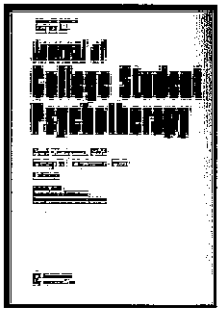

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Nonsuicidal Self-Injury in College Populations: Mental Health Provider Assessment of Prevalence and Need

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Nonsuicidal Self-Injury in College Populations: Mental Health Provider Assessment of Prevalence and Need

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Concern about the prevalence of nonsuicidal self-injury is widespread. Members of an electronic listserv for college counseling center directors nationwide were invited to participate in a Web survey to investigate provider experience with nonsuicidal self-injury; 290 surveys were analyzed. Most respondents perceived recent increases in nonsuicidal self-injury and lack of effective treatment knowledge. Most favored dialectical behavior therapy or cognitive behavior therapy for treatment, but few found treatment effective. Implications for treatment and prevention in college settings are discussed.

KEYWORDS *self-injury, mental health, college students*

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INTRODUCTION

There is concern by college mental health professionals that nonsuicidal self-injury (NSSI) has increased in college populations. This is also a widespread assumption in the popular media and in anecdotal reports (Tanner, 2006; Welsh, 2004). Although no empirical evidence exists with which to validate such claims, recent research suggests that a significant proportion of college students have some degree of current or past experience with self-injury (Whitlock, Eckenrode, & Silverman, 2006; Gollust, Eisenberg, & Golberstein, 2008). NSSI behaviors are those in which an individual intentionally physically harms or mutilates his or her body for purposes not socially recognized or sanctioned and without the obvious intention of committing suicide (Alderman, 1997). Although most often not a suicidal gesture, it is statistically associated with suicide and can result in unanticipated severe harm or fatality (Claes, Vandereycken, & Vertommen, 2003).

Unfortunately, virtually no mechanism exists in the United States for routinely tracking NSSI in the general population. While the vast majority of research currently available on NSSI in U.S. populations has been conducted in clinical populations with preestablished disorders, growing evidence suggests that NSSI is present at levels of between 12% and 17% in college populations (Whitlock, et. al., 2006). Despite this alarming prevalence, very little is known about perceptions and experiences of college mental health providers with students presenting with NSSI, although recognition of the need for additional training in outreach, education, and prevention has been advocated (White, Trepal-Wollenzier, Nolan, 2002). Studies with secondary school providers (Heath, Toste, & Beettam, 2006) suggest that most secondary school teachers, counselors, nurses, and social workers perceive high rates of NSSI in secondary school settings but lack the confidence and knowledge needed to treat effectively. No similar assessment of perceived knowledge and need exists for college mental health providers.

This study was designed to assess the perceptions and experiences of college and university mental health providers related to NSSI behavior in college populations. We were particularly interested in assessing (a) perceived trends in NSSI behavior within college students, (b) NSSI client characteristics, (c) institutional protocols for responding to disruptive NSSI behaviors, (d) attributions for perceived increases in NSSI, and (e) treatment approaches.

METHOD

Respondents

All members of a listserv linking over 700 college and university counseling center directors nationwide were invited to participate in the "Survey of Practices in Detecting and Treating Self-Injurious Behavior in College

Settings." Directors were invited to distribute the survey to members of their mental health staff. The survey was delivered online through a secure server. Respondents participated anonymously. The study was reviewed and approved by the Cornell Human Subjects Committee and all respondents were free to discontinue the survey at any time by closing their browser. A total of 318 individuals participated in the survey. Of these, 28 were from countries outside of the United States and were thus omitted from analyses.

Measures

In addition to questions intended to assess demographic and professional characteristics of respondents and institutions represented, the survey consisted of questions intended to assess perceptions and experience related to four primary areas: (a) perceived incidence and trends in NSSI on campus; (b) NSSI clients, practices, and institutional protocols; (c) attributions for perceived changes in NSSI; and (d) NSSI treatment approaches. Respondents indicating that they had encountered self-injurious clients were alerted that the following set of questions would assess their perceptions of and experience with self-injurious behavior. Self-injurious behavior was defined as "non-socially sanctioned but mutilative behaviors performed with the intention of inflicting harm on one's body without the obvious intent of committing suicide." This was followed by a more detailed description of possible self-injurious behaviors. Respondents were asked to answer questions based on their experience as a mental health provider in a college setting.

College level demographic characteristics gathered included region, institution type, and institution size; individual respondent demographic characteristics included professional identity, highest degree obtained, and years of clinical practice (response options are viewable in Table 1). Respondents were also asked if they had received formal training on NSSI either through their degree program or through continuing education workshops. Perception of changes in NSSI over the past five years was assessed using a single item: "How would you characterize the incidence of adolescent and young adult clients with self-injurious behaviors in your overall client population over the past five years?" Response options for both questions were "decreased substantially," "decreased a little," "no change," "increased a little," and "increased substantially." Respondents were also asked to estimate the percentage of current clients engaging in NSSI. Respondents indicating that they had observed an increase in self-injurious behavior were asked an open-ended question about to what, in their professional opinion, they attributed the increase.

In addition, respondents were asked a variety of questions about their perceptions of self-injurious clients, practices on campus, and institution protocols. In particular, they were asked about (a) gender of self-injurious

TABLE 1 Characteristics of Study Respondents (n=290)

Characteristic	No. (%)
School Region	
Northeast	104 (35.5)
Midwest	85 (29.3)
Southeast	24 (14.5)
West coast	19 (6.6)
Northwest	12 (4.1)
Southwest	25 (8.6)
University Type	
State university	136 (46.9)
Liberal arts/private college	138 (47.6)
Ivy League institution	12 (4.1)
Other	4 (1.4)
Size of Student Population	
< 1,000	10 (3.4)
1,000–5,000	99 (34.1)
5,001–10,000	47 (16.2)
10,001–20,000	57 (19.7)
> 20,000	77 (27.6)
Respondent Professional Role	
Counseling or clinical psychologist	185 (63.8)
Professional counselor	35 (12.1)
Social worker	32 (11.0)
Nonspecified mental health professional	20 (6.9)
Other	18 (6.2)
Highest Degree Attained	
PhD, MD, or equivalent	187 (64.5)
Master's degree	100 (33.1)
BA or uncategorized	5 (1.7)
Respondent Years of Experience	
> 10 years	173 (59.7)
5–10 years	62 (21.4)
1–4 years	36 (12.4)
< 1 year	17 (5.9)

clients compared to other clients (largely female, largely male, split equally by gender); (b) degree of comfort treating self-injurious clients (less difficult, about the same, more difficult); (c) how well informed about NSSI they believe themselves and their colleagues to be (not at all, a little, somewhat, very); (d) how addictive they believe self-injury to be (would not describe as addictive, somewhat addictive, very addictive); (e) how important they think it is to remove self-injurious clients from the general college/university population (not at all, not very, somewhat, very); (f) whether their institution possesses specific protocols for dealing with depression-related disorders and self-injury (yes, no, not sure); and (g) perceived efficacy in treating NSSI (I know enough to treat self-injury effectively, self-injury is a subject those of us who work with adolescents and young adults need to know more about).

Treatment approaches were assessed using five items. Respondents were asked, "If stopping self-injurious behaviors is a therapeutic goal, which techniques do you find work best in achieving this goal?" They were provided with a list of nine possible options (including an open-ended "other") option. If they selected "medication" as one of the response options, they were asked to indicate which specific medications they typically recommend. Respondents were also asked whether they had changed their approach to treating NSSI over time and, if so, how. Using a Likert-type scale respondents were also asked to assess how effective they believed therapy was in leading to cessation of NSSI, if cessation of NSSI was one of the treatment objectives. Last, respondents were asked to provide, through an open-ended question, the most common reasons clients gave for ceasing NSSI.

Data Analysis

Univariate analyses were used to assess degree of agreement among respondents in regard to changes in mental health and self-injurious status among their clients. All quantitative analysis was conducted in SPSS (SPSS Inc., Chicago, Illinois). Qualitative data was analyzed using the constant comparative method (Glaser & Strauss, 1967) in which emergent themes are compared and grouped into meaningful themes. Binary logistic regression was used to examine the relationship between characteristics of respondents and their institutions as predictors of change in NSSI incidence in their client populations.

RESULTS

Respondent Demographics

Table 1 shows school and respondent characteristics. The 290 respondents included in the sample varied by institution and individual characteristics. Though no empirical basis for respondents' perceptions was either solicited or spontaneously reported, the majority of respondents (77.9%) reported perceiving that the proportion of their clients engaging in NSSI over the past five years showed a little or no substantial increase; 20.3% indicated no change, and 1.8% indicated little or substantial decrease. When asked to approximate the percentage of current clients who engaged in self-injurious behaviors, 24.1% reported less than 5% of current clients engaged in NSSI, 30.7% reported that 5% to 10% of current clients engaged in NSSI, 23.4% reported 10% to 20% of current clients engaged in NSSI, and 14.9% reported that 20% to 40% of current clients engaged in NSSI. The remaining 6.9% reported that between 40% and 80% of current clients engaged in NSSI.

Since it is reasonable to assume that amount of experience may affect perception of change in the proportion of their clients who engage in self-injurious behaviors, binary logistic regression was used to examine the relationship between these variables. Institution size and region were entered as control variables in each equation. Results of adjusted odds ratios (AORs) with confidence intervals (CIs) showed that a positive, linear relationship such that the greater the years of professional experience as a mental health provider, the more likely responders were to perceive that the incidence of self-injurious behavior had increased over the past five years (AOR 1.45, 95% CI 1.2–1.8). Region was also significantly correlated such that respondents from the Southeast were significantly less likely (AOR .3, 95% CI .1–.8) than respondents from the Northeast to note increases in NSSI in their client population.

Self-Injurious Clients, Practices, and Institutional Protocols

When asked to select the sex breakdown of the self-injurious students they see, 87.9% indicated all or mostly female while 11.9% said it was equally split by gender. Only one individual said they saw mostly or all male students who self-injure. Over half (54%) of the respondents indicated that they found self-injurious clients more difficult to treat than non-self-injurious clients, 44.5% indicated that self-injurious clients were about the same to treat as other clients, and 1.5% were unsure. When asked what about NSSI made them uncomfortable, the majority (40.2%) indicated that they worry about the potential lethality of the behavior, even if unintentional. Ten percent indicated they were not at all or a little informed about self-injurious behaviors, 61.2% indicated that they were somewhat informed, and 28.8% indicated that they were very well informed. Consistent with this, three quarters of the respondents (74.8%) agreed with the comment, "Self-injury is a subject those of us who work with young adults and adolescents generally need to know much more about," and just over one quarter of the respondents (28.3%) indicated that they knew enough about self-injurious behavior to treat it effectively. Just under half of all respondents (45.5%) indicated that they were aware of referral resources for clients they felt unequipped to treat.

One quarter of respondents described self-injury as very addictive, 55% described it as somewhat addictive, and 14% indicated that they would not describe it as addictive. When asked how important they believed it was that self-injurious students be removed from the general university/college population, 27.9% said it was not at all important, 59.6% said it was not very important, 10.2% indicated that it was somewhat important, and no one indicated that it was very important. Last, 28.7% indicated the college/university for which they work had a set of protocols related to NSSI. This is comparable to the 27.4% who indicated that they had protocols for depression-related disorders.

Reasons Given for Perceived Increase in Self-Injurious Behavior

The next analysis related to the reasons given by respondents for the perceived increase in self-injurious behavior. A total of 500 comments were made regarding the perceived increase in self-injurious behavior. Two individual coders read and coded attributions in two successive waves. The first round of coding was used to identify emergent themes. The second round of coding was used to group responses by these themes. A total of 16 unique themes emerged. Coders agreed in 93.6% of the attributions. Attributions for which there was disagreement were discussed until agreement was reached. Results are shown in Table 2.

In order of frequency mentioned, attributions could be grouped into four broad categories: (a) perceived changes in the internal resources students bring to bear in handling stress, (b) increased in the reporting of NSSI behavior in the media, (c) increased external stress, and (d) changes in mental health status and treatment. Three of the themes were not large enough to warrant their own category and were grouped into "other." The themes grouped into the first category, accounting for 36.4% of the attributions,

TABLE 2 Respondent Attributions to Account for Their Perceived Increase in Proportions of Clients with Self-Injurious Behavior

Code category	Frequency
Changes in Internal Resources	**182**
Fewer coping skills; Increase in tendency to self-medicate; Increase in need to make emotional pain physical; Decrease in ability to self-sooth	106
Inability (but desire) to communicate emotions; attention-seeking	20
Increased need to prevent dissociation and enhance capacity to feel something	18
Increase in personal pressure, perfectionism, lack of direction, stress about future	17
Increased need to have control over or connection with self	14
Past trauma (sexual, physical, emotional abuse)	7
Media/Social Environment	**114**
Increased contagion from peers	46
Increased presence in media	40
Increased social acceptance of self-injurious behavior	28
Changes in Sources of External Social Stress	**96**
Decreased world/social stability; Changes in sociocultural trends and factors	45
Increased family dysfunction and pressure (increased family mental health issues, pressure to succeed/be perfect from family)	27
Increased social isolation; poor relationships with others	24
Changes in Student Mental Health Status & Treatment	**64**
More students with individual mental health concerns (increased anxiety, depression, other mental health issues; easier for these students to go to college)	34
More willingness to talk about and seek treatment; being recognized more/ more awareness among counseling staff	30
Other	**44**
TOTAL	**500**

concerned perceived reductions in student capacity to effectively cope with adversity. Comments in this category related to the perception that an increasing number of students experience intrapsychic pressure and fewer resources for managing real or perceived stress, isolation, and/or disconnection from self or others.

The second category, accounting for 22.5% of emergent themes, revolved around the perceived increase in the presence of self-injurious behavior in the media and general social environment. The perception that self-injurious behavior was to some extent contagious and an increasingly accepted part of the visual, verbal, and psychic lexicon of adolescents and young adults was a core theme. Some respondents linked the first category to the second by acknowledging the psychological and social currency students gained by capitalizing on the "fad" elements of the behavior.

One fifth (19.2%) of the comments concerned the perceived contributions of external sources of stress including world instability and large shifts in political, social, and economic trends as well as increased family dysfunction and social isolation. Perceived changes in the criteria for diagnosing mental disorders, the number of students entering college with mental health disorders, and increased acceptance of help-seeking comprised the final category of themes and accounted for 12.8% of the attributions.

Treatment Approaches

The final set of questions assessed (a) types of treatment modalities typically employed, (b) whether providers have changed their approach over time, (c) perception of therapy effectiveness in helping a client cease their NSSI behavior, and (d) the most common reasons clients give for ceasing NSSI behavior. As shown in Table 3, the majority of practitioners reported using cognitive behavior therapy (CBT) (66.9%) closely followed by dialectical behavior therapy (DBT) (42.8%). Significantly fewer practitioners reported using multisystemic therapy (14.5%), interpersonal group therapy (9.7%),

TABLE 3 Frequency of Approaches Employed to Treat NSSI (n=290)

	Self-Injurious Behavior N (%)
Cognitive behavior therapy	194 (66.9)
Dialectical behavior therapy	124 (42.8)
Multisystemic therapy	42 (14.5)
Interpersonal group therapy	28 (9.7)
Hypnosis	5 (1.7)
None, since none work very well	26 (8.9)

Note: Numbers may add up to more than 100% since respondents could select more than one option.

and hypnosis (1.7%). Just less than 1 in 10 (8.9%) indicated that nothing they had tried had been successful.

When medications were recommended or prescribed, providers most often identified selective serotonin reuptake inhibitors (SSRIs) as the preferred medication. Consistent with earlier results suggesting that many providers find NSSI clients difficult to treat, 64% indicated that they had changed their approach to treating NSSI over time, most in favor of using DBT or CBT related approaches. Confidence that therapy works is less than secure, with 64.1% of the respondents indicating that treatment is only sometimes effective. Only 11.7% indicated that it is very effective while 3.8% suggested that treatment is never effective. When asked to reflect on the most common reasons for client cessation of the behavior, the vast majority of respondents identified three primary areas: acquisition of coping mechanisms, improvement of life circumstances, and enhanced ability to reflect on the underlying causes of distress.

DISCUSSION

The findings reported here suggest that self-injurious behavior has not gone unnoticed by college mental health providers. And yet, self-injurious behavior is an area that has received scant attention in college health literature. The perceived increase in the proportion of their clients who engage in NSSI is consistent with the perception of counseling center directors reported in the Counseling Center Director's Report (Gallagher, Zhang, & Taylor, 2003) and with trends in college mental health reported in other studies (Benton, Robertson, Tseng, & Newton, 2003). Whether or not perceived increases in mental disorders, including self-injury, reflect actual empirical trends in college populations is unclear. In a representative study of American adults age 18–54, Kessler and colleagues (Kessler et al., 2005) found that while the prevalence of DSM IV (*Diagnostic and Statistical Manual of Mental Disorders*, fourth edition) classifiable mental disorders did not change in the years between 1990–2003, the rate of treatment did increase. Interestingly, Kessler and colleagues found that about only half of those who received treatment had disorders that met diagnostic criteria for a mental disorder. This is particularly germane to our findings since it is quite possible that perceived increases in clients with NSSI reflect actual increases in students with subthreshold symptomology rather than in DSM IV classifiable disorders. Such an interpretation is consistent with the finding that 44% of those with current self-injury behavior in a recent college study of NSSI showed no concurrent depression or anxiety, no eating disorder symptoms, and reported no suicidal ideation in the past four weeks (Gollust et al., 2008).

Results also showed a linear relationship between years of experience and perception that the incidence of self-injurious behavior had increased

over the past five years. These findings are consistent with the idea that providers with more experience would be more likely to note increases since they have more time to accumulate clients and experiences. Why respondents from the southeast would be less likely to note an increase in the behavior is not clear but may reflect important regional variation in prevalence and/or awareness of the behavior.

The disparity in the ratio of male to female self-injurers clinicians report seeing and the ratio reported in studies of gender and self-injurious behavior is notable since some studies find females only slightly more likely to self-injure than males (Whitlock et al., 2006; Briere & Gil, 1998). This disparity may be due to the fact that males and females exhibit different forms of NSSI (Whitlock, Muehlenkamp, and Eckenrode, 2008) and/or to the fact that males are significantly less likely to seek psychological treatment than females in general (Gallagher et al., 2003). The fact that mental health providers report seeing significantly more females than males in college settings helps to explain why self-injury is commonly regarded as a female practice. Nevertheless, the disparity between the number of men likely to self-injure and the number of men likely to seek treatment suggests a need for better detection and treatment of self-injurious males and cautions against the assumption that men rarely self-injure.

The fact that NSSI in and of itself can pose challenges for psychiatric teams is documented (Fagin, 2006). Consistent with this, over half of all those surveyed perceive self-injurious clients to be more difficult to treat than other clients. One explanation for this is the fact that NSSI is often comorbid with many other challenging clinical presentations such as borderline personality disorder and depressive and anxiety disorders, suicidality, disordered eating, and a history of trauma and abuse. Other possible explanations include the perceived addictive nature of the behavior and uncertainty about how to best treat or manage self-injurious behavior. Eighty percent of respondents classified the behavior as either very or somewhat addictive and many expressed clear concern about the potential for highly lethal but unintended consequences. Indeed, uncertainty about how to best treat the behavior was common, with only 28.3% of respondents saying that they knew enough to treat self-injurious clients effectively and three-quarters agreeing that this is a subject about which they need more information. Although it is quite possible that respondents would indicate a similar level of uncertainty about a variety of other conditions, such as suicidality, attention-deficit disorder, or major depressive disorders, the findings reported here suggest that enhanced information and training about treating self-injury may be beneficial in aiding these clients.

Consistent with current thinking in the area of NSSI treatment, the majority of practitioners reported using CBT or DBT treatment approaches. Nevertheless, a majority also reported believing that treatment is only sometimes effective, and many reported having changed their approach to

treatment over time, typically in favor of DBT. Since acquisition of coping mechanisms, improvement of life circumstances, and enhanced ability to reflect on the underlying causes of distress were identified as the most common reasons for NSSI cessation, treatment approaches that enhance capacity in these areas, such as DBT and emotion-regulation based therapies, seem warranted. This also suggests that early intervention and prevention efforts may be most successful when they target these domains in the general student population.

The nature of attributions made for the perceived increase in self-injury reflect concern about the way a combination of internal and external stress in conjunction with media may be affecting young people. Why and whether internal and external sources of stress may have increased in the past half decade is less clear. The possibility that self-injury is "communicable" through virtual communities has been posited (Whitlock, Powers & Eckenrode, 2006) and may be, in part, responsible for the fadlike quality of the behavior in which self-injury becomes an accepted emotional outlet for adolescents and young adults with receptive predispositions. These concerns about communicability may be heightened further in a higher education setting in which students live in residence halls and have close contact with one another.

Although the respondents represent all regions in the United States with significant numbers of colleges and universities, there is no way to account for response bias that may have systematically affected results. Moreover, the tendency for older generations to assume that life is more difficult or chaotic for younger generations is common and, as reviewed, there may be many alternative explanations for perceived increases in mental health disorders and NSSI that are not empirically verifiable.

Despite these limitations, these findings have clear implications for how colleges and universities identify and respond to self-injurious students. Given the prevalence of self-injury and the level of concern reported in this study, mental health professional training programs should consider including specific training in responding to self-injury. It is also clear that college professionals with regular student contact, such as health service and residence life staff, would benefit from training on detecting self-injurious behavior and in helping self-injurious students identify treatment professionals. This may include training in therapies advocated by self-injury treatment experts and general informational training on recognizing and responding to self-injurious behavior for other college professionals. Therapists, as well, expressed a need for heightened training in effectively treating NSSI. Findings related to who is treated for NSSI suggest that college health and residence life staff may overlook males at risk for NSSI. Last, variability in how mental health professionals and institutions respond to NSSI suggests a need for clearer identification of conditions under which removing students for NSSI is likely to be beneficial for both the student and the

institution. These findings suggest that additional research on the detection, intervention, treatment, and prevention of self-injury on college campuses is warranted.

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