Special Educators and Nonsuicidal Self-Injurious Behavior: Self-Injury Training, Exposure, and Self-Efficacy

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Abstract:

Nonsuicidal self-injurious behavior (NSSIB) is one of the most perplexing and challenging behaviors special educators come across in their schools. Thus, there is a need for special educators to be equipped with information regarding NSSIB to help identify students with disabilities who engage in these behaviors and provide them with appropriate support or referrals. This study examined the effectiveness of training received by 390 special educators on NSSIB and their self-efficacy regarding the training. Results revealed that although many special educators serve students who engage in self-injurious behaviors, many did not receive training on how to implement strategies for students who self-injure. Those special educators who received training were more confident in their abilities to work with students who self-injured compared with those special educators who did not receive training. Implications, limitations, and future research areas are discussed.

Keywords: nonsuicidal self-injurious behavior | self-injury | special education | special educators | disabilities

Article:

Nonsuicidal self-injurious behavior (NSSIB) is one of the most perplexing and challenging behaviors educators encounter in their schools (Selekman, 2009). Defined as the intentional destruction of body tissue for purposes not socially sanctioned without suicidal intent (Klonsky & Muehlenkamp, 2007; Nafisi & Stanley, 2007), ample evidence exists suggesting NSSIB is a growing problem among adolescents (e.g., Crawford, Geraghty, Street, & Simonoff, 2003; Matson, Cooper, Malone, & Moskow, 2008; Moyer, Haberstroh, & Marbach, 2008; Moyer & Nelson, 2007). NSSIB is categorized in several different ways according to whether the behaviors are culturally sanctioned (Favazza, 1996) and the degree to which they are direct,

repetitive, and lethal (Kahan & Pattison, 1984). Although some types of NSSIB are associated with psychosis (e.g., self-castration), most of the documented literature on NSSIB describes the more superficial and moderate forms of NSSIB likely to be seen in a school-aged population (e.g., cutting, scratching, head banging, preventing wounds from healing, picking, poking, and hair pulling; Klonsky & Muehlenkamp, 2007; Lieberman, 2004; Moyer & Nelson, 2007). NSSIB may be a coping behavior some students use to manage stress (Kibler, 2009; Lieberman, 2004; Nafisi & Stanley, 2007; O'Connor, Rasmussen, & Hawton, 2009; Selekman, 2009; Sim, Adrian, Zeman, Cassano, & Friedrich, 2009) and occurs most often in the context of feeling worried, sad, worthless, or overwhelmed (Nock, Prinstein, & Sterba, 2009; Sim et al., 2009). NSSIB typically occurs in early to midadolescence (Moyer et al., 2008; Moyer & Nelson, 2007; White-Kress, Gibson, & Reynolds, 2004) with estimated prevalence rates of 14% to 17% or approximately 4 students in a classroom of 26 who engage in these behaviors (Kibler, 2009; Muehlenkamp & Gutierrez, 2004; Whitlock, 2009).

Educators may be the first individuals to observe changes in students' behaviors and respond to those changes (Selekman, 2009). Due to the varied topography and causes of NSSIB, many students who engage in these behaviors go unnoticed by educators untrained to recognize the behavior and are subsequently unable to receive help (Evans, Hawton, & Rodham, 2005; Kibler, 2009). When special educators are knowledgeable about NSSIB and are trained to work with students who may be self-injuring, they can quickly identify and respond, ensuring students are provided with the assistance (e.g., support or referrals including a school counselor or other mental health professional) that they need to alter behaviors (Roberts-Dobie & Donatelle, 2007). Educators who lack the skills necessary to identify the features of NSSIB may be ineffective in providing the vital support to students who self-injure. The repercussions of underprepared educators may be devastating potentially resulting in a student's accidental death as an outcome of damage inflicted on her or his body (White-Kress et al., 2004).

Although a majority of literature regarding NSSIB focuses on students within the general education population, some special educators encounter students with disabilities who self-injure almost daily (Moyer et al., 2008). Approximately, 4% to 10% of individuals with a mild or moderate intellectual disability and 7% to 15% of individuals with a severe or profound intellectual disability engage in NSSIB (Didden, Korzilius, & Curfs, 2007; Halliday & Mackrell, 1998; Iwata et al., 1994; Myrbakk & von Tetzchner, 2008; White-Kress et al., 2004). For example, in a classroom of students with an intellectual disability, teachers may see behaviors such as scratching, hand biting, pinching, head banging, skin picking, and slapping (Drysdale, Jahoda, & Campbell, 2009). The severity of the NSSIB depends on the degree of intellectual disability (e.g., mild, moderate, severe, or profound; Myrbakk & von Tetzchner, 2008). These extreme behaviors may serve a function for adolescents with disabilities such as an outlet to deal with abusive, neglectful, or traumatic environments or events (Halliday & Mackrell, 1998) or as an outlet to deal with the inability to communicate their wants and desires in socially appropriate ways (i.e., lack of communication skills; Iwata et al., 1994).

Given the prevalence of NSSIB in adolescents with an intellectual disability, a crucial need exists for research examining special educators' preparation for and self-efficacy in working with students who self-injure (Kibler, 2009). Researchers note that professionals who receive training about the cause and function of NSSIB may be more likely to seek help for students engaging in such behaviors, may feel more comfortable and effective in managing the issue of NSSIB, and may have a more positive attitude toward the students who self-injure (Crawford et al., 2003; Nock et al., 2009; White-Kress et al., 2004).

To better understand the training special educators received on NSSIB and their self-injury-related self-efficacy, we conducted the following study. Specific research questions included the following: (a) Do special educators encounter students who engage in NSSIB? (b) What training have special educators received regarding NSSIB? (c) Do special educators feel the training they received adequately prepared them to identify and intervene with students who engage in NSSIB? (d) Are special educators confident in their abilities to identify and intervene with students who engage in NSSIB? and (e) Do special educators who identify as having received training in NSSIB feel more confident in their abilities to identify and intervene with students who engage in NSSIB than their peers who do not identify as having received training?

Method

Participants

Special educators in a Midwestern state employed in urban, suburban, and rural areas were contacted electronically to request their participation in an online survey. Of the1,800 public schools originally contacted, the final sample included 390 special educators who responded to the web-based survey. Of the special educators who completed the web-based survey, 35.9% (n = 140) of the participants held bachelor's degrees and 64.1% (n = 250) of the participants held master's degrees. In addition, 97.9% (n = 382) of the participants were licensed special educators whereas 2.1% (n = 8) were not. The participants were teaching for periods of time ranging from 1 to 37 years, with a mean of 14.8 years (SD = 0.49).

Participants (52.1%; n = 203) reported currently teaching students with mild disabilities (e.g., mild intellectual disability, emotional/ behavioral disorder, learning disability, at risk), whereas 5.1% (n = 20) reported teaching students with moderate disabilities (e.g., moderate intellectual disability, autism spectrum disorder), and 3.1% (n = 12) reported teaching students with severe/profound disabilities (e.g., severe disability, multiple disabilities, communication disorder). The remaining 39.7% (n = 155) of participants reported teaching responsibilities for students in a combination of the aforementioned categories (e.g., mild and moderate disabilities, moderate and severe disabilities, or the resource room) or other disabilities (e.g., other health impairment, blind or low vision, deaf or hard of hearing). Participants who worked in elementary schools were 39.7% (n = 155; e.g., preschool through 5th grade), whereas 52.1% (n = 203) were employed in secondary schools (e.g., 6th grade through 12th grade). Totally, 32 participants

(8.2%) indicated they were employed somewhere other than an elementary or secondary school (e.g., behavior specialist, special education cooperative).

Participants were evenly split between rural and urban areas, with 48.9% (n = 191) employed in urban areas and 44.1% (n = 172) employed in rural areas. Fewer than 7% (6.9%; n = 27) indicated they were employed in a suburban area.

Procedures

Due to a lack of access to special educators' contact information using a state-managed database (www.doe.in.gov/schooldirectory), special educators were contacted through their building principals. Each building principal was contacted electronically with an email describing the purpose of the study and why the survey was being used. In addition, the email requested building administrators to forward the survey link to each special educator within their building. No email address was available for 100 principals; therefore, they were not included in the solicitation email subsequently sent to 1861 building principals. A total of 203 emails were returned to the researchers due to incorrect email addresses or those no longer in use. Researcher efforts to obtain these email addresses, include accessing school websites and phoning school administrators. Unfortunately, some contact information was inaccurate or unavailable due to building principals no longer being employed or incorrect. In addition, 20 building principals or central office administrators replied to the researchers indicating the survey could not be distributed due to teachers union rules. The final number of email requests distributed to building principals was 1,638. A reminder email was sent to building principals 14 days following the initial invitation.

Instrument

To understand the experience of special educators with NSSIB training, a researcher-created instrument titled the NSSIB Special Educator Survey (NSSIB-SES) and a researcher-created demographic questionnaire were used. This survey focused on the areas of basic knowledge, identification, and intervention strategies as research suggested these areas as topics that should be addressed in training (Roberts-Dobie & Donatelle, 2007; White-Kress, Drouhard, & Costin, 2006). Appendix provides a list of the questions used on the NSSIB-SES.

NSSIB-SES. The NSSIB-SES was a survey developed for the purpose of this study and based on a comprehensive review of the literature. Survey instruments with similar populations and purposes (i.e., Kibler, 2009; Wachter, 2006) were adapted and used to create the NSSIB-SES, which contained 13 questions. The initial 4 questions addressed whether participants received NSSIB training and how frequently they encountered students who self-injure. These questions were forced choice or open ended (e.g., "Have you received training on nonsuicidal self-injurious behavior?" "Have you ever encountered students who exhibited nonsuicidal self-injurious behavior?").

The next six questions formed a Training Adequacy and Self-Efficacy subscale designed to understand participants' beliefs about the training they received and their personal capabilities related to self-injury. Questions were scored on a 3-point Likert-type scale, with 1 indicating, "*No, I don't agree*" and 3 indicating, "*Yes, I agree*." Questions included, "The training I received on nonsuicidal self-injurious behavior prepared me to identify students who have self-injured" and "I am confident in my ability to identify students who have self-injured." Reliability for this subscale was strong (Cronbach's $\alpha = .908$).

The final three questions asked about intervention-based information regarding NSSIB. These questions were open ended and included, "When you are working with a student with NSSIB, how was it typically identified?" and "What interventions did you use with these students to help decrease their nonsuicidal self-injurious behaviors?" In addition, a demographic questionnaire was created containing multiple-choice and open-ended questions specific to the participant's teaching experience (e.g., years teaching, range of students taught, population of students taught, school location, and current level of education).

Demographic Questionnaire. This questionnaire contained five multiple-choice and open-ended questions specific to the participant's teaching experience (e.g., years teaching, range of students taught, population of students taught, school location, and current level of education). To protect participant identity, we chose not to collect information that potentially could have been identifying, including the school(s) or agencies at which the special educators were employed.

Data Analysis

Analyses of study data were performed using the SPSS 17.0 statistical package (SPSS Inc., 2008). For Research Questions 1 through 4, descriptive statistics were performed to obtain frequencies and means. For Research Question 5, the data set was split based on participant response to a question regarding whether they had received previous training on self-injury, and an ANOVA was performed to compare mean efficacy scores of participants who had self-selected as having received training versus those participants who had not. In addition, an independent samples *t* test was performed to determine whether there were differences between the trained and the untrained group of teachers who encountered students who self-injured. Analyses also included an examination of participant demographics.

Results

Participants were asked to provide a response to each of the 13 survey questions that inquired about their NSSIB training, agreement with their level of training adequacy and self-efficacy concerning that training, and intervention-based information. Participants were also asked to provide a response to each of the five demographic questions. However, some respondents declined to answer some questions.

Exposure and Training

The majority of teachers (78%; *n* = 305) indicated they encountered students who self-injured, whereas 21.8% (*n* = 82) had not (0.2%; *n* = 3 did not respond). Particularly, the majority of teachers who encountered students who self-injured were teachers of students with mild or other disabilities (e.g., other health impairment, blind or low vision, deaf or hard of hearing). Table 1 provides a breakdown of the percentages of participants who encounter students who self-injured. In addition, those who encountered students who engaged in NSSIB saw on average 2.07 students (*SD* = 3.52) who self-injured in the past 24 months.

Table 1. Percentage of Exposure to Students With NSSIB by Level of Training and Students Taught

	Trained (*n* = 114)				Untrained (*n* = 276)				
Students taught	Mi (*n* = 50)	Mo (*n* = 7)	S/P (*n* = 5)	O (*n* = 52)	Mi (*n* = 153)	Mo (*n* = 14)	S/P (*n* = 5)	O (*n* = 104)	Total
Level of exposure									
Student encounter	36.8 (84)	5.3 (85.7)	4.4 (100)	41.2 (90.4)	39.5 (71.2)	3.8 (78.6)	1.1 (60)	29.7 (78.8)	100%
No student encounter	7.0 (16)	0.9 (14.3)	0.0 (0)	4.4 (0.6)	15.9 (28.8)	1.1 (21.4)	0.72 (40)	7.8 (21.2)	100%
Total	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	

Note: NSSIB = Nonsuicidal self-injurious behavior; Mi = mild disabilities; Mo = moderate disabilities; S/P = severe/profound disabilities; O = other. Percentages not in parentheses represent the percentage of total respondents. Percentages in parenthesis represent the percentage of respondents in each category (i.e., Trained Mi, Mo, S/P, and O).

When asked about the type of NSSIB training they received, 45 (39.5%) teachers indicated they received training in their formal undergraduate education, 24 (21%) indicated they received training in their formal graduate education, and 45 (39.5%) attended self-injury-related workshops. Teachers who received training (*n* = 114) indicated training topics covered knowledge (39.6%), identification (22.8%), and intervention (37.7%). However, 70.8% (*n* = 276) indicated they had not received any NSSIB training.

An independent samples *t* test was conducted to compare the means of the group of trained teachers and untrained teachers who encountered students who self-injured. We were interested in determining whether there was a significant difference between the groups. The results indicate there were statistically significant differences, $F = 39.25$, $p = < .01$, with trained special educators encountering students who self-injured at higher rates than untrained special educators.

Training Usefulness and Level of Confidence

Trained teachers (*n* = 114) were asked to provide a response to each of the six survey questions inquiring about their level of agreement with training adequacy. A slight majority (59.3%; *n* = 68) reported their training left them feeling adequately prepared to identify the signs and risk

factors of students who engage in NSSIB, whereas 46 (40.7%) reported not feeling adequately prepared or undecided. In addition, a slight majority (53.5%; *n* = 61) of trained teachers reported feeling adequately prepared to identify students who may be engaging in NSSIB, whereas 53 (47.1%) reported not feeling adequately prepared or undecided. Regarding being adequately prepared by their training to intervene with students who self-injured, slightly more than one third (39.8%; *n* = 45) felt their training was adequate, whereas more than half (59.9%; *n* = 68) felt it was not adequate or undecided (0.3%; *n* = 1 did not respond).

Trained (*n* = 114) and untrained (*n* = 276) teachers were asked to provide a response to each of the six survey questions inquiring about their level of agreement with their self-efficacy concerning NSSIB training. Of the trained teachers, more than half (54.9%; *n* = 62) felt confident in their ability to identify signs and risk factors as compared with 15.2% (*n* = 42) who were untrained. Fifty-one (44.7%) trained teachers did not feel confident in their ability to do so or were undecided as compared with 66.0% (*n* = 182) of untrained teachers. One (0.4%) trained and 52 (18.8%) untrained teachers did not respond to this question. ANOVA results indicate there were statistically significant differences, $F(1, 335) = 51.74$, $p = < .01$, suggesting trained teachers had higher levels of self-efficacy than untrained teachers when identifying signs and risk factors.

Furthermore, just less than half (46.5%; *n* = 53) of trained teachers felt confident in their ability to identify students who engage in NSSIB as compared with 15.6% (*n* = 43) of untrained teachers. Sixty (52.6%) trained teachers did not feel confident in their abilities or were undecided as compared with 64.5% (*n* = 178) of untrained teachers. One (0.9%) trained and 55 (19.9%) untrained teachers did not respond to this question. ANOVA results indicate there were statistically significant differences, $F(1, 332) = 31.84$, $p = < .01$, suggesting trained teachers had higher levels of self-efficacy than those teachers who did not receive training when identifying students who engage in NSSIB. In addition, 41 (36.0%) trained teachers felt confident in their abilities to intervene as compared with 13.4% (*n* = 37) of untrained teachers. Seventy-two (63.2%) trained teachers indicated they were not confident, or were undecided, in their ability to intervene with students who were self-injuring as compared with 66.0% (182) of untrained teachers. One (0.8%) trained and 57 (20.6%) untrained teachers did not respond to this question. ANOVA results indicate there were statistically significant differences, $F(1, 330) = 17.46$, $p = < .01$, suggesting trained teachers had higher levels of self-efficacy than untrained teachers when intervening with students who engage in self-injury.

Identification Method and Intervention Strategies

When asked about who identified students as self-injuring, responses indicated that many were identified by their classroom teachers (47.9%; *n* = 187). Results also indicated some students were identified by a counselor or social worker (20.0%; *n* = 78), the student self-disclosed the information (17.9%; *n* = 70), or the parents identified the self-injuring behavior (14.1%; *n* = 55). In addition, teachers were asked to list intervention strategies used with students. The most frequent intervention strategies were referrals to other professionals (28.1%; e.g., guidance

counselor, social worker, and mental health professional), talking with students about why behavior was occurring (21.7%), replacing the behavior with something (15.6%; e.g., another behavior, stress ball, and coping strategies) that satisfied the same need, or journaling (15.1%). An overwhelming majority (81.3%) of teachers reported these intervention strategies were effective. However, some teachers mentioned the intervention strategies were not effective or only temporarily so (e.g., students began exhibiting the behaviors 6 months to 1 year later). Teachers were not asked whether intervention strategies were evidence based, considered best practice, data driven, or effective as demonstrated by student data, as this was beyond the scope of this study.

Discussion

The purpose of this study was to better understand the training special educators receive concerning self-injury. We found that a majority of teachers (78%) encountered students who self-injure, but only 37% had received training on NSSIB. Those teachers who were trained reported higher levels of adequacy and self-efficacy regarding the training they received and felt better prepared to identify signs/risks, identify students, or intervene with students who engage in self-injury. In addition, consistent with previous research (e.g., Trepal & Wester, 2006), these teachers were more likely to report working with students who engaged in self-injury compared with untrained teachers ($F = 39.25$, $p = < .01$). The results of this study reveal an important dilemma. Although special educators interact with students who self-injure in their schools, a majority do not report being trained to help these students. Special educators who receive training may report higher levels of NSSIB prevalence in their schools, due to increased awareness (Trepal & Wester, 2006). As such, it is possible that estimates of student NSSIB would be greater if more teachers were knowledgeable about self-injurious behavior (Muehlenkamp, Walsh, & McDade, 2010; White-Kress et al., 2004).

Untrained Special Educators

NSSIB occurs in schools and special educators report encountering students who engage in such behaviors. Yet, despite more than three fourths of respondents reporting experiences with these students, fewer than 30% indicate receiving training about NSSIB. Thus, a significant proportion of special educators are working with students who engage in NSSIB without information on how best to address these behavior challenges. This lack of knowledge (e.g., function and intervention strategies) could have negative repercussions for students who self-injure. For example, special educators unfamiliar with the treatment process for NSSIB may become impatient with students who self-injure, wanting them to stop their behaviors immediately or they may discontinue interventions prematurely because they do not see results quickly or if they see a recurrence of NSSIB after a period of abstinence from the behavior. A special educator knowledgeable about NSSIB would know that self-injurious behaviors may not be extinguished quickly, even with treatment (Lieberman, 2004; Malikow, 2006) and reoccurrence of the behavior does not mean that interventions were ineffective (Wester & Trepal, 2005). It may take

months or years for students to overcome their self-injurious behaviors, and NSSIB may continue, even during active treatment (Lieberman, 2004; Wester & Trepal, 2005).

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There is a need for special educators to receive increased, and perhaps more intense, training. Respondents seem to have some confidence in their abilities to identify warning signs and risk factors for self-injury as well as to identify students who are at risk. The ability to identify students who self-injure is positive; however, increased focus is needed on training special educators to intervene effectively with students who self-injure.

Trained Special Educators

Those teachers who received training reported they did not feel highly confident in their abilities. However, their levels of confidence were higher than those who did not receive training across constructs measured (e.g., identification, signs and risks, intervention). Although teachers with no training scored low confidence levels, 15% of those teachers did report confidence in their abilities. This finding indicates confidence could be achieved by other means (e.g., personal experience with NSSIB, experience in the field, vicarious learning experiences).

Ultimately, the findings from this study highlight a problem—students who self-injure may be served by special education teachers who may lack the training and/or self-efficacy to appropriately identify NSSIB or appropriately intervene. It is possible that some students may go undetected because they hide or cover their injuries (Lieberman, 2004; Malikow, 2006; Wilson & Deane, 2010). Educators who receive training may report higher levels of NSSIB prevalence at their schools (Trepal & Wester, 2006), so being trained in self-injury may help special educators identify students who are self-injuring and might have gone undetected. Literature suggests special educators who understand NSSIB and are willing to help students are the most

valuable assets in the treatment of students attempting to overcome their self-injurious behaviors (Malikow, 2006).

Limitations and Future Research

This study provided evidence to suggest there is a need for special educators to be educated about NSSIB in schools. However, there are several limitations. First, this study was conducted with special educators in one state, and results may not be generalizable nationally, to other states or other regions. Many of the teachers from this study may have been trained primarily by programs within this geographical area or had access to similar training experiences, which could also limit the generalizability of the findings.

Another limitation was that participants were recruited indirectly via an email addressed to building administrators. Building administrators were asked to forward the survey to special educators and may not have done so. The time period in which the survey was distributed may have impacted the number of responses, due to being distributed so close to high-stakes achievement testing time, which may have reduced the overall number of participants.

Third, communities with teachers union rules governing the dissemination of survey materials may be underrepresented, as indicated by principal responses. The use of a web-based survey may have impacted the response rate, particularly if special educators did not have access to an email account or lacked the technological knowledge to navigate an online survey. Although efforts were made to access all special educators within the state, flaws within the state-managed email database made this difficult. Thus, there was no way to ascertain whether significant differences existed between those who responded and those who did not. Because we are unable to determine how many within the target population received the link to the online survey, it is impossible to determine an accurate response rate, which is consistent with electronic survey research (Van Horn, Green, & Martinussen, 2009).

Fourth, responses were self-reported and were considered a reflection of special educators' perspectives. For example, although teachers who received training reported higher levels of self-efficacy, this does not necessarily mean that levels of self-efficacy or skill will increase with training. However, these teachers may feel more confident after receiving training. Future research should consider testing special educators' level of competence after receiving NSSIB training and compare levels of self-efficacy with actual competency.

Fifth, the Training Adequacy and Self-Efficacy subscale portion of the survey instrument used a 3-point Likert-type scale. Hence, respondents were limited in the responses they could provide. It is possible that the results of the study may have looked differently had the Likert-type scale been expanded to include more choices for respondents to choose from. Future research may consider expanding the Likert-type scale to include more items (i.e., five items) to allow for collection of more nuanced responses.

Finally, only initial information was collected concerning the type, length, content, and quality of the professional development activities in which the teachers had been engaged in to gain NSSIB training. In addition, no attempts were made to determine whether teachers were using intervention strategies that were evidence based, considered best practice, data driven, or effective as demonstrated by student data when working with students who engaged in NSSIB. Future research should consider surveying special educators to obtain information about their involvement in professional development activities and evaluate how these activities have prepared them to use intervention strategies with students who engage in NSSIB. Furthermore, the results of that survey can provide researchers with evidence, or lack thereof, of the effectiveness of intervention strategies.

In this study, only one question was asked about how often special educators encountered students who self-injure in the schools. Because limited research exists about the prevalence of NSSIB among students with high-incidence disabilities, research is needed to determine whether this population of students is at a differential risk than those students without a disability. Although prevalence rates of 4% to 15% among individuals with disabilities are reported, the functions of NSSIB may vary widely—particularly with students with disabilities. Thus, there is a need to obtain a clear understanding on the number of students with disabilities who engage in these behaviors, how NSSIB is similar and different in students with disabilities than in their nondisabled peers, and how special educators can best provide support for students who may be self-injuring.

A majority of teachers indicated their NSSIB training was inadequate or were undecided about the adequacy of their training. Thus, future research might examine the effectiveness of NSSIB training, rather than focusing primarily on self-injury-related self-efficacy. By developing quality indicators created from the current literature about special education and self-injury, researchers and educators could maximize effectiveness of training provided to maximize the use of professional development time.

Although teachers with training reported higher self-efficacy related to NSSIB than those without training, their levels of intervention-related self-efficacy were lower than their self-efficacy related to identification of risk factors and identification of students. This suggests many teachers may not feel skilled in intervening with students who self-injure. Future research is also needed to examine effective strategies of preparing special education practitioners and faculty who lack knowledge on NSSIB on how to work with students who self-injure.

Implications

University programs. Preparation should begin within teacher education programs which provide a curriculum to preservice teachers that will prepare them to interact with a range of students, including those who self-injure. Particular attention should be given to providing preservice special education teachers with education regarding how to identify students who self-injure and

effective intervention strategies to use with these students. This information could be included in methods classes or classes that discuss the characteristics of students with mild or severe disabilities. It is also vital for training experiences to have a hands-on or practical component or the use of case studies if a practical component is not feasible. For example, a supervised field experience or a practical component that allows preservice teachers an opportunity to work with students who may be self-injuring, to apply knowledge to practice would be helpful.

Because NSSIB is an area possibly lacking in the special education curriculum, it is likely that special education university faculty may also lack current knowledge on self-injury. For faculty who are expected to train preservice special education teachers, they may consider engaging in professional development opportunities or collaborating with faculty from other programs (e.g., school counseling faculty) or faculty members with expertise in crisis prevention and intervention. This partnership could provide special education faculty the opportunity to learn from individuals with specialized NSSIB intervention knowledge as well as provide preservice special education teachers the opportunity to learn from and about collaboration and consultation with other professionals. Furthermore, special education university faculty could build examples or case studies that include NSSIB into classes that include functional behavioral analysis (FBA), so that special educators in training learn that they can use an FBA as one method of understanding the function of NSSIB to be able to determine possible interventions.

Special education practitioners. Findings suggest a need for special educators to receive training concerning NSSIB—particularly, how to identify and intervene with students who self-injure. A majority of special educators surveyed encountered students who self-injured but reported not being trained to work with these students. Special educators are ethically obligated to work within their scope of practice (National Council for Accreditation of Teacher Education/Council for Exceptional Children Standards, 2010) and thus may need to be trained to ethically and competently work with students who self-injure. Special educators who recognize they lack training on NSSIB may consider seeking opportunities for professional development to prepare them to work with students who self-injure in schools. Particular types of topics to include in training should be basic knowledge, identification, and intervention strategies (Roberts-Dobie & Donatelle, 2007; White-Kress et al., 2006).

In addition to training, special educators can use FBA as a strategy to gain understanding regarding their students who self-injure. For those special educators who are unfamiliar with NSSIB interventions, FBA is a good way to gain understanding concerning the function of NSSIB in their students. In addition, a FBA can help special educators develop interventions to alter student behaviors. Cooper, Heron, and Heward (2007) suggest interventions based on FBAs are likely to be more durable and effective for students who self-injure because the intervention addresses the function of the NSSIB. Teachers who are effectively able to identify causes of the behavior and implement interventions are likely to facilitate a decrease in the rate of their student’s NSSIB.

Appendix

Nonsuicidal Self-Injurious Behavior Special Educator Survey (NSSIB-SES) Questions

1. Have you received training on nonsuicidal self-injurious behavior (NSSIB)?

    No, I have not received training.

    Yes, I received training in my undergraduate education.

    Yes, I received training in my post-undergraduate education.

    Yes, I received informal training during a workshop.

2. If you have received training, what topics did that training cover?

    Knowledge

    Intervention

    Knowledge and intervention

    None of the above

3. Have you ever encountered students who exhibited NSSIB?

    No, I have not encountered students who exhibit NSSIB.

    Yes, I have encountered students who exhibit NSSIB.

4. Approximately how many students who exhibit NSSIB have you encountered in the previous 24 months? _____

5. The training I received on NSSIB prepared me to identify the signs/risk factors that students who exhibit these behaviors may show.

    No, I don’t agree.

    I am undecided.

    Yes, I agree.

6. I am confident in my ability to identify the signs and risk factors that students who have NSSIB demonstrate.

    No, I don’t agree.

    I am undecided.

Yes, I agree.

7. The training I received on NSSIB prepared me to identify students who have NSSIB.

No, I don’t agree.

I am undecided.

Yes, I agree.

8. I am confident in my ability to identify students who have NSSIB.

No, I don’t agree.

I am undecided.

Yes, I agree.

9. The training I received on NSSIB prepared me to intervene with students who have NSSIB.

No, I don’t agree.

I am undecided.

Yes, I agree.

10. I am confident in my ability to intervene with students who have NSSIB.

No, I don’t agree.

I am undecided.

Yes, I agree.

11. When you are working with a student with NSSIB, how was the NSSIB typically identified?

I identified it.

Parent identified it.

Student self-disclosed.

Colleague identified it (please specify position of colleague).

I have not worked with a student who has exhibited NSSIB.

12. What interventions did you use with these students to help decrease their NSSIBs? Give examples.

13. Do you think that these interventions were effective? How do you know?

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References

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

Crawford, T., Geraghty, W., Street, K., & Simonoff, E. (2003). Staff knowledge and attitudes towards deliberate self-harm in adolescents. *Journal of Adolescence, 26*, 619-629. doi:10.1016/S0140-1971(03)00060-5

Didden, R., Korzilius, H., & Curfs, L. M. G. (2007). Skin-picking in individuals with Prader-Willi syndrome: Prevalence, functional assessment, and its comorbidity with compulsive and selfinjurious behaviors. *Journal of Applied Research in Intellectual Disabilities, 20*, 409-419.

Drysdale, E. E., Jahoda, A., & Campbell, E. (2009). Investigating spontaneous attributions in mothers of individuals with intellectual disabilities and self-injurious behaviour. *British Journal of Learning Disabilities, 37*, 197-206. doi:10.1111/j.1468-3156.2009.00549.x

Evans, E., Hawton, K., & Rodham, K. (2005). In what ways are adolescents who engage in self-harm or experience thoughts of self-harm different in terms of help-seeking, communication and coping strategies? *Journal of Adolescence, 28*, 573-587. doi:10.1016/j.adolescence.2004.11.001

Favazza, A. R. (1996). *Bodies under siege: Self-mutilation and body modification in culture and psychiatry* (2nd ed.). Baltimore, MD: Johns Hopkins University Press.

Halliday, S., & Mackrell, K. (1998). Psychological interventions in self-injurious behaviour: Working with people with a learning disability. *British Journal of Psychiatry, 172*, 395-400.

Iwata, B., Pace, G., Dorsey, M., Zarcone, J., Vollmer, T., Smith, R., . . . Willis, K. D. (1994). The functions of self-injurious behavior: An experimental-epidemiological analysis. *Journal of Applied Behavior Analysis, 27*, 215-240.

Kahan, J., & Pattison, M. (1984). Proposal for a Distinctive Diagnosis: the Deliberate Self-Harm Syndrome (DSH). Suicide and Life-Threatening Behavior, 14, 17-35. Doi: 10.1111/j.1943-278X.1984.tb00334.x

Kibler, J. (2009). Self-injury in the schools: An exploratory analysis of Midwest school counselors' knowledge and experience. *North American Journal of Psychology, 5*, 309-322.

Klonsky, E. D., & Muehlenkamp, J. J. (2007). Selfinjury: A research review for the practitioner. *Journal of Clinical Psychology, 63,* 1045-1056. doi:10.1002/jclp.20412

Lieberman, R. (2004). Understanding and responding to students who self-mutilate. *Principal Leadership, 4,* 10-13.

Malikow, M. (2006). When students cut themselves. *Educational Digest, 71,* 45-50.

Matson, J. L., Cooper, C., Malone, C. J., & Moskow, S. L. (2008). The relationship of self-injurious behavior and other maladaptive behaviors among individuals with severe and profound intellectual disability. *Research in Developmental Disabilities, 29*, 141-148. doi:10.1016/j.ridd.2007.02.001

Moyer, M., Haberstroh, S., & Marbach, C. (2008). Self-injurious behaviors on the net: A survey of resources for school counselors. *Professional School Counseling, 11*, 277-284.

Moyer, M., & Nelson, K. W. (2007). Investigating and understanding self-mutilation: The student voice. *Professional School Counseling, 11*, 42-48.

Muehlenkamp, J. J., & Gutierrez, P. (2004). An Investigation of Differences Between Self-Injurious Behavior and Suicide Attempts in a Sample of Adolescents. *Suicide and Life-Threatening Behavior, 34*, 12-23. Doi: 10.1521/suli.34.1.12.27769

Muehlenkamp, J. J., Walsh, B. W., & McDade, M. (2010). Preventing non-suicidal self-injury in adolescents: The signs of self-injury program. *Journal of Youth and Adolescence, 39*, 306-314. doi:10.1007/s10964-009-9450-8

Myrbakk, E., & von Tetzchner, S. (2008). Psychiatric disorders and behavior problems in people with intellectual disability. *Research in Developmental Disability, 29*, 316-332.

Nafisi, N., & Stanley, B. (2007). Developing and maintaining the therapeutic alliance with self-injuring patients. *Journal of Clinical Psychology, 63,* 1069-1079. doi:10.1002/jclp.20414

National Council for Accreditation of Teacher Education. (2010). *Special education program standards and report forms*. Retrieved from http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards/EthicsPracticeStandards/default.htm

Nock, M. K., Prinstein, M. J., & Sterba, S. K. (2009). Revealing the form and function of selfinjurious thoughts and behaviors: A real-time ecological assessment study among adolescents and young adults. *Journal of Abnormal Psychology, 118,* 816-827. doi:10.1037/a0016948

O'Connor, R. C., Rasmussen, S., & Hawton, K. (2009). Predicting deliberate self-harm in adolescents: A six month prospective study. *Suicide and Life-Threatening Behavior, 39,* 364-375.

Roberts-Dobie, S., & Donatelle, R. J. (2007). School counselors and student self-injury. *Journal of School Health, 77,* 257-264.

Selekman, M. D. (2009). Helping self-harming students. *Educational Leadership, 67,* 48-53.

Sim, L., Adrian, M., Zeman, J., Cassano, M., & Friedrich, W. N. (2009). Adolescent deliberate self-harm: Linkages to emotion regulation and family emotional climate. *Journal of Research on Adolescence, 19,* 75-91.

SPSS Inc. (2008). SPSS for Windows, Release 17.0. Chicago, IL: SPSS Inc.

Trepal, H. C., & Wester, K. L. (2006). School counselors and self-injurious behaviors: Assessing perceptions, prevalence, and training issues. *Journal of School Counseling, 4,* 1-29. Retrieved from http://www.jsc.montana.edu/articles/v4n18.pdf

Van Horn, P. S., Green, K. E., & Martinussen, M. (2009). Survey response rates and survey administration in counseling and clinical psychology: A meta-analysis. *Educational and Psychological Measurement, 69,* 389-403. doi:10.1177/0013164408324462

Wachter, C. A. (2006). *Crisis in the schools: Crisis, crisis intervention training, and school counselor burnout* (Unpublished doctoral dissertation). University of North Carolina at Greensboro, Greensboro, NC.

Wester, K. L., & Trepal, H. C. (2005). Working with clients who self-injure: Providing alternatives. *Journal of College Counseling, 8,* 180-189.

White-Kress, V. E., Drouhard, N., & Costin, A. (2006). Students who self-injure: School counselor ethical and legal considerations. *Professional School Counseling, 10,* 203-209.

White-Kress, V. E., Gibson, D. M., & Reynolds, C. A. (2004). Adolescents who self-injure: Implications and strategies for school counselors. *Professional School Counseling, 7,* 195-201.

Whitlock, J. (2009). Self-injuring adolescents on the rise. *Psychotherapy Networker, 33,* 13-14.

Wilson, C. J., & Deane, F. P. (2010). Help-negation and suicide ideation: The role of anxiety, depression and hopelessness. *Journal of Youth and Adolescence, 39,* 291-305. doi:10.1007/s10964-009-9487-8

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