpersonal orientation, and body satisfaction.

These results have been partially replicated in a study of 235 subclinical adolescents (Zaitsoff, Geller, & Srikameswaren, 2002). Relative to adolescents with low scores of eating disorder symptomatology, adolescents with higher eating symptomatology scores exhibited significantly higher anger suppression scores and significantly higher scores on 3 of the 4 interpersonal cognitive schemas assessed by the STSS subscales (Zaitsoff et al., 2002). Unlike Geller et al. (2000), no significant differences were found regarding the Care subscale, which assesses the tendency to give priority to others' needs over one's own needs. Although the specific risk factors of weight-based and shape-based self-esteem and the general risk factor of global self-esteem accounted for the greatest variance in eating disorder symptomatology scores, the three silencing the self subscale scores and the anger suppression scores accounted for additional, unique variance even after controlling for each type of self-esteem.

The clinical implications of perfectionistic self-presentation in eating disorder clients is far-reaching. First and foremost, the need to appear perfect or avoid displays of imperfection may prevent individuals from seeking treatment because seeking treatment may be equated with failure. Second, if treatment is sought, a perfectionistic self-presentation style is likely to interfere with the process of establishing a working alliance due to fear of disclosure and the threat self-disclosure poses to one's self-esteem. Unless a client's perfectionistic self-presentational style is recognized and addressed as part of the treatment process, therapeutic progress may be compromised and, ultimately, the chances for recovery lessened.

Eating Disorders and Deliberate Self-Harm

The comorbid relationship between eating disorders and DSH is rarely discussed in the empirical literature, and the empirical basis for the relationship is limited. The paucity of research is surprising given that many theorists view eating disorders and DSH as different manifestations of the same underlying deficits in self-care capacities and emotional regulation (Conterio & Lader, 1998; Favazza, 1996; Miller, 1994), and eating disorders are one of the diagnoses most frequently associated with DSH (Dulit et al., 1994; Favazza, DeRosear, & Conterio, 1989; Herpertz, 1995). As a whole, the few studies addressing the comorbidity of eating disorders and DSH are characterized by small sample sizes, limited power, discrepant definitions of eating disorders and DSH, and failure to assess for the presence of personality disorders (Paul, Schroeter, Dahme, & Tiulzinger, 2000). Within these studies, comorbidity estimates have varied widely based on method of assessment and based on the primary presenting problem under study.

Theoretically, the link between eating disorders and DSH has been explained in terms of shared psychological correlates and common risk factors. Diagnostically, the link between eating disorders and DSH has been explained in terms of a "Repetitive Self-Harm Syndrome," a multi-impulsive personality disorder, multi-impulsive bulimia, and borderline personality disorder. Each of these diagnoses has been presented as a means to understand the comorbid development of eating disorders and DSH. The following section first addresses possible explanations for the range of comorbidity estimates, and then reviews existing theoretical and diagnostic explanations for the overlap between eating disorders and DSH.

Eating Disorder and DSH Comorbidity Estimates

As pointed out by Sansone & Sansone (2002), one issue impeding empirical progress in this area involves the lack of assessment instruments addressing potential comorbidity. In a review of current measures used to assess eating disorder symptomatology, Sansone & Sansone (2002) noted that none of the measures contained items assessing for the presence of DSH. Several of the DSH measures reviewed contained items assessing eating disorder symptomatology, but the number of items was insufficient to make an eating disorder diagnosis (Sansone & Sansone, 2002). More importantly, standardized measures of DSH do not exist, and the only DSH measure to report reliability and validity estimates (i.e. the Deliberate Self-Harm Inventory; DSHI; Gratz, 2001) has not been validated in a clinical population. The lack of appropriate instrumentation and failure to assess for the presence of personality disorders may provide a partial explanation for the wide variation in reported estimates of comorbidity.

Eating disorder and DSH comorbidity estimates have varied greatly based on the primary presenting problem of participants in each study, as well as the specific eating disorder subtype studied. For instance, Paul et al. (2002) estimated that approximately 61% of the DSH population suffers from a comorbid eating disorder, whereas Farber (2000) reported that between 57% and 93.3% of the DSH population exhibits a comorbid eating disorder. Favazza et al. (1989) found that among a mixed sample of 290 self-harmers from an inpatient program and from the community, 50% of participants indicated a current or past history of an eating disorder. Anorexia was endorsed by 15% of participants; bulimia was endorsed by 22% of participants; and 13% of participants endorsed both anorexia and bulimia (Favazza et al., 1989).

Comorbidity estimates have also varied within the eating disorders literature. Farber (2000) estimated that between 8.9% and 26.6% of bulimics engage in DSH, and Garfinkel, Moldofski, & Garner (1980) reported DSH among 9.2% of the 68 bulimics they studied. Favazza (as cited in Conterio & Lader, 1998) estimated that 40.5% of bulimics and 35% of anorexics engage in DSH, based on a review of several studies. Sansone et al. (2003) estimated that approximately 25% of the eating disorder population engages in DSH, regardless of specific eating disorder diagnosis or diagnostic subtype, but other researchers contend that DSH is more common in a bulimic population. The hypothesis that DSH is more common in a bulimic population has received some empirical support. Both bulimia (Fichter, Quadflieg, & Rief, 1994; Weiderman & Pryor, 1996) and DSH (Favazza & Rosenthal, 1993) have been linked to deficits in impulse control. Anorexia, in contrast, has shown a stronger relationship to obsessive compulsive behaviors (Holden, 1990; Thorton & Russel, 1997). Yet, at least one study found a similarly high incidence of DSH in an anorexic population compared to a bulimic population (Baral, Kora, Yuksel, & Sezgin, 1998). Furthermore, even though impulsivity and compulsivity are considered separate psychological traits, impulsive and compulsive behaviors often coexist (McElroy, Pope, Keek, & Hudson, 1995; Rasmussen & Eisen, 1994). Individuals with eating disorders often display coexistent impulsive and compulsive symptoms (Favaro & Santonastaso, 1998; Newton, Freeman, & Munro, 1993).

Theoretical Explanations for Eating Disorder and DSH Comorbidity

Theoretically, the relationship between eating disorders and DSH is complex. While the idiosyncratic meanings behind eating disorders and DSH vary between

individuals, eating disorders and DSH appear to share similar, multiple psychological functions, and are remarkably similar in terms of age of onset, sex ratio, and psychological correlates. According to Alderman:

> Each type of activity may be used as a way of coping with great internal pain. Both can provide a way to relieve or release tension, of communicating with others [one's] own internal state, to regulate dissociate states, and to physically express [one's] psychological state. (p. 97-98)

Heatherton & Baumeister (1991) hypothesized that binge eating may be a form of dissociation or a means to induce dissociation, paralleling the hypothesized relationship between DSH and dissociation (Favazza & Simeon, 1995; van der Kolk et al., 1991). DSH and eating disorders have each been associated with high levels of self-reported dissociative symptoms (Abraham & Beaumont, 1992; Everill, Waller, & MacDonald, 1995). Additionally, women with comorbid DSH and bulimia have been found to exhibit higher scores on a measure of self-transcendence compared to groups of suicidal bulimic women and bulimic women with no histories of DSH or suicidal behavior, thus suggesting a greater sense of disconnectedness and dissociation among this population (Anderson, Carter, McIntosh, Joyce, & Bulik, 2002). According to Favaro (1998), DSH in eating disorders represents a means of tension release which is often used as an alternative to binging; both DSH and binging serve as a means of experiencing one's one body and re-establishing a sense of reality.

A history of child abuse and trauma constitutes another shared risk factor in the development of DSH and eating disorders. Some evidence suggests that child abuse and trauma has the potential to explain the high co-occurrence of DSH and eating disorders

(Deep, Lilenfeld, Plotniciv, Pollice, & Kaye, 1999; Favaro & Santonastoso, 1998; Wonderlich et al., 2000; Wonderlich et al., 2001). Yet, similar to the DSH literature, discrepant results have been found in regards to whether childhood abuse and trauma represents a general or specific risk factor in the development of eating disorders (Everill & Waller, 1995; Lacey & Evans, 1986; Welch & Fairburn, 1994). Although dissociation and a history of child abuse and trauma are the shared risk factors most often cited to explain the co-development of eating disorders and DSH, additional shared risk factors have also been identified. These factors include poor self-esteem, depression, substance abuse, poor problem-solving skills, negative body image, body alienation, compulsivity, and impulsivity.

Diagnostic Explanations for Eating Disorder and DSH Comorbidity

Repetitive Self-Harm Syndrome. Favazza & Rosenthal (1993) proposed that the comorbidity between DSH, eating disorders, and other impulsive behaviors could be understood in terms of a "Repetitive Self-Harm Syndrome," in which DSH is "interphased with periods of quiescence, eating disorders, episodic alcohol and substance abuse, or kleptomania" (p. 136). The syndrome has no set course; characteristic behaviors may occur simultaneously or, alternatively, some behaviors may diminish as other symptoms become more predominant. Recognizing that DSH can occur sporadically in the context of other Axis I and Axis II mental disorders, Favazza & Rosenthal (1993) recommended diagnosing Repetitive Self-Harm Syndrome when DSH assumes an autonomous course and the behaviors are incorporated into one's self-identity. Primarily considered a disorder of impulse control, Favazza & Rosenthal (1993) also highlighted possible compulsive features: "People with the disorder may brood

about harming themselves for hours or days and may engage in ritualistic behaviors such as tracing areas of their skin and placing their self-harm paraphernalia in a special order" (p. 137).

Multi-impulsive personality disorder. Other theorists have proposed models conceptually similar to the Repetitive Self-Harm Syndrome. From an eating disorders perspective, the comorbidity between eating disorders and DSH has been conceptualized in terms of a multi-impulsive personality disorder (Lacey & Evans, 1986), and more specifically, in terms of multi-impulsive bulimia (Lacey, 1993). Both the Repetitive Self-Harm Syndrome and multi-impulsive bulimia appear to be conceptually driven by Lacey and Evans' (1986) conceptualization of multi-impulsive personality disorder. After reviewing the literature on impulsivity, impulse control disorders, and disorders perceived to be related to impulse control, Lacey and Evans (1986) proposed that within each population of "uni-impulsive disorders," a subset of individuals display multiple impulse control problems that are characterologically-based. Individuals displaying multiple patterns of impulsivity were argued to form a unitary subgroup with a "multi-impulsive personality disorder" (Lacey & Evans, 1986). Furthermore, it was argued that this subgroup has a poor prognosis because clinicians typically address the presenting impulsive behavior and fail to address underlying characterological problems with impulse control. As a result, symptom substitution occurs and individuals with multi-impulsive personality disorder alternate predominant impulsive behaviors. For example, Lacey and Evans (1986) posited that "if alcohol abuse is addressed in the alcohol treatment unit, the patient may stop drinking but move to food or cutting" (p. 646). The same reasoning applies to the comorbidity between DSH and eating disorders: If only

one problem area is addressed in treatment, symptoms are likely to increase in the non-addressed problem area.

Multi-impulsive bulimia. In addition to suggesting a multi-impulsive personality disorder, Lacey (1993) formulated diagnostic criteria for a multi-impulsive form of bulimia. The term "multi-impulsive bulimia" was introduced to describe a subset of bulimics who exhibit impulse control problems associated with bulimia in one of the following areas: gross alcohol abuse, "street drug" abuse, multiple drug overdoses, repeated self-harm, sexual disinhibition, or shoplifting. In multi-impulsive bulimia, each of these behaviors is interchangeable and impulsive, each is associated with a similar sense of being out of control, and suppression of these behaviors results in intense anger and depression. Lacey (1993) noted that multi-impulsive bulimia is strongly associated with DSH and a poor prognosis.

Studies examining multi-impulsive bulimia have reported rates ranging between 18% and 80% in a bulimic population (Fahy & Eisler, 1993; Wiederman & Pryor, 1996). However, these studies differ not only in terms of sample characteristics, but also in diagnostic criteria used to evaluate the presence of multi-impulsive bulimia. As highlighted by Bell & Newns (2002), the number of impulsive behaviors which constitute multi-impulsivity range from two to eight, the types of impulsive behaviors under investigation vary between studies, and the time period in which impulsive behaviors are assessed ranges from the previous month to lifetime occurrence.

In support of the validity of a multi-impulsive bulimia diagnosis, some evidence exists that multi-impulsive bulimics exhibit greater general psychopathology and lower adaptive functioning than other non-impulsive bulimics (Fichter et al., 1994; Weiderman

& Pryor, 1996). However, the concept of multi-impulsive bulimia has not been uniformly accepted. Welch & Fairburn (1996) posited that different impulsive behaviors, including DSH and substance abuse, may each have different relationships with bulimia, and explaining eating disorder comorbidity in terms of multi-impulsive bulimia may be premature. Similarly, Fahy & Eisler (1993) found that multi-impulsive bulimics exhibited more severe bulimic symptoms than non-impulsive bulimics, but argued that a separate diagnostic category was not warranted. Fahy & Eisler (1993) hypothesized that the majority of impulsive behaviors do not result from impulsivity, or the failure to consider risks and consequences before acting, but instead result from affective disturbances. Lacey & Evans (1986) conceded that multi-impulsive personality disorder could be a variant of borderline personality disorder, thereby suggesting that multi-impulsive bulimia and its associated impulsive behaviors may also be understood in relationship to borderline personality disorder.

Borderline personality disorder. In an on-going study in which data has been collected from 46 bulimics to date, 33% of participants met the criteria for borderline personality disorder (Wonderlich, Myers, Norton, & Crosby, 2002). Of those meeting borderline personality disorder criteria, 47% of participants endorsed one or more lifetime occurrences of DSH. Comparatively, 61% of participants meeting the criteria for multi-impulsive bulimia endorsed one or more lifetime occurrences of DSH. Less than 9% of participants who did not meet criteria for either borderline personality disorder or multi-impulsive bulimia endorsed a lifetime history of DSH. As a result, the authors concluded that a lifetime history of DSH among a bulimic population was highly suggestive of the presence of either multi-impulsive bulimia or an underlying borderline

personality structure. However, this conclusion may be premature given the nature in which DSH was assessed; DSH was assessed in terms of participants' responses to one question regarding lifetime occurrence of DSH.

According to Wonderlich & Mitchell (1997), approximately 20% of individuals with bulimia carry a comorbid borderline personality disorder diagnosis. Individuals with comorbid bulimia and borderline personality disorder diagnoses display greater mood disturbances, family distress, general dysfunction, and a higher number of self-destructive behaviors (Wonderlich & Mitchell, 1997). Yet, again, DSH assessment was limited to one question concerning lifetime occurrence of DSH.

It is important to note that the relationship between eating disorders and DSH can not be fully explained by the presence of a borderline personality disorder. Using borderline personality disorder and suicidal behavior as an exclusion criteria, Favaro & Santonastoso (1998) found a 34.6% lifetime prevalence rate of DSH among an inpatient German eating disorder population. The sample included a total of 376 women: 119 anorexic individuals (restricting subtype, n= 59; purging subtype, n= 59), 137 bulimic individuals, and 120 individuals diagnosed with an eating disorder not otherwise specified. The highest rates of DSH were found among women diagnosed with eating disorders not otherwise specified (35.8%) and bulimia (34.7%). No significant differences in DSH emerged between anorexic subtypes. Within the total sample, 49.2% reported DSH onset post-eating disorder, 25.5% reported DSH onset pre-eating disorder, and the remaining participants reported simultaneous onset of DSH and eating disorder. The DSH group reported a higher number of traumatic events, higher scores on two of the three dissociation subscales used, and more obsessive thoughts and behaviors. No

differences were found between individuals reporting DSH and those who did not on measures of behavioral impulsivity, but the DSH group exhibited higher cognitive impulsivity scores.

In summary, despite the methodological limitations of the empirical literature, evidence supports high co-occurrence of DSH and eating disorders. Among eating disorder subtypes, a specific link has been found between DSH and bulimia, while the relationship between other eating disorder subtypes and DSH is less clear. Multiple psychological factors have been explored in an attempt to further understand the underlying mechanisms responsible for DSH and eating disorder comorbidity. These factors include impulsivity, compulsivity, body dissatisfaction, dissociation, and history of child abuse and trauma. Diagnoses of Repetitive Self-Harm Syndrome, multi-impulsive personality disorder, multi-impulsive bulimia, and borderline personality disorder have each been suggested as a means to organize and understand the interrelationships between several of these psychological factors. Yet, continued inquiry is needed as both DSH and eating disorders are believed to be multidetermined disorders of heterogeneous origin. For example, perfectionism represents an unexplored premorbid personality trait that may serve as a vulnerability factor contributing to the comorbidity of DSH and eating disorders, but before this line of inquiry is pursued, it is first necessary to establish an empirical relationship between perfectionism and DSH.

Perfectionism and DSH

Given the lack of empirical research linking perfectionism and DSH, the purpose of the following section is to 1) suggest a theoretical link between perfectionism and DSH; and 2) provide anecdotal evidence in support of the hypothesized relationship

between perfectionism and DSH. Attachment theory is suggested as a viable framework from which to conceptualize the proposed relationship between perfectionism and DSH, and the anecdotal evidence is presented in the context of developmental models of perfectionism.

Conceptual models of perfectionism and conceptual models of DSH each heavily emphasize the role of early parent-child relationships and the familial environment, but empirical evidence in support of the etiological role of attachment relationships is minimal in both bodies of literature. As previously discussed, the empirical literature on the etiology of DSH, while limited, suggests that the perceived quality of early parent-child attachment relationships is an important etiological factor in the development of DSH. Within the perfectionism literature, a strong association has been reported between perfectionism and attachment variables such as relationship preoccupation and need for approval (Andersson & Perris, 2000). Additionally, small, significant correlations have been found between perfectionism and lack of secure attachment, avoidant attachment, relationship ambivalence, and fear of abandonment (Brennan & Shaver, 1995). However, empirical evidence linking attachment security and perfectionism remains tentative and largely conceptual.

In a review of the perfectionism literature, Flett, Hewitt, Oliver, and Macdonald (2002) outlined four conceptual models to explain the development of perfectionism: the social expectations model, the social reaction model, the anxious rearing model, and the social learning model. These four models of perfectionism do not distinguish between family environmental conditions that promote adaptive aspects of perfectionism and those that promote maladaptive aspects of perfectionism. However, a common theme

among the models is the importance of parent-child interactions in the development of perfectionism; thus suggesting the quality of attachment relationships may set the stage for later development of perfectionism.

The social expectations model suggests that perfectionism develops in response to parental approval which is contingent on meeting high standards of performance, which in turn leads to contingent self-worth. Children learn that perfection results in parental approval; thus perfectionism becomes a means to maintain attachment security and self-worth. Failure to consistently meet parental standards can lead to an inability to maintain self-worth and can foster a chronic sense of helplessness. According to Flett et al. (2002), "In general, exposure to conditions that foster a sense of conditional self-worth also increase that likelihood that a state of helplessness will develop (p. 90). Feelings of helplessness have been identified as one of the most common precipitants of DSH (Alderman, 1997; Conterio & Lader, 1998). The following excerpt illustrates the potential role of perfectionism and contingent self-worth in DSH (Strong, 1998):

> Barbara graduated at the top of her high school class and earned a bachelor's degree from Brigham Young University. During her college years she didn't self-injure often. When she did it was usually brought on by demands she felt she could not meet—like being able to maintain the straight-A average she kept in high school. (p. 15)

When failure to meet perfectionistic expectations results in feelings of diminished self-worth and helplessness, DSH may be adopted as a means to punish and degrade the unworthy self (Deiter, Nicholls, & Pearlman, 2000).

Hamachek (1978) indicates that perfectionism may also develop in the absence of parental expectations. Without clear parental expectations and standards, a child may adopt perfectionism as a defensive strategy to avoid punishment. As noted by Flett et al. (2002), adults in treatment have reported adopting perfectionism in response to parental neglect. In turn, parental neglect has been found to negatively impact two of the presumed primary functions of DSH: emotional regulation and affective expression. According to Dieter et al. (2000), "Expressing or externalizing affective states is the primary function of self-injury" (p. 1181).

The social reaction model of perfectionism suggests that perfectionism develops in response to being raised in a harsh environment characterized by hostility or lack of warmth. Exposure to abuse, neglect, withdrawal of love, or shaming situations may individually or interactively foster the development of perfectionism; as previously discussed, these same environmental conditions have been implicated in the development of DSH. According to the social reaction model, perfectionism develops as a means to establish predictability in an unpredictable environment, reduce exposure to shame and humiliation, and minimize abuse (Flett et al., 2002). The following excerpt provides an example of a perfectionistic self-harmer with a history of sexual abuse (Strong, 1998):

> [Erin] can't bear conflict or criticism. She tries to please everybody, save everybody, ease everyone's pain. But she hates herself in the process because she isn't revealing her true feelings....As Erin grew up, she played out two very different roles: good girl and bad girl. She became a slave to perfectionism. She graduated with a perfect 4.0 grade-point average even though she missed an entire year of high school while she was in the psychiatric ward. (p. 206-207)

In the context of a harsh environment, perfectionism and DSH may each independently develop as a means of establishing control in an uncontrollable environment. As explained by one woman, "Self-harm gives me a feeling of control when I cannot find control in the environment" (as cited in Favazza, 1989, p. 139).

The anxious rearing model suggests that perfectionism develops in response to anxious parents who focus on mistakes and the negative consequences of making mistakes; as a result, perfection develops as a strategy to avoid exposure of mistakes. Under these circumstances, perfectionism can be viewed as a characterological vulnerability which discourages the adaptive communication of psychological stress through pressures to be perfect and pressures to present oneself as perfect. DSH, in turn, can be viewed as a compensatory mechanism used by individuals who are unable to adaptively communicate their psychological distress regulate affect.

Together, the first three models suggest perfectionism may develop as a defense mechanism adopted to avoid harsh criticism and punishment within insecure parent-child attachment relationships. Alternatively, the social learning model suggests that perfectionism develops through modeling and idealization of attachment figures, thus the development of perfectionism can be explained in terms of children imitating perfectionistic parents. According to Flett et al. (2000):

> Perfectionism is likely to develop not only when children are exposed to authoritarian parenting and an emotional climate that emphasizes the negative consequences of making mistakes but also when parents engage in specific behaviors designed to promote perfectionism (e.g., placing children in demanding situations that emphasize the attainment of standards and meeting expectations)

and when parents express perfectionistic goals and standards. (p. 109)

Yet, as emphasized by Flett et al. (2002), parental behaviors alone are an inadequate explanation for the development of perfectionism. Broader environmental factors and individual child characteristics must also be considered. For instance, the development of perfectionism depends, in part, on whether the child internalizes pressures to be perfect, externalizes pressures to be perfect, or actively rejects pressures to be perfect and rebels. Stated differently, the quality of parent-child attachment relationships appears to provide a foundation for the development of perfectionism, but numerous mediating and moderating variables must be considered as well.

In summary, theorists have identified multiple developmental pathways to perfectionism. The common theme of the models involves the importance of the quality of parent-child interactions. Similarly, the quality of parent-child interactions has been identified as an etiological factor in the development of DSH. Additional empirical research is needed in order to clarify the relative contribution of attachment relationships in comparison to other risk factors in the development of perfectionism and DSH. If the results of the current study support the hypothesized relationship between perfectionism and DSH, attachment theory may serve as a theoretical foundation for future studies that advance our understanding of the comorbidity between perfectionism and DSH. Evidence of the relationship between perfectionism and DSH is currently limited to anecdotal accounts. The primary goal of this study, therefore, is to examine empirically the possible relationship between perfectionism and DSH.

CHAPTER 3

Methodology

A field correlational design was utilized due to the population and variables under study. This design was most appropriate because it would have been unethical to manipulate the variables under study and impossible to randomly assign participants to groups. The primary interest of this study was to examine the interrelationships between DSH, eating disorders, and perfectionism; cause-effect statements were not of interest.

Participants

Participants included 85 women ranging in age from 18 to 48 years ($M = 27.5$, $SD = 7.9$). All participants were seeking psychological help for issues related to DSH and/or eating disorders at the time of study participation. Of the total sample, 84.7% of participants were receiving outpatient treatment; 7.1% were receiving treatment in a partial hospitalization program; 4.7% were receiving inpatient treatment; and 3.5% were receiving treatment through participation in a support group alone. Several participants were involved in multiple treatment modalities; 12.9% of participants were involved in a support group in addition to outpatient treatment and 1 participant was involved in a support group in addition to treatment in a partial hospitalization program. Approximately half (51.8%) of the participants had received treatment for more than 1 year, while 16.5% of participants had been in treatment 1-6 months and 31.8% of participants had received less than 6 months of treatment.

The total sample included 72 Caucasian women, 4 Hispanic/Latino women, 2 Asian/Asian-American women, 1 African-American woman, 3 multiracial women, and 3

women identifying their racial background as "other." Whereas 19 participants were married, 61 participants were single. The remaining participants were separated, divorced, or widowed. Overall, participants exhibited a high degree of education, with 50.6% of the sample noting at least some college, 21.2% noting a college degree, 10.6% noting some graduate work, and 12.9% noting a graduate degree. Yet, 67.1% of participants reported earning less than $15,000 per year. The majority of participants (75.3%) resided in the Midwest, while 21.2% of participants resided in California and 3.5% of participants resided in other parts of the country.

Instruments

Demographic questionnaire. The demographic questionnaire collected data regarding the following variables: gender, age, race/ethnicity, marital status, number of children, current living arrangements, state of residence, socioeconomic status, level of education, employment status, and occupation. Data collected from the demographic questionnaire were used to adequately describe the characteristics of the sample.

Help-Seeking and Treatment History Questionnaire. The Help-Seeking and Treatment History Questionnaire, designed specifically for this study, collected information regarding the following variables: receival of psychological treatment, type of treatment received, length of psychological treatment, primary reasons for seeking treatment, perceived effectiveness of treatment, presence or history of an eating disorder diagnosis, presence or history of DSH behaviors, type and frequency of DSH behaviors (if applicable), history of abuse/trauma, and therapeutic disclosure of DSH, eating disorders, or abuse/trauma experiences when relevant to the participant. Data from the Help-Seeking and Treatment History Questionnaire were used to determine group status

for analyses and to adequately describe the demographic characteristics and treatment experiences of participants in each analysis group.

Multidimensional Perfectionism Scale-Frost (MPS; Frost et al., 1990). The Frost et al. (1990) MPS is a 35-item instrument containing six subscales designed to measure the nature and potential origins of trait perfectionism. Each item is responded to on a Likert scale ranging from 1 (disagree strongly) to 5 (agree strongly), with higher scores indicating greater perfectionism. The Organization subscale (6 items) assesses the emphasis the respondent places on order and organization (i.e. "I try and be a neat person."). A "total perfectionism" score is obtained from summing across items on the remaining five subscales. The Concern Over Mistakes subscale (9 items) assesses the tendency to respond negatively to perceived mistakes and equate mistakes with failure (i.e. "People will probably think less of me if I make a mistake."). The Personal Standards subscale (7 items) assesses high expectations for personal performance, including high goals and standards (i.e. "I hate being less than best at things."). Doubts about Actions (4 items) assesses the tendency to doubt one's ability to effectively complete tasks (i.e. "I usually have doubts about the simple everyday things I do."). Parental Expectations (5 items) measures the respondent's belief that his/her parents set high standards and held high expectations for the respondent (i.e. "My parents expected excellence from me."). Parental Criticism (4 items) measures the respondent's belief that his/her parents were overly critical and failure to meet high standards would result in the loss of acceptance (i.e. "As a child, I was punished for doing things less than perfectly."). Cronbach coefficient alpha, ranging from .77 to .93, indicate adequate reliability for the measure (Frost et al., 1990). The Frost et al. (1990) MPS has been widely used across

diagnostic groups to study a range of psychopathological symptoms, including abnormal eating and eating disorders (Enns & Cox, 2002). Construct, concurrent, and discriminant validity has been demonstrated across multiple studies (Enns & Cox, 2002).

Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991). Although Hewitt & Flett's (1991) MPS bears the same name of the Frost et al. (1990) measure, the Hewitt & Flett (1991) MPS assesses distinctly different dimensions of trait perfectionism. The Hewitt & Flett (1991) MPS consists of 45 items rated for agreement on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items are evenly divided among three subscales which reflect the source and target of perfectionistic expectations, with higher scores on each subscale indicating greater perfectionism. Intercorrelations among items indicate some degree of overlap, ranging from .25 to .40 (Hewitt & Flett, 1991). The Self-Oriented Perfectionism (SOP) subscale assesses self-directed perfectionism characterized by the setting of excessively high personal standards (i.e. "One of my goals is to be perfect in everything I do."). The Socially Prescribed Perfectionism (SPP) subscale assesses the perception that others hold excessively high standards for one's self (i.e. "My family expects me to be perfect."). The Other-Oriented Perfectionism (OOP) subscale assesses one's tendency to hold others to excessively high standards of behavior and performance (i.e. "The people who matter most to me should never let me down"). Internal consistency (α) was reported as .86 for the SOP subscale, .87 for the SPP subscale, and .82 for the OOP subscale in a college student sample (Hewitt & Flett, 1991); coefficient alphas for the subscale in a psychiatric population were .88, .81, and .74, respectively. Three month test-retest reliability (*r*) reports have ranged from .75 (SPP) to .88 (SOP) in a college student sample (Hewitt & Flett, 1991), and from .60

(SPP) to .69 (SOP) in a sample of psychiatric patients. Convergent, concurrent, and discriminant validity has been established across multiple studies using a range of clinical and nonclinical population including eating disorder populations. Additional data indicates MPS subscales are relatively free from response bias (Hewitt & Flett, 1989; 1991a; 1991b).

Perfectionistic Self-Presentation Scale (PSPS; Hewitt et al., 2003). The PSPS (Hewitt et al., 2003) is a 27-item instrument consisting of three subscales designed to measure an individual's need to appear perfect to others through action or avoidance. Items are responded to on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores indicating greater self-presentational perfectionism. The Perfectionistic Self-Promotion subscale (10 items) assesses one's need to actively display an ideal self that appears flawless in public situations (i.e. "I strive to look perfect to others."). The Nondisplay of Imperfection subscale (10 items) assesses concerns that one's actions in public will reveal perceived shortcomings and imperfections (i.e. "Errors are much worse if they are made in public rather than in private.") The Nondisclosure of Imperfection subscale (7 items) assesses avoidance of verbal disclosures of perceived shortcomings or imperfections (i.e. "I should solve my own problems rather than admit them to others."). Preliminary data indicate adequate reliability and validity (Hewitt et al., 2003). Cronbach coefficient alphas (α) suggest good internal consistency of the subscales. Three week test-retest coefficients for the Perfectionistic Self-Promotion, Nondisplay of Imperfection, and Nondisclosure of Imperfection subscales were .83, .84, and .74, respectively, in a college student sample; and .81, .81, and .79, respectively, in a clinical population (Hewitt et al., 2003). Convergent validity was established through

significant correlations between each of the PSPS subscales, and both significant others' and clinicians' ratings of perfectionistic self-promotion, nondisplay of imperfection, and nondisclosure of imperfection. Construct and predictive validity were also adequately established (Hewitt et al., 2003).

Procedure

Participants were recruited from three different treatment settings: hospital-based treatment programs, college counseling centers, and private practice outpatient settings. All participants were recruited with the assistance of cooperating therapists employed in these settings and identified as working with the populations under study. All cooperating therapists were asked to assist in selecting appropriate participants to minimize risks associated with participation. Anticipated risks involved with participation included the possible activation of affect-laden memories and negative self-evaluation. Due to the possibility of activating affect-laden memories and the possibility of inducing negative self-evaluation, all cooperating therapists were informed of the purpose of the study and asked to provide potential participants with times that they were available to discuss potential feelings and reactions to study participation, if participants felt the need to discuss their experience of participation. Potential benefits associated with study participation included increased self-awareness and self-understanding. Study approval was obtained from all relevant institutional review boards.

Participants receiving hospital-based treatment were recruited from the S.A.F.E. (Self Abuse Finally Ends) Alternative Program and from the Eating Disorders Program at Linden Oaks at Edward Hospital, located in Naperville, Illinois. The S.A.F.E. Alternative Program offers therapeutic services focusing specifically on DSH. Individual

therapy, group therapy, and outpatient therapy are provided in the context of partial/day hospitalization and inpatient hospitalization programs. Recruitment efforts targeted both programs to obtain a wider representation of individuals who seek treatment for DSH. The Eating Disorders Program at Linden Oaks at Edward Hospital offers inpatient, partial hospitalization, and intensive outpatient programs for individuals with eating disorders. Recruitment efforts targeted multiple programs to obtain a wider representation of individuals who seek treatment for eating disorders.

Participants receiving treatment in college counseling centers were drawn from one mid-sized public university in Illinois and one large public university in Michigan. Participants receiving treatment from private practice therapists were drawn from Illinois and California. Potential cooperating therapists in private practice in California were identified with the assistance of Dr. Tracy Alderman, Ph.D., a licensed clinical psychologist based in the San Diego area. Dr. Alderman consults, lectures, and has published on the treatment of DSH, thus placing her in regular contact with therapists who treat adult women presenting with psychological issues related to DSH and eating disorders. Additional potential cooperating therapists in California were identified based on affiliation with the Association of Professionals Treating Eating Disorders in the San Francisco Bay area. Potential cooperating therapists in private practice in Illinois were identified from a list of therapists specializing in the treatment of eating disorders in Illinois; this list was obtained from the National Association of Anorexia Nervosa and Associated Disorders (ANAD).

Recruitment of all potential participants occurred as follows. Cooperating therapists each received a Request for Therapist Assistance form (see Appendix A),

outlining the purpose of the study, the need for volunteer participants, and instructions for distributing survey packets to clients. Survey packets included the following material: a Participant Recruitment form (see Appendix B); two copies of an Informed Consent form (see Appendix C for the general Informed Consent; see Appendix D for the Informed Consent specific to Linden Oaks at Edward Hospital); a demographic questionnaire (see Appendix E); a Help-Seeking and Treatment History Questionnaire (see Appendix F); and a perfectionism questionnaire, containing the three perfectionism measures described in detail at a later point in this chapter. Therapists were asked to distribute survey packets to clients meeting study criterion, and inform clients of therapist availability to discuss any feelings that arose as a result of participation, if clients chose to participate and chose to share their decision to participate with their therapist. All cooperating therapists received study materials from their program directors at their place of employment, with the exception of private practice therapists. Cooperating private practice therapists received study materials either from Dr. Alderman or through direct contact with the researcher.

Potential participants were informed via the Participant Recruitment form that the purpose of the study was to examine perfectionistic tendencies among females seeking treatment for eating disorders and/or DSH in order to develop more effective treatments. Potential participants were also instructed to read the Informed Consent form to obtain additional study information. The Informed Consent form described precautions that were taken to protect participant confidentiality, described the potential benefits and risks associated with participation, and informed participants that the amount and type of information they wished to share with their therapist regarding participation was their

decision. However, participants were encouraged to address any potential adverse effects or feelings associated with participation with their therapist.

A place was provided on the Informed Consent form where participants could indicate whether or not they wanted a copy of the completed study and the study's results. If participants requested a copy of the completed study, they were asked to provide an e-mail address, home mailing address, or alternatively, were given the researcher's e-mail address so that they could request a copy of the results at a later date. Each participant was given a copy of the Informed Consent for her own, and asked to send a second, signed consent form to the researcher in a stamped envelope provided by the researcher.

Informed Consent forms were matched to corresponding completed questionnaires only through a subject identification number. Questionnaires were coded with a subject identification number to protect identification of participant responses; neither participants' names nor therapists' names appeared on questionnaire responses. Participants were asked to mail completed questionnaires to the researcher in the second stamped envelope provided by the researcher in the survey packet.

In order to protect the privacy of participants to the maximum extent allowable by law, the following procedures were followed regarding data obtained from participants. Informed consent forms and the list that matches participant names with subject identification numbers were kept separately from all questionnaire responses in a locked file cabinet. Questionnaire responses were kept in a separate locked file cabinet. Questionnaire data were entered into a computer, analyzed, and stored in a password-protected file on the researcher's personal computer. At completion of the project, data

were transferred to disks, and these disks were stored in the locked cabinet together with questionnaire responses. Data will be retained for a minimum of three years in these secure locations and destroyed after 3 years by shredding.

Data Analyses

Data from the Help-Seeking and Treatment History Questionnaire were screened to divide the sample into groups based on self-identification or non-identification as a survivor of childhood neglect, childhood physical abuse, and childhood sexual abuse. Participants were divided into groups based on responses to true or false questions assessing if participants remembered being neglected, physically abused, or sexually abused as a child. Data from the Help-Seeking and Treatment History Questionnaire were also screened to divide the sample into groups based on the presence or history of an eating disorder, presence or history of DSH, or presence or history of comorbid eating disorder/DSH, independent of presence or absence of childhood abuse or neglect. Participants were divided into groups based on responses to true/false questions about the presence or history of an eating disorder, and a yes/no question about a history of self-harm. Using data from the Demographic Questionnaire and Help-Seeking and Treatment History Questionnaire, preliminary analyses were run to adequately describe each subgroup in terms of demographics and treatment history.

Next, to determine whether mean perfectionism scores between subgroups were statistically significant, multivariate analysis of variance (MANOVA) was employed. Due to small cell sizes, each research question was examined separately, requiring a total of 4 separate MANOVAs. MANOVAs were used to control for inflated Type I error rates due to the multiple dependent variables of interest in this study, and the high

correlation between dependent variables. Significant multivariate omnibus F tests were followed by individual univariate analyses (ANOVAs) to further delineate differences in the nature and prevalence of perfectionism between subgroups. Finally, Tukey HSD tests and pairwise comparisons were used to complete post hoc analyses.

Research Question 1. To determine whether mean perfectionism scores differed based on presence of an eating disorder, presence of DSH, and presence of comorbid eating disorder/DSH, a MANOVA was conducted using perfectionism scores as the dependent variables and group membership (i.e. eating disorder group, DSH group, comorbid eating disorder/DSH group) as the between-subjects factor.

Research Question 2. Childhood abuse and childhood neglect have been repeatedly implicated in the etiology of DSH, yet little is known about the relationship between childhood abuse, neglect, and eating disorders or the relationship between childhood abuse, neglect, and perfectionism. Therefore, to determine whether mean perfectionism scores differed based on self-identification as a survivor of childhood neglect, childhood physical abuse, or childhood sexual abuse, 3 separate MANOVAs were conducted using perfectionism scores as the dependent variables and self-identification as a survivor of childhood neglect, childhood physical abuse, and childhood sexual abuse as separate between-subjects factors. Small cell sizes prevented inclusion of all three predictor variables in one MANOVA.

CHAPTER 4

Results

As a preliminary means of exploring the contribution of perfectionism in the development and maintenance of DSH, the primary goal of the current study was to explore the prevalence and nature of perfectionism within a DSH population compared to an eating disorder population and comorbid eating disorder/DSH population. No differences in the nature and prevalence of perfectionism were predicted when comparing a DSH population, eating disorder population, and comorbid eating disorder/DSH population. A secondary goal was to explore the possibility that within a DSH population, eating disorder population, and comorbid eating disorder/DSH population, individuals who self-identified as survivors of childhood abuse or childhood neglect would exhibit differential rates of interpersonal, intrapersonal, and self-presentational dimensions of perfectionism as compared to individuals who did not self-identify as a survivor of childhood abuse or childhood neglect. No hypotheses were offered in regards to the secondary goal of the study.

Preliminary analyses were conducted to assign participants to groups based on the indication of an eating disorder, DSH, or comorbid eating disorder/DSH. Preliminary analyses were also conducted to assign participants to groups based on a history of childhood neglect, childhood physical abuse, and childhood sexual abuse, independent of the initial group status (i.e. eating disorder group, DSH group, comorbid eating disorder/DSH group). Results are addressed separately for each research question.

Research Question 1

Eating disorder group. The eating disorders group was composed of 38 women ranging in age from 18 to 47 years (*M*= 27.08, *SD* = 7.16). Five participants reported a current diagnosis of Anorexia Nervosa; 9 reported a current diagnosis of Bulimia Nervosa; 4 reported concurrent Anorexia Nervosa and Bulimia Nervosa; 7 reported an eating disorder not otherwise specified; 6 reported they were not sure of their diagnosis; and 7 participants noted being in recovery. Of the 7 participants reporting recovery, 1 participant indicated recovery from Anorexia Nervosa; 3 participants reported recovering from Bulimia Nervosa; 2 participants indicated recovering from an eating disorder not otherwise specified; and 1 participant was unsure of her previous eating disorder diagnosis. More than half (55.3%) of the participants in the group had received more than one year of treatment at the time of study participation, with the majority (68.4%) reporting that treatment had helped "a lot." Of the remaining participants in the group, an equal number reported feeling that treatment had either helped "a little" (15.8%) or were "not sure" that treatment had helped. The predominant treatment modality of this group at the time of study participation was outpatient therapy (73.7%). The presence of eating disorder symptoms was one of the primary reasons for seeking treatment for 89.5% of the group; 28.9% of the group had a history of hospitalization as a result of their eating disorder. All but one had discussed her eating disorder with her therapist.

Almost half (44.7%) of the eating disorder group reported a history of neglect or abuse at some point in their lives. A history of childhood neglect was reported most often (28.9%), followed by a history of childhood sexual abuse (23.7%), a history of childhood physical abuse (10.5%), a history of adult sexual assault (10.5%), and a history

of being physically abused as an adult (5.3%). Of the 17 women in this group who reported a history of neglect or abuse, 6 (15.8%) noted that a history of trauma represented one of their primary reasons for seeking treatment.

DSH group. The DSH group was composed of 13 women ranging in age from 19 to 34 years (M= 22.92 , SD= 5.15). The age of onset of DSH ranged from 7 to 19 years (M= 15.31, SD= 4.09), with 69.2% of the group reporting an onset during the teen years. Within the group, 23.1% of participants indicated more than 50 incidences of DSH, 46.2% indicated 21-50 incidences of DSH, and 30.8% indicated 10 or fewer incidences of DSH. At the time of study participation, 4 of the women had received more than a year of treatment; 4 had received six months to one year of treatment; 2 had received 1-6 months of treatment; and 3 participants had received less than one month of treatment. The majority of women in this group (53.8%) noted that treatment had helped "a lot," compared to 30.8% of the group who noted that treatment had helped "a little," 7.7% who were "not sure" how helpful treatment had been, and 7.7% who noted that treatment had "not at all" been beneficial. The predominant treatment modality of this group at the time of study participation was outpatient therapy (84.6%). The majority of women in this group (61.5%) reported that DSH represented a primary reason for seeking treatment, and 3 of the 13 women had been hospitalized at some point in time as a result of DSH. All of the participants had discussed DSH with their therapist.

The majority of the DSH group (69.2%) reported a history of neglect or abuse at some point in their lives. A history of childhood physical abuse was reported most often (46.2%), followed by a history of childhood sexual abuse (30.8%) and sexual assault during adulthood (30.8%). A history of childhood neglect (7.7%) or history of physical

assault during adulthood (7.7%) was reported least often. Of the 9 women in this group reporting a history of neglect or abuse, 4 (30.8%) noted a history of trauma as one of the primary reasons for seeking treatment.

Comorbid eating disorder/DSH group. The comorbid ED/DSH group was composed of 34 women ranging in age from 19 to 48 years (M= 29.68, SD= 8.95). The age of onset of DSH ranged from 5 to 22 years (M= 14.50, SD= 4.14), with 71.6% of the group reporting an onset during the teen years. Within the group, 23.5% of participants indicated more than 50 incidences of DSH; 26.5% indicated 21-50 incidences of DSH; 17.6% indicated 11-20 incidences of DSH; and 32.4% indicated 10 or fewer incidences of DSH. Ten of the 34 group participants reported a current Anorexia Nervosa Diagnosis; 7 reported a current Bulimia Nervosa diagnosis; 3 reported a concurrent Anorexia Nervosa/Bulimia Nervosa diagnosis; 3 reported an eating disorder not otherwise specified diagnosis; and one participant was unsure of her diagnosis. Ten participants in this group indicated they were in recovery. One participant reported recovery from Anorexia Nervosa; 3 participants reported recovery from Bulimia Nervosa; 3 participants reported recovery from concurrent Anorexia Nervosa and Bulimia Nervosa; 2 participants reported recovery from an eating disorder not otherwise specified; and 1 participant was unsure of her past eating disorder diagnosis.

More than half (55.9%) of the participants in this group had received more than a year of treatment at the time of study participation, with 70.6% of the group reporting that treatment had helped "a lot." In comparison, 29.4% of the group reported that treatment had helped "a little." The predominant modality of treatment at the time of study participation was outpatient therapy (64.7%). The presence of eating disorder

symptoms was one of the primary reasons for seeking treatment for 61.8% of the group, and 35.3% of the group reported a history of hospitalization as a result of an eating disorder. All but one of the group participants had discussed their eating disorder with their therapist. In comparison, the presence of DSH was one of the primary reasons for seeking treatment for only 26.5% of the group, but 35.3% reported a history of hospitalization as a result of DSH. Ten of the 34 group participants had never discussed DSH with their therapist.

The majority of the comorbid ED/DSH group (88.2%) reported a history of neglect or abuse at some point in their lives. A history of childhood neglect was reported by 50 % of the group; a history of sexual assault during adulthood was also reported by 50% of the group. A history of childhood sexual abuse was reported by 44.1% of the group, and a history of childhood physical abuse was reported by38.2% of the group. A history of physical abuse during adulthood was reported by 32.4 % of the group. Of the 30 women in this group reporting a history of neglect or abuse, 13 women (38.2%) indicated that a history of trauma represented one of the primary reasons for seeking treatment.

Perfectionism analyses by group . MANOVA was conducted to determine whether the above three groups differed on mean perfectionism scores. Group status served as the predictor variable and mean perfectionism scores were the dependent variables. Group means and standard deviations for each of the perfectionism variables are presented in Table 2.

Table 2
Means and Standard Deviations by Diagnostic Group

Perfectionism variable	Eating disorders group (*n*= 36) *M*	*SD*	DSH group (*n*= 13) *M*	*SD*	Comorbid group (*n*= 32) *M*	*SD*
Trait perfectionism						
SOP	85.63	15.93	74.00**	15.51	86.38	15.93
SPP	64.75	13.20	62.54	14.15	69.31	17.21
OOP	56.14	14.11	59.31	12.75	56.44	16.38
Self-presentational perfectionism						
Self-promotional perfectionism	55.81	8.80	44.46**	12.06	56.16	8.87
Nondisplay of imperfection	53.28	10.51	49.62*	11.41	58.97	8.02
Nondisclosure of imperfection	32.42	9.62	32.00	8.47	34.56	7.89
Total perfectionism	102.39	16.31	93.23*	17.58	110.59	15.60

Note. SOP= self-oriented perfectionism; SPP= Socially prescribed perfectionism; OOP= Other-oriented perfectionism. *Indicates significant differences between the DSH group and the comorbid eating disorder/DSH group. **Indicates significant differences between the DSH group and both the eating disorder group and comorbid eating disorder/DSH group.

MANOVA assumptions were checked prior to beginning the analyses. Two outliers were found in the eating disorder group and two outliers were found in the comorbid eating disorder/DSH group; these outliers were dropped from subsequent analyses. Six of the 7 perfectionism variables initially met the assumption of normality; self-oriented perfectionism scores were slightly negatively skewed and were therefore transformed. Levene's Test of Equality of Error Variances was nonsignificant for each of the 7 perfectionism variables, therefore indicating equality of error variances. However, Box's M Test of Equality of Covariance Matrices was significant, $F(56, 4530) = 1.82$, $p<.001$. As a result, Pillai's Trace test statistic was chosen because of its robustness in face of violations of the equality of covariances assumption. Additionally, a significance level of Alpha= .01 was used for all statistical tests. A Sidak adjustment was applied to all post-hoc tests due to the number of multiple comparisons.

Initial MANOVA results showed a significant multivariate effect for group status, Pillai's Trace =.510, approximate $F(14, 146) = 3.57$, $p<.01$, $\eta_p^2=.255$. In order to explain

the differences among groups on mean perfectionism scores, univariate analyses of variance (ANOVA) were conducted. Significant univariate results were found for self-promotional perfectionism, $F(2,78) = 8.184$, $p < .01$, $\eta_p^2 = .173$; nondisplay of imperfection, $F(2,78) = 5.1901$, $p < .01$, $\eta_p^2 = .117$; self-oriented perfectionism, $F(2,78) = 6.017$, $p < .01$, $\eta_p^2 = .134$; and the total perfectionism score, $F(2,78) = 5.748$, $p < .01$, $\eta_p^2 = .128$. Tukey's HSD post-hoc tests revealed that the mean self-promotional perfectionism scores of the DSH group (*M*= 44.46, *SD*= 12.06) were significantly lower compared to the mean self-promotional perfectionism scores of the eating disorders group (*M*= 55.81, *SD*= 8.80) and the comorbid eating disorder/DSH group (*M*= 56.16, *SD*= 8.87). Similarly, mean self-oriented perfectionism scores of the DSH group (*M*=74.00, *SD*= 15.51) were significantly lower than the mean self-oriented perfectionism scores of the eating disorder group (*M*=85.63, *SD*= 15.93) and the comorbid eating disorder/DSH group (*M*=86.38, *SD*= 15.93). No significant differences were found between the eating disorder group or comorbid eating disorder/DSH group on either mean self-promotional perfectionism scores or mean self-oriented perfectionism scores.

Tukey HSD post-hoc tests also revealed significantly lower nondisplay of imperfection mean scores for the DSH group (*M*=49.62, *SD*= 11.41) compared to the comorbid eating disorder/DSH group (*M*=58.97, *SD*= 8.02), but the DSH group mean score did not significantly differ from the eating disorder group mean score (*M*= 53.28, *SD*= 10.51) and the eating disorder group mean score and comorbid group mean score did not significantly differ from one another. An identical pattern was found when examining total perfectionism scores. The DSH group exhibited significantly lower

mean total perfectionism scores (*M*= 93.23, *SD*= 17.58) compared to the comorbid eating disorder/DSH group, but the DSH group mean total perfectionism score did not differ significantly from the eating disorder group mean total perfectionism score (*M*=102.39, *SD*= 16.31) and the eating disorder group and comorbid eating disorder/DSH group did not significantly differ from one another.

Research Question 2

Of the total sample of 85 participants, 40 participants reported no history of childhood neglect, childhood sexual abuse, or childhood physical abuse; 9 participants reported a history of all 3 types of childhood trauma. Seven participants reported a history of childhood neglect alone; 7 participants reported a history of childhood sexual abuse alone; and 5 participants reported a history of childhood physical abuse alone. Nine participants reported a history of both childhood neglect and childhood sexual abuse; 4 participants reported both a history of childhood neglect and childhood physical abuse; and 4 participants reported both a history of childhood sexual abuse and childhood physical abuse. The small cell sizes prevented an analyses of potential interaction effects between childhood neglect, childhood sexual abuse, and childhood physical abuse. Therefore, main effects for childhood neglect, childhood sexual abuse, and childhood physical abuse were examined by conducting separate MANOVAs. MANOVA assumptions were checked prior to beginning the analyses. Four outliers were found and dropped from subsequent analyses. Three of the 7 perfectionism variables initially met assumptions of normality. Self-promotional perfectionism scores, Other-oriented perfectionism scores, and total perfectionism scores were slightly negatively skewed for each predictor variable. Socially prescribed perfectionism scores were slightly positively

skewed for each predictor variable. Therefore, these 4 perfectionism variables were transformed. Box's Test of Equality of Covariance Matrices was nonsignificant for each of the 3 MANOVAs, therefore indicating equality of covariances. Levene's Test of Equality of Error Variances was nonsignificant for the dependent variables of each MANOVA with the following exceptions. Levene's Test of Equality of Error Variances was significant for total perfectionism scores with childhood neglect as a predictor and with childhood physical abuse as a predictor, $F(1,79) = 5.21, p < .05$, $F(1,79) = 10.57, p < .05$, respectively. Levene's Test of Equality of Error Variances was also significant for socially prescribed perfectionism scores with childhood neglect as a predictor, $F(1,79) = 5.32, p < .05$. As a result, Pillai's Trace test statistic was chosen because of its robustness in face of violations of the equality of error variances assumption. A significance level of Alpha= .01 was used for each MANOVA. A Sidak adjustment was applied to all pairwise comparisons due to the number of multiple comparisons. A significance level of Alpha= .05 was used for all pairwise comparisons.

Childhood neglect. Of the total sample of 85 participants, 29 participants self-identified as a childhood neglect survivor compared to 56 participants who did not self-identify as a childhood neglect survivor. The mean age of neglect survivors was 32.01 years (SD= 8.8), compared to 25.11 years (SD= 6.29) for participants who did not self-identify as a childhood neglect survivor. The majority of participants who self-identified as a childhood neglect survivor were drawn from the comorbid eating disorder/DSH group (58.6%), followed by the eating disorder group (37.9%) and the DSH group (3.4%).

MANOVA was conducted to determine whether mean perfectionism scores differed based on self-identification as a survivor of childhood neglect. Group status (ie. self-identification as a childhood neglect survivor, no self-identification as a childhood neglect survivor) served as the predictor variable and perfectionism scores were the dependent variables. Group means and standard deviations for each of the perfectionism variables are presented in Table 3.

Table 3
Means and Standard Deviations by Childhood Neglect History

Perfectionism variable	Childhood neglect (n= 26) *M*	*SD*	No Childhood neglect (n= 55) *M*	*SD*	Significance of difference between means
Trait perfectionism					
Self-oriented perfectionism	90.88	11.60	83.98	11.83	.02*
Socially prescribed perfectionism	70.69	17.62	64.47	12.97	.10
Other-oriented perfectionism	52.42	17.51	59.18	12.46	.12
Self-presentational Perfectionism					
Self-promotional perfectionism	57.34	9.04	53.01	9.73	.06
Nondisplay of imperfection	57.65	9.57	53.76	10.14	.11
Nondisclosure of imperfection	35.19	9.83	32.33	8.03	.17
Total perfectionism	113.00	17.05	100.96	14.01	.001*

*p <.05

Initial results showed a significant multivariate effect for group status, Pillai's Trace =.270, approximate $F(7, 73) = 3.85$, p<.01, η_p^2 =.270. In order to explain the differences among groups on mean perfectionism scores, univariate analyses of variance (ANOVA) were conducted. Significant univariate results were found for self-oriented perfectionism, $F(1,79)=6.082$, $p<.05$, η_p^2 =.071, and the total perfectionism score, $F(1,79)=12.83$, $p<.05$, $\eta_p^2 = .140$. Pairwise comparisons revealed that childhood neglect survivors exhibited significantly higher self-oriented perfectionism mean scores (M= 90.88, SD= 11.60) compared to participants who did not identify as childhood neglect survivors (M= 83.98, SD= 11.83). Additionally, pairwise comparisons revealed that childhood neglect survivors exhibited significantly higher total perfectionism mean

scores (*M*= 113.00; *SD*= 17.05) compared to participants who did not identify as childhood neglect survivors (*M*=100.96, *SD*= 14.01).

Childhood sexual abuse. Of the total sample of 85 participants, 28 participants self-identified as a childhood sexual abuse survivor compared to 57 participants who did not self-identify as a childhood sexual abuse survivor. The mean age of sexual abuse survivors was 32.61 years (*SD*= 8.31), compared to 24.96 years (*SD*= 6.46) for participants who did not self-identify as a childhood sexual survivor. The majority of participants who self-identified as a childhood sexual survivors were drawn from the comorbid ED/DSH group (53.6%), followed by the eating disorder group (32.1%) and the DSH group (14.3%).

MANOVA was conducted to determine whether mean perfectionism scores differed based on self-identification as a survivor of childhood sexual abuse. Group status (ie. self-identification as a childhood sexual abuse survivor, no self-identification as a childhood sexual abuse survivor) served as the predictor variable and perfectionism scores were the dependent variables. Group means and standard deviations for each of the perfectionism variables are presented in Table 4.

Table 4
Means and Standard Deviations by Childhood Sexual Abuse History

	Childhood sexual abuse (*n*= 25)		No childhood sexual abuse (*n*=56)		Significance of difference between means
Perfectionism variable	*M*	*SD*	*M*	*SD*	
Trait perfectionism					
Self-oriented perfectionism	87.04	12.38	85.82	12.11	.68
Socially prescribed perfectionism	71.56	14.46	64.20	14.51	.75
Other-oriented perfectionism	57.48	15.12	56.80	14.38	.04*
Self-presentational perfectionism					
Self-promotional perfectionism	55.72	7.22	53.82	10.59	.73
Nondisplay of imperfection	56.92	9.25	54.16	10.38	.26
Nondisclosure of imperfection	35.20	7.85	32.37	8.96	.18
Total perfectionism	107.52	14.09	103.63	16.73	.41

* $p < .05$

Initial results showed a nonsignificant multivariate effect for group status, Pillai's Trace = .104, approximate $F(7, 73) = 1.216$, p>.05, $\eta_p^2 = .104$. Given the exploratory nature of this study, univariate analyses of variance (ANOVA) were conducted to identify potential areas for future research, despite the nonsignificant omnibus multivariate *F* test. Significant univariate results were found for Socially Prescribed Perfectionism, $F(1,79) = 4.49$, $p<.05$, $\eta_p^2 = .054$. Pairwise comparisons revealed that childhood sexual abuse survivors exhibited significantly higher socially prescribed perfectionism mean scores (*M*= 71.56, *SD*= 14.46) compared to participants who did not identify as childhood sexual abuse survivors (*M*= 64.20, *SD*= 14.51). However, given the nonsignificant omnibus multivariate *F* test, this result should be interpreted with appropriate caution.

Childhood physical abuse. Of the total sample of 85 participants, 23 participants self-identified as a childhood physical abuse survivor compared to 62 participants who did not self-identify as a childhood physical abuse survivor. The mean age of childhood physical abuse survivors was 28.96 years (*SD*= 8.83), compared to 26.94 years (*SD*= 7.59) for participants who did not self-identify as childhood physical abuse survivors. The majority of participants who self-identified as a childhood physical survivor were drawn from the comorbid ED/DSH group (56.5%), followed by the DSH group (26.1%) and the eating disorder group (17.4%).

MANOVA was conducted to determine whether mean perfectionism scores differed based on self-identification as a survivor of childhood physical abuse. Group status (ie. self-identification as a survivor of childhood physical abuse, no self-identification as a survivor of childhood physical abuse) served as the predictor variable

and perfectionism scores were the dependent variables. Group means and standard deviations for each of the perfectionism variables are presented in Table 5.

Table 5
Means and Standard Deviations by Childhood Physical Abuse History

Perfectionism variable	Childhood physical abuse (n= 22) *M*	*SD*	No childhood physical abuse (n= 59) *M*	*SD*	Significance of difference between means
Trait perfectionism					
Self-oriented perfectionism	87.36	12.23	85.76	12.16	.60
Socially prescribed perfectionism	73.86	15.34	63.71	13.73	.01*
Other-oriented perfectionism	55.68	17.75	57.51	13.26	.89
Self-presentational perfectionism					
Self-promotional perfectionism	57.36	8.00	53.31	10.07	.14
Nondisplay of imperfection	58.00	8.567	53.90	10.42	.10
Nondisclosure of imperfection	36.59	8.04	32.00	8.65	.03*
Total perfectionism	107.82	19.59	103.71	14.44	.15

*p <.05

Initial results showed a nonsignificant multivariate effect for group status, Pillai's Trace = .146, approximate $F(7, 73) = 1.216$, p>.05, $\eta_p^2 = .146$. Given the exploratory nature of this study, univariate analyses of variance (ANOVAs) were conducted to identify potential areas for future research, despite the nonsignificant omnibus multivariate F test. Significant univariate results were found for socially prescribed perfectionism, $F(1,79) = 7.89, p<.05, \eta_p^2 = .091$, and nondisclosure of imperfection, $F(1,79) = 4.68, p<.05, \eta_p^2 = .056$. Pairwise comparisons revealed that childhood physical abuse survivors exhibited significantly higher socially prescribed perfectionism mean scores (M= 73.86, SD= 15.34) compared to participants who did not identify as childhood physical abuse survivors (M= 63.71, SD= 13.73). Pairwise comparisons also revealed that childhood physical abuse survivors exhibited significantly higher nondisclosure of imperfection mean scores (M= 36.59, SD= 8.04) compared to participants who did not identify as childhood physical abuse survivors (M= 32.00, SD= 8.65). However, given

the nonsignificant omnibus multivariate *F* test, these result should be interpreted with appropriate caution.

CHAPTER 5

Discussion

The primary goal of this study was to explore the prevalence and nature of perfectionism within a DSH population. Anecdotal reports have suggested that perfectionism is a common characterological trait among individuals who engage in DSH, but the relationship between DSH and perfectionism had not been examined empirically prior to the current study. An eating disorder population and comorbid eating disorder/DSH population were used as control groups due to the theoretical and empirical links that have been established between DSH and eating disorders, and between eating disorders and perfectionism, as well as the lack of reliable and valid DSH assessment instruments. No differences in the nature and prevalence of perfectionism were predicted when comparing a DSH population, eating disorder population, and comorbid eating disorder/DSH population. The results of this study partially supported this hypothesis. A comparison of the groups on the separate perfectionism variables found commonalities between groups, but also revealed several significant differences between groups.

Differences in Dimensions of Perfectionism

Higher levels of total perfectionism were found in the comorbid eating disorder/DSH group compared to the DSH group, yet no significant differences emerged between the eating disorder group and DSH group or the eating disorder group and

comorbid eating disorder/DSH group on total perfectionism. This finding illustrates the importance of examining perfectionism from a multidimensional perspective and examining intrapersonal and interpersonal dimensions of perfectionism separately. As the total perfectionism score collapses intrapersonal and interpersonal dimensions of perfectionism, this finding suggests that certain dimensions of perfectionism may be more prevalent in either an eating disorder population or DSH population.

Self-concept plays a pivotal role in self-oriented perfectionism and socially prescribed perfectionism. Both dimensions of perfectionism involve perfectionistic expectations directed at the self, but the distinction involves the source of perfectionistic expectations. Self-oriented perfectionism involves self-imposed standards of perfectionism. Socially prescribed involves the perception that others expect one to be perfect. In contrast, other-oriented perfectionism is other-focused rather than self-focused. In the present study, both the eating disorder and comorbid eating disorder/DSH groups exhibited significantly higher self-oriented perfectionism scores compared to the DSH group, but the eating disorder group and comorbid eating disorder/DSH group did not differ from one another. In other words, self-oriented perfectionism was most pronounced when an eating disorder was present. However, no significant differences emerged between any of the three groups on socially prescribed perfectionism or other-oriented perfectionism, both considered interpersonal dimensions of perfectionism. Although it is possible that low study power failed to reveal existing differences, this finding suggests commonalities between populations in terms of perceptions of others' expectations and expectations of others. This pattern of findings suggests that whereas eating disorder symptoms may be driven by the desire to meet self-imposed unrealistic

standards, issues common to both eating disorders and DSH, such as low self-esteem, fear of criticism, and fear of rejection, may be driven by a feelings that one is not meeting the standards perceived to be set by others (Goldner et al., 2002). These distinctions are relevant to understanding the potential differential relationships between perfectionism and self-concept within a DSH population compared to an eating disorder population. Previous research has found self-oriented perfectionism to be driven by a need for achievement, and socially prescribed to be driven by a fear of failure. The findings from the present study suggests the self-concept of women struggling with DSH is similarly affected by the perceived perceptions and expectations of others, and similar to an eating disorder population, fear of failure may be a prominent characteristic of the DSH population. However, the DSH population may be less driven by a need for achievement compared to an eating disorder and comorbid eating disorder/DSH population. Instead, perfectionistic expectations within a DSH population, in the absence of an eating disorder, appear to be interpersonally driven by the need to be accepted as well as the need to avoid criticism from others. The self-presentational perfectionism findings from this study support this proposition.

A growing body of research has demonstrated a relationship between perfectionistic self-presentation and eating disorders (Goldner et al., 2002), but perfectionistic self-presentation has never been previously explored in a DSH population. Previous research has found that a clinical sample of women with eating disorders exhibited stronger needs to avoid disclosing imperfection, avoid displaying imperfection, and stronger needs to present an image of perfection to others compared to women with other Axis I diagnoses (Cockell et al., 2002). Consistent with the results found by

Cockell et al. (2002), the results of the present study found significantly higher levels of self-promotional perfectionism in the eating disorder group and comorbid eating disorder/DSH group compared to the DSH group, suggesting stronger needs to actively display one's accomplishments, goals, and aspirations among women when an eating disorder is present. However, the present study revealed no significant differences between the eating disorders group and the DSH group, or the eating disorder group and comorbid eating disorder/DSH group on nondisplay of imperfection. Nondisplay of imperfection specifically refers to a perfectionistic self-presentational style involving the concealment of imperfections. The only significant difference to emerge between groups on nondisplay of imperfection scores emerged between the DSH group and comorbid eating disorder/DSH group; the comorbid eating disorder/DSH group exhibited significantly higher levels of nondisplay of imperfection compared to the DSH group. In contrast, the results of this study found no significant differences between the DSH group, eating disorders group, or comorbid eating disorder/DSH group on nondisclosure of imperfection, a perfectionistic self-presentation style involving the avoidance of verbal disclosures of imperfection. Taken together, this pattern of findings suggests that women who self-harm may possess a level of reluctance to verbally self-disclose or display self-perceived imperfections similar to that of women with eating disorders, but women who self-harm in the absence of an eating disorder are less likely than women with an eating disorder to actively promote the appearance of competence and success, regardless of the presence or absence of self-harm.

In summary, no significant differences emerged between the eating disorder group and the comorbid eating disorder/DSH group on any of the dimensions of trait

perfectionism or self-presentational perfectionism, but these groups exhibited significantly elevated self-oriented perfectionism and self-promotional perfectionism compared to the DSH group. It is plausible that a unique relationship exists between intrapersonal perfectionism and eating disorders, as supported by the finding that self-oriented perfectionism was significantly elevated within the DSH population when an past or present history of an eating disorder was also present. This hypothesis is supported by past research in which Hewitt et al. (1995) found a specific relationship between eating disorder symptomatology and self-oriented perfectionism.

The secondary goal of this study was to explore the possibility that within a DSH population, eating disorder population, and comorbid eating disorder/DSH population, individuals who self-identified as survivors of childhood abuse or childhood neglect would exhibit differential rates of interpersonal, intrapersonal, and self-presentational dimensions of perfectionism compared to individuals who did not self-identify as a survivor of childhood abuse or neglect. No hypotheses were offered in regards to the secondary goal of the study as research has yet to empirically examine the relationship between different dimensions of perfectionism and childhood trauma. However, exposure to neglect, abuse, and shaming situations have each been theorized to individually and interactively foster the development of perfectionism.

When all of the dimensions of perfectionism were examined simultaneously for each of the indicators of childhood trauma, the only significant differences to emerge involved childhood neglect. Significant differences were revealed between self-identified childhood neglect survivors and women reporting no history of childhood neglect on total perfectionism scores and self-oriented perfectionism. Given that 4 of the 6 subscales

associated with the total perfectionism score are intrapersonal in nature, it is not surprising that the total perfectionism scores and self-oriented perfectionism scores were similarly elevated. While the social reaction model of perfectionism suggests that perfectionism develops in response to being raised in a harsh environment characterized by hostility or lack of warmth (Flett et al., 2002), the model does not adequately explain why differences emerged in an intrapersonal dimensional of perfectionism and not in interpersonal or self-presentational dimensions of perfectionism. Yet, as noted by Flett et al. (2002), adults in treatment have reported adopting perfectionism in response to parental neglect, and Hamachek (1978) notes that perfectionism may develop in the absence of parental expectations. Without clear parental expectations and standards, it can be hypothesized that neglected children self-impose standards of perfection in order to attempt to gain attention from neglectful parents or avoid punishment (Flett et al., 2002).

No significant differences emerged when comparing self-identified childhood sexual abuse survivors to women reporting no history of childhood sexual abuse when examining all of the perfectionism dimensions under study simultaneously. Similarly, no significant differences emerged when comparing self-identified childhood physical abuse survivors to women reporting no history of childhood physical abuse when examining all of the perfectionism dimensions under study simultaneously. However, in an effort to identify specific areas for future research, each of the dimensions of perfectionism was examined separately.

Prior research, using a unidimensional conceptualization of perfectionism, has indicated higher levels of perfectionism among female college students with a history of

sexual abuse or physical abuse compared to nonabused female college students (Schaaf & McCane, 1994). While both abuse groups exhibited higher scores, only the physically abused group exhibited significantly higher scores. Similarly, in a clinical sample, Zlotnick et al. (1996) found higher levels of perfectionism among women with a history of sexual abuse compared to nonabused women, but again, a unidimensional measure of perfectionism was utilized. In the only study found to specifically address the relationship between perfectionism and abuse in an eating disorder population, bulimic women with a history of physical battery were found to exhibit higher levels of perfectionism on a unidimensional measure of perfectionism compared to bulimic women with no history of physical battery. Interestingly, given the results of prior studies, no differences were found on total levels of perfectionism for either childhood sexual abuse or childhood physical abuse. However, higher levels of socially prescribed perfectionism were found in childhood sexual abuse survivors compared to women reporting no history of childhood sexual abuse, and higher levels of socially prescribed perfectionism were found in childhood physical abuse survivors compared to women reporting no history of childhood physical abuse. Additionally, childhood physical abuse survivors exhibited higher levels of nondisclosure of imperfection compared to women reporting no history of childhood physical abuse. Although caution is warranted given the nonsignificant multivariate effects, these findings suggest the need for continued study of the relationships between childhood abuse and different dimensions of perfectionism in general, and continued study of the relationships between childhood abuse and different dimensions of perfectionism in the DSH population and eating disorder population in particular.

Implications of findings

The present study has implications for therapists working with clients with DSH and comorbid eating disorder/DSH, as well as clients with eating disorders. In terms of assessment, the high comorbidity rate between DSH and eating disorders established in this study and elsewhere necessitates a thorough assessment of both DSH and eating disorder symptoms when a client presents with either of these concerns. The high levels of self-reported childhood neglect and childhood abuse in this study also supports the importance of completing a detailed assessment of childhood experiences when a client presents with DSH or eating disorder concerns.

Clinically, perfectionism may be more obvious in an eating disorder client or client with comorbid eating disorder/DSH concerns than a client with DSH alone through self-promotion of perfectionism, but the astute clinician should be attuned to client feedback indicating high levels of socially prescribed perfectionism. The similar levels of socially prescribed perfectionism found between the populations in this study, in conjunction with previous research indicating significant associations between elevated levels of socially prescribed perfectionism and disordered eating (Cockell et al., 2002; Hewitt et al., 1995; McVey et al., 2002), suggests socially prescribed perfectionism is prevalent in a DSH population. Neilson et al. (1997) found that perfectionism was positively related to decreased openness about personal issues and less tolerance for the stigma associated with seeking professional help; these relationships were strongest for socially prescribed perfectionism (as cited in Habke & Flynn, 2002). Socially prescribed perfectionists often feel socially inadequate (Flett, Hewitt, & DeRosa, 1996), fear criticism, and fear appearing foolish to others (Blankstein, Flett, Hewitt, & Eng, 1993).

Hewitt et al. (2003) reported a negative association between comfort in seeking help and socially prescribed perfectionism, as well as a positive relationship between difficulty continuing treatment and socially prescribed perfectionism, thus indicating that socially prescribed perfectionism may significantly impede the treatment of clients with eating pathology or DSH.

Additionally, while DSH clients may not evidence self-promotional perfection levels and self-oriented perfectionism levels to the same degree as eating disorder clients, similar levels of nondisclosure of imperfection and nondisplay of imperfection have significant implications for the therapeutic relationship. These self-presentation styles may not only decrease the likelihood of initial help-seeking behaviors, but may also increase the likelihood of premature termination of treatment. According to Flett & Hewitt (2002), "High levels of perfectionistic self-presentation in the context of therapy may undermine treatment because the client may be unwilling to reveal intimate aspects of his or her self; that reluctance contributes to the experience of distress and undermines the treatment process" (p. 26). Preliminary evidence suggests a significant association between perfectionism and a distressing experience of the therapeutic relationship (Habke & Flynn, 2002). Specific issues that may arise include a client's attempt to be the "perfect" client and the perception that the therapist is placing excessive expectations of recovery on the client, inevitably leaving the client feeling like a failure if progress does not occur quickly enough or if a relapse of symptoms occurs. Additionally, perfectionistic clients may need assistance recognizing small gains in therapy rather than employing "all or nothing" thinking to judge the success of treatment.

Although there is a paucity of research addressing the treatment of perfectionism, limited evidence suggests the efficacy of a psychodynamic, interpersonal approach that targets the interpersonal needs driving perfectionism, such as a fear of rejection and a need for approval, and targeting the process-related variables associated with perfectionism rather than targeting perfectionistic behavior itself (Hewitt et al., 2001). While research has failed to address the efficacy of different approaches in the treatment of DSH, this approach is consistent with the literature supporting the efficacy of interpersonal treatment approaches in an eating disorder population (Fairburn, 1997). Cognitive-behavioral approaches have also been found to be efficacious in the treatment of eating disorders (Fairburn, 1997; Garner, Vitousek, & Pike, 1997; Johnson & Conners, 1987), and are commonly incorporated into the treatment of DSH (Conterio & Lader, 1998). When treating DSH and eating disorders alone or concurrently, it may be helpful to employ cognitive behavioral approaches to decrease specific DSH and eating disorder behaviors, and simultaneously incorporate interpersonal techniques to address the interpersonal functions of the behaviors and underlying personality traits, such as perfectionism (Levitt, Sansone, & Cohn, 2004). Regardless of the treatment approach taken, this study underscores the importance of assessing perfectionism from a multidimensional perspective in a DSH, eating disorder, or comorbid eating disorder/DSH population in order to ascertain the source and target of perfectionistic expectations, thus allowing for interventions to be tailored accordingly.

Limitations

The results of the present study must be interpreted in the context of several important limitations, including limitations associated with the design and internal

validity of the study, external validity and generalizability, and analyses and statistical power. First, the design of the study prevented causal statements from being made. Second, potentially significant differences within each population were not examined or controlled for in the analyses. For example, the duration and severity of DSH among participants were not considered in the analyses, and specific eating disorder diagnoses were not examined separately. Furthermore, within the comorbid eating disorder/DSH group, the onset of an eating disorder in comparison to the onset of DSH was not examined. Imprecise measurement of childhood abuse and neglect limited the results as well. While the use of categorical data indicating group membership may have disguised within group differences, this study was intended to be exploratory in nature; results should be generalized with appropriate precaution.

Generalizability of the findings is limited due to the small sample size, the use of a nonrandom sample of volunteers, the use of a clinical population obtained from a restricted geographical area, and the utilization of therapists' assistance in selecting appropriate participants in order to minimize risk. The method of recruitment utilized in this study did not allow the researcher to determine the number of individuals who chose not to participate when presented with the opportunity; thus, important but unknown characteristics may have distinguished those individuals choosing to participate from the larger populations under study. Additionally, by informing potential participants that perfectionism was the focus of the study, it is possible that a response bias was introduced. Reliance on self-report data may have also affected the results.

Finally, although attempts were made to adjust for violations of MANOVA assumptions, it should be reiterated that violations did occur. The assumption of equality

of covariance matrices was violated when multivariate effects were examined with membership in a DSH group, eating disorder group, and comorbid eating disorder/DSH group as the predictor. The assumption of equality of error variances was violated for total perfectionism scores with childhood neglect as a predictor and with childhood physical abuse as a predictor, and with socially prescribed perfectionism scores with childhood neglect as a predictor.

Despite these limitations, the present study makes a number of contributions to the existing empirical literature and has important implications for clinical practice. To date, this is the first empirical study to provide evidence of perfectionism in a group of women who deliberately self-harm. Future studies are needed to determine more fully whether perfectionism represents a specific risk factor for DSH. The present study is also among the first to empirically examine the relationship between indices of childhood trauma and different dimensions of perfectionism. Again, continued inquiry is needed to further delineate the relationships between specific types of childhood trauma and different dimensions of perfectionism, but the present study should serve as a foundation for future studies. Finally, this study extends the research on multidimensional perfectionism within an eating disorder population. The results of this study clearly support the importance of examining perfectionism from a multidimensional perspective.

Directions for Future Research

The study was initially designed to examine whether self-identification as a childhood abuse and/or neglect survivor interacted with group status (i.e. DSH group, eating disorder group, comorbid DSH/ED group) in the relationships between group status and various dimensions of perfectionism. However, small cell sizes prevented an

examination of potential interaction effects. Given the significant differences found in dimensions of perfectionism when group status, childhood abuse, and childhood neglect were examined separately, it will be important for future studies to continue to address whether differences in perfectionism exist among women with DSH and/or eating disorders based on histories of abuse and neglect. Additionally, future research is needed to clarify whether childhood sexual abuse, childhood physical abuse, and childhood neglect interact to predict perfectionism. To date, minimal research has addressed the relationship between childhood abuse and neglect and perfectionism. Utilization of non-categorical measures of abuse and neglect will be capable of providing a more in-depth exploration of these relationships.

Although the present study provides preliminary empirical evidence of elevated levels of perfectionism within a DSH population, the findings of this study need to be replicated in larger samples, particularly since a large number of analyses were performed in a relatively small sample, thus limiting power. Finally, whereas the primary interest of the current study was to determine the nature and prevalence of perfectionism with a DSH population, additional research is needed to explore the role of different dimensions of perfectionism in the development and maintenance of DSH. DSH and perfectionism are both complex phenomena; in order for counseling psychologists to successfully treat perfectionistic women who self-harm, attention must be given to the ways in which specific perfectionistic expectations have influenced the initiation and perpetuation of self-harm behavior.

APPENDICES

APPENDIX A

Request for Therapist Assistance

Thank you for your potential assistance and cooperation with this research project. This project is being conducted by Anne Kubal, a doctoral candidate in Counseling Psychology at Michigan State University, under the supervision of Dr. Nancy Crewe, a professor in the Department of Counseling, Educational Psychology, and Special Education at Michigan State University.

One of my goals as a psychologist-in-training is to work with other professionals to improve the treatment experiences of women who seek help for eating disorders and/or deliberate self-harm (i.e. self-injury) through research that is specifically relevant to treatment. The purpose of this investigation is to learn more about the nature and prevalence of perfectionistic tendencies among women who have sought psychological or psychiatric help for deliberate self-harm, eating disorders, or both of these issues. For the purposes of this study, deliberate self-harm or self-injury is defined as the deliberate destruction or alteration of one's own body, performed without suicidal intent. Examples of deliberate self-harm include cutting oneself, burning oneself, biting oneself, head-banging, interfering with the healing of wounds, or scratching until one bleeds. For the purpose of this study, deliberate self-harm DOES NOT include excessive drinking of alcohol or overdosing on drugs.

You have received this request for assistance because you have been identified as a therapist who treats women with issues related to either eating disorders, deliberate self-harm, or both of these issues. If you feel comfortable assisting with data collection for this research after reviewing the study materials you have received, please distribute survey packets to clients who meet study criterion and who you feel will not be significantly, adversely affected by participation.

Some clients may report appreciation for the opportunity to share their experiences, and clients may benefit from participating in this study through increased self-awareness and self-understanding. However, there is a risk that study participation may activate affect-laden memories or induce negative self-evaluative states. Therefore, as an added precaution to protect your clients, please inform potential participants of your availability to discuss any adverse reactions or feelings that arise from potential study participation.

The following criterion must be met by potential study participants addressing issues related to the presence or history of eating disorders and/or deliberate self-harm:

1. Only volunteers are asked to participate in this research.
2. Participants must be female.
3. Participants must be age 18 or older.
4. Participants must be in treatment at the time of study participation.

5. Potential participants must not be actively suicidal or psychotic.

Each survey packet contains all of the material necessary for participation in the study. Each survey packet includes the following material: a Participant Recruitment letter, two copies of the Informed Consent form, a Demographic Questionnaire, a Help-Seeking and Treatment History Questionnaire, and a Perfectionism Questionnaire, containing three perfectionism measures. The Perfectionism Questionnaire contains questions related to self-oriented perfectionism, other-oriented perfectionism, socially prescribed perfectionism, intrapersonal perfectionism, interpersonal perfectionism, and self-presentational perfectionism. It will take approximately 45 minutes to complete the questionnaires contained within the survey packet.

Once you distribute survey packets to potential participants, potential participants will have all of the information they need to make a decision regarding participation and to complete and return study material to the researcher in a confidential manner. Neither the participants' names nor your name, as therapist, will appear on any of the completed questionnaires within the survey packet. Additional safeguards regarding the protection of confidentiality are outlined in the informed consent form.

If you have questions or concerns about assisting with this study, please contact Anne Kubal by phone at (630) 854-5168 , or by e-mail at kubalann@msu.edu; or contact Dr. Nancy Crewe by phone at (517) 432-0606, or by e-mail at ncrewe@msu.edu. If you have questions or concerns about the rights of study participants, or are dissatisfied at anytime with any aspect of this study, you may contact - anonymously if you wish - Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

If you would like a copy of the completed study, including the results of the study, please contact Anne Kubal through the e-mail address listed above or by phone, with the number listed above.

Again, thank you for your potential assistance and cooperation with this research project. Additional research is needed to better understand the manner in which perfectionistic tendencies and perfectionistic self-presentation impacts the lives and treatment of women struggling with deliberate self-harm and/or eating disorder issues. My goal in conducting this study is to increase our understanding of these issues.

Sincerely,

Anne E. Kubal
Ph.D. Candidate in Counseling Psychology
Michigan State University

APPENDIX B

Participant Recruitment Form

Volunteers Needed for Research on Perfectionism!

Information and Directions for Potential Participants

My name is Anne Kubal. I am studying to be a psychologist at Michigan State University. One of my goals as a psychologist-in-training is to work with other professionals to improve the treatment experiences of women who seek help for eating disorders and/or self-injury. The purpose of this study is to help counselors and therapists learn more about the nature and prevalence of perfectionistic tendencies among women seeking treatment for either or both of these issues.

I am seeking women, age 18 and older, who are willing to share their thoughts, beliefs, and experiences through study participation. Only volunteers are asked to participate in this research. Your therapist has been asked to distribute questionnaires to women who are addressing issues related to eating disorders and/or self-injury, but participation is completely voluntary and your therapist will not be informed about your decision to participate or not participate unless you choose to tell your therapist about your decision.

If you choose to participate in this study, all of the information you provide will be held confidential. Your name will not appear anywhere on the survey; responses will only be associated with an identification number. A detailed description of the precautions that will be taken to protect your confidentiality is included in the enclosed "Informed Consent" form.

If you do chose to participate, please read the enclosed "Informed Consent" form carefully. This form outlines your rights as a participant. You may keep one copy of this form for your own records. I ask that you return the second copy of this form to me in the provided self-addressed, stamped envelope. A second self-addressed, stamped envelope (the large brown envelope this letter is attached to) is provided so that you may return your completed survey to me without your name being attached to the survey.

Thank you for thinking about participating in this study.

Sincerely,

Anne Kubal
Doctoral Student in Counseling Psychology
Michigan State University

APPENDIX C

Informed Consent
Perfectionism Among Women Seeking Help for Eating Disorders and/or Self-Injury

Thank you for your interest in this research project. This project is being conducted by Anne Kubal, a doctoral candidate in Counseling Psychology at Michigan State University, under the supervision of Dr. Nancy Crewe, a professor in the Department of Counseling, Educational Psychology, and Special Education at Michigan State University.

The purpose of this investigation is to learn more about the nature and prevalence of perfectionistic tendencies among women who have sought psychological or psychiatric help for self-injury, eating disorders, or both of these issues. Only volunteers are asked to participate in this research. Your therapist has been asked to distribute questionnaires to women who are addressing issues related to eating disorders and/or self-injury, but participation is completely voluntary and your therapist will not be informed about your decision to participate or not participate unless you choose to tell your therapist about your decision.

If you chose to participate, your responses will be completely confidential. The following precautions will be taken to protect your confidentiality. Neither your name nor your therapist's name will appear on any of the questionnaires. Your responses will only be associated with a subject identification number. This informed consent and the list that matches names with identification numbers will be kept separately from all questionnaire responses in a locked file cabinet. Questionnaire responses will be kept in a separate locked file cabinet. Questionnaire data will be entered into a computer, analyzed, and stored in a password-protected file on the researcher's personal computer. At completion of the project, data will be transferred to disks, and these disks will be stored in the locked cabinet together with questionnaire responses. The locked files cabinets and computer in which data will be stored are located in a locked room. Only the researchers conducting this study will have access to any of the study information. Data will be retained for a minimum of three years in these secure locations and destroyed after 3 years by shredding. At no time will your name be released in association with this study. No individual results will be reported. Your privacy will be protected to the maximum extent allowable by law.

If you choose to participate in this study, please complete the packet of self-report questionnaires provided by your therapist. The questionnaires will ask about your personal experiences and beliefs, experience with psychological or psychiatric treatment, and some of the issues you may be dealing with in treatment. You will also be asked to report possible past experiences, including a history of abuse. The entire process should take approximately 45 minutes.

Please read each question carefully and answer as honestly as possible. Although some people report appreciation for the opportunity to share their experiences, and you may benefit from participating in this study through increased self-awareness and self-understanding, there is a risk that you may feel uncomfortable responding to some questions. For example, some of the questions will ask you to report your thoughts and feelings, and ask you to report negative experiences you may or may not have had in your lifetime. You are under no obligation to answer any of the questions. You may refuse to participate at all, decline to participate in certain portions of the study, or not answer certain questions. There are no right or wrong answers. At any time during your participation, you have the right to discontinue your participation without penalty or loss of benefits to which you are entitled.

If you are distressed while answering some of the questions, or later after you have completed the questionnaire, you are encouraged to discuss your feelings with your therapist. If you have questions or concerns about participating in this study, please contact Anne Kubal by phone at (630) 854-5168 , or by e-mail at kubalann@msu.edu; or contact Dr. Nancy Crewe by phone at (517) 432-0606, or by e-mail at ncrewe@msu.edu. If you have questions or concerns about your rights as a study participant, or are dissatisfied at anytime with any aspect of this study, you may contact - anonymously if you wish - Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824. Please make sure you have all of your questions answered before you sign this consent form. If you have read the information above and consider yourself to be fully informed about this research study, please print and sign your name below. Keep the second copy of the consent form for your records.

My signature below indicates that I voluntarily agree to participate in the study as described above:

____________________	____________________	__________
PRINT your name here	SIGN your name here	DATE

If you would like the results of this research study, please mark the method by which you would prefer to receive results and provide either a mailing address below, or an e-mail address where the results can be sent electronically. Alternatively, you may contact Anne Kubal by phone at (630) 854-6158 or by e-mail at kubalann@msu.edu to request the results of this study at a later date.

____ I would prefer to have the results of this research study sent to me by regular mail at the following address:

____

____

____

____ I would prefer to have the results of this study sent to me via e-mail at the following e-mail address: ______________________________________

APPENDIX D

Consent Form for use at Linden Oaks at Edward Hospital

Project: Perfectionism Among Women Seeking Help for Eating Disorders and/or Self-Injury

Investigator: Nancy Crewe, Ph.D.

Sub-Investigator: Anne Kubal, M. A.

Address: Anne Kubal, M.A.
2868 Valley Forge Rd.
Lisle, IL 60632

24 Hour Contact Number: Anne Kubal at (630) 854-5168 (cell).

INTRODUCTION/ PURPOSE

Thank you for your interest in this research project. This project is being conducted by Anne Kubal, a doctoral candidate in Counseling Psychology at Michigan State University, under the supervision of Dr. Nancy Crewe, a professor in the Department of Counseling, Educational Psychology, and Special Education at Michigan State University.

The purpose of this investigation is to learn more about the nature and prevalence of perfectionistic tendencies among women who have sought psychological or psychiatric help for self-injury, eating disorders, or both of these issues. Only volunteers are asked to participate in this research. Your therapist has been asked to distribute questionnaires to women who are addressing issues related to eating disorders and/or self-injury, but participation is completely voluntary and your therapist will not be informed about your decision to participate or not participate unless you choose to tell your therapist about your decision.

About 180 subjects will be asked to participate from Linden Oaks Hospital and from cooperating private therapists in the Naperville, Illinois area.

PROCEDURES/ CONFIDENTIALITY

If you chose to participate, your responses will be completely confidential. The following precautions will be taken to protect your confidentiality. Neither your name nor your therapist's name will appear on any of the questionnaires. Your responses will only be associated with a subject identification number. This informed consent and the list that

matches names with identification numbers will be kept separately from all questionnaire responses in a locked file cabinet. Questionnaire responses will be kept in a separate locked file cabinet. Questionnaire data will be entered into a computer, analyzed, and stored in a password-protected file on the researcher's personal computer. At completion of the project, data will be transferred to disks, and these disks will be stored in the locked cabinet together with questionnaire responses. The locked files cabinets and computer in which data will be stored are located in a locked room. Only the researchers conducting this study will have access to any of the study information. Data will be retained for a minimum of three years in these secure locations and destroyed after 3 years by shredding. At no time will your name be released in association with this study. No individual results will be reported. Your privacy will be protected to the maximum extent allowable by law.

If you choose to participate in this study, please complete the packet of self-report questionnaires provided by your therapist. The questionnaires will ask about your personal experiences and beliefs, experience with psychological or psychiatric treatment, and some of the issues you may be dealing with in treatment. You will also be asked to report possible past experiences, including a history of abuse. The entire process should take approximately 45 minutes. Please read each question carefully and answer as honestly as possible.

RISKS AND BENEFITS OF PARTICIPATION

Although some people report appreciation for the opportunity to share their experiences, and you may benefit from participating in this study through increased self-awareness and self-understanding, there is a risk that you may feel uncomfortable responding to some questions. For example, some of the questions will ask you to report your thoughts and feelings, and ask you to report negative experiences you may or may not have had in your lifetime. You are under no obligation to answer any of the questions. You may refuse to participate at all, decline to participate in certain portions of the study, or not answer certain questions. There are no right or wrong answers. At any time during your participation, you have the right to discontinue your participation without penalty or loss of benefits to which you are entitled.

If you are distressed while answering some of the questions, or later after you have completed the questionnaire, you are encouraged to discuss your feelings with your therapist. If you have questions or concerns about participating in this study, please contact Anne Kubal by phone at (630) 854-5168 , or by e-mail at kubalann@msu.edu; or contact Dr. Nancy Crewe by phone at (517) 432-0606, or by e-mail at ncrewe@msu.edu.

ALTERNATIVE TREATMENT

You have the ability to choose to not participate in this research project. If you decline to participate, it will not impact your current or future treatment plan .

AUTHORIZATION TO USE AND DISCLOSE PROTECTED HEALTH INFORMATION

A new Privacy Rule has been issued under a federal law which requires the investigators conducting this project to ask for permission from participants to use and share protected health information for purposes of this project.

The following sections explain how your protected health information will be collected, used and shared with certain other persons involved in the project and describe your rights.

1. The protected health information that may be used and disclosed includes:
   - All information collected during the project as described in this Informed Consent Form; and
   - health information in my medical records that is relevant to the Research

2. Your health providers may disclose information in your medical records:
   - To the researchers; and,
   - as required by law, to ethics and/or institutional review boards, and other persons who are required to watch over the conduct of this research study.

3. The investigators in charge of this project may:
   - Use and share your protected health information among themselves and with other participating investigators involved in this project
   - Disclose your health information as required by law, to ethics and/or institutional review boards, such as:
     - Edward Hospital Institutional Review Board
     - Michigan State University Committee on Research Involving Human Subjects

4. Please note that:
   - You do not have to consent to this Authorization to use or disclose protected health information, but if you do not, you will not be allowed to participate in the Research.
   - You (or your legally authorized representative) may change your mind and revoke this authorization at any time. To revoke this Authorization to use or disclose protected health information, you must write to

     Anne Kubal, M.A.
     2868 Valley Forge Rd.
     Lisle, IL 60632

     However, if you revoke this Authorization, you will no longer be allowed to participate in the Research. Also, even if you revoke this Authorization to use or disclose protected health information, the information already obtained by the Researchers and the

Sponsor of this study may be used and disclosed as permitted by this Authorization and the Informed Consent.

5. This Authorization does not have an expiration (ending) date.

FINANCIAL INFORMATION

Participation in this project is at no additional cost to you and you will not receive any payment for your participation.

VOLUNTARY PARTICIPATION AND WITHDRAWAL STATEMENT

Your participation in this project is voluntary. Your decision whether or not to participate will not interfere with your future care at this institution, or your right to health care or other services to which you are otherwise entitled. You are not waiving any legal claims or rights because of your participation in this project. If you do decide to participate, you are free to withdraw your consent and discontinue participating at any time.

You are encouraged to ask questions regarding your participation in the project. In the event you experience any problems related to your participation in this project, or you experience a project-related injury or should have any questions; you should immediately contact Anne Kubal, M.A., at (630) 854-5168.

If you have additional questions concerning your rights or welfare as a participant, you should contact the manager of the Institutional Review Board (IRB) at Edward Hospital, or designated substitute, by telephoning (630) 527-3042 or 527-3010. An Institutional Review Board is a group of scientific and non-scientific individuals who perform the initial and on-going ethical review of this project with the participant's safety and welfare in mind. If you have questions or concerns about your rights as a study participant, or are dissatisfied at anytime with any aspect of this study, you also may contact - anonymously if you wish - Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) at Michigan State University by phone: (517) 355-2180, fax: (517) 432-4503, email: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

CONSENT

Your signature below indicates that you understand the preceding information, that your questions have been answered to your satisfaction, and that you freely and voluntarily decided to participate in this project. You understand that refusal to participate will result in no penalty or loss of medical care to which you are otherwise entitled. You understand that you will not give up any of your legal rights by signing this form. You will receive a copy of this consent form for your records.

If you have read the information above and consider yourself to be fully informed about this research study, please print and sign your name below. Keep the second copy of the consent form for your records.

My signature below indicates that I voluntarily agree to participate in the study as described above:

PRINT your name here	SIGN your name here	DATE

Name of Investigator	Signature	Date

If you would like the results of this research study, please mark the method by which you would prefer to receive results and provide either a mailing address below, or an e-mail address where the results can be sent electronically. Alternatively, you may contact Anne Kubal by phone at (630) 854-6158 or by e-mail at kubalann@msu.edu to request the results of this study at a later date.

____ I would prefer to have the results of this research study sent to me by regular mail at the following address:

____
____
____
____

_____ I would prefer to have the results of this study sent to me via e-mail at the following e-mail address: ________________________________

APPENDIX E

Demographic Questionnaire

1. Please circle the number next to your gender.

   (1) male
   (2) female

2. How old are you? _______years old

3. Please circle the number next to your race/ethnicity.

   (1) Asian, Asian-American
   (2) Black, African-American
   (3) Hispanic, Latino
   (4) Native American
   (5) Pacific Islander
   (6) White, European American
   (7) Multiracial, Mixed Race
   (8) Other, please specify:___________________________

4. Please circle the number next to your marital status.

   (1) Single
   (2) Married
   (3) Separated
   (4) Divorced
   (5) Widowed
   (6) Other, please specify: ___________________________

5. How many children do you have? Please circle.

   (1) None
   (2) One child
   (3) Two children
   (4) Three children
   (5) Four or more children

6. Which state (i.e. Illinois, Ohio) do you live in? _________________________

7. Who currently lives in your home with you? Please circle.

   (1) I live alone.
   (2) I live with a roommate.
   (3) I live with my romantic partner or spouse and children.
   (4) I live with my children only.
   (5) I live with my romantic partner or spouse only.
   (6) I live with my parents.
   (7) I live with relatives other than my parents.
   (8) I live in a group home.
   (9) Other, please specify: ____________________________

8. How much education have you completed? Please circle.

   (1) less than high school
   (2) high school degree (or GED)
   (3) post high school (e.g. trade, technical, or secretarial school)
   (4) some college (e.g. one year, associate's degree)
   (5) completed college (e.g. bachelor's degree)
   (6) some graduate or post-bachelor's training
   (7) completed graduate degree or post-bachelor's training

9. What is your current employment status? Please circle.

   (1) full-time work
   (2) part-time work
   (3) unemployed
   (4) disabled
   (5) full-time student
   (6) part-time student
   (7) multiple categories, please specify: ______________________________

9. If you are employed, what is your occupation? ____________________________

10. If employed, what is your yearly income? Please circle.

   (1) $0 - $15,000
   (2) $15,001 - $30,000
   (3) $30,001- $45,000
   (4) $45,001- $60,000
   (5) $60,001 -$75,000
   (6) Over $75,000

APPENDIX F

Help-Seeking and Treatment History Questionnaire

This questionnaire is divided into 4 sections. The questions are designed to obtain information about your treatment experiences and some of the issues you may be dealing with in treatment. Please read each question carefully and answer each question as honestly as possible. ALL OF YOUR RESPONSES WILL BE KEPT CONFIDENTIAL AND YOUR NAME WILL NOT BE ATTACHED TO ANY OF YOUR ANSWERS. A space is provided at the end of the questionnaire if you would like to comment on your experiences filling out the questionnaires or add any additional information that you would like to share.

SECTION I

The following section asks you to provide information about your experiences with psychological and/or psychiatric treatment. One of the primary goals of this study is to gain information that will help improve women's experiences with treatment.

1. Are you currently seeking psychological or psychiatric help?

    _____ yes _____no

2. If yes, what type of treatment are you receiving?

    _____ outpatient therapy
    _____ inpatient therapy/ hospitalization
    _____ partial hospitalization
    _____ support group (please specify:____)

3. Approximately how long have you been receiving treatment?

    _____ less than one month
    _____ between 1 month and 6 months
    _____ between 6 months and 1 year
    _____ more than 1 year

4. Treatment has helped me............

    _____ not at all
    _____ a little
    _____ a lot
    _____ not sure

SECTION II

The following section contains questions about eating disorders. If you do not have an eating disorder, and have never had an eating disorder, please check "false," "no," or "not applicable" where appropriate.

1. I currently have an eating disorder. _____ true _____ false

   If true, my diagnosis is:
   (1) anorexia
   (2) bulimia
   (3) anorexia AND bulimia
   (4) eating disorder not otherwise specified
   (5) I am not sure of my diagnosis.

2. I have had an eating disorder in the past. _____ true _____ false

   If true, my diagnosis was:
   (1) anorexia
   (2) bulimia
   (3) anorexia AND bulimia
   (4) eating disorder not otherwise specified
   (5) I am not sure of my diagnosis.

3. Was an eating disorder one of the primary reasons you sought psychological or psychiatric help? _____ yes _____no _____ not applicable

4. Have you discussed your eating disorder with your therapist?
   _____ yes _____no _____ not applicable

5. Have you ever been hospitalized in a psychiatric unit as a result of your eating disorder? _____ yes _____no _____ not applicable

SECTION III

This section asks you to respond to true/false questions about traumatic events you may have experienced during your lifetime. Definitions of terms are provided.

1. Child neglect is defined as failure by a parent or caretaker to provide for a child's basic needs. Neglect may be physical (i.e. failure to provide necessary food or shelter, or lack of appropriate supervision), medical (i.e. failure to provide necessary medical or mental health treatment), educational (i.e. failure to educate a child or attend to special education needs), or emotional (i.e. inattention to a child's emotional needs, failure to provide psychological care, or permitting the child to use alcohol or other drugs.

As a child, I remember being neglected.

_____ true _____ false

2. Physical abuse is defined as physical injury (ranging from minor bruises to severe fractures or death) as a result of punching, beating, kicking, biting, shaking, throwing, stabbing, choking, hitting (with a hand, stick, strap, or other object), burning, or otherwise harming a child.

As a child, I remember being physically abused.

_____ true _____ false

3. Sexual abuse includes activities by a parent, caretaker, or other adult such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the reproduction of pornographic materials.

As a child, I remember being sexually abused.

_____ true _____ false

4. As an adult, I have been physically abused or assaulted.
_____ true _____ false

5. As an adult, I have been sexually abused or assaulted.

_____ true _____ false

6. Was a history of trauma or abuse one of the primary reasons you sought psychological or psychiatric help? _____ yes _____no _____ not applicable

<u>SECTION IV</u>

The questions in this section refer to deliberate self-harm or self-injury, sometimes called self-mutilation. Deliberate self-harm or self-injury is the deliberate destruction or alteration of one's own body, performed without meaning to commit suicide. Examples of self-injury include cutting oneself, burning oneself, biting oneself, head-banging, interfering with the healing of wounds, or scratching until one bleeds. For the purpose of this study, self-injury or deliberate self-harm DOES NOT include excessive drinking of alcohol or overdosing on drugs.

1. Have you ever self-injured? _____ yes _____no

**If your answer to the above question is "yes," please unseal and complete the remaining pages of this questionnaire.

***If your answer is "no," then you have finished the questionnaire.* If you would like to comment about any of the questions asked as part of this research study, provide feedback about the questions to the researcher, or share what it was like for you to participate in this study, please do so in the space provided below. Your participation, as well as any comments you would like to make, is greatly appreciated!

____
____
____
____
____
____
____
____
____
____

SECTION IV – *Please answer the remaining questions only if you responded "yes" to Question # 1 on the previous page.*

2. Please estimate and circle the number of times you have self-injured?

   (1) only once
   (2) 2 – 5 times
   (3) 6 – 10 times
   (4) 11 –20 times
   (5) 21 –50 times
   (6) more than 50 times

3. At what age did you first self-injure? ______

4. List the ways that you have harmed yourself. List them in the order in which you have most often harmed yourself.

   1. ________________________________
   2. ________________________________
   3. ________________________________
   4. ________________________________
   5. ________________________________

5. When did you last harm yourself?

   (1) within the last week
   (2) within the last month
   (3) within the last 6 months
   (4) within the last year
   (5) more than a year ago

6. Was self-injury one of the primary reasons you sought psychological or psychiatric help? _____ yes _____no

7. Have you discussed your self-injury with your therapist? _____ yes _____no

8. Have you ever been hospitalized in a psychiatric unit as a result of your self-injury? _____ yes _____no

9. Please check the appropriate response to the following statement.

   I no longer struggle with self-injury. _____ true _____false

If you would like to comment about any of the questions asked as part of this research study, provide feedback about the questions to the researcher, or share what it was like for you to participate in this study, please do so in the space provided below. Your participation, as well as any comments you would like to make, is greatly appreciated!

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