



Published in final edited form as:

Arch Suicide Res. 2019 ; 23(4): 551–563. doi:10.1080/13811118.2018.1486252.

Self-Injury Age of Onset: A Risk Factor for NSSI Severity and Suicidal Behavior

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Abstract

Objective: This study replicates and extends prior work by examining how age of NSSI onset relates to NSSI severity, suicidal behavior, perceived recovery from NSSI, and protective factors of life satisfaction, resilience, and subjective happiness.

Methods: University students who reported engaging in NSSI within the past year ($n = 644$) completed on-line questionnaires assessing NSSI characteristics, suicidal behavior, and protective factors.

Results: Participants who began self-injuring at or before age 12 reported significantly more lifetime acts of NSSI, greater method versatility, and medically severe NSSI than those who began NSSI at older ages (17years). Those with a typical age of onset (13–16years) did not differ from the younger age group on method versatility, medical severity, past year frequency, or perceived recovery but did differ from those with an older age of onset. The proportion of individuals reporting suicide attempts significantly increased as the age of onset became younger. No age of onset group differences were observed on the protective factors.

Conclusions: The age at which one begins NSSI appears to be a risk factor for increasingly severe NSSI and potential suicidal behavior. Early detection and intervention is important for reducing the negative consequences of engaging in NSSI.

Keywords

Self-injury; NSSI; self-harm; Risk Factor; Suicide; Recovery; protective factor

Concern regarding non-suicidal self-injury (NSSI) among adolescents and young adults continues to rise given findings that large portions of adolescents report engaging in the behavior at some point in their lives (Muehlenkamp, Claes, Havertape, & Plener, 2012; Taliaferro & Muehlenkamp, 2015), and NSSI holds a strong connection to future suicidal behavior (Victor & Klonsky, 2014; Whitlock, Muehlenkamp, et al., 2013). Research has consistently reported an average age of onset for NSSI around 14 years (Ammerman,

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Jacobucci, Kleiman, Uyeji, & McClosky, 2017; Gandhi, Luyckx, Baetens, Kiekens, Sleuwaegen et al., 2018; Swannell, Martin, Page, Hasking, & St John, 2014), but recent studies indicate there is notable variations in age of onset. In a review of longitudinal studies examining NSSI, Plener and colleagues (2015) found the *prevalence* of NSSI steadily increases up to age 12, peaks between age 14 and 16, and shows a decrease beginning around age 18. Within a large epidemiological study of Belgian adolescents, Gandhi and colleagues (2018) found the highest odds for beginning NSSI were at ages 14 and 15, with odds starting to weaken around age 18. A handful of studies have also reported that ages 18–20 are the second most common age for NSSI to emerge, after age 14 (Gandhi et al., 2018; Whitlock, Muehlenkamp, Purington, Eckenrode, Barreira et al., 2011), suggesting adolescence is the critical time period for the onset of NSSI. The variations in age of onset suggest there may be unique developmental factors influencing different patterns to NSSI initiation that could influence features of the behavior based on the age when self-injury begins.

Age of NSSI onset is rarely examined as a unique risk factor influencing the behavioral features of NSSI or its vulnerabilities. This is surprising given research suggesting that the longer one engages in NSSI the more likely there is to be increased frequency, versatility, and severity of co-occurring pathologies (Somer, Bildik, Kabukçu-Ba ay, Güngör, Ba ay, & Farmer, 2015; Victor, Styer, & Washburn, 2016; Whitlock et al., 2011), as well as poorer overall quality of life (Rotolone & Martin, 2012). In the only known study that specifically examined age of onset as a risk factor, Ammerman and colleagues (2017) used decision tree analyses and found that age of onset for NSSI at or prior to 12 years of age was associated with increased frequency, method versatility, hospital visits due to medically severe NSSI, and having a suicide plan. While this study provides data suggesting age of onset is a potential risk factor for more severe patterns of NSSI, a number of limitations exist. A primary limitation is that the authors did not control for duration of NSSI, and as they stated, the increased frequency and method versatility observed may be due to the fact individuals with an early age of onset simply had longer to experiment with methods and occasions to engage in NSSI. Additionally, the sample was comprised predominantly of individuals with a history rather than current NSSI, making it hard to discern whether age of onset increases risk for more severe NSSI among those actively engaging in the behavior; and, overall NSSI frequency (median of 8 lifetime acts) within the sample was low. Replicating these findings within additional samples, particularly with individuals currently engaging in NSSI would strengthen conclusions about age of onset as a unique risk factor.

Another limitation to understanding the full impact of age of onset is the lack of data on whether an earlier age of onset is also associated with lower rates of recovery from NSSI. There is very little research on the recovery process for NSSI, and knowledge about how characteristics of NSSI, such as age of onset, impact recovery is scarce. Furthermore, only a few studies examine potential protective factors associated with NSSI, and we are not aware of any that look at how age of onset may influence such factors. Past studies suggest that factors such as life satisfaction, objective happiness, and resilience are associated with a decreased likelihood of engaging in NSSI (Kress, Newgent, Whitlock, & Mease, 2012; Rotolone & Martin, 2012). It is unknown how these protective factors operate within those who are actively engaging in NSSI to influence markers of severity such as frequency,

method versatility, and need for medical attention. Also, there is no known data regarding how these protective factors may vary in relation to age of NSSI onset. Past research shows that factors such as resilience, life satisfaction, and subjective happiness are linked to positive mental health, ability to cope with distress, and decreased symptoms of depression and anxiety (Jones, You, & Furlong, 2013; Wood & Tarrier, 2010). Examining global protective factors such as these is important because they can be easier to target in universal prevention efforts. Aspects such as resilience, life satisfaction, and subjective happiness may also influence a person's resolve to refrain from NSSI, so exploring how age of onset is related to protective factors is important to advancing the field's understanding of NSSI engagement. Knowing if these factors vary as a function of age of onset of NSSI could also shed light on potential ages to target for prevention programs. If age of onset is a risk factor for NSSI severity among those currently engaging in the behavior, it may also be related to the strength of the protective factors. Assuming higher levels of these factors should serve to protect one from engaging in NSSI, we hypothesize that individuals who began NSSI at a later age may have higher levels of protective factors (e.g., they delayed the onset) than those who began NSSI at an earlier age, but to our knowledge this has yet to be explored.

There is also a need to examine how age of onset of NSSI may influence the relationship between NSSI and suicide. While there is a growing body of evidence demonstrating that NSSI is a robust risk factor for suicide (Anestis, Khazem, & Law, 2015; Victor & Klonsky, 2014), mixed results have emerged with regard to how strongly different NSSI characteristics affect risk. Specific to age of onset, Ammerman and colleagues (2017) found that an earlier age of onset was related to having suicide plans, but not to attempts or ideation. In contrast, others have reported that suicide ideation and attempts were more common in groups of self-injurers who reported an earlier age of onset (Somers et al., 2015), where others have found that a later age of onset was associated with attempted suicide (Klonsky & Olino, 2008). Ideation-to-action (Klonsky & May, 2015) theories stress the importance of understanding unique factors differentiating suicidal thoughts, plans, and attempts. Research indicates that higher NSSI lifetime frequency and method versatility are strongly associated with suicidal behavior (Paul et al., 2015; Victor & Klonsky, 2014), so it would be expected that those with an earlier age of NSSI onset would also report more thoughts, plans, attempts. However, these associations may differ among those currently engaging in NSSI depending on the duration of the NSSI. The current study aims to expand upon the mixed findings and examine how age of NSSI onset is associated with lifetime and past-year suicide ideation, plans, attempts taking into account the duration of time individuals' have been engaging in NSSI.

It is worthwhile to replicate and expand upon the study conducted by Ammerman and colleagues (2017) by assessing how age of onset is associated with potential protective factors for, and perceived recovery from, NSSI as well as suicidal behavior among individuals who are currently engaging in NSSI. Finding differences could inform strengths-based prevention and intervention strategies. This study investigates how age of NSSI onset is related to frequency, method versatility, need for medical attention, suicidal behavior, perceived recovery from NSSI, and the protective factors of life satisfaction, resilience, and subjective happiness. It was hypothesized that participants currently engaging in NSSI who began NSSI at a younger age would report more frequent lifetime and past-year NSSI,

methods of NSSI, and needing medical care for NSSI injuries than those with an older age of onset (replicating past work). We also hypothesized that those with a younger age of onset would be more likely to have engaged in suicidal behavior (i.e., made a suicide plan or attempt), as well as report less life satisfaction, subjective happiness, resilience, and perceived recovery, than those who began NSSI at an older age (expanding current knowledge).

Methods

Participants

Participants for the current study were pulled from a sample of 4,178 first and second year students ($M_{\text{age}} = 18.96$, $SD = 1.53$; 74.1% female, 54.2% identifying as a minority) attending college at one of two Midwestern universities. Within this sample, 1143 students (27.4% of full sample) indicated a lifetime history of at least one act of NSSI, and 644 reported current NSSI (at least one act of NSSI within the past year; 15.4% of full sample). The NSSI participants reflected the demographics of the larger sample with 78.5% identifying as female, 5.7% as gender fluid or transgender, and 53.7% identifying with a minority race (41.0% African American, 6.2% Asian or Hmong, 3.6% Hispanic/Latino, 2.9% other/multiracial), and a mean age of 18.93 years ($SD = 1.46$). The average age of onset for NSSI was 14.36 years ($SD = 2.37$), and ranged from 10 to 22 years, with both the mode and median age of onset being 14 years. The most common forms of NSSI reported were cutting (80.1%), severe wound picking (46.2%), self-battery (42.5%), and burning (24.8%). Average lifetime frequency of NSSI was 57.49 acts (median = 26.0 acts, $SD = 71.92$ acts), and participants reported using an average of 2.83 methods ($SD = 1.67$). The mean frequency of NSSI acts in the past year was 13.71 (median = 6.0 acts, $SD = 19.04$), and 15.2% ($n = 97$) participants reported requiring medical attention for NSSI related injuries.

Procedures

All first and second year students enrolled at two Midwestern universities ($N = 7,800$) were contacted by email and invited to participate in a screening survey to determine eligibility for entry into a unique, but related study. The screening survey inquired about history and characteristics of NSSI and suicidal behavior, life satisfaction, resilience, and subjective happiness. Participation was voluntary, and all participants indicated informed consent prior to entering the study. Participants could include their name in a drawing for one of a few campus-specific prizes (e.g., coffee mug) as an incentive. An overall participation rate of 53.6% was achieved. Procedures for the current study were approved by the internal review board at both institutions.

Measures

Self-Injurious Thoughts and Behaviors Inventory-NSSI Module (SITBI-NSSI; Nock, Holmberg, Photos, & Michel, 2007): Items from the SITBI-NSSI module assessing the lifetime and past year frequency of NSSI, type of methods use, age at which NSSI began, and whether medical treatment was received for any injuries were included in

the current study. The SITBI has shown good reliability and validity across samples (Nock, et al., 2007). An alpha of 0.73 was obtained in the current sample for the NSSI items.

Perceived Recovery.—A single item was added within the SITBI module to assess individuals' perception of whether they had recovered from self-injury. Participants responded to the item; “*If you have not engaged in self-injury in the past year, would you consider yourself “recovered” from self-injury?*” using a 5-point scale (0 = No, 2 = Maybe, to 4 = Yes, definitely) as response options. Response values were used to categorize participants as “not recovered” (0–2) and recovered (3–4).

Suicide Behavior Questionnaire-Revised (SBQ-R; Osman, et al., 2001).—Participants responded to the SBQ-R item inquiring whether they had ever seriously considered suicide (suicide ideation), made a suicide plan, or had attempted suicide in their lifetime. Participants also responded to an item asking whether they had attempted suicide in the past year. The SBQ-R has shown strong validity and reliability in many samples (Osman et al., 2001).

Subjective Happiness Scale (Lyubomirsky & Lepper, 1997).—This four-item scale assesses an individual's perception of how happy they are in general and in comparison to other people. Participants indicate the extent to which the items describe them on a 5-point Likert scale. A total scale is calculated by averaging the response values for all items so that higher scores indicate greater subjective happiness. Reliability of this scale has been deemed good to excellent (Lyubomirsky & Lepper, 1997), and an alpha of 0.82 was obtained in the current sample.

Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985): The SWLS consists of four items inquiring about how close to ideal one's life is, how excellent the conditions of one's life are, how satisfied with life one is, as well as the desire to change one's life if given the chance to start over. Participants rated the extent to which they agreed with each item using a 7-point Likert scale (1 = “Strongly disagree” to 7 = “Strongly agree”). A total scale score was calculated by averaging the response values so that higher scores indicated greater life satisfaction. The SWLS has been shown to have high internal consistency and a 2-month test-retest correlation of 0.87 (Diener, et al., 1985). Internal consistency of the items in the current sample was $\alpha = 0.86$.

Connor-Davidson Resilience Scale-Brief (CD-RISC; Campbell-Sill & Stein, 2007): This scale consisted of ten items assessing adaptability in adverse situations, healthy coping skills, the extent that one tolerates adversity, and optimism when faced with hardships. Participants indicated the extent to which they agreed with each item using a 7-point Likert scale (1 = “Strongly disagree” to 7 = “Strongly agree”). A total scale score was calculated by averaging response values for all items, with higher scores indicated greater resilience. The CD-RISC-brief has shown strong validity and reliability (Campbell-Sill & Stein, 2007). An alpha of .87 was obtained in the current sample.

Data Analysis Plan

To examine our hypotheses, participants were divided into three groups reflecting a younger age of onset (age 12 and younger), typical age of onset (age 13–16), and later age of onset (age 17 and older). We chose to split the sample in this way given recent data suggesting age 12 as the cut-off for “early” NSSI (Ammerman et al., 2017; Plener et al., 2015), the robust findings that NSSI onset peaks between age 13–16 (Gandhi et al., 2018; Plener et al., 2015; Swannell et al., 2014), and data indicating age 17/18 as an age where the odds of starting NSSI begins to decrease (Gandhi et al., 2018; Plener et al., 2015). These splits resulted in 141 (21.9%) participants being placed into the younger age of onset group, 374 (58.1%) comprised the typical age of onset group, and 129 (19.9%) fell in the older age of onset group.

Two MANCOVAs with duration of NSSI engagement as the covariate evaluated group differences on the continuous measures of NSSI characteristics and protective factors. Duration of NSSI was not directly assessed on our survey so we computed duration by subtracting the participants’ reported age of onset from their current age since all participants had recent acts of NSSI. We examined data for extreme outliers on all the continuous variables (more than 2.5 standard deviations above the mean; $n = 10$) and replaced those values with the score at 2 standard deviations above the mean (Field, 2013). All the variables with the exception of lifetime and past year frequency demonstrated acceptable skew (0.05 to 0.43) and kurtosis (–0.65 to –0.37). A log-10 transformation on lifetime and past year NSSI frequency was conducted to correct for non-normality prior to running the MANCOVAs.

Chi-square analyses tested the hypotheses for the categorical variables of needing medical attention, lifetime suicide plans and attempts, past-year suicide attempts, and perceived recovery. Despite the fact the phrasing of the perceived recovery item stated “if you have not self-injured in the past year...,” a majority of participants still responded to this item ($n = 516$; 80.1% of the analytic sample). All participants in the analytic sample reported engaging in one or more acts of NSSI in the past year, but it is possible that some did so months prior to taking the survey and so may have considered themselves currently recovered from NSSI. We decided to conduct exploratory analyses on the perceived recovery item among those who responded to it since this is an under-studied area within the field.

Results

NSSI Characteristics

Table 1 displays the log-transformed mean lifetime and past year NSSI frequencies and number of methods as a function of age of onset. The multivariate model was significant, Wilk’s $\lambda = 0.928$, $F(6,1248) = 7.97$, $p < .001$, $d = 0.39$, with differences between groups observed on all three variables (see Table 1). Controlling for the significant effect of NSSI duration, $F(3, 624) = 9.14$, $p < .001$, participants with a younger age of onset reported significantly greater lifetime NSSI frequency than those with a typical or older age of onset, but did not differ from those with a typical age of onset on past year frequency or method versatility. Those with a later age of onset had significantly fewer lifetime and past year acts

of NSSI, as well as reported less method versatility than both the younger and typical age of onset groups (see Table 1).

The age of onset groups also significantly differed in the proportion of individuals requiring medical attention, $\chi^2(2) = 6.50, p < .04$, Cramer's $V = 0.10$, and perceived recovery, $\chi^2(1) = 7.70, p < .03$, Cramer's $V = 0.12$. Those with an older age of onset were less likely to have required medical attention for their NSSI injuries than either the early or the typical age of onset groups, whom did not differ from each other on need for medical attention. Participants with a younger age of onset were significantly less likely to report perceiving themselves as having recovered from NSSI than those with an older age of onset, and the typical age of onset group did not differ from either the younger or older age of onset groups in regards to perceived recovery (see Table 1).

Suicidal Behaviors

A significant group difference was observed for lifetime suicidal ideation only, $\chi^2(2) = 8.21, p < .02$, Cramer's $V = 0.11$, with the younger age of onset group having a significantly smaller proportion of only ideators than the typical and later age of onset groups, who did not differ from each other (see Table 1). There were no significant group differences for lifetime suicide plans, $\chi^2(2) = 1.06, p > .58$, Cramer's $V = 0.04$, but there were group differences for lifetime suicide attempts, $\chi^2(2) = 29.60, p < .01$, Cramer's $V = 0.22$. All three groups significantly differed from each other with an increasing proportion reporting a lifetime suicide attempt as age of onset decreases (see Table 1). The younger age of onset group also had a significantly larger proportion of individuals reporting a past-year suicide attempt than the typical and older age of onset groups, $\chi^2(2) = 11.69, p < .01$, Cramer's $V = 0.14$, who did not differ from each other (see Table 1).

Protective Factors

The multivariate model testing group differences on the protective factors was not significant, Wilk's $\lambda = 0.99, F(6,1186) = 1.07, p > .38, d = 0.14$. As seen in Table 1, the three age of onset groups reported very comparable levels of life satisfaction, resilience, and subjective happiness. A post-hoc MANCOVA with duration and perceived recovery as covariates was conducted to explore whether perceptions of having recovered from NSSI would influence results specific to age of onset. While both covariates, duration and perceived recovery, showed significant between subject effects for resilience and subjective happiness, the full multivariate model was not significant, Wilk's $\lambda = 0.98, F(6,620) = 0.64, p > .70, d = 0.16$. Thus, age of onset was not associated with differences in the assessed protective factors.

Discussion

Our findings replicate prior research indicating that the age at which an individual begins NSSI is a potential risk factor for increased severity of NSSI (Ammerman et al., 2017), and may also elevate risk for suicidal behavior among those with an earlier age of onset. Currently self-injuring individuals who began their NSSI at or before age 12 reported significantly higher lifetime frequencies than those who had a typical or older age of onset

even after controlling for the duration of NSSI. However, the younger age of onset group did not differ from those with a typical age of onset in terms of method versatility, need for medical attention, and past year frequency. These findings suggest that those initiating NSSI during childhood compared to early/mid-adolescence may not show meaningful differences in the characteristics of their NSSI but do represent a group at risk for more severe NSSI relative to those who begin self-injury at a later age.

Initiating NSSI at a later age appears to be somewhat protective since individuals in that group reported the lowest frequencies, method versatility, and need for medical attention compared to the younger and typical age of onset groups. These results align with other research suggesting that an earlier onset of NSSI may contribute to a more chronic, severe, and long-lasting condition (Ammerman, et al., 2017; Groschwitz, Plener, Kaess, Schumacher, Stoehr, & Boege, 2015). While duration of NSSI was controlled for in all analyses, it remains a potential reason for why an earlier age of onset may produce more medically severe NSSI. Over time an individual may habituate to the effects of NSSI requiring not only increased repetition but also changes in methods and/or severity of the injury to produce the desired physiological or psychological effects (e.g., Whitlock, Exner-Cortens, & Purington, 2014).

In addition to having more medically severe injuries from NSSI, there was a negative association between age of onset and suicidal behavior. Those with a young age of onset were more likely to have attempted suicide in their lifetime and in the past year than either the typical and older age of onset groups. In contrast, those with an older age of onset were more likely to have experienced only thinking about suicide and least likely to have attempted suicide but, there were no group differences regarding having made a suicide plan. These findings contrast with those reported by Ammerman et al. (2017), who only found differences in having made a suicide plan across age of onset groups. The inconsistent results could be due to sampling differences since the current sample was comprised of participants actively engaging in NSSI who also reported higher lifetime and past-year acts of NSSI than those in the Ammerman study. The inconsistent results across studies suggests a need to further examine how age of onset impacts suicide risk within diverse samples.

Still, the current results add to the robust literature showing that NSSI holds a strong relationship to suicidal behavior (Victor & Klonsky, 2014) and indicates that initiating NSSI at or before age 12 is a potential marker for suicide risk. Although it is equally important to recognize that those with a typical age of onset also report more suicide attempts than those with an older age of onset suggesting that initiating NSSI during early and mid-adolescence is also associated with heightened risk. Again, age of onset may impact suicide risk directly, or indirectly through its impact on frequency and method versatility, both of which have been identified as key features of NSSI associated with suicidal behavior (Victor & Klonsky, 2014). It may also be that an individual who has engaged in NSSI for multiple years has come to rely heavily on the NSSI as a coping strategy, habituating to fears of serious self-harm and therefore, could more quickly transition from suicidal ideation to actions if the NSSI is failing to achieve the desired outcomes (e.g., Brausch & Muehlenkamp, 2018). The current results underscore the importance of early detection and intervention with youth who

are self-injuring so that the medical severity of their NSSI and risk for suicidal behaviors can be contained.

Expanding on the limited research examining recovery in NSSI, we found that those with an older age of onset were more likely to perceive themselves as having recovered, even though they reported at least one act of NSSI within the past year, relative to those with a younger age of onset, but not to those with a typical age of onset. This result may reflect the impact of duration, or the lower severity of NSSI observed within the older age of onset group, as one prior study found that severity of NSSI impacted recovery from NSSI more so than age of onset (Whitlock, Prussien, & Pietrusza, 2015). It is possible that beginning NSSI at a later age results in an “experimental” pattern of self-injury (e.g., Klonsky & Olino, 2008; Thullen, Taliaferro, & Muehlenkamp, 2016; Whitlock, Muehlenkamp, & Eckenrode, 2008) that does not become an ingrained coping mechanism so that even a short period of no-NSSI is perceived as having recovered; whereas those who begin at an early age may come to rely more heavily on NSSI making recovery from the behavior harder (Whitlock et al., 2015). Those with a typical age of onset may not differ from either group in their perceived recovery because they may represent a heterogeneous group with varied patterns of NSSI ranging from experimental to chronic/repetitive engagement, but additional research is needed to explore this possibility. It may also be that age of onset has an indirect effect on recovery from NSSI through its impact on frequency, versatility, and severity which was observed in this and other studies. Future research will need to examine how age of onset interacts with duration and other NSSI features to influence actual and perceived recovery.

Contrary to study hypotheses, no differences were observed between age of onset groups on the protective factors assessed. The lack of differences may be due to the fact all our participants had recently engaged in NSSI and current external circumstances may impact perceptions of happiness, resilience, and life satisfaction more so than the age at which NSSI began. NSSI is motivated by desires to alleviate and cope with distress irrespective of age of onset, or whether one has recovered from the behavior (Klonsky & Muehlenkamp, 2007), which may also explain why no differences were found between groups. Given that the sample was currently self-injuring, it makes sense they would perceive similar (low) levels of life satisfaction and happiness that is not influenced by age of NSSI onset. It is also possible that self-injurers perceive their NSSI to be an effective coping mechanism, allowing them to see themselves as resilient individuals, capable of managing their distress; albeit through maladaptive means. It appears that age of onset for NSSI does not directly impact protective factors so interventions to enhance these protective factors could mitigate self-injury at any age. Exploring the trajectory and influence of protective factors across the developmental course of NSSI is a rich opportunity for future research to explore.

While these data fill a gap in the literature, the limitations of the current study need to be considered. First, these results come from the use of cross-sectional, self-report data from college students. The majority of participants also identified with a female gender and were of a White/Caucasian ethnicity. Replication with a more diverse sample and with a longitudinal design would improve confidence in the results, as well as generalizability. While the sample was comprised of students actively engaging in NSSI, all participants were college students and the results might change within a clinical inpatient or outpatient

sample. Due to the nature of the data collection, we were limited in the number of variables to assess and encourage additional research to extend the current findings by exploring potential mediators and moderators, as well as other protective factors.

Overall, the current results replicate and extend prior research suggesting that an earlier age of onset is associated with markers of more severe NSSI and risk for suicidal behavior. Preventative interventions that help youth to strengthen their subjective happiness, resilience, and satisfaction with life, such as fostering a strengths-focused, or gratitude- mindset at any age may reduce vulnerability to NSSI (e.g., (Davis, Choe, Meyers, Wade, Varjas, et al., 2016). In addition, detecting NSSI as early as possible and helping youth to stop the behavior appears to be critical for decreasing the negative sequelae that occurs among those who begin NSSI early age.

Acknowledgements:

This research was supported by the National Institute of Mental Health under Award Number R15MH110960. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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Table 1.

Group Differences on NSSI Characteristics, Protective Factors, and Suicidality as a function of Age of Onset

NSSI Characteristics/ Protective Factors	Young Age of Onset(n = 141)M (SD)	Typical Age of Onset(n = 374)M (SD)	Older Age of Onset(n = 129)M (SD)	F-Statistic (df = 2)	d
Lifetime Frequency ^a	1.80 (0.51)	1.54 (0.56)	0.96 (0.60)	6.23 **	0.48
Number of Methods	3.69 (1.75)	3.33 (1.59)	2.08 (1.13)	12.07 **	0.39
Past Year Frequency ^a	1.02 (0.52)	0.82 (0.51)	0.62 (0.48)	18.02 **	0.29
Life Satisfaction	3.50 (1.25)	3.71 (1.28)	3.86 (1.18)	0.02	0.00
Subjective Happiness	2.70 (0.75)	2.80 (0.77)	2.93 (0.79)	0.21	0.06
Resilience	4.08 (1.07)	4.27 (1.10)	4.39 (1.02)	2.35	0.18

Categorical Variable	Younger % Yes	Typical % Yes	Older % Yes	X ²	Cramer's V
Medical Attention Needed	18.7	16.1	8.6	6.50 *	0.10
Perceived Recovery	25.4	33.7	43.5	7.70 *	0.12
Lifetime Ideation Only	19.6	26.8	35.2	8.21 *	0.11
Lifetime Suicide Plan	38.4	40.9	35.9	1.06	0.04
Lifetime Suicide Attempt	39.9	24.7	10.9	29.60 **	0.22
Past Year Suicide Attempt(s)	24.1	13.0	10.9	11.69 **	0.14

Note.

^aMeans for lifetime and past year frequency are the log-transformed means.

* $p < .05$

** $p < .01$