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Guest Editorial

Nonsuicidal Self-Injury: What We Know, and What We Need to Know

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For decades, knowledge about nonsuicidal self-injury (NSSI) was limited to only a small handful of empirical studies. However, the last 10 to 15 years have witnessed an explosion of research and significant advances in knowledge about NSSI. We now understand much about the classification, prevalence, correlates, forms, and functions of NSSI, and have dispelled many misconceptions. It is time for NSSI researchers to apply this basic knowledge to develop empirically grounded theoretical models and effective treatments. This In Review on NSSI was developed to help the field of mental health move forward in these 2 areas. First, this editorial briefly reviews what we now know about NSSI. Next, Margaret S Andover and Blair W Morris¹ describe an emotion regulation model for understanding and potentially treating NSSI and for explaining the emotion regulation function of NSSI in terms of basic emotion models. Finally, Brianna J Turner, Sara B Austin, and Alexander L Chapman² provide a systematic review of NSSI treatment outcome research, and note the need for new treatment approaches specifically tailored to target NSSI. We hope that this In Review not only provides state-of-the-art knowledge but also motivates and facilitates future efforts to better understand and treat NSSI.

NSSI refers to the intentional destruction of one's own body tissue without suicidal intent and for purposes not socially sanctioned.^{3,4} Common examples include cutting, burning, scratching, and banging or hitting, and most people who self-injure have used multiple methods.³ Because NSSI is typically associated with emotional and psychiatric distress,^{5,6} and because NSSI increases risk for suicide,^{7,8} it is crucial to establish accurate conceptual and clinical models of this behaviour. In this introduction to the In Review on NSSI, we summarize what is now known about NSSI (much of which has been learned in just the past 10 to 15 years), dispel common myths, and describe the 2 review articles featured in this special section.

What We Now Know

Despite some notable exceptions,^{9–11} few researchers focused attention on NSSI until recently. One might identify the early 2000s as a turning point. Kim L Gratz¹² published an influential measure that facilitated research on NSSI, E David Klonsky and colleagues⁵ found that NSSI is present and associated with psychiatric morbidity even in nonclinical populations, Matthew K Nock and Mitch J Prinstein¹³ drew attention to the reasons why people engage in NSSI, and Jennifer J Muehlenkamp (see Muehlenkamp¹⁴ and Muehlenkamp and Gutierrez¹⁵) argued that NSSI should be

distinguished from other SIBs, such as attempted suicide, and regarded as an independent clinical syndrome. Each of these publications has been cited in hundreds of subsequent articles, and together they arguably provided a foundation for subsequent work that has answered many key questions about the nature of NSSI, including who self-injures, why people self-injure, and the complex relation between NSSI and suicidal behaviour.

Who Self-Injures?

NSSI is most common among adolescents and young adults. Lifetime rates in these populations are about 15% to 20%,^{16,17} and onset typically occurs around age 13 or 14.^{6,18} In contrast, about 6% of adults report a history of NSSI.^{19,20} It is unclear whether the lower lifetime rate in adults reflects an increase in NSSI among recent cohorts of adolescents or an artifact of memory by which most adults who self-injured as adolescents do not recall their NSSI. Generally speaking, rates of NSSI appear to be similar across different countries.²¹

In both adolescents and adults, rates of NSSI are highest among psychiatric populations, particularly people who report characteristics associated with emotional distress, such as negative emotionality, depression, anxiety, and emotion dysregulation.^{5,18,22,23} NSSI is especially common in people prone to self-directed negative emotions and self-criticism.^{24,25}

Interestingly, while it is common for people to assume that NSSI is more common in women, general population studies find equivalent rates between men and women.^{17,19,20} However, there does appear to be a sex difference regarding the methods of NSSI used; specifically, women are more likely to use cutting, whereas men are more likely to use hitting or burning.¹⁸ Finally, 2 other sociodemographic trends have been repeatedly noted. NSSI appears to be more common among people who report nonheterosexual orientations (for example, homosexual, bisexual, and questioning),^{26,27} and among Caucasians than non-Caucasians.¹⁸

Why Do People Self-Injure?

As recent as the early 2000s, the seminal publications addressing why people self-injure were theoretical rather than empirical.²⁸ Gratz²⁹ helped draw attention to the empirical literature on NSSI functions, and the paper by Nock and Prinstein¹³ was the first to introduce an empirically based model of NSSI functions. Shortly thereafter, Klonsky³ systematically reviewed the empirical evidence

for 7 functional theories. These papers converged on answers to several key questions about why people engage in NSSI. First, by a wide margin, NSSI most commonly functions to (temporarily) alleviate overwhelming negative emotion. Intense negative emotions precede NSSI, and the performance of NSSI results in reduced negative emotions as well as feelings of calm and relief. Second, slightly more than one-half of people report that they self-injure as a form of self-directed anger or self-punishment (consistent with work by Hooley and colleagues [see Nock et al,²³ Glassman et al,²⁴ and Hooley and St Germain²⁵], suggesting that self-criticism has a causal relation to NSSI). Third, NSSI can serve multiple other functions, such as a desire to influence others or to produce a physical sign of emotional distress, but each of these functions is relevant only to a minority of people who self-injure. Further, the different functions of NSSI can be divided into 2 superordinate categories: intrapersonal–self-focused (for example, emotion regulation and self-punishment); and interpersonal–other-focused (for example, influencing others). The past decade has also seen the development and validation of tools to assess these functions.^{30,31}

What Is the Relation Between Nonsuicidal Self-Injury and Attempted Suicide?

NSSI and suicidal behaviours are both forms of SIBs, and therefore they are sometimes conceptualized as falling along a single self-harm continuum.^{32,33} However, NSSI and suicidal behaviours differ in several important ways. NSSI is more prevalent, involves different methods (for example, cutting and burning, rather than behaviours involving firearms, hanging, or self-poisoning), and results in bodily harm that is less medically severe and that causes less lethal damage, compared with suicide attempts.^{15,21,34–37} More importantly, people who engage in NSSI do not intend to end their own life.^{3,38} In fact, NSSI is most often performed in the absence of suicidal ideation.²⁰ Because of these and other accumulating empirical findings, the distinction of NSSI from suicidal behaviour is a point of emphasis in the most recent edition of the DSM,³⁹ which proposes that NSSI be classified as an independent diagnostic entity.

Importantly, however, the differences between NSSI and attempted suicide do not preclude their co-occurrence. Indeed, NSSI and suicidal behaviours have often been found to co-occur in both community¹⁷ and psychiatric populations.⁶ Moreover, a growing body of literature suggests that NSSI may be an especially important risk factor for suicidal behaviour. Klonsky et al⁷ found NSSI to be more strongly associated with a history of suicide attempts than other established risk factors for suicide, such as depression, anxiety, impulsivity, and BPD. Further, there is accumulating longitudinal evidence that NSSI is a strong predictor of future suicide attempts, even stronger than a history of past suicide attempts.^{40–42}

An important question, then, is how to understand the relation of NSSI to attempted suicide (for an extensive discussion see Hamza et al⁴³). We suggest that Thomas

Abbreviations

BPD	borderline personality disorder
CSA	child sexual abuse
DSM	Diagnostic and Statistical Manual of Mental Disorders
NSSI	nonsuicidal self-injury
SIB	self-injurious behaviour

E Joiner's interpersonal theory of suicide⁴⁴ provides a compelling framework for understanding this relation.⁷ Joiner's theory states that people must possess both the desire for suicide and the capability to act on this desire for one to make a potentially lethal suicide attempt. In general, people fear and seek to avoid pain and injury, especially pain and injury that may result in death. Therefore, acquiring the capability for suicide entails overcoming the pain and fear associated with performing the suicidal act. Viewed in this context, NSSI may represent a unique risk factor for suicide as it is strongly associated with emotional and interpersonal distress,^{5,8,45} which increases risk for suicidal ideation and (or) desire, and desensitizes people to the pain associated with SIBs, which increases capability to act on suicidal desire.⁶ In short, when it comes to suicide risk, NSSI presents double trouble, in that it increases risk for both suicidal ideation and the ability to act on the ideation.

Dispelling Misconceptions About Nonsuicidal Self-Injury

Research during the past 10 to 15 years has also allowed NSSI researchers to correct several misconceptions regarding the diagnosis, etiology, and functions of NSSI. For example, historically, many have viewed NSSI as, first and foremost, a symptom of BPD. Indeed, in DSM-IV,^{46,47} NSSI appears only once, as part of a symptom of BPD. However, numerous studies have now demonstrated that NSSI does occur independently from a diagnosis of BPD, and that NSSI reflects clinically significant impairment regardless of whether BPD is also present.⁴⁸ For this reason, DSM-5 has classified NSSI as its own diagnostic entity for further study.³⁹

Another misconception regards the etiology of NSSI. Many have implicated CSA as a primary cause of NSSI, referring to NSSI as a result, manifestation, or even a re-enactment of CSA; but meta-analytic data show that child sexual abuse and NSSI have only a modest association.⁴⁹

A final misconception involves the motivation for NSSI. It is sometimes assumed that NSSI primarily functions to elicit attention or reactions from others. It is true that NSSI sometimes serves interpersonal functions; however, across studies by diverse investigators using diverse methods and populations, it has become clear that NSSI is infrequently attention-seeking. Instead, NSSI is most often performed in private as a way to quickly alleviate intense negative emotions.^{3,13,45,50}

What We Need To Know: Rationale for the In Review

The last 10 to 15 years have witnessed a tremendous advancement in knowledge about NSSI. We now know much about the descriptive characteristics, psychosocial correlates, and functions of NSSI. We suggest that the next step is to apply this information to the development of the following:

- 1) empirically grounded theories for understanding NSSI and
- 2) more effective interventions designed specifically to meet the needs of people who engage in NSSI.

Of course, these 2 aims are complementary. Data-based theories inform the development of more effective interventions, and lessons learned from the development and evaluation of new interventions lead to revised and enhanced theory. The 2 articles^{1,2} that comprise this In Review were commissioned to support these aims.

Andover and colleagues¹ and Turner and colleagues² describe how NSSI may be understood in the context of a well-known and heavily researched emotion regulation framework.⁵¹ This approach is promising and timely, given the extensive body of literature implicating negative emotions and emotion dysregulation in both the psychosocial correlates and functions of NSSI. The framework proposed by Andover et al¹ and Turner et al² has promise for clarifying both theoretical and clinical perspectives on NSSI, and for motivating others to offer enhanced or alternative organizing perspectives.

Turner and colleagues² present a systematic review of treatment studies in which NSSI was included as an outcome. This review is particularly timely and important because few treatments have been specifically tailored or designed for NSSI. Instead, treatments applied to NSSI tend to be those that were developed for related conditions, such as BPD or suicidality. The review by Turner et al² provides critical information regarding the kinds of treatment approaches and principles that are most likely to be appropriate for individuals with NSSI, and thus a foundation for others to adapt these treatments more specifically to NSSI, or to incorporate and integrate aspects from different existing treatments into single, cohesive new treatments optimized for people with NSSI.

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