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Poster and Oral Presentation Abstract Book



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Welcome to the 16th annual conference of the International Society for the Study of Self-Injury!

It is my pleasure to welcome you to this year's online conference. While I am disappointed we are yet again meeting online, I am pleased to see so many high quality presentations from all corners of the globe.

This year we have 23 extended abstracts, 38 pre-recorded oral presentations and 4 symposia. Topics covered are diverse and include psychobiology of NSSI, peer education, use of technology and intervention studies, assessment of NSSI, and the lived experience of NSSI. Research methods are also evolving, with neurological studies, experimental studies, longitudinal studies, clinical case studies, ethnography, qualitative and EMA studies all represented.

We also have an exciting live program over three days, hosted on Zoom.

This includes presentations from our inaugural Invited Fellows, Barry Walsh and Jennifer Muehlenkamp, as well as from our 2021 Rising Star – Sarah Victor. We have presentations from individuals with lived experience and a discussion on the costs and benefits of online advocacy. There will also be lively social activities, designed to bring us together, although we remain physically separated.

I would like to take this opportunity to thank all who have helped bring this conference together this year. First, Rachel Zerkowicz who has been our webmaster and played a critical role in getting all the recorded abstracts online. She was ably supported by Laurianne Bastien who organised all the YouTube clips of the pre-recorded talks. Second, Ruth Tatnell and Lexy Staniland for helping with the social activities. Rachel and Ruth have also been instrumental in making sure everyone's membership is up to date and that people are able to access the pre-recorded content. Third, Paul Plener, who despite not being able to hold the conference in Vienna as planned, is still virtually hosting the conference from Vienna. And last but not least, the rest of the ISSS Executive Board: Stephen Lewis, Greg Lengel, Jason Washburn, Marc Wilson, Lindsay Taliaferro, Nicholas Westers, Mark Boyes, and Elizabeth Lloyd-Richardson - all of whom reviewed abstracts, decided on prize winners, and have planned this three day conference.

I hope you enjoy the program.

Penelope Hasking

ISSS President



POSTER PRESENTATION ABSTRACTS

Examining the Neurobiology of Non-Suicidal Self-Injury in Children and Adolescents: The Role of Reward Responsivity

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Background: Although prior work has shown altered responses to negative and positive outcomes across monetary and social domains in non-suicidal self-injury (NSSI) in adults, little is known about the role of reward responsivity in NSSI in youth populations. Thus, the current study examined associations between NSSI engagement and neural responsivity to negative and positive outcomes across reward domains in youth aged 9-12 years old.

Method: We employed task-based functional magnetic resonance imaging to examine differences between youth with and without NSSI in responses to negative and positive outcomes. NSSI was defined by lifetime history of one or more NSSI acts, evaluated using a diagnostic interview, the Kiddie Schedule for Affective Disorders and Schizophrenia-PL DSM-IV, and a self-report scale, the Inventory of Statements about Self-Injury. We used the Chatroom Interact Task (N=121, N_{NSSI}=36) to examine responses to social rejection and acceptance, and the Guessing Task (N=97, 30 N_{NSSI}=30) to examine responses to monetary losses and gains. Regions of interest (ROIs) were determined based on prior NSSI fMRI studies, and included the ventral and dorsal striatum [VS, DS], anterior cingulate cortex [ACC], orbitofrontal cortex [OFC], ventrolateral and ventromedial prefrontal cortex [vlPFC; vmPFC], and insula. We also examined whole-brain connectivity, utilizing bilateral DS, mPFC, and insula seeds. Finally, we examined the specificity of the associations for NSSI by controlling for dimensional levels of comorbid depressive and aggressive symptomatology.

Results: ROI analysis results found that NSSI was associated with reduced activation following monetary gains in the VS, DS, ACC, OFC, vlPFC, vmPFC, and insula. These differences remained significant when controlling for aggression and depression. No significant differences between groups in ROI activation were found following monetary loss, social rejection, or social acceptance. Connectivity analyses found differential connectivity between groups in regions including the DS, mPFC, insula, parietal operculum cortex, supramarginal gyrus, cerebellum, and central opercular cortex. When controlling for depressive and aggressive symptoms, youth with NSSI displayed attenuated negative connectivity between the DS and vmPFC following monetary loss, and negative connectivity between the DS and parietal operculum cortex, whereas youth without NSSI displayed positive connectivity between these regions, following both monetary loss and gains.

Discussion: Our findings of associations between NSSI and decreased activation in ROIs following monetary gains suggest that individuals with NSSI exhibit disruptions in responses to monetary reward processing. Thus, individuals who demonstrate reward hyporesponsivity may be at higher risk for problem behaviors such as NSSI. Connectivity findings showed differential connectivity between frontal, limbic, and reward-related regions. Attenuated connectivity between these regions in individuals with NSSI suggests deficits in inhibitory control of emotions. Further, negative connectivity between the DS and parietal operculum cortex could suggest dysfunction in pain processing, whereby individuals with NSSI may experience pain as less salient than those without NSSI, who display positive connectivity between these regions. Lastly, our findings also suggest these neural correlates are specific to NSSI, rather than being accounted for by symptoms of aggression or depression. As the current study establishes differential processing following the onset of NSSI, future work should seek to examine the prospective associations between neural function, connectivity, as this work could eventually help us to predict the individuals who will go on to engage in NSSI prior to engagement, contributing to prevention efforts for NSSI behaviors in the future.

Posttraumatic Stress Symptomology and Non-Suicidal Self-Injury: The Role of Intrusion and Arousal Symptoms

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Background: Previous evidence has shown a strong relation between Posttraumatic Stress Disorder (PTSD) symptomology and Non-Suicidal Self-Injury (NSSI). The current study aimed to extend prior research by investigating the relationship between PTSD symptom clusters (arousal and intrusion) and NSSI, and putative moderators of this association within a large-scale adult sample in England.

Method: A subsample with experiences of trauma in adulthood ($n=2,480$) from the Adult Psychiatric Morbidity Survey (APMS) was utilised to examine the relations among PTSD intrusion and arousal symptom clusters, childhood interpersonal trauma, perceived social support and lifetime NSSI.

Results: Arousal symptoms were consistently associated with NSSI, even when adjusting for multiple covariates, and had a stronger relationship than intrusion symptoms. Childhood interpersonal trauma was independently and significantly associated with lifetime NSSI after adjusting for covariates. However, the moderating effects of childhood interpersonal trauma and perceived social support were not statistically significant.

Discussion: PTSD arousal and a history of childhood interpersonal trauma were significantly associated with lifetime NSSI. Findings highlight the need for NSSI screening as well as for specific interventions that target the complex needs of those who exhibit elevated PTSD arousal symptoms, especially those with a history of childhood interpersonal trauma.

Psychosocial determinants of NSSI among young adults – a pilot study

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Background: An unfavourable family environment is associated with non-suicidal self-injury among adolescents and young adults. As evidence shows, a family is also seen as one of the causes of Early Maladaptive Schemas (EMS). At the same time, there is a scarcity of literature on determinants of the NSSI functions, such as, EMS or methods of coping with stress. Finally, little is known about family-related determinants of NSSI in Poland. Regarding the above-mentioned issues, the current study aimed to provide an insight into the relationship between psychosocial variables connected to both individual and family functioning and non-suicidal self-injury among people in early adulthood.

Method: The sample consisted of 97 young adults (18 – 34 year old) recruited from NSSI groups in social media. They were divided into two subgroups: the first one experiencing at least one form of NSSI in the past (n= 48), the second one without a history of NSSI (n= 49). Both groups completed self-report measures, which included: ISAS, YSQ-S3, Mini-COPE and FACES-IV.

Results. Out of 18 schemas, NSSI group achieved higher results in 15 EMS: Emotional deprivation, Abandonment, Mistrust, Social isolation, Defectiveness, Failure to achieve, Dependence, Vulnerability, Enmeshment, Subjugation, Emotional inhibition, Unrelenting standards, Insufficient self-control, Pessimism and Self-punitiveness. According to family-related variables, i.e. cohesion and flexibility, group with history of NSSI presented higher results in scales: Chaotic, Disengaged, and lower in scales: Balanced Cohesion, Balanced Flexibility, Family Communication Scale and Family Satisfaction Scale. Analysis of the coping strategies revealed that the NSSI group used more often: Dealing with something else, Use of psychoactive substances, Suppression of activities and Self-blame, whereas the non-NSSI group practised usually Active coping, Planning, Positive reappraisal, Turning to religion and Seeking emotional support. Multivariate, hierarchical linear regressions were used to explore the association between the psychosocial predictors and the outcome variables, i.e. functions of NSSI. The significant models were found for 12 functions of NSSI: Affect regulation (predictors: Vulnerability, Turning to religion and Use of psychoactive substances), Self-punishment (Self-punitiveness and Abandonment), Anti-dissociation (Self-punitiveness and Abandonment), Self-care (Insufficient self-control), Anti-suicide (Abandonment), Sensation-seeking (Rigid and Sense of humour), Peer-bonding (Social isolation, Entitlement and Seeking instrumental support), Interpersonal influence (Abandonment), Toughness (Mistrust and Enmeshed), Marking distress (Self-punitiveness), Revenge (Entitlement, Balanced cohesion and Balanced flexibility) and Autonomy (Emotional deprivation and Rigid).

Discussion: The current findings highlighted the importance of family and individual background in the non-suicidal self-injuries among young adults. In sum, families of people with a history of NSSI present less cohesion and flexibility, they also seem to be more chaotic. Their members are less engaged in a relationship with each other, have lower general satisfaction from family life and report decreased quality of communication. The study subgroups also differ in the coping with stress strategies. Besides, people with a NSSI history note higher levels in the most of EMS. Lastly, the psychosocial predictors of some of the NSSI functions have been found. The main limitations of the study include a low number of the participants and the usage of only self-report measures.

Circadian Variation of Cardiac Autonomic Activity in Adolescent Non-Suicidal Self-Injury

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Background: Decreased vagally-mediated heart rate variability (vmHRV) has been associated with a variety of pathological affective, cognitive, and behavioral processes and disorders, including adolescent non-suicidal self-injury (NSSI). Existing research in adolescent psychopathology mainly focused on short-term recordings of vmHRV under resting conditions. The investigation of circadian rhythms of autonomic nervous system (ANS) activity using ambulatory ECG measurements is an emerging field of interest. Previous studies in adults substantiated altered circadian variation patterns (CVP) of ANS activity in association with affective symptoms and disorders. CVP of ANS activity in developmental psychopathology, including NSSI disorder, has so far not been investigated. Further research into the association between CVP and clinical characteristics of adolescent NSSI disorder could provide important insights regarding the etiology and maintenance of the behavior, and critically inform the expansion of currently available treatment options.

Method: We examined for the first time whether CVP of cardiac autonomic activity indexed by heart rate (HR) and vmHRV derived from 48 hours of ambulatory ECG recording might be altered in adolescent NSSI disorder, compared to healthy, age-matched control females (HC; $N = 30$ per study group). We also examined potential associations between altered CVP and NSSI frequency, as well as a range of dimensional clinical predictors, including early life maltreatment (ELM), borderline personality disorder (BPD), difficulties in emotion regulation, depressive symptoms, and sleep duration. Several confounders, including physical activity, were controlled for.

Results: Adolescents with NSSI disorder are characterized by altered CVP of ANS activity, indexed by a greater HR Amplitude, MESOR and Acrophase, as well as a lower Amplitude and MESOR, and greater Acrophase, of vmHRV – although the latter findings were not robust when adjusting for important confounds. CVP of ANS activity in adolescent NSSI is characterized by a general shift in rhythmicity of about one hour, indexed by a later acrophase. ELM severity significantly predicted CVP of HR and vmHRV in unadjusted but not fully-adjusted models. BPD symptomatology was a significant predictor of CVP of HR but not vmHRV.

Discussion: In the present study, we expand on previous findings by demonstrating that CVP of ANS activity over 48 hours of recording is significantly altered in female adolescents with NSSI disorder compared to well-matched, healthy control participants. Furthermore, we found altered CVP to be potentially linked with ELM. Chronobiological interventions in NSSI might be translationally relevant avenues of future research, while there is also a need for rigorous control of critical confounders in ambulatory ECG studies.

Internalized stigma and NSSI assessment in daily life: NSSI stigma, urges, behaviors, and compliance with an ecological momentary assessment protocol

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Background: Non-suicidal self-injury (NSSI) severity has been found to predict less negative views of NSSI. However, research has not considered different types of internalized NSSI stigma and how they relate to NSSI urges and behaviors in daily life. Ecological momentary assessment (EMA) allows assessment of NSSI in real-world settings, but is limited by participants' willingness to complete surveys (compliance). Studies using EMA have reported mixed findings on how EMA compliance relates to psychopathology, and EMA compliance has not been examined in relation to internalized stigma, which may hamper participants' responding to questions about NSSI. The present analyses draw on EMA data collected from young adults with recent NSSI urges and/or behaviors to examine whether internalized NSSI stigma was associated with (1) EMA compliance and (2) EMA-reported NSSI urges or behaviors.

Method: Participants were 92 young adults with past month NSSI urges/behaviors and a lifetime history of NSSI. The mean age was 23.5 years ($SD = 4.3$). Thirteen percent ($n = 12$) of participants were cisgender men, 56.5% ($n = 52$) cisgender women, 5.4% ($n = 5$) trans men, 22.8% ($n = 21$) genderqueer or gender non-conforming, and 2.2% ($n = 2$) none of the above. 67.4% ($n = 62$) of participants were non-Hispanic white, 14.1% ($n = 13$) Hispanic/Latinx white, 3.3% ($n = 3$) Black or African American, 5.4% ($n = 5$) Asian or Asian American, and 9.8% ($n = 9$) multiracial or other. Internalized stigma of NSSI was measured at baseline with an adapted version of the Internalized Stigma of Mental Illness scale measuring (1) alienation, (2) stereotype endorsement, (3) discrimination experience, (4) social withdrawal, and (5) stigma resistance. Participants then received 6 surveys a day for either 7 days (38% of participants, $n = 35$) or 14 days (62% of participants, $n = 57$) assessing NSSI urges and NSSI behaviors (yes/no) since the last survey completed. Bivariate Pearson correlations were used to test whether internalized NSSI stigma reported at baseline was associated with (1) percentage of EMA surveys completed (out of 42 possible for participants who received EMA surveys for 7 days, and 84 possible for participants who received EMA surveys for 14 days) or (2) percentage of EMA surveys in which NSSI urges or behaviors were reported. A Bonferroni correction of $\alpha = .01$ (.05/5) was used to adjust for multiple comparisons. We hypothesized that higher internalized NSSI stigma would be associated with (1) fewer EMA surveys completed and (2) fewer NSSI urges and behaviors reported during EMA.

Results: 93.5% ($n = 86$) of participants reported NSSI urges during the EMA, and 53.3% ($n = 49$) reported NSSI behaviors. No domains of internalized stigma were significantly associated with EMA compliance or frequency of NSSI urges or behaviors ($ps \geq .085$).

Discussion: Results do not support an association between internalized NSSI stigma and EMA compliance and/or EMA-reported NSSI urges or behaviors. Results suggest that internalized NSSI stigma is unlikely to be a significant barrier to EMA research focused on NSSI, at least within similar samples of young adults. It is possible that the measure of internalized stigma used here differs meaningfully from measures assessing views of NSSI in prior research; greater research on internalized NSSI stigma is thus needed.

Nonsuicidal self-injurious behaviour cessation versus continuation during routine treatment

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Background: Nonsuicidal self-injury (NSSI) is a major public health concern because of its association with many unfavorable outcomes, including suicide. The rates of NSSI are elevated in non-psychotic mental disorders (NPMD) (reference). Up to now, there is no agreement in the literature on NSSI treatment strategies. Some studies have reported a reduction of NSSI behavior after treating the comorbid mental disorder (like mood, anxiety or personality disorder) following a routine protocol (reference). The current literature lacks the demographic and clinical variables associated with NSSI recurrence in patients with NPMD during the standard psychiatric treatment. In the present study, we aim to study the correlation between a broad range of sociodemographic, biographical and clinical factors and the 12 month-ongoing NSSI in patients with lifetime NSSI suffering from an NPMD. Patients were enrolled in the inpatient department of Moscow Research and Clinical Centre for Neuropsychiatry.

Methods: The study included 131 consecutive patients (110 assigned females at birth) with NPMD and lifetime NSSI. At the first visit, all patients underwent a structured interview to collect demographic and clinical data. A detailed ad-hoc semi-structured questionnaire was used. Variables for the questionnaire was chosen according to previous suicide research (reference) and included family history of self-injurious behavior, traumatic events like physical and sexual abuse, witnessing of domestic violence, sexual behavior, body modifications, substance abuse, history of psychiatric disorders and hospital admissions. Detailed information on self-injurious behaviors (suicide plans, suicide gestures, SA, age at first suicidal thoughts, NSSI) was obtained with the Self-Injurious Thoughts and Behaviors Interview (SITBI) (Nock et al., 2007). All patients were diagnosed with at least one NPMD according to ICD-10 diagnostic criteria and received treatment as usual (TAU) based on approved local treatment protocols. Patients were scheduled for a follow-up visit 12 months after discharge. Chi-square test, Fisher's exact test and logistic regression were used as statistical methods.

Results: At the follow-up period (12-FU), fourteen patients (10.7%) dropped out for the following reasons: one patient committed suicide, one developed a psychotic disorder, and 12 patients decided to quit for personal reasons. Of the remaining 117 patients, 51 (43.6%) (mean age 25.63 (8.67)) reported at least one episode of NSSI one year after discharge from the hospital. The remaining 66 (56.4%) (mean age 23.8 (5.69)) patients had no NSSI for the last 12 months at follow-up. These two groups differed significantly in few sociodemographic variables. Patients with no repetition of NSSI reported less lifetime domestic violence witnessing (34.8% vs 54.9%, $P=0.030$), less sexual abuse history (30.3% vs 51%, $P=0.023$) but more lifetime tattoos (62.1% vs 39.2%, $P=0.014$). No primary ICD-10 diagnoses, including personality disorders, or their number showed any association with repetition of NSSI in these patients, as well as the history of suicidal ideation, suicide plan, gesture or attempt by the time of the first interview. Nevertheless, at follow-up, fewer patients with no repetition of NSSI reported suicidal ideation (63.6% vs 94.1%, $P<0.001$) and suicide attempts (4.5% vs 27.5%, $P<0.001$), were less prone to discontinue treatment for the primary psychiatric condition (47.0% vs 66.7%, $P=0.033$) and, in contrast to the initial stage, had fewer tattoos (13.6% vs 39.2%, $P=0.001$) in the 12 months follow-up. In logistic regression analysis, the only factors that remained significant were lifetime sexual abuse history (OR2.23, 95%CI 1.12-4.44, $P=0.022$), 12-FU tattoos (OR3.84, 95%CI 1.29-11.4, $P=0.015$) 12-FU suicide ideation (OR 7.31, 95%CI 1.84-28.95, $P=0.005$) and 12-FU suicide attempt (OR 5.97, 95%CI 1.41-25.27, $P=0.015$).

Discussion: This study aimed to investigate the correlation between repetition of NSSI after TAU for non-psychotic mental disorder and sociodemographic and clinical variables. . Expectedly, interventions focused on

underlying psychiatric symptoms were not associated with a substantial reduction in NSSI. In some patients, the repetition of NSSI behavior was associated with treatment discontinuation, but we were not able to define a clear temporal relationship and this variable lost its significance in logistic regression analysis anyway. The only factors associated with repetition of NSSI behavior were suicidal ideation, suicidal attempt and new tattoos during the follow-up, along with a lifetime history of sexual abuse, which is in line with current views (Ose SO et al., 2021; Solís-Bravo MA et al., 2019). Our findings confirm a tight relationship between NSSI, suicidality, and trauma (Serafini G et al., 2017) and are not correlated to other psychiatric conditions. This study identified demographic and clinical variables associated with NSSI repetition during TAU for a psychiatric condition, which should further elucidate its triggers and possible explanation as a defined psychiatric condition regardless of the comorbid psychiatric disorder, as well as have implications for early identification and prevention of nonsuicidal and suicidal self-injurious behaviors.

NSSI Among University Students: Investigating the Roles of Parental Pressure, Perfectionism, Academic Coping, and Emotion Dysregulation

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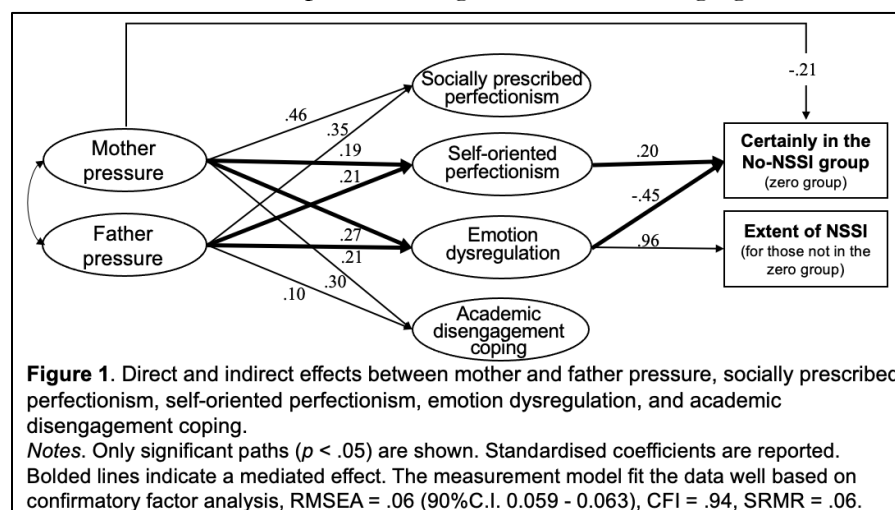
Background: Despite non-trivial rates of non-suicidal self-injury (NSSI) among university and college students (Kiekens et al., 2019), little research has explored risk factors relevant to the university student experience as predictors of NSSI. To date, developmental theory (Linehan, 1993) and research (e.g., Hasking et al., 2020) on NSSI risk factors emphasizes the key role of parental figures in shaping young people's disposition to cope with stress and negative emotions. Seeing as university students face considerable stress related to academic demands and performance (Beiter et al. 2015), one could anticipate that perceived parental pressure about achievement could predict less optimal adjustment to university-related demands (e.g., perfectionism, poor academic coping) and more dysregulated emotions. This maladjustment could, in turn, predict engagement in NSSI among students.

Objective: Our multiple mediation model explored whether perceived pressure from mothers and fathers (i.e., criticism, unrealistic expectations, and psychological control) may be related to past-year NSSI indirectly through socially prescribed perfectionism, self-oriented perfectionism, emotion dysregulation, and academic disengagement coping.

Method: The study sample consisted of 2,479 university students aged 17 to 25 (75% females; mean age=18.97, SD=1.55), of which 19% had engaged in NSSI within the past year. All data were collected via questionnaires online. Students' engagement in NSSI in the past year was measured using the Ottawa Self-Injury Inventory based on 5 response categories: "Never", "1-3 times", "4-6 times", "7-10 times", or "more than 10 times". To adequately handle excess zeros and resulting skewness in the NSSI variable (see Gonzalez-Blanks et al., 2020), zero-inflated negative binomial regression (ZINB) was used to predict NSSI (i.e., odds of engaging in NSSI, and frequency of NSSI among those who endorsed it).

Results: The model was tested through Structural Equation Modeling (SEM) using the MLR estimator and Monte Carlo numerical integration. Missing data (less than 2%) was handled using Full Information Maximization Likelihood. Results from the ZINB model (see Figure 1) indicated that higher mother and father pressure predicted lower odds of belonging to the zero group (i.e., greater odds of engaging in NSSI) indirectly through emotion dysregulation (mother_{indirect}: -0.22, $SE=0.03$, $p<.001$; father_{indirect}: -0.17, $SE=0.03$, $p<.001$). Higher mother and father pressure also independently predicted higher self-oriented perfectionism, which in turn predicted higher odds of belonging to the zero group (i.e., lower odds of engaging in NSSI; mother_{indirect}: 0.07, $SE=0.03$, $p=.02$; father_{indirect}: 0.07, $SE=0.03$, $p=.02$). The frequency of NSSI was only predicted by emotion dysregulation ($p<.001$).

Discussion: Consistent with extensive research documenting the role of emotion dysregulation in NSSI (Wolff et al., 2019), findings suggest that university students who feel a sense of undue pressure from mothers and fathers are more emotionally dysregulated and, in turn, more likely to engage in NSSI. Results also indicated that students were less likely to engage in NSSI when



the pressure they felt from parents was internalized as perfectionistic standards toward the self. In previous work, maladaptive aspects of perfectionism (e.g., evaluative concerns) have been found to be risk factors for NSSI (Ying et al., 2021). Taking this into consideration, our results suggest that different facets/conceptualizations of perfectionism may be differentially linked to NSSI. Students high in self-oriented perfectionism may be *less* likely to engage in NSSI because of their higher positive strivings, or because they may perceive NSSI to be dissonant with their personal standards of achievement.

Nonsuicidal Self-Injury: design of a school-based Peer Education Program for adolescents

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Background: Nonsuicidal self-injury (NSSI) emerges as a major mental-health concern, as it is highly prevalent among youth and prospectively associated with suicide attempts and negative mental health outcomes. Although NSSI represents an impairing behavior, the development of evidence-based preventive approaches for youth is still limited. Stemming from the idea that identifying vulnerability factors that predispose to the target behavior is a crucial step in planning an effective prevention, the Peer Education Program for NSSI (PEP-NSSI), grounded in the psychoanalytic tradition, implement psychoeducational modules targeting four crucial risk factors for NSSI: pubertal changes, body image, self-esteem, and emotion regulation. As puberty approaches, adolescents have to address confronting developmental milestones related to the rapid body changes. The new and frightening sensation arising from the (mature) may disrupt the developmental function of adolescence - integration of the mature sexual body - may lead to a distorted relationship to the body perceived as an enemy, responsible for a sense of worthlessness. A mindset of inadequacy can lead to an inability to regulate emotions that, consequently, may be expressed through the body. As such, adolescents are particularly vulnerable to attacking their body, mostly aggressively, even in the preadolescence years. Thus, middle school is an ideal environment for the implementation of the PEP-NSSI.

Methods: The program is a two-arms randomized controlled trial, in which 6th and 7th-grade students are eligible to receive the PEP. Selected 8th-grade students will be trained to serve as peer educators and will hold a peer-education intervention to participants for up to four weeks through group activities. Pre and two post-test assessments will be conducted in order to evaluate the program's effectiveness. Also, program feasibility data will be collected.

Results: The program is expected to effectively address the psychological risk factors for NSSI, minimizing their effects, and encouraging positive health and well-being among youth. It is expected that participants would report a higher level of self-esteem, a positive body image, and more adaptive strategies of emotion regulation.

Discussion: The program would provide a new and innovative model for preventing NSSI among youth, targeting vulnerability factors, instead directly NSSI, also avoiding the potential iatrogenic effects related to the knowledge and awareness of NSSI. Findings may help current policies to promote targeted preventive activities and produce sizable benefits to society. The NSSI-PEP is funded by the program V:ALERE 2020 (University of Campania "Luigi Vanvitelli").

Using real-time monitoring to study non-suicidal self-injury in everyday life: New opportunities and unique challenges

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Although non-suicidal self-injury (NSSI) - deliberate damage to body tissue without suicidal intent - is a behavior that occurs in interaction with the real-world context, studying it in the natural environment has historically been impossible. Recent advances in real-time monitoring technologies have revolutionized our ability to track NSSI as it unfolds in daily life, providing myriad opportunities for research and clinical practice. We provide (1) an agenda for new research pathways using real-time monitoring methods to improve our ability to understand, predict and prevent self-injurious thoughts, urges, and behavior in everyday life, and offer (2) critical perspectives on the key ethical and practical challenges that accompany these opportunities. By considering the opportunities of real-time monitoring research in the context of the accompanying responsibilities (Table 1), we provide novel insights and guidance for advancing real-time monitoring studies on NSSI. Together, this lays the foundation for collaborative discussions, as the field opens the 'black box' of everyday life in the next decade(s) of research.

Table 1. New opportunities and unique challenges of real-time monitoring methods in the study of NSSI.

Using real-time monitoring to study non-suicidal self-injury creates new opportunities:

1. To better understand the short-term course of NSSI thoughts, urges, and behavior through direct observation and precise measurement.
 2. To advance knowledge of individual-level predictors of NSSI thoughts, urges, and behavior and the ability to detect idiographic risk accurately.
 3. To test existing theories and develop new models that bridge the idiographic and nomothetic divide and explain who is at risk, and when.
 4. To generate insights into the functional mechanisms and relationship of dynamic patterns with meaningful longer-term outcomes and trajectories.
 5. To promote person-centered care and the deployment of personalized prevention and novel digital interventions.
-

Using real-time monitoring to study NSSI creates practical and ethical challenges:

1. Recruitment should be inclusive from study inception to completion and actively include more vulnerable individuals, with representatives from any vulnerable groups at every stage.
2. The informed consent process should be fully transparent regarding the study demands, the safety protocol, whether data will be passively collected, reimbursement, researchers' responsibility to respond to risk, and potential implications of this responsibility.
3. A proper safety protocol should be developed - with all stakeholders - that matches participants' needs, but that does not inadvertently defeat the study's observational purpose.
4. Although there is no reason to expect that repeated questioning in everyday life will lead to measurement reactivity in self-injury, researchers are responsible for evaluating whether this holds for all participants.
5. Study designs must be carefully balanced to appropriately answer the research question(s) while not unnecessarily burdening participants. Sufficient resources should be allocated to pilot all aspects of the

-
- protocol, first within the research team and then iteratively with a selected group of participants. Researchers are encouraged to preregister their protocol and be aware of the relevant privacy laws in their home country.
6. Participants should be recognized as valued research members and receive financial incentives and information about the overall findings. Where feasible, participants should receive feedback on their data.
 7. Research staff should receive good quality training in responding to risk and continued supervision and mentoring. A lone researcher should never be the only person responsible for participants' safety.
-

A preprint of the manuscript can be found here: <https://psyarxiv.com/yp86x>. We very much welcome any comments, questions, and feedback: glenn.kiekens@kuleuven.be

Age and Gender Effects on Non-Suicidal Self-Injury, and their Interplay with Psychological Distress

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Background: NSSI (non-suicidal self-injury) is an important public health issue, with high prevalence and associations with future mental illness and suicide. To date, no large single study has tested age and gender effects on NSSI and their interplay with psychological distress.

Method: NSSI and psychological distress were ascertained by questionnaire in a community study of 2368 young people aged 14-25; proportions at each age and of each gender were approximately equal.

Results: There was a significant effect of age and gender on last month NSSI prevalence, best described as a quadratic age x gender interaction ($p = 0.025$): NSSI was more common in females ages 16-19, but there were no significant gender differences at younger/older ages (Figure 1). General distress partially mediated the effects of age and gender on NSSI. The association between general distress and NSSI was not significantly moderated by age, gender nor their interactions.

Discussion: Gender difference in NSSI is not a static gap, but evolves across time, widening in mid-adolescence and disappearing by early adulthood. Part of the reason for that gender gap being present at those ages is the increase levels of distress in young women at those ages. There was no evidence that the effects of general distress on NSSI differed by age/gender. The study was cross-sectional, meaning conclusions about directionality (in particular for mediation) need to be tentative: NSSI may cause distress rather than vice-versa.

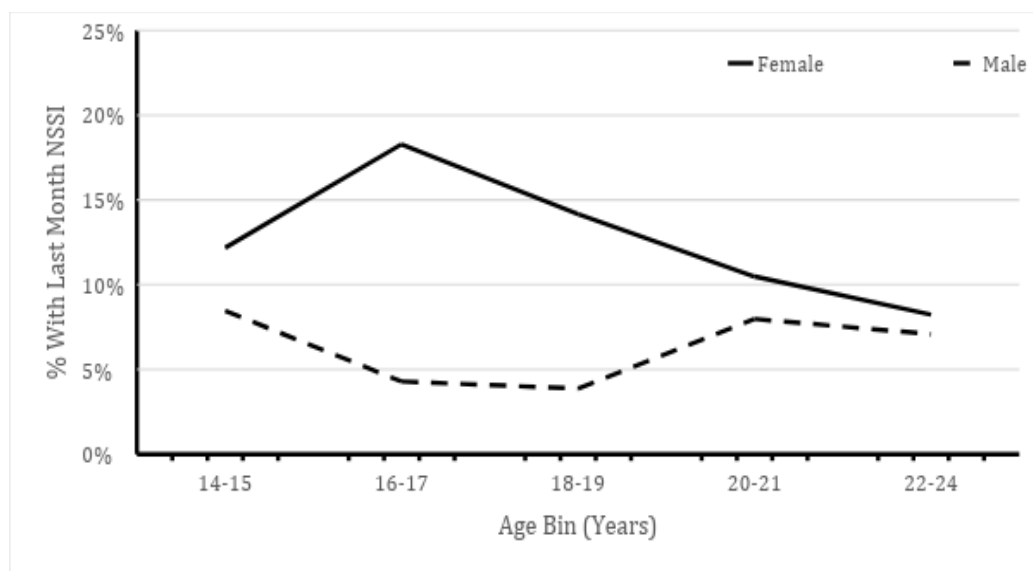


Figure 1. Percentage of Participants with Past Month Non-Suicidal Self-Injury, by Age and Gender

Improving our understanding of stigmatizing attitudes and disclosure reactions towards self-injurious thoughts and behaviors

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Background: Self-injurious thoughts and behaviors (SITBs) can be distinguished between nonsuicidal self-injury (NSSI) and suicidal thoughts and behaviors (e.g., suicide ideation, plan, and attempt) based on the intent to die (Nock, 2010). Although identification and subsequent treatment of SITBs heavily rely on self-disclosure, those who experience SITBs rarely self-disclose due to fear of unwanted reactions (e.g., stigmatization; Sheehan et al., 2019), which has been identified to be influenced by factors such as the precipitating event (Law et al., 2009), presence of suicide intent (Nielson & Townsend, 2018) and gender (Lloyd et al., 2018). Despite this, to date, no study has examined the interaction effects of these factors on how individuals would describe the person engaging in self-harm (i.e., stigmatized attitudes) and/or react to disclosures (i.e., disclosure reactions). Consequently, this study examined if attitudes and reactions toward SITBs differed based on the interaction between SITB behavior (i.e., NSSI vs. suicide attempt) and gender in vignettes with differing precipitating events.

Method: The sample was 409 undergraduate students (68.5% female; $M_{age}=19.19$; 77.5% White; 34.2% lifetime NSSI; 26.2% lifetime suicide attempt) who completed an online survey presenting six hypothetical vignettes. Vignettes depicted a fictional character who had engaged in NSSI or a suicide attempt (three vignettes each), which were reported to follow different precipitating events: an interpersonal conflict, an external stressor, or an internal stressor (i.e., depression). Participants rated how they would describe the fictional character on eight adjectives (e.g., “Pathetic”, “Shallow”; Stigma of Suicide Scale - Batterham et al., 2013). Participants also responded how they would react if the described character disclosed this event to them, including both positive and negative reactions (modified from the Self-Injury Social Reactions Questionnaire; Ammerman & McCloskey, 2020). Two-way repeated measures ANOVAs were conducted to examine the interactions effects between participants’ reported gender and behavior type on: (a) stigmatizing attitudes, (b) positive reactions, and (c) negative reactions. Participant SITB histories were included as covariates.

Results: The main effect of gender was significant for all precipitating events. Men (vs. women) held greater stigmatizing attitudes toward individuals who engaged any SITB and reported greater negative reactions to disclosures; women reported more positive reactions to disclosures. The main effect of behavior type was significant in the interpersonal conflict and internal stressor scenarios, where suicide attempts (vs. NSSI) were more stigmatized, but received more positive reactions. The gender – behavior interaction was significant for stigmatizing attitudes towards SITBs in the interpersonal conflict scenario, Wilks’ $\lambda = .98$, $F(1, 401) = 8.56$, $p = .004$, in that women were significantly more stigmatizing of suicide than NSSI. In the internal stressor scenario, the gender – behavior interaction was significant for both stigmatizing attitudes Wilks’ $\lambda = .98$, $F(1, 402) = 9.05$, $p = .003$, in that men were significantly more stigmatizing of suicide than NSSI, and for positive reactions, Wilks’ $\lambda = .98$, $F(1, 402) = 7.27$, $p = .007$, such that both men and women were more likely to provide positive reactions to suicide than NSSI.

Discussion: Taken together, results indicate suicide attempts compared to NSSI are more likely to receive positive reactions, even though they are more stigmatized. In addition, men and women significantly differ in how they react to SITB disclosure based on the specific behavior and its precipitating event.

A Compassionate Cognitive Behavioural Therapy online learning resource (workbook) for people who self-injure: A Knowledge Exchange project.

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Background:

Following provision of many different projects, supervision and education for staff working with people who self-injure, Gillian Rayner considered a clear manual-based approach was useful to help enhance personal understanding and use of therapeutic techniques for people who self-injure. This was also deemed helpful for staff from a wider variety of settings who would like to help but are not necessarily deemed “experts” in this area. The online learning resource for people who self-injure directly supports the World Health Organisation (WHO) initiative, EQUIP(Ensuring Quality in Psychological Support) as this is the development, research and dissemination of resources for scaling-up the quality delivery of psychological and psychosocial interventions by people who are not necessarily highly trained mental health professionals. This project provides a digital user-friendly solution to providing psychological support for people who self-injure with online training and supervision for helpers. She has created an integrated model of Compassion Focused therapy (CFT) and Cognitive Behavioural Therapy (CBT) for people who self-injure, based on current evidence available and this underpins the resource.

Method:

This 2-year project was created and funded from the University of Central Lancashire (UCLan) UK, Knowledge exchange funding. The first stage of the project was to create an innovative learning resource for people who self-injure, provide staff with 2 days training and monthly supervision. The second stage was to gain feedback using an online questionnaire for service users and staff. This will then be used to improve the learning resource for future projects and research evaluation with a view to national and international pilot sites. UCLan’s “CPD system” has been used to host the interactive online learning resource. The resource and the project evaluation based at two pilot sites, UCLan student wellbeing services as guided self-help and “Lancashire Women” charity as an adjunct to Person Centred/Humanistic Counselling. There are currently 8 staff participating (4 at each site) and 4-5 clients. The project will continue as recruitment of clients has taken a little longer than expected due to the pandemic. The evaluation will then take place.

Resource content includes making a digital and physical compassionate kit bag, learning about CBT, CFT and self-injury. The participants actively work to think about “Angelas” self-injury to make sense of her experiences using CBT formulation and then gradually move towards understanding their own self injury. Interpersonal self-injury experiences are considered and then the role of thoughts and behaviours alongside self-criticism, shame and guilt. Other CBT aspects include problem solving, assertiveness and recognizing ways of thinking and cycles of maintenance. Other CFT aspects include creating a compassionate image and compassionate letter writing and mindfulness activities. Alongside this, participants can keep a CBT diary that facilitates reflection on self-injury, before during and after the incident, or how they use urge surfing and coping strategies to avoid self-injury. This also contains a variety of coping strategies to try and evaluate linked to various functions of self-injury. Then the resource invites them to compassionately reflect on the diary contents. The evaluation online questionnaire is embedded in the learning resource, alongside many activities, audio and video clips and ideas of things to try outside of the sessions. The sessions are interactive in nature and allow downloads of the diary and completed sessions for future use and storage.

Non-Suicidal Self-Injury Internet Usage Among Young Adults

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Background: Non-suicidal self-injury (NSSI) is a growing concern among young adults. NSSI content is also prevalent on the Internet, encompassing a wide range of websites and media, including text, images, and videos. As the Internet-native generation grows older, NSSI-related Internet use is becoming more rampant. However, very little is known about who accesses such content and the type of content encountered among young adults. This study examines the rate of engagement with NSSI-related Internet content and how engagement differs among participants who self-harm and participants who do not.

Method: Data were collected in 2019 among students at a college in New England via an online survey ($N = 279$). The Self Harm Behavior Questionnaire (SHBQ) was used to measure NSSI behavior. To assess NSSI-related Internet use, participants indicated whether they had ever seen any of the following NSSI-related Internet content: images, videos, news articles, personal stories, educational information, advice/support, and tips on how to conduct NSSI. For each content item they endorsed seeing, participants then indicated the number of times they had ever encountered it. Two-sample independent t-tests were conducted to compare the mean number of encounters with each type of NSSI-related Internet content among participants who had self-harmed (NSSI participants) and participants who had never self-harmed (non-NSSI participants).

Results: The percent of participants who indicated that they had engaged in NSSI was 38% ($n = 107$). Among all participants, 81% ($n = 227$) had seen NSSI-related Internet content. Among participants who had engaged in NSSI, 78% ($n = 83$) has seen NSSI-related Internet content, and among participants who had never engaged in NSSI, 84% ($n = 144$) had seen NSSI-related Internet content. NSSI participants had seen images of NSSI ($t(132) = 2.20, p = .03$), had read personal stories ($t(121) = 2.54, p = .012$), and had read tips on how to conduct NSSI ($t(94) = 2.89, p = .005$) significantly more times than non-NSSI participants. There was no significant difference found for frequency of videos, news articles, educational information, and advice/support.

Discussion: This study contributes to our understanding of who is engaging with NSSI-related Internet content and the types of content they engage with. The results suggest that NSSI-related Internet content is prevalent and easily accessible, as indicated by the proportion of the sample who had encountered such content. Although participants who self-harmed and participants who did not self-harm had encountered content at similar rates, participants who self-harmed viewed images, personal stories and tips significantly more frequently than participants who did not self-harm. Frequency may reveal information about intentionality of viewing; if a person has seen something many times, it is likely that they intentionally sought it out instead of encountering it by chance. Additionally, this finding highlights the need to differentiate between types of content, instead of considering NSSI-related Internet usage as dichotomous (i.e., a person either views content or they do not). Finally, this study reveals that many young adults who do not self-harm have encountered NSSI content online; future research should examine the ways in which people who do not self-harm engage with and understand NSSI-related content.

Exploring the relationship between eating disorder features and non-suicidal self-injury in a large online sample

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Background: A growing body of literature has identified an association among eating disorders (EDs) and non-suicidal self-injury (NSSI). Indeed, EDs and NSSI frequently co-occur, with 25-50% of individuals with EDs also reporting NSSI. Even without a formal ED diagnosis, a number of people experience ED features and their associated distress and impairment. However, the majority of research on the association among EDs and NSSI has focused on ED diagnoses rather than ED behaviours or features more specifically. Focusing on specific ED features, rather than groups of features subsumed under a diagnostic category, may aid in clarifying the association among EDs and NSSI. Further, few studies have examined the potential influence of gender on the association among ED features and NSSI. Thus, the current study aims to bridge this gap by examining a wide variety of ED features and their relation to NSSI in a male and female identifying sample ($N = 320$).

Methods: 320 participants who screened positive for ED features were recruited through Amazon's Mechanical Turk (MTurk). Participants completed self-report questionnaires using an online survey (Qualtrics) which assessed demographics, ED features, NSSI history, anxiety, depression and hopelessness. ED features were measured using the Eating Pathology Symptoms Inventory (EPSI) to assess body dissatisfaction, binge eating, cognitive restraint, excessive exercise, restricting, purging, muscle building, and negative attitudes toward obesity. A history of NSSI was determined by the question: "Have you ever purposely hurt yourself without wanting to die, known as non-suicidal self-injury? (for example, cutting or burning)."

Results: Independent samples t -tests revealed small differences between participants endorsing lifetime histories of NSSI and those who did not. Specifically, participants reporting NSSI were more likely to endorse overall ED pathology ($d = .20, p = .09$), restricting ($d = .25, p = .03$), and purging ($d = .26, p = .02$) compared to participants who did not report NSSI; however, results were no longer statistically reliable after controlling for covariates anxiety, depression, and hopelessness ($ps > .05$). Next, we examined the influence of gender on the association between ED features and NSSI. We used linear regression to test whether gender would reliably moderate the relationship between ED features and NSSI group status. Moderation analyses indicated that gender reliably moderated the relationship between ED dimension cognitive restraint and NSSI group status ($p = .03$). For male identifying participants, differences between NSSI and non-NSSI males on cognitive restraint were moderate: ($d = .52, p = .02$); for female identifying participants, differences between NSSI and non-NSSI females on cognitive restraint were small: ($d = .13, p = .37$). Moreover, logistic regression analysis revealed that cognitive restraint in male participants maintained a statistically reliable difference between groups after controlling for covariates depression, anxiety, and hopelessness ($p = 0.04$). Gender did not reliably moderate the relationship between group status and overall eating pathology, body dissatisfaction, purging, restricting, binge eating, negative attitudes towards obesity, excessive exercise, and muscle building ($ps > .05$).

Discussion: By examining specific ED features, rather than clusters of features or diagnostic categories, results of this study suggest which ED features specifically, contribute to the relationship between EDs and NSSI. Whole sample and female only analyses indicate that NSSI group status is associated with higher mean levels of overall ED pathology, restricting and purging, compared to non-NSSI group status; however, results were no longer statistically reliable after controlling for covariates anxiety, depression, and hopelessness. Moderation analyses revealed that cognitive restraint in males may be an important feature that distinguishes individuals who endorse NSSI from those who do not endorse NSSI. As some research suggests that cognitive restraint may be a prodrome to clinical EDs, endorsement of this feature may potentially be capturing a more clinically severe sub-group; thus, presenting one possible explanation for its moderate association with NSSI in the present study. Future research should seek to examine the relationship

between cognitive restraint and NSSI further, particularly, why this relationship may be prominent in males. Furthermore, one important limitation of the current study is that given the small sample size of participants who identified as nonbinary, only comparisons between male and female identifying participants were able to be conducted. As some research suggests associations between sexual orientation, gender identity and eating-related pathology, future research should seek to examine the relationship among ED features and NSSI in more diverse populations, such as sexual minority and gender non-conforming individuals.

Can mindfulness increase resilience against COVID-19 stress and NSSI among young adults?

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Background: Among young adults, depressive symptoms, and suicidal ideation have increased since the COVID-19 pandemic (Czeisler et al., 2020; Ettman et al., 2020). These vulnerabilities stem from financial strain and social isolation (Kämpfen et al., 2020; Kecojevic et al., 2020). As such, there is a need for assessing self-help interventions with potential benefits for all education and socioeconomic backgrounds, such as mindfulness (Belan, 2020). As a whole, mindfulness can be described by both the clarity and vividness offered to one's consciousness (Brown & Ryan, 2003). Mindfulness is theorized to instill positive effects on emotion regulation with resulting decreases in levels of unhealthy behaviors and ruminative thoughts (Brown & Ryan, 2003; Ryan & Deci, 2000). This cross-sectional study sought to address existing gaps in the literature through exploring: (H1) whether trait mindfulness decreases COVID-19-related stress and NSSI; (H2) if young adults with more college experience are less prone to NSSI and COVID-19 related stress due to higher approach coping and health literacy, as compared to young adults with less college experience; and (H3) if practicing mindfulness reduces NSSI and COVID-19 related stress.

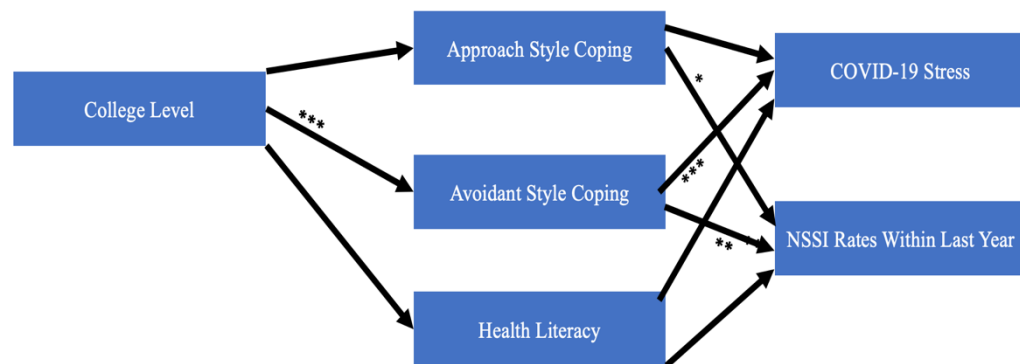
Method: Participants included young adults ($n = 198$) with diverse educational backgrounds recruited from a university located in the eastern US and Amazon's Mechanical Turk. Surveys administered assessed: NSSI experience, depressive symptoms, trait anxiety, COVID-19-related stress, health literacy, and coping style. Surveys were completed anonymously via Qualtrics.

Results: 17.2% ($n = 34$) of our sample had previously engaged in NSSI. Of these, 4 indicated beginning self-injury during COVID-19, and none of these reported increases in depression or anxiety or seeking treatment. H1: Trait mindfulness did not decrease NSSI rates or COVID-19 related stress. H2: (A) College experience did not predict any differences in COVID-19 stress and NSSI rates; (B) greater college experience was associated with more avoidant coping ($b = 0.24, p < .0001$); (C) avoidant coping mediated the association between college

experience and COVID-19 stress ($b = 1.25, p < .0001$); (D) avoidant coping increased NSSI rates within the last year ($b = 0.23, p < .001$); and (E) approach coping was associated with reduced NSSI rates within the last year ($b = -0.01, p = 0.04$) (as seen in Figure 1). H3: Participants who previously engaged in mindfulness did not exhibit any reduction in COVID-19 stress ($M = 32.25, SD = 26.64$) compared to those who did not practice mindfulness ($M = 16.82, SD = 20.79$); $t(195) = -3.18, p < 0.001$. Additionally, no associations were found between the frequency of NSSI rates within the last year and previous engagement in mindfulness ($\chi^2(2) = 3.99, p = 0.14$).

Figure 1

Eight-variable serial mediation model



Note. Serial mediation of health literacy and approach and avoidant style coping between the relationship of college level, COVID-19 related stress, and NSSI rates within the last year. * = $p < 0.05$. ** = $p < 0.01$. *** = $p < 0.001$

Discussion: Overall, our results indicate that both engaging in mindfulness and level of trait mindfulness did not reduce past-year NSSI rates or COVID-19 related stress. As aligned with previous literature, the following was revealed: (1) Rates of COVID-19 stress were high among this sample (Czeisler et al., 2020; Ettman et al., 2020); (2) avoidant coping predicted higher rates of NSSI within the last year (Hasking et al., 2008); and (3) approach coping

was associated with reduced NSSI rates (Castro et al., 2014; Neilson et al., 2018). These results suggest engagement in mindfulness had little impact with COVID-19 stress levels. Future research should consider the roles of active mindfulness intervention and other approach coping strategies for reducing NSSI rates and navigating demanding, stressful situations.

Dispositional mindfulness and attitudes towards mindfulness in students with a history of self-injury

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Background: Non-suicidal self-injury (NSSI) is prevalent among university students, with about 15-20% of students reporting having engaged in the behaviour over the past year. One of the most commonly reported functions of NSSI is emotion regulation. Mindfulness is a core element of Dialectical Behavioral Therapy and has been shown to be effective in improving emotion regulation in individuals who engage in NSSI. Mindfulness involves purposefully focusing one's attention and being aware of the present moment without judgment. Dispositional mindfulness (DM) is the general tendency to be mindful in daily life. Although DM has been associated with numerous mental health benefits, negative attitudes towards mindfulness have been highlighted as a potential threat to these positive outcomes. Specifically, negative attitudes towards mindfulness may diminish the likelihood of engaging in mindfulness practice and fostering DM. Additionally, individuals with a history of NSSI report lower levels of DM compared to their peers. However, it is unclear if these differences are the results of students with a history of NSSI being less receptive to adopting a mindfulness practice due to holding negative attitudes towards mindfulness. Thus, the present study sought to investigate group differences between individuals with versus without a history of NSSI on (a) reports of DM and (b) mindfulness attitudes (mindfulness receptivity).

Method: Participants were 227 university students ($M = 22.26$, $SD = 3.78$) who either reported having engaged in NSSI in their lifetime ($n = 91$) or who did not ($n = 136$). Participants completed online self-report measures assessing DM using the Five Facets of Mindfulness Questionnaire–Short Form and mindfulness attitudes using a researcher-developed measure. For the researcher-developed measure, negative statements were reverse-scored and summed with positive statements for an uppermost score of 42, where higher scores indicate more positive mindfulness attitudes.

Results: Results from a one-way ANOVA revealed significant group differences on DM, $F(1, 224) = 14.069$, $p < .001$, where students with a history of NSSI reported significantly lower levels of DM ($M = 69.44$, $SD = 12.11$) than those without such a history ($M = 75.12$, $SD = 10.50$). However, results from a second one-way ANOVA revealed no significant group differences on mindfulness attitudes, $F(1, 224) = 1.625$, $p = .204$. Students with a history of NSSI ($M = 27.86$, $SD = 7.00$) and those without ($M = 29.08$, $SD = 7.14$) both reported moderately high receptivity towards mindfulness.

Discussion: Results of the present study are consistent with related findings demonstrating that young adults with a history of NSSI report lower levels of DM compared to their peers. However, findings may have important clinical implications, whereby although students with a history of NSSI are reporting lower DM, they are reporting moderately high receptivity to mindfulness, like their peers. In light of the well-documented evidence supporting the benefits of DM, findings highlight the need to emphasize mindfulness training for individuals with a history of NSSI given their receptiveness. Given the literature showing that DM can be fostered through mindfulness practice, these findings highlight the need to make mindfulness resources more easily accessible and specifically target individuals with a history of NSSI.

Managing clinician reactions to NSSI

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NSSI can be anxiety-provoking and intimidating to mental health professionals (MHPs; White, McCormick, & Kelly, 2003) and, as Janis and Nock (2008) state, NSSI is a complex and potentially dangerous treatment issue for which therapeutic intervention can be challenging. Indeed, the risk-laden nature of NSSI and its relationship to suicide can produce practitioner anxiety and lead to difficulties in treatment. According to Fleet and Mintz (2013), common reactions to NSSI include shock, sadness, anger, anxiety/frustration, and diminished professional self-confidence. Examining the experiences of counselors-in-training who work with clients who self-injure, De Stefano and colleagues (2012) found high levels of self-reported emotional reactivity to NSSI, feelings of incompetence, and difficulty resolving ethical dilemmas. Relatedly, Simpson, Armstrong, Couch, and Bore (2010) found that many novice school counselors report a limited understanding of the causes and symptoms of NSSI and a lack of confidence in their ability to intervene therapeutically.

Considering the emotional reactivity MHPs may experience when working with clients who self-injure, it is advised that MHPs monitor competency related to case conceptualization, clinical intervention, and personalization. Case conceptualization may relate to maintaining knowledge of current literature on NSSI (e.g., risk factors, warning signs, functions, comorbid treatment issues, risk management), considering social and systems-level contributors to NSSI, and practicing consistent consultation/supervision to avoid tunnel vision in case conceptualization. Skill related to clinical intervention may include conducting holistic assessments for NSSI and comorbid treatment issues, utilizing functional analyses to aid in directly addressing the functions of NSSI, utilizing available resources (e.g., literature, workshops, listservs, consultation) to build a knowledge-base for NSSI interventions, obtaining specialty training in interventions that are proven efficacious in the treatment of NSSI, establishing a collaborative therapeutic relationship with clients, and actively seeking client feedback to improve services. Finally, competency related to personalization may involve utilization of ongoing consultation/supervision, practicing of intrapersonal awareness skills (e.g., meditation, mindfulness, introspective journaling) to process challenging clinical issues and/or to self-monitor for factors that can limit effectiveness (e.g., compassion fatigue, burnout, countertransference, biases), and actively seeking client feedback to monitor the working alliance.

Considering the need for MHPs to monitor our internal response to NSSI (De Stefano et al., 2012) and the relatively high comorbid risk for suicide among clients who self-injure (Whitlock et al., 2013), introspection and consistent supervision are chief recommendations for MHPs who work with clients who self-injure, regardless of professional experience. Introspective practices may include mindfulness (e.g., body scans, meditation, and creative/projective expression following sessions; grounding during sessions) and reflection (e.g., logging thoughts/feelings immediately following sessions; reflective session analysis). Through supervision, MHPs can process their initial thoughts and feelings about NSSI, share past experiences that may reflect biases, monitor case management, and receive feedback on clinical intervention through observation or tape review.

Recursive suicide risk assessment with clients who self-injure

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Although NSSI differs in important ways from suicide (Chapman & Dixon-Gordon), individuals who self-injure are at an increased risk of suicide (Brausch & Gutierrez, 2010; Toprak, Cetin, Guven, Can, & Demircan, 2011). For those who self-injure, the severity or frequency of current and overall lifetime NSSI, combined with current and lifetime number of self-injury methods, may predict suicidal ideation (Wester et al., 2016). In fact, those who self-injure may seriously consider suicide at a rate of eight times greater than the general public and may have a risk of attempting suicide that is 25 times greater (Glenn & Klonsky, 2009). As such, it is imperative that mental health professionals (MHPs) identify, assess, and respond appropriately to suicide risk.

MHPs are advised to engage in comprehensive and recursive suicide risk assessment (without assuming inherent suicidality) and assessment for comorbid treatment issues. Common informal procedures for suicide risk assessment include use of screening related to suicide warning signs and/or risk factors, such as IS PATH WARM (American Association of Suicidology, 2006) and SIMPLE STEPS (McGothlin, 2008). Multiple suicide assessment instruments are available, such as the Columbia Suicide Severity Rating Scale (C-SSRS; Posner et al., 2011), SITBI, Suicidal Behavior Questionnaire-Revised (SBQ-R; Osman, Bagge, Guitierrez, Kooper, & Barrios, 2001), Suicide Attempt Self-Injury Interview (SASII; Linehan, Comtois, Brown, Heard, & Wagner, 2006), and Self Harm Behavior Questionnaire (SHBQ; Gutierrez, Osman, Barrios, & Kopper, 2001).

Comprehensive and recursive suicide risk assessment involves assessment at intake, at specified intervals, and as indicated through identification of suicide warning signs and/or risk factors. Janis and Nock (2008) recommend that MHPs use multiple means of assessing suicidal risk. As such, although MHPs are strongly advised to utilize established reliable and valid suicide risk assessments, a comprehensive clinical interview is necessary to generate a holistic case conceptualization. The clinical interview allows for the MHP to (a) collect relevant psychosocial history, which can identify risk and protective factors; (b) assess for cognitive functioning and personality factors that can exacerbate risk; (c) determine current level of adaptive functioning; and (d) identify comorbid treatment issues that can exacerbate risk (e.g., childhood sexual abuse [Chapman, Gratz, & Turner, 2014]; substance use or intoxication [Galway et al., 2016]; hopelessness [Chapman, Gratz, Turner, 2014]; persecutory self-criticism [Gilbert et al., 2010]; distorted self-image [Kerr & Muehlenkamp, 2010]; and use of websites that encourage SI [Mitchell et al., 2014; Lewis et al., 2012]).

Related treatment issues may be assessed using formal instruments, such as those for depression (e.g., Beck Depression Inventory, II [BDI-II; Beck, 1996]), anxiety (e.g., Beck Anxiety Inventory [BAI; Beck, 1993]), trauma (e.g., Trauma Symptom Inventory, II [TSI-II; Briere, 1996]; Trauma Symptom Checklist [TSC; Elliot & Briere, 1992]), and substance use (e.g., Alcohol Use Disorders Identification Test [AUDIT]; Adult Substance Abuse Subtle Screening Inventory-4 [SASSI-4; Lazowski, Miller, Boye, & Miller, 1998]). Given that NSSI is often a presentation of other underlying treatment issues, thorough assessment may yield clinical information that is vital to NSSI intervention and long-term recovery.

Poor convergence between self-reported global emotion dysregulation and real-time emotional reactivity for young adults who self-injure

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Background: People who engage in non-suicidal self-injury (NSSI) consistently report greater global emotion dysregulation on self-report measures. However, studies tracking real-time responding to emotional challenges largely fail to find evidence of a systematic difference in emotional responding by NSSI status. One possibility for this disconnect is that when reporting their global emotional functioning people who engage in NSSI extrapolate from daily emotional challenges in a different manner than people with no history of NSSI. If this is the case, then NSSI status should moderate the relationship between global emotion dysregulation and real-time subjective responding.

Method: We conducted exploratory secondary analysis of a study in which we investigated real-time emotional responding in people with (and without) a 12-month history of NSSI. 50 young adults with recent NSSI, and 51 with no history of NSSI completed a resting baseline, followed by a stress induction (mathematics component of the Trier Social Stress Test), and a recovery phase. Participants reported their negative mood after each phase. Change scores were created to capture subjective reactivity (Stress – Baseline) and subjective recovery (Stress – Recovery) to and from acute stress. Participants also reported their global emotion dysregulation (16-item Emotion Dysregulation Scale; DERS).

Results: NSSI status was strongly associated with global emotion dysregulation ($r = .53$) but was unrelated to emotional reactivity to acute stress ($r = .01$) or elevated negative mood following recovery ($r = .06$). Emotion dysregulation was positively associated with emotional reactivity to stress ($r = .24$), as well as elevated negative mood following recovery ($r = .21$). Critically, NSSI status moderated the association between global emotion dysregulation and real-time emotional *reactivity* (NSSI status x DERS, $B = -13.04$, $p = .022$). Control participants who reported greater emotion dysregulation showed greater reactivity to acute stress ($r = .42$); however, participants with a recent history of NSSI showed no association between global emotion dysregulation and real-time emotional reactivity ($r = .02$). NSSI status did not moderate the association between global emotion dysregulation and real-time emotional *recovery* (NSSI status x DERS, $B = 6.31$, $p = .109$).

Discussion: People with no history of NSSI showed a positive association between their global self-reports and their real-time subjective responding to emotional challenge. In contrast, people with a past-year history of NSSI showed no association between global self-reports and real-time subjective responding to emotion challenge. Taken together, this study suggests that people with no history of NSSI draw from their real-time experiences when making global judgements of their emotion dysregulation, whereas people who engage in NSSI rely on different channels of information. Given the significant role of emotion dysregulation in our theoretical and empirical understanding of NSSI, findings underscore the need to better isolate the underlying cause(s) of global emotion dysregulation experienced by people who self-injure.

Object Constancy in Adolescents with Borderline Personality Disorder Pathology

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Background: Persistent, interpersonal difficulties are a core feature of borderline personality disorder (BPD). Theories propose that these may result from an insufficient object constancy, e.g. the insufficient capacity to maintain feelings of closeness (FC) towards a person when he or she is absent. Based on this assumption, this study examined whether FC towards the mother or the best friend were more dependent on previous contact in adolescents with BPD pathology compared to healthy controls. Additionally, the influence of different contact modes was examined.

Method: N = 52 female adolescents aged 14 to 18 years (n = 24 with ≥ 5 BPD symptoms [full-threshold BPD], n = 10 with 1-4 BPD symptoms [sub-threshold BPD], n = 18 healthy controls) completed e-diaries on two consecutive weekends (four days). They were prompted twelve times a day to rate their momentary FC towards their mother and their best friend, whether they had contact with them since the last assessment or not, and the contact mode (in person, over phone/Skype, written). Multilevel mixed-effect regression analyses were conducted to assess the effect of diagnostic group (sub-threshold/full-threshold BPD, healthy controls), number of BPD symptoms, contact (yes/no), and contact mode on FC towards the mother/best friend.

Results: FC towards the best friend were significantly more dependent on actual contact since the last assessment in the full-threshold BPD group compared with the sub-threshold BPD group and healthy controls. Additionally, the more BPD symptoms a patient fulfilled, the more dependent were FC towards the best friend on actual contact. In contrast, BPD pathology did not influence the dependency of the FC towards the mother on actual contact. Finally, we found that mode of contact matters: The more BPD symptoms a patient met, the more was the FC towards the best friend dependent on personal compared to written or no contact, while phone or written contact was no different from no contact.

Discussion: The findings support the assumption that adolescents with full-threshold BPD show more difficulties than healthy controls in feeling close towards an absent person in friendships, but not in the mother-daughter relationship. Limitations of the study are the limited generalizability due to an only female sample and measurements only taken on the weekends as well as the lack of a measurement of valence of the previous contact with the mother/best friend. The present findings partially support the theory of an insufficient object constancy in adolescents with BPD features.

Burning and Versatility of NSSI Methods Are Associated with Lifetime Suicide Attempts

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Background: Exposure to painful and provocative events are conceptualized as contributing to capability for suicide (Smith & Cukrowicz, 2010). In this vein, pain severity and persistence associated with non-suicidal self-injury (NSSI) may be contributors to capability for suicide (May & Victor, 2018). However, frequency and number of NSSI methods are associated with number of suicide attempts independent of capability, suggesting that there are explanatory variables still to be discovered in the relation between NSSI and suicide (Matney et al., 2018). Though cutting is associated with suicide attempt severity (Baer et al., 2020), it is not yet known if specific NSSI methods are associated with number of reported past suicide attempts.

Method: One hundred and nineteen young adults from the community who reported NSSI urges within past month and lifetime NSSI behaviors (60.5% women, 20.2% gender non-conforming or other, 19.3% men) were recruited online for a broader ecological momentary assessment study of NSSI. Participants were between ages of 18 and 34 ($M = 23.7$ years, $SD = 4.3$) and mostly non-Hispanic white (63.0%). NSSI and suicidal behavior were assessed using the Columbia–Suicide Severity Rating Scale (Posner et al., 2011) and Self-Injurious Thoughts and Behaviors Interview (Nock et al., 2007).

Results: There was a significant association between lifetime number of NSSI methods and lifetime number of suicide attempts, $R^2 = .04$, $F(1, 117) = 4.1$, $p = .04$. After testing each NSSI method, only burning was shown to have a significant association with lifetime number of suicide attempts, $\chi^2 = 16.0$, $OR = 4.7$, $p < .001$. In a model controlling for fearlessness about death, lifetime NSSI methods ($OR = 1.3$) and burning ($OR = 3.9$) were significantly associated with lifetime suicide attempts, $\chi^2 = 22.0$, $p < .001$.

Discussion: The lifetime number of NSSI methods (i.e. versatility) appeared to be associated with the lifetime number of suicide attempts, which does match previous findings (Anestis et al., 2015; Turner et al., 2013). However, when specific NSSI methods were examined, only burning was significantly associated with lifetime suicide attempts. Burning has previously been associated with suicide attempts (Stewart et al., 2017), which suggests that NSSI methods typically considered more "severe" may be more significant contributors to increased pain tolerance associated with capability for suicide. However, a key limitation of the study is cross-sectional data, limiting temporal conclusions about NSSI versatility and future suicide attempts. Future studies should investigate the roles of individual NSSI methods in prospectively predicting risk for suicide attempts.

Social media use as a moderator in the relationship between sleep difficulties and NSSI engagement in adolescents

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Objective: Research has shown that increased sleep disturbance leads to higher likelihood of engaging in NSSI (Latina et al., 2020), yet it is not fully understood why this relationship exists. Adolescents that spend more time on social media report more sleep difficulties (Levenson et al., 2016) and more engagement in self-harm (Twenge & Farley, 2021). It is possible that social media use may moderate the relationship between sleep difficulties and NSSI. The present study examined the connections between sleep, social media, and NSSI in a community sample of adolescents. It was predicted that social media use would moderate the relationship between sleep difficulties and past-year and lifetime NSSI in adolescents such that sleep difficulties would be associated with more lifetime and past-year NSSI engagement when social media use was also high.

Method: Participants (N = 444; 54.8% female, 85.0% white) recruited from three local high schools completed a packet of self-report measures that included questions on self-injurious thoughts and behaviors (SITBI-SF), sleep quality (PSQI), and social media use (hours per day). About 13.6% of adolescents reported that they engaged in NSSI within their lifetime, and 7.1% said they engaged in NSSI in the past year.

Results: Moderation analyses using PROCESS Macro showed that social media use was predictive of past-year NSSI ($p = .006$), and the interaction with sleep difficulties was significant in predicting past-year NSSI engagement ($p < .001$). Simple slope analyses to test moderation effects showed that the relationship between sleep difficulties and past-year NSSI was significant at minimum ($p = .03$), moderate ($p < .001$) and high ($p < .001$) levels of social media use, and that as use increased, the relationship was strengthened. In the model predicting lifetime NSSI, sleep difficulties ($p < .001$) and social media use ($p = .02$) were significant, but the overall interaction was not ($p = .08$).

Discussion: Results showed that sleep problems predicted past-year NSSI at all levels of social media use. More time on social media content may influence NSSI engagement, such as through online pro-self harming content, as well as by taking away time from sleep. In contrast, sleep problems and lifetime NSSI were not significantly moderated by social media, but sleep difficulties and social media use were predictive of lifetime NSSI. Lack of sleep may prompt adolescents to use social media, and recent NSSI engagement may increase a focus on NSSI-based social media, which may increase dependence on NSSI as a coping skill. The reverse of this could also be true, with social media use disrupting sleep. Longitudinal analysis to test directionality of this relationship is recommended. Future research should expand on the relationship between sleep difficulties and social media use with aspects of suicidality in order to create more effective self-harm and suicide interventions.

Assessing distress tolerance using a modified version of the Emotional Image Tolerance task

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Background: An inability to tolerate distress is frequently associated with self-injury, with findings from self-report studies indicating individuals who self-injure perceive themselves to be worse at tolerating distress relative to individuals who have never self-injured. NSSI-related differences in the ability to tolerate experimentally-elicited distress have also been established using several behavioural tasks designed to assess tolerance of frustration and physical discomfort. These tasks do not explicitly assess tolerance of negative emotion, central to the function of NSSI. Recently, Veilleux et al (2019) developed the Emotional Image Tolerance task, a computer task designed to assess individuals' tolerance to negative emotionally-valenced stimuli. Using a modified version of this task (Slabbert et al., 2021), this study aimed to compare individuals with and without a history of self-injury in their ability to tolerate experimentally-elicited distress using emotional images.

Method: *Participants.* The sample comprised 118 participants (Mage = 22.18, SD = 5.16), including undergraduate psychology students (n = 105) and community members recruited through social media advertising (n = 13). Of participants, 62.7% were female (n = 74). Within the total sample of 118 participants, 34 (28.8%) reported a history of self-injury. Of these, 17 (51.5%) had self-injured in the past 12 months, with 7 (21.2%) reporting engaging in self-injury five or more times in the last year. Primary forms of NSSI were cutting (42.2%) and self-battery (30.3%), followed by severe scratching (9.1%). Age of NSSI onset ranged from 7 years of age to 20 years of age (Mage=14.61, SD = 3.04).

Emotional Image Tolerance task (adapted): Individual differences in behavioural distress tolerance were assessed using the modified Emotional Image Tolerance task (Slabbert et al., 2021; Veilleux et al., 2019). Participants were presented with negative, positive, and neutral images. They were instructed to view the image presented and press 'q' as soon as they experienced distress or discomfort. They were asked to continue viewing the image until the distress or discomfort was nearly intolerable, at which point they could press 'p' to escape the image. Images were presented for a maximum of 30 seconds, with 5 blocks of 9 images. Subjective distress ratings were recorded at the end of each block, and key task variables were calculated for responses to negative images.

Procedure. After screening, eligible participants completed a series of self-report measures (including the Distress Tolerance Scale) and then completed the computer task. Data were analysed using Generalised Linear Mixed Modelling.

Results and Discussion: Findings indicate that the task successfully induced distress, with all participants reporting increased distress over time. Additionally, NSSI-related differences were observed on two key task variables; unexpectedly, individuals with a history of self-injury indicated distress less often and took longer to indicate distress when they did so. Possible explanations include a higher baseline distress level may mean the presentation of these highly negative images may not elicit as strong a response relative to individuals without a history of NSSI, resulting in distress being indicated less often. Alternatively, greater difficulties in identifying emotions, or an unwillingness to communicate distress may also underpin these findings. Importantly though, after indicating distress, there were no differences in the ability to tolerate distress elicited by the task. This is in contrast to group differences in self-report distress tolerance established in the same study. Despite perceiving themselves as experiencing greater difficulties tolerating distress, individuals with a history of self-injury do not differ in their behavioural ability to tolerate distress elicited by the negative images in the Emotional Image Tolerance task. This discrepancy between trait and behavioural distress tolerance requires further exploration.

The Utility of Risk Behaviors for the Screening of Adolescent Borderline Personality Disorder

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Abstract

Background: Borderline Personality Disorder (BPD) is a severe mental disorder with instability in affect regulation, interpersonal relationships and identity being core features. Like most mental health problems, BPD usually has its onset in adolescence which makes this time crucial for early identification and intervention in order to reduce adverse long-term effects and chronicity. Risk behaviors, including alcohol and substance misuse, self-harming and sexually risky behaviors, have shown to be promising early markers of BPD symptomatology in school-based samples. The aim of the present study was to evaluate the association between risk behaviors and BPD pathology in a clinical adolescent sample.

Method: $N = 402$ participants (82.5% females, mean age = 15.0 years, $SD = 1.5$ years) were consecutively recruited from a specialised outpatient service for 12- to 17-year-olds with risk-taking or self-injurious behaviour. They underwent a structured clinical assessment, including the assessment of DSM-IV BPD and risk behaviors defined as truancy, media usage, alcohol and drug consumption, tobacco usage, sexual risk behavior and self-injurious behavior. A series of regression analyses was conducted to examine the association of each risk behavior with BPD pathology (i.e., BPD diagnosis or number of BPD criteria as an indicator of BPD severity). Additionally, a Latent Class Analysis (LCA) was conducted to explore patterns of risk behaviors and their relationship with BPD pathology.

Results: 25.6% fulfilled a BPD diagnosis. Patients with a BPD diagnosis were significantly older ($t_{(400)} = -3.23, p = .001$) and more likely female ($\chi^2_{(1)} = 4.37, p = .037$) compared to patients without a BPD diagnosis. When controlled for age and sex, all risk behaviors with the exception of media usage and sexual risk behavior were significantly associated with having a BPD diagnosis. Additionally, all risk behaviors were significantly associated with a greater number of BPD criteria. Results of the LCA yielded a two-class model, with class 1 being characterized by low risk behavior, and class 2 being characterized by high risk behavior. Belonging to the high risk group was associated with an increased probability of meeting more BPD criteria ($OR = 1.66, p < .001$) and being diagnosed with BPD ($OR = 2.18, p = .002$).

Discussion: Our findings confirm previous evidence that risk behaviors are associated with adolescent BPD pathology and demonstrate that this also holds true in a clinical sample. The findings highlight the importance of specific risk behaviors as markers for early identification of and intervention for BPD in adolescents.

ORAL PRESENTATION ABSTRACTS

Non-suicidal self-injury in eating disorders: The role of body image

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Background: Nonsuicidal self-injury (NSSI) is more widespread in eating disorders (EDs) patients than in the general population and shares many phenomenological characteristics, functions and correlates with EDs. Body image (BI), in particular, is a key factor for both NSSI and EDs. However, few studies focused on the relationship between these conditions and the different facets of BI. Thus, the aim of the present work is to further understand the role of BI dimensions in predicting self-injury among EDs patients.

Methods: A sample of 65 EDs patients aged 13–39 (54 women; Mage = 21.08; SD = 6.16) completed a self-report multifaceted measure of body image including weight phobia, body image concerns, avoidance, compulsive self-monitoring and depersonalization, and a semi-structured interview assessing NSSI history. Thirty-four participants (53.3%) were diagnosed with Anorexia Nervosa (AN), 9 (13.8%) with Bulimia Nervosa (BN), 17 (26.6%) with Binge Eating Disorder (BED), 3 (4.6%) with Obesity and 2 (3.1%) with Eating Disorder Not Otherwise Specified (EDNOS).

Results: Sixteen patients (24.6%; 15 women) reported NSSI, with 29.4% (n=10) diagnosed with AN. Four BED patients (23.5%) engaged in NSSI, showing prevalence higher than expected. Just 11.1% (n=1) among BN and EDNOS patients reported NSSI, with lower rates than previous findings. The most used methods were cutting (56.3%; n=9) and scratching (43.8%; n=7) and the mean age of the first NSSI episode was 16.10 (SD = 4.80). The average frequency of the behaviour was 39.46 months (SD = 111.32) and the mean duration 25.25 months (SD = 32.15). Logistic regression analysis showed that, when controlling for age, gender, BMI, and socioeconomic status, the only significant predictor of NSSI among EDs patients was depersonalization (B = 2.120; OR = 8.33; p = .009; Nagelkerke R Square = 44.7%).

Conclusions: Depersonalization, which describes the presence of detachment and estrangement feelings toward the body, is proposed as a potential predictor leading to the occurrence of NSSI in EDs patients. The hypothesis is that people suffering with these disorders may deny their body and feel it as separate from the self. The body can then become the means to express emotions experienced as unnamed and unbearable. The detachment may also lead patients to attack the body in order to feel it and thus own it again. Working on BI when treating EDs patients is therefore important to reduce NSSI incidence in such population.

Comparing the Desirable Consequences of Nonsuicidal Self-Injury, Disordered Eating, and Binge Drinking: Support for a Transdiagnostic Functional Model of Self-Damaging Behaviors?

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Background: Self-damaging behaviors (SDBs) refer to behaviors that result in immediate or cumulative bodily harm and include nonsuicidal self-injury (NSSI; deliberate damage to one's body without suicidal intent), disordered eating (DE; binge eating, restricting, or purging), and binge drinking (BD; having at least five alcoholic drinks on one occasion). According to functional models, SDBs are enacted because they lead to short-term desirable consequences (e.g., improved affect or relationship quality) that are reinforcing. Unfortunately, research has largely examined the desirable consequences of a given SDB in isolation, precluding our knowledge of whether similar consequences reinforce these behaviors and the formation of a transdiagnostic functional model of SDBs. To take a step forward in addressing this gap, this study compared the extent to which people report similar desirable consequences following NSSI, DE, and BD.

Methods: 704 college freshmen completed seven monthly surveys assessing the consequences of past-month NSSI, DE, and BD using items developed for this study. Due to the low rates of SDBs, the consequences of each SDB were averaged across timepoints to create overall scores. Paired sample t-tests then compared levels of desirable consequences across SDBs.

Results: NSSI communicated a greater need for support than DE and BD. NSSI and DE led to greater feelings of being in control than BD. BD led to meeting more new people, feeling closer to others, fitting in, and feeling stronger and more independent than DE and NSSI. Finally, BD led to greater decreases in negative emotions than DE, but not NSSI.

Conclusions: This study highlights both differences and similarities in the desirable consequences of SDBs. The greatest differences were found for BD, such that BD generally elicited more desirable social consequences than DE and NSSI. One explanation could be that BD is a more socially normative behavior than DE and NSSI. An exception was that NSSI communicated a greater need for support than BD and DE, suggesting NSSI may be an effective, albeit maladaptive, way of conveying social needs. Finally, few differences emerged between the consequences of DE and NSSI, lending credence to a common functional framework for understanding these behaviors. Research that continues to integrate across SDBs can inform the development of a transdiagnostic functional model of SDBs and interventions to reduce these harmful behaviors.

Emotion-related constructs and their relationship to NSSI

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Objective: Most theoretical models of NSSI focus on the experience and regulation of emotion. Emotion regulation, distress tolerance, experiential avoidance, and both positive and negative affect have all been linked to NSSI. These constructs are proposed to be distinct, however closer examination reveals that there are conceptual similarities between them. For example, some people tolerate distress by avoiding it, conflating distress tolerance and avoidance. We explored relationships between emotion-related constructs and NSSI with a focus on potential overlap between constructs. Specifically, we aimed to determine if constructs previously linked with NSSI (when studied in isolation), remain significant correlates of NSSI when considered alongside other related constructs (with which they may share variance).

Method: University students ($n = 479$) aged 18-52 ($M = 21.35$, $SD = 3.66$, 75% female) completed well validated self-report measures of NSSI, difficulties with emotional regulation, distress tolerance, experiential avoidance, emotional reactivity, positive and negative affect, and alexithymia. Participants were grouped as never having engaged in NSSI ($n = 288$), engaged in NSSI but not in the last 12 months ($n = 72$), and engaged in NSSI in the last 12 months ($n = 119$).

Results: Moderate to large correlations were observed between all emotion-related constructs ($r = 0.32 - 0.71$), and all were significantly associated with NSSI. However, in multivariate analyses, only positive affect, distress tolerance, and emotional reactivity were uniquely associated with NSSI history.

Conclusion: These findings raise the possibility that associations between some emotion-related constructs (e.g. experiential avoidance, alexithymia) and NSSI may actually reflect variance that is shared with other constructs. If true, this will have important theoretical, conceptual, and measurement implications for NSSI research.

Help-seeking Duration in Adolescents with Suicidal Behavior and Non-Suicidal Self-Injury

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Background: Prompt access to appropriate professional care for adolescents with self-harm thoughts and respective behaviors (suicidal behavior and non-suicidal self-injury [NSSI]) is crucial as both are associated with an increased risk of suicide in later life. The present study aimed to describe the duration from initial onset of thoughts and incidents of self-harm until first clinical presentation in children and adolescents and to identify factors affecting help-seeking duration.

Methods: Onset of self-harm thoughts and behaviors, time of first clinical presentation, and psychiatric and demographic variables were obtained from $n = 672$ adolescents (11-19 years, 82% female) from the Germany-based AtRisk (Ambulanz für Risikoverhalten & Selbstschädigung) cohort-study at an outpatient clinic for risk-taking and self-harm behaviors.

Results: In almost a quarter of overserved cases, the initial onset of self-harm thoughts and behaviors occurred after patients already had contact to a professional mental health care service. Focusing on actual help-seeking delay only, it took between $M = 0.99$ years (after first suicide attempt) and $M = 1.98$ years (after first thoughts of NSSI) until participants sought professional help. Overall, help-seeking duration and help-seeking delay were longer for participants with more severe psychopathology (i.e., BPD, depressive symptoms, general symptom severity).

Conclusion: The findings revealed a substantial delay of receiving appropriate professional care in adolescents with self-harm thoughts and behavior. The correlation between treatment latency and higher psychopathology may emphasize the need of prompt treatment. A better understanding of barriers and facilitators to professional help will contribute to enhance measures of tailored support for young patients in their help-seeking process.

Comparing NSSI Disclosure and Non-disclosure

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Disclosure of NSSI can help facilitate support-seeking if desired. Drawing on previous NSSI disclosure research and broader theories regarding disclosure of sensitive information we compared individuals who had disclosed their self-injury to another person with people who had not, to identify factors that may be relevant to NSSI disclosure.

University students ($n = 566$) with lived experience of NSSI, aged 17-52 ($M=23.67$, $SD= 6.45$, 80% female), completed measures of NSSI functions, outcome expectations, disclosure expectations, and internalised stigma, as well as general measures of distress, perceived social support, self-esteem, self-compassion, resilience, and self-efficacy. Having a mental illness diagnosis was reported by 62.2% of the sample. Participants were also asked whether they had ever told anybody about their self-injury; in all, 80.4% had told at least one person.

Women and individuals reporting a mental illness were more likely to have disclosed NSSI. Intrapersonal and self-care functions of NSSI, the expectation that self-injury would help regulate emotion, and expecting poor disclosure outcomes were more likely amongst individuals who had previously disclosed their NSSI.

These findings highlight the relevance of intrapersonal factors and cognition (specifically expectations) to the disclosure of NSSI. The lack of group differences between people who had and had not disclosed their self-injury with regards to stigma and protective psychosocial factors (e.g., self-esteem, social support etc.), in contrast to the previous literature may have implications for the way NSSI disclosure is understood and addressed.

The Perth Emotion Regulation Competency Inventory (PERCI): Psychometric Properties in University Students with a History of Non-Suicidal Self-Injury

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Contemporary models of NSSI emphasise that emotion dysregulation plays a key role in the behaviour. People commonly regulate both negative and positive emotions, but for the past few decades, the measures of emotion regulation traditionally used in the NSSI field have only assessed negative emotions. The Perth Emotion Regulation Competency Inventory (PERCI; Preece et al., 2018) is a 32-item self-report questionnaire that was recently introduced to assess emotion regulation ability across both valence domains. Based on Gross's process model of emotion regulation, the PERCI assesses people's ability to regulate the experiential and behavioural manifestations of their emotions, and their ability to know when it is appropriate to activate a goal to regulate emotions in the first place (i.e., ability to tolerate emotions). Presently, few data are available on the PERCI, and its psychometric properties have not been examined in samples with a history of NSSI. Our study aimed to address this gap.

Australian university students (N=249) with a history of NSSI completed the PERCI as part of a battery of psychometric questionnaires (Inventory of Statements about Self-Injury, NSSI Expectancy Questionnaire, Self-Efficacy to Avoid NSSI Action, Depression Anxiety Stress Scales-21).

Confirmatory factor analysis supported the intended 8-factor (subscale) structure of the PERCI as an excellent fit to the data (i.e., CFI = .95, RMSEA = .05, SRMR = .06; all item factor loadings > .65), highlighting the multidimensional and valence-specific nature of the emotion regulation ability construct. All PERCI subscales and composites had good internal consistency (Cronbach's α = .79-.95, McDonald's ω = .79-.95). Difficulties regulating negative and positive emotions were associated with more severe psychopathology symptoms, lower self-efficacy to avoid NSSI action, and more expectations that NSSI will help regulate emotions and lead to negative social outcomes.

Overall, our results indicate that the PERCI has strong psychometrics. Its capacity to integrate the assessment of both valence domains should now enable more comprehensive assessments of emotion regulation ability in the NSSI field.

Adolescent Non-Suicidal Self-Injury and Oxygenation of the Prefrontal Cortex during a Resting-State Task – A Near-Infrared Spectroscopy Study

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Background: Research on neural alterations in limbic and prefrontal circuits in association with self-injurious behavior has focused primarily on adults with borderline personality disorder (BPD). Adolescent samples are rare. Here, we used resting functional near-infrared spectroscopy (fNIRS) to examine oxygenation of the prefrontal cortex (PFC) and its association with symptom severity in adolescents engaging in non-suicidal self-injury (NSSI) and matched healthy controls (HC).

Method: Adolescents (12-17 years) with recurrent episodes of NSSI (n = 170) and HC (n = 43) performed a low-demanding resting-state vanilla baseline task. Mean PFC oxygenation and prefrontal functional connectivity were measured using an 8-channel functional NIRS system (Octamon, Artinis, The Netherlands). Various clinical variables derived from diagnostic interviews and self-reports were included in statistical analyses to explore potential associations with PFC oxygenation and connectivity.

Results: Adolescents with NSSI showed significantly decreased PFC oxygenation compared to HC, as indexed by oxygenated hemoglobin. Lower PFC oxygenation was associated with greater adverse childhood experiences and less health-related quality of life (HRQoL). While there was no evidence for alterations in PFC connectivity in adolescents engaging in NSSI compared to HC, increased PFC connectivity in the full sample was associated with greater adverse childhood experience, greater BPD pathology, greater depression severity, psychological burden in general, and lower HRQoL.

Discussion: This study is the first to examine PFC oxygenation using NIRS technology in adolescents engaging in NSSI. Overall, results indicate small effects not specific to NSSI. Clinical implications of these findings and recommendations for further research are discussed.

Evaluation of Self-Harm Gatekeeper interventions in the University Setting

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Despite the high prevalence of nonsuicidal self-injury (NSSI) among students, most university mental health interventions focus on suicidality. Kognito, a dynamic AI-driven gatekeeper intervention, may offer improvement over traditional static knowledge dissemination interventions in identifying and assisting at-risk students. Kognito is unique in its emphasis on skill development (e.g., active listening, respectful curiosity) for discussing difficult topics with peers. The current study adds to existing literature by implementing a dynamic online suicide-prevention gatekeeper intervention, Kognito, combined with the addition of NSSI-based content, in comparison to a static intervention format, in an effort to examine which format yields better knowledge retention and skill implementation at follow-up.

Participants (N=90) were undergraduates enrolled from a diverse public university and randomized to either a dynamic or static intervention group, or a waitlist control. Participants completed measures that assessed: preparedness to engage with peers in distress; mental health knowledge; stigma towards NSSI and suicide; personal experience with NSSI and suicide; depressive symptoms; and coping style. At follow-up, knowledge retention and skills were assessed via open-ended questions on how the participant would respond to a peer in distress based on two vignettes: one describing a female student experiencing academic-based distress and engaging in NSSI, and the second describing a male experiencing interpersonal distress and suicide risk. Participants described how they would address each situation, what conversation skills would they utilize, and whether and how they would assess for NSSI or suicide.

Compared to static intervention and control groups, we expect participants in the dynamic intervention will be significantly more likely to utilize empathic listening, ask neutral and open-ended questions, and recommend resources to distressed peers. Such results would support the continued use and development of dynamic interventions that prioritize application of the material being learned. Understanding which type(s) of intervention formats yield the highest level of knowledge retention and skill development is imperative, as it will allow for more impactful on-campus identification of at-risk peers and greater preparedness for difficult conversations about mental health.

Managing critical ethical tensions in adolescent self-harm (ADSH) research in secondary schools in Wales. Supporting pupils to talk about self-harm and their “ADSH-lived-experiences” safely, for ADSH prevention intervention support purposes.

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This paper centres on a current adolescent self-harm preventative intervention research project at DECIPHer (Centre for Development, Evaluation, Complexity and Implementation in Public Health Improvement) in Cardiff University. It will exposit some of the critical issues that arose when undertaking adolescent self-harm (ADSH) research with pupils in the secondary school context in Wales, when pupils had not previously spoken about their experiences or perceived self-harm as a topic that was not talked about in schools. Pupils in this study therefore used their research interviews with the researcher for these purposes. This paper will outline the key ethical tensions that arose here, and how they were successfully managed to facilitate pupils sharing their ADSH-lived-experiences, for prevention intervention support purposes. This work aims to address ADSH research barriers, facilitating pupils' perspectives.

Use of a mobile peer support app and web-based psychoeducation materials in nonsuicidal self-injury recovery: Results of a randomized-controlled trial and user-experience analysis

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Young people often turn to online spaces to exchange support and information about nonsuicidal self-injury (NSSI). While our understanding of the types of content individuals exchange in online peer support forums, and social media, has grown, few studies have formally analyzed the effects of online peer support on NSSI outcomes and there are no efficacy trials of online peer support platforms that we are aware of. The aims of our work were two-fold: First, we sought to examine the efficacy of a mobile peer support app, TalkLife, in decreasing NSSI frequency and increasing readiness to change and help-seeking behaviors through an 8 week 2-arm RCT comparing use of Talklife to weekly delivery of web-based psychoeducational materials. Secondly, we sought to explore (a) user experiences in both study arms and (b) how participants conceptualized these experiences in the context of their NSSI recovery. To do so, we solicited participant reflections through open responses post-trial and analyzed these responses through content analysis.

We report preliminary findings from both aims. Our main trial analysis included 131 participants between 16-25 years of age. We found a significant effect of condition on NSSI frequency such that TalkLife participants injured less over the course of the study ($M=.94$, $SE=.20$), when compared to participants in the control condition ($M=1.29$, $SE=.20$, $P=.02$). TalkLife participants also reported greater confidence in their ability to change NSSI behavior ($M=2.68$, $SE=.41$), when compared to control participants ($M=5.67$, $SE=.41$, $P=.04$). No significant differences were observed for help seeking outcomes.

Ninety-six of the individuals from the trial responded to questions designed to elicit information about what participants liked, and disliked, about their experience using the peer support app or receiving web-based psychoeducational materials. Overall, TalkLife was most frequently associated with positive effects of improved mood and feeling less alone, and negative effects on mood and self-injury behavior. In contrast, psychoeducation was almost entirely associated with positive effects, including enhanced self-knowledge, effects on self-injury activity, outreach, and improved attitudes towards therapy.

In the proposed talk, we will discuss findings and potential implications for the design of digital interventions for NSSI.

Exploring antecedents and functions of indirect self-harm

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Indirect self-harm (ISH) is physically or psychologically self-destructive behavior without direct, immediate destruction of body tissue (Germain & Hooley, 2012). While ISH is linked to traditional NSSI, there is evidence of it being a distinct construct (Hooley & St. Germain, 2014). However, further clarification is needed regarding whether ISH shares antecedents and functions with NSSI, as this can help identify potential unique vulnerabilities for ISH and NSSI, and help elucidate ISH's relationship with NSSI.

We aimed to quantitatively and qualitatively explore ISH behaviors, antecedents, and functions. To do so, we developed a self-report measure (Indirect Self-Harm Inventory; ISHI) to assess history and intent of 68 ISH, risky, and self-destructive behaviors as well as a semi-structured interview to explore ISH antecedents and functions. We administered these measures to university students (current N=147), along with the Self-Harm Inventory (SHI; Sansone et al., 1998), Chronic Self-Destructiveness Scale (CSDS; Kelly et al., 1985), and Risky, Impulsive, & Self-Destructive Behavior Questionnaire (RISQ; Sadeh & Baskin-Sommers, 2016) to further assess ISH and NSSI.

Preliminary results indicated 33% of individuals who endorsed ISH also reported an NSSI history. There were no gender differences on CSDS scores ($F=0.5; p=.50$), but participants with an NSSI history reported elevated indirect self-destructiveness compared to those without ($F=8.2; p<.01$). ISHI results suggested the most prominent intent for ISH was to cause psychological/emotional harm (25.3%). 73.3% of participants that endorsed RISQ behaviors reported negative affect reduction and 60.3% excitement/pleasure seeking functions. Thematic analysis of interview responses indicated that stress (31.5%; e.g., "need to relieve stress"), peer influence (28.3%; e.g., "peer pressure"), and boredom (22.8%; e.g., "looking for something to do") were precipitating factors prompting ISH. Prominent initiating emotions included negative affect (78.9%; e.g., anxiety) and positive affect (12.1%; e.g., excitement). Function themes included negative affect reduction (32.6%; e.g., "stress and anger relief"), excitement/pleasure (29.4%; e.g., "to bring joy"), and distraction (14.1%; e.g., "takes my mind off things"). Preliminary results provide insight regarding antecedents and functions of ISH, and suggest potential overlap with NSSI. Data collection is ongoing, and further results and implications will be discussed.

Pain Sensitivity and Plasma Beta-Endorphin in Adolescent Non-Suicidal Self-Injury

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Background: Beta-endorphin (BE) has been suggested to play a central role as to why people engage in non-suicidal self-injury (NSSI). To our knowledge, no study has systematically assessed this potential relationship in adolescents with NSSI.

Methods: N = 94 adolescents with NSSI (according to DSM-5 criteria) and n = 35 healthy controls (HC) were included. All participants received heat pain stimulation. Pain sensitivity (PS) was assessed; pain threshold and tolerance were measured in °C, pain intensity was assessed via visual analogue scale. Plasma BE levels were assessed. Sociodemographic and clinical characteristics were obtained via semi-structured interviews and self-report questionnaires.

Results: Adolescents with NSSI showed increased pain thresholds ($t(127) = -2.071$, $p = .040$), lower pain intensity ($t(114) = 2.122$, $p = .036$) and lower plasma BE levels ($t(127) = 3.182$, $p = .002$) compared to HC. Groups did not differ on pain tolerance ($t(127) = -0.911$, $p = .364$). Greater pain threshold correlated positively with borderline personality disorder (BPD) symptoms ($r(129) = .182$, $p = .039$), while pain intensity ($r = -.206$, $p = .033$) and BE levels ($r = -.246$, $p = .007$) correlated negatively with depression severity. No significant relationship was found between pain threshold and plasma BE ($r(129) = -.013$, $p = .882$).

Conclusions: Findings support both reduced PS and basal opioid deficiency as independent biological correlates and potential risk-factors for NSSI. Further longitudinal and experimental studies are needed to investigate the role of BE levels and PS as well as their potential association. Future studies should implement repeated plasma BE measures to assess BE release in association with pain in NSSI. Validity of plasma BE measures compared to central measures should be considered. Assessing the association between PS and BE in a naturalistic setting presents a promising avenue for future research in NSSI.

Exploring Perceptions of Self-Injury: A Virtual Ethnographic Study

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The internet provides us with various bidirectional media websites under which the function of communication and interaction between one and another is essential. These websites have various virtual communities on them that are created for people who self-injure to join and connect with each other. Perceptions of self-injury by people who engage in this behavior has been an important aspect of study amongst researchers in this field. However, these studies neglect the influence of bidirectional media on their participants and how these online interactions shape the way these individuals view self-injury. This present study attempts to understand the way people who engage in self-injury perceive it. The sample for this study were 20 threads of messages on a virtual community which is where the members communicate with each other. Inclusion criteria for this requires each thread to have posts from a minimum of five different members. Hence, in this regard, interactions amongst members with respect to their perceptions on self-injury could be understood. Inter-rater reliability was carried out. Identity of the members and of the virtual community were safeguarded through consent forms and paraphrasing of the data excerpts. This paper would benefit therapeutic practitioners who may use their knowledge of these communities in their practice with clients who may be a member of any such self-injury virtual community.

An Ecological Momentary Assessment Study on the Short-Term Impact of NSSI on Suicidal Ideation

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Non-suicidal self-injury (NSSI) is a robust risk factor for suicidal ideation, attempts, and deaths. Understanding the function of NSSI in suicidal populations may therefore be critical to suicide prevention, as well as the treatment of individuals with NSSI. Clinical anecdotal and self-report data suggest that some suicidal individuals who engage in NSSI may do so to avoid engaging in suicidal behavior (Brausch & Muehlenkamp, 2018). This is consistent with evidence that suicidal individuals who engage in NSSI after their first experience of suicidal ideation (SI) take longer to transition to an eventual suicide attempt compared to non-NSSI suicidal individuals (Bryan, Bryan, May, & Klonsky, 2015). However, suicidal individuals with NSSI are also at significantly higher risk of ultimately attempting suicide than those who do not engage in NSSI (Whitlock & Knox, 2007). Thus, NSSI may have the short-term effect of alleviating suicidal urges, while elevating longer-term risk of suicidal behavior. To our knowledge, however, no studies have directly examined the short-term impact of NSSI on SI. The current study sought to address this gap by using ecological momentary assessment (EMA) over a seven-day period to understand the real-world impact of NSSI on SI.

Our sample consisted of 82 adults with Borderline Personality Disorder (BPD), a clinical population prone to engaging in NSSI. Seventy-two percent of the sample reported a history of at least 1 suicide attempt, and 93% reported past NSSI. Participants completed EMA for a week with prompts on NSSI and suicidal ideation at six 2-hour epochs per day over a 12-hour wake period. We assessed the effect of NSSI on change in SI in the following (post-NSSI) epoch, using single-predictor mixed effects regression models with random intercepts for subject and an AR(1) correlation structure.

Results indicated a mean reduction in ideation of 1.77 (SE=0.54) units following epochs in which NSSI occurred, which significantly differed from the mean 0.05 (SE=0.10) unit increase in ideation following epochs with no NSSI ($t=-3.26$, $p=.001$).

These findings provide evidence that NSSI may serve a defensive function as a strategy to cope with suicidality. Unfortunately, the short-term success of NSSI in reducing SI may reinforce use of NSSI as a means to regulate suicidal states, thereby raising risk of suicide over time. Findings highlight the importance of addressing suicidal thoughts in the treatment of individuals with NSSI.

Concurrent and prospective links between self-concept and emotion in non-suicidal self-injury

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Non-suicidal self-injury (NSSI) is consistently associated with self-concept disturbances (e.g., a negative, unclear, and inconsistent view of self; Gandhi et al., 2017; Lear & Pepper, 2016) and emotion regulation impairments (e.g., perceived limited access to regulation strategies, heightened use of maladaptive strategies; Wolff et al., 2019). Yet, the relationship between self-concept and emotion among people who engage in NSSI remains remarkably unclear. Additionally, NSSI research that does examine both self-concept and emotion is predominantly cross-sectional, leaving us with little knowledge about whether self-concept disturbances precede or follow emotion regulation impairments.

This ongoing online study examines concurrent and prospective relationships between aspects of self-concept (self-criticism, self-concept clarity, and authenticity) and emotion (emotion reactivity, emotion regulation strategy use, and alexithymia) among people who engage in NSSI (history of NSSI $n = 112$ [time 1]; past year NSSI $n = 53$ [time 1]) compared with controls ($n = 110$ [time 1]). Participants complete a battery of questionnaires assessing self-concept, emotion, and NSSI at 3 time points: baseline assessment, 3 months post-enrolment, and 6 months post-enrolment.

Results from this work will identify whether and how distinct components of self-concept and emotion are associated with one another for people with past and current NSSI engagement. Furthermore, these findings will shed light on temporal relationships between self-concept and emotion, consequently clarifying how one's self-concept influences one's emotions (and vice versa) in this population. More broadly, this line of work will further inform a key tenet of the cognitive-emotional model of NSSI (Hasking et al., 2017) by providing additional insight into how cognitive and affective factors are jointly implicated in NSSI.

Trauma-informed approach to qualitative data collection in NSSI research

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Non-suicidal self injury (NSSI) is a growing concern among youth across the world, which has led to increase in inquiry into lived experiences of NSSI. There is no single reason for initiation of NSSI and the behavior might be best understood in the context of unique individual experiences, familial and socio-cultural circumstances. However, it is seen that individuals living with NSSI often report traumatic experiences such as sexual abuse, emotional abuse, early loss or separation from a caregiver or sibling, parental neglect, severe illness, bullying, witnessing domestic violence, poverty, deprivation and other forms of difficulties. Trauma in itself is pervasive and can potentially lead to the development of emotional and physical concerns (Felitti et al., 1998).

Given this understanding, the paper aims to highlight the methodologies and ethics involved in NSSI research from a trauma-informed lens. There has been relevant literature documenting the ethical procedures to be undertaken in NSSI research (Lloyd-Richardson et al., 2015; Singhal & Bhola, 2017). The paper attempts to build on that and document the process of interviewing young adults with lived experience of NSSI through a trauma lens.

During research interviews, participants may be reminded of trauma memories, may experience overwhelming emotions, or even experience brief moments of dissociation, while sharing their experiences related to NSSI. It is therefore extremely important to be sensitive to the needs of the participants, evaluate the ethical soundness of the study and adopt a trauma-informed approach for data collection. The paper will highlight some strategies/measures that might be helpful while collecting data on NSSI from a trauma lens.

A trauma-informed approach also brings into focus the researcher as a person and how she is influenced by the journey of self-harm research. The implications will focus on the sense of responsibility to safeguard well-being of participants and researcher.

Associations between non-suicidal self-injury, mental health and emotion regulation difficulties in high-school students: A mediation model

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Non-suicidal self-injury (NSSI) is often conceptualized as a maladaptive coping mechanism, a dysfunctional emotion regulation process. NSSI is a prevalent behavior among high-school students, however there is a lack of research about the detailed associations between NSSI and mental health. In the current study we use Keyes and Waterman's (2003) conceptualization about mental health, the model of subjective well-being. The aim of our research was to investigate the link between NSSI, mental health and difficulties in emotion regulation in high-school settings, especially the mediating role of mental health in the relation of emotion regulation difficulties and NSSI.

A large Hungarian adolescent sample was investigated. Participants were high-school students (N= 1015; girls= 671 (66.1%); mean age =16.81, SD = 1.41). In our cross-sectional study we used structural equation modeling (SEM) to investigate the mediation role of mental health on the link between difficulties in emotional regulation and NSSI. Inventory of Statements About Self-Injury - short form (Washburn, unpublished material; original version: Klonsky & Glenn, 2008) was used to assess NSSI. Adolescent Mental Health Continuum-Short Form (Adolescent MHC-SF; Keyes, 2006) was used to measure mental health. Difficulties in Emotion Regulation Scale – short form (DERS; Bjureberg et al., 2016) was used to measure emotion regulation difficulties.

The point prevalence of NSSI (n= 320; 31.7%) is particularly high in our sample, life-time prevalence is even higher (n= 415; 41%). Every type of emotion regulation difficulties (non-acceptance of negative emotions, inability to engage in goal-directed behaviors, difficulties controlling impulsive behavior, limited access to emotion regulation strategies, lack of emotion clarity) differ significantly the group of adolescents engaging in NSSI and those who have never engaged in NSSI. SEM indicated that emotion regulation problems were strongly associated both directly and indirectly with NSSI. Mental health mediates the link between emotion regulation problems and NSSI.

Although this study is a cross-sectional design, these findings provide a more detailed understanding of the indirect association between emotion regulation difficulties and NSSI. Higher level of mental health might be a protective factor against NSSI when having emotion regulation problems.

Non-suicidal self-injury in young adult participants of online support groups for eating disorders with a history of trauma

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Background. Previous studies discovered a number of adverse effects of trauma, especially in early childhood, on the mental health of the individual. We add to the efforts to discover links between trauma and NSSI by focusing on interpersonal sensitivity (IS), a known risk factor for depression and anxiety (Boyce, Parker, 1989).

Methods. The study was conducted online; the sample ($N=254$; 242 women) included Russian-speaking young adults aged 18–28 ($M=19$; $SD=1.92$) who were recruited in support groups for eating disorders. 86 participants reported a mental disorder diagnosed by a psychiatrist or psychotherapist.

Measures used in the study included the Reasons for Self-Injury Scale (Polskaya, 2017), Interpersonal Sensitivity Measure (Boyce, Parker, 1989), Adverse Life Events Checklist (Polskaya, 2007) and Impact of Event Scale (Horowitz et al., 1979; Tarabrina, 2001). A group of more severe NSSI behaviors (cutting, piercing, burning, hitting hard surfaces) was labeled instrumental NSSI.

Results. The participants showed a very high frequency of instrumental NSSI (e.g., frequent cutting was endorsed by 42.9%, and 13% had cut themselves within a week prior to completing the questionnaires). Traumatic events were also frequent: 29.1% survived at least one disaster, 59.4% were abused; 94.9% had problems in parental family (e.g., parental substance abuse, divorce, scandals). Family- and abuse-related traumatic events significantly correlated to NSSI frequency and PTSD symptoms (intrusion, avoidance, hyperarousal).

Participants with and without mental disorders didn't differ in terms of overall frequency and recency of NSSI, but they used instrumental NSSI more often and endorsed more intrapersonal functions such as stress relief.

In diagnosed participants IS predicted instrumental NSSI ($R^2=.19$, $F=8.16$, $p<.01$, $\beta=.44$, $p<.01$). In participants without a diagnosis instrumental NSSI frequency ($R^2=.12$, $F=7.53$, $p<.01$, $\beta=.34$, $p<.01$) and recency ($R^2=.14$, $F=8.64$, $p<.01$, $\beta=.37$, $p<.01$) were predicted by hyperarousal.

Conclusion. Participants of online support communities for eating disorders with traumatic experiences display a concerning severity and frequency of NSSI. Hyperarousal as a predictor of NSSI can be linked to emotional reactivity, whereas IS points to stable deficits in interpersonal functioning. The study was supported by RFBR grant no. 20-013-00429.

**Childhood TBI and Lifetime NSSI Impact Suicidality Age of Onset
(Age of First Suicide Plans and Age of First Attempt)**

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Introduction: Traumatic Brain Injury (TBI) victims are at an increased risk for suicide. Additionally a history of non-suicidal self-injury (NSSI) is associated with also developing suicidal thoughts and behaviors. However, very little is known as to how these factors interact and how this interaction affects the age of suicidality's onset. The purpose of this abstract is to understand if those with TBI and NSSI begin planning or attempting even sooner than those with a history of one or the other, in order to elucidate who should be targeted for intervention and when is best to intervene. Therefore, the aim of this study is to explore how NSSI and childhood TBI interact to create and amplify future lifetime suicide risk in terms of when suicide planning and attempting begins.

Method: A sample of 89 Veterans at risk for suicide were recruited from an urban VA medical Center. Participants were included in the sample if their Columbia Suicide Severity Rating Scale indicated severe ideation or a suicide attempt in the past year. Participants were then administered the SITBI as well as the OSU TBI Identification Method by a trained clinician. Participants were 89.9% male and racially diverse (37.1% Black, 33.7% White, 9.0% Multiracial, 1.1% Native American, and 15.7% Other). Of the sample, 44.9% identified as Hispanic.

Results: To analyze how NSSI interacts with childhood TBI on the outcome of age of first suicide attempt and suicide plan, three t-tests were run for those with no TBI, childhood TBI, and adult TBI. Across the sample and regardless of TBI status, those who engaged in NSSI reported making an attempt an average of 10 years younger than those without NSSI engagement. Furthermore, participants with a TBI in childhood or adulthood as well as a history of NSSI engagement reported making a suicide plan about 10 years younger than those who have not engaged in NSSI. Stats to be presented at time-of-conference.

Conclusions: Engagement in NSSI predicted earlier suicide attempts regardless of TBI status. Additionally, engagement in NSSI as well as presence of TBI in either childhood or adulthood predicted earlier suicide planning than those without NSSI. Based on this research, targeting specific groups for earlier interventions is important. Individuals with a combination of non-suicidal self-injurious behaviors, and TBI should receive targeted interventions at childhood onset to limit a future of increased and earlier suicide risk.

How do NSSI and Childhood Suicide Planning Impact Number of Lifetime Suicide Attempts?

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Introduction: A history of non-suicidal self-injury (NSSI) is associated with developing suicidal thoughts and behaviors. Additionally, those who begin to severely ideate during childhood (e.g. making detailed suicide plans) are also at increased risk for suicide. However, little is known as to how NSSI and childhood suicide planning interact and how this interaction affects the number of suicide attempts one will go on to make. This abstract seeks to understand if those with NSSI and childhood suicide plans go on to make more attempts than those without NSSI or those who begin planning as an adult. Doing so will help elucidate how NSSI and childhood suicide planning interact to increase future suicide risk.

Method: A sample of 89 Veterans at risk for suicide were recruited from an urban VA medical Center. Participants were included in the sample if they had a CSSRS score of 3 or more for past month ideation or a suicide attempt in the past year. Participants were then administered the SITBI as well as the OSU TBI Identification Method by a trained clinician. Participants were 89.9% male and racially diverse (37.1% Black, 33.7% White, 9.0% Multiracial, 1.1% Native American, and 15.7% Other). Also, 44.9% identified as Hispanic.

Results: To analyze how NSSI interacts with childhood suicide planning in terms of number of lifetime suicide attempts, two t-tests were run. For Veterans who began suicide planning as a child and also have engaged in NSSI, they had a significant number of lifetime suicide attempts, $t(21)=4.49$, $p<0.001$, $d=2.33$. In the NSSI sample, those who began making suicide plans as children had about 3x the amount of attempts ($M=8.0$, $SD=4.5$) than those who began suicide planning as adults ($M=2.7$, $SD=1.4$). For Veterans who have not engaged in NSSI, age of suicide planning onset did not significantly predict number of lifetime suicide attempts.

Conclusions: Results suggest that Veterans who engaged in NSSI were likely to have more attempts in their lifetime when they had a suicide plan in childhood compared to those who had a first suicide plan in adulthood. No significance in the non-NSSI group suggests that both NSSI and childhood suicide planning interact to create a greater risk for multiple attempts down the line. Such research can have implications for making sure that specific individuals, such as those with suicide planning in childhood and NSSI history, receive early interventions and monitoring considering their increased risk.

A longitudinal examination of the disclosure of NSSI among university students

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Many emerging adults who engage in nonsuicidal self-injury (NSSI) are reticent to disclose the behavior to others, though the disclosure of a concealable stigmatized identity may improve psychological adjustment and facilitate more formal help-seeking behavior. Cross-sectional research has sought to examine both the intra- and interpersonal factors that may promote or hinder NSSI disclosures. However, there is a paucity of longitudinal work, but this work is necessary to elucidate which factors temporally precede NSSI disclosures, and to identify individuals most likely to conceal versus disclose their NSSI. In the present study, 475 emerging adult students with a history of NSSI ($M_{age} = 17.96$; 74.9% female) reported on their NSSI behaviours and functions, NSSI disclosures and experience of disclosing, recent stressful experiences, and perceived social support from loved ones at three time points (baseline, 4 months follow-up and 8 months follow-up). Over half of participants with a history of NSSI had not disclosed NSSI behaviours to anyone (43.4% disclosure rate). Among individuals who had disclosed, peers, mothers, and romantic partners were the most common recipients of disclosures. A binomial logistic regression analysis was used to predict new disclosures across the 8-month follow-up from three baseline predictors that were associated with disclosure at the bivariate level (i.e., NSSI severity, social support from significant other, romantic problems). Results indicated that individuals who reported greater recent NSSI severity were more likely to later disclose their NSSI behaviours, but no other factors were significant. Results of the present study may indicate that individuals who disclose NSSI are more at-risk, or that disclosure is used to signal more severe distress, further highlighting the importance of equipping disclosure recipients with effective and supportive responses. The present study represents the first large-scale examination of longitudinal predictors of NSSI disclosures in an emerging adult university sample. Findings can inform educational and supportive programming for students aimed at promoting disclosure on university campuses, as well as by equipping likely sources of disclosures with effective and supportive responses.

Students' Opinions on Interventions for Self-Harm, Including a Smartphone app (BlueIce)

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Background: University students are twice as likely to self-harm than controls, with prevalence rates estimated at 20%. Despite this, only around 19% seek support for it. Self-harm is often a private act associated with shame and stigma, so talking therapies can be unappealing. UK University mental health services are also over-stretched, with 1 in 4 students using/waiting to use them. A smartphone app, such as BlueIce, could be a viable option given that 99% of university students own a smartphone. BlueIce has been found to be effective in improving self-harm, anxiety and depression in adolescents, however, it is unclear if BlueIce could also be useful for university students. Objective: This study aimed to explore what students think about different interventions for self-harm, including 'BlueIce', and to understand how students determine if support for self-harm is effective. Methods: Semi-structured interviews were conducted with 25 students from the University of Bath who had experience of self-harm thoughts/behaviours. Results: The interviews were thematically analysed and five themes were identified: 'understanding self-harm', 'barriers to seeking support', 'preferences in support', 'appraisal of BlueIce' and 'context of university during COVID-19'. Students understood self-harm as private, secretive and stigmatised. Barriers to seeking support therefore related to disclosing self-harm, however, issues of access such as long waiting lists were also discussed. Preferences for support were varied with some wanting the personal connection through professional support, and others preferring the anonymity and convenience of digital interventions. Participants wanted to develop alternative coping mechanisms and to address the emotional/mental health issues underlying self-harm. Following this students expressed that BlueIce would help them to achieve this. Students suggested that coping ability and wider mental wellbeing are important outcomes, and that relying on self-harm frequency may not accurately indicate recovery. Finally, participants discussed how university can be a challenge for mental health, particularly during the pandemic. Conclusion: Participants mostly wanted support to develop coping skills and address issues that underlie self-harm, and they therefore believed that these indicate recovery from self-harm. Participants believed that BlueIce could be helpful and so a subsequent RCT of BlueIce is currently ongoing at University of Bath.

Graph theoretical analysis of resting-state functional connectivity in adolescent self-harm

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Background: Research on the neurobiological mechanisms underlying non-suicidal self-injury (NSSI) is scarce. Using task-based paradigms, previous studies demonstrated altered brain activation in adolescents engaging in NSSI in prefrontal, amygdala and anterior cingulate regions, as well as altered amygdala – frontal cortex connectivity. Our aim was to investigate global and local patterns of brain connectivity applying graph theory, which yields useful network metrics including efficiency and organization of a network.

Methods: We examined resting-state-functional-connectivity (RSFC) in $n = 33$ female adolescents aged 12-17 years engaging in NSSI, and $n = 29$ age-matched healthy controls using graph theory. Mixed linear models were calculated using exploratory analyses evaluated with the Bayes Factor (BF), to determine 1) group differences on global and 2) on regional network measures and 3) associations between network measures and clinical characteristics in patients.

Results: Adolescents engaging in NSSI demonstrated longer average characteristic path lengths and a smaller number of weighted hubs globally. Regional measures indicated lower efficiency and worse integration in (orbito)frontal regions and higher weighted coreness in the pericalcarine gyrus. In patients, higher orbitofrontal weighted local efficiency was associated with NSSI during the last month while lower pericalcarine nodal efficiency was associated with suicidal thoughts in the past year. Higher weighted hubness in the right but lower weighted hubness in the left pericalcarine gyrus was associated with more suicide attempts during the past year.

Conclusion: Patients engaging in NSSI showed less integrated frontal RSFC networks but a highly connected occipital sub-network. Higher and lower network efficiency related to worse clinical outcome depending on the brain region and hemisphere. Using a graph-based technique to identify functional connectivity networks, this study adds to the growing understanding of the neurobiology of NSSI.

Stressful Experiences in University Predict Nonsuicidal Self-Injury through Emotional Reactivity

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Theoretical perspectives on nonsuicidal self-injury (NSSI; direct and deliberate self-injury without lethal intent such as self-cutting or hitting) have long underscored the affective regulating properties of NSSI. Less attention has been given to the processes through which individuals choose to engage in NSSI, specifically, to regulate their distress. One prominent theoretical model suggests that recent stressful experiences facilitate NSSI engagement through emotional reactivity, and that this relationship is strengthened by several NSSI specific risk factors (e.g., having friends who engage in NSSI). However, comprehensive empirical investigations of this theoretical model are sorely lacking to date.

To address this gap in the literature, 1125 emerging adults at a large academic institution (72% female, Mage = 17.96, 25% with a recent history of NSSI at Time 1) completed an online survey three times over their first year. Assessments were four months apart, and at each assessment participants reported on their recent stressful experiences in university, emotional reactivity, NSSI, and three theoretically relevant NSSI specific risk factors (close friend engagement in NSSI, high self-disgust, and low fear of pain).

As expected, path analysis revealed that there was a significant indirect effect of recent stressful experiences on NSSI engagement through emotional reactivity. However, this indirect effect was maintained across moderator analyses. The findings underscore the salient role of proximally occurring stressors in the prediction of NSSI engagement and suggest that emotional reactivity may be a key mechanism accounting for this association. The findings also suggest that NSSI specific risk factors do not strengthen the association among stressful experiences, NSSI, and emotion reactivity as the indirect effect was maintained across individuals with and without the NSSI specific risk factors.

These findings are the first to empirically investigate one prominent theoretical model of NSSI and will inform developing theoretical perspectives on NSSI. The findings also indicate that identifying effective strategies to help students manage stress, and emotional responses to stressors, during the transition to university may serve to reduce risk for NSSI engagement during the early university years.

Gender differences in NSSI aetiology: moderation and mediation analyses of psychological distress, emotion dysregulation, and impulsivity in a sample of young adults

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Introduction: Non-suicidal self-injury (NSSI) appears to be more common among women than men, though the underlying reasons for this remain unclear.

Methods: In a community sample of young adults ($n = 996$, aged 18-30), we investigated gender differences in NSSI aetiology. Mediation and moderation analyses considered the relationships between past-year NSSI prevalence, gender, and self-reported psychological distress (K10), emotion dysregulation (DERS), and impulsivity (UPPS-P).

Results: Nearly twice as many women as men reported past-year NSSI (14.5% vs 7.8%), and women reported more frequent NSSI than men. Past-year NSSI prevalence did not significantly decrease with age and we found no significant age by gender interaction. Women reported significantly higher psychological distress and significantly lower sensation seeking and positive urgency than men. Gender did not significantly moderate the relationship between any self-report variable and past-year NSSI. Psychological distress partially mediated the relationship between gender and past-year NSSI.

Conclusion: Women are not more likely than men to engage in NSSI due to greater difficulty managing their emotional responses; women and men did not significantly differ in levels of emotion dysregulation or negative urgency, and gender did not moderate the association between psychological distress and past-year NSSI. Rather, greater psychological distress among women significantly contributed to the NSSI gender gap. Furthermore, we show that NSSI often persists beyond adolescence. Interventions which reduce distress or improve distress tolerance, strengthen emotion regulation skills, and provide alternative coping strategies may be effective for treating NSSI.

Applying a Conceptual Framework of NSSI Stigma

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NSSI stigma is a significant barrier to seeking support and impacts the health and wellbeing of people with lived experience. Despite the importance of NSSI stigma as a research priority, it is poorly understood. It has been argued that NSSI stigma differs from mental illness stigma in several distinct ways. As such, a recent conceptual framework (Staniland et al., 2020) proposed that NSSI stigma comprises six core components that manifest across four contexts. The present study aims to assess the utility and applicability of the proposed NSSI Stigma Framework by applying it to descriptions of NSSI stigma experiences.

A directed content analysis was used to code qualitative data from 99 undergraduate students (Mage = 21.49, SD = 3.71; 82.8% female) who responded to four broad open-ended questions embedded within a larger survey about self-injury and mental illness. The 6 x 4 NSSI Stigma Framework was used as a coding rubric, providing 24 codes to direct analysis.

Most components of the framework were present in the data set. The public and enacted levels of stigma yielded the strongest evidence, with participants describing observations and personal experiences of NSSI stigma. There were relatively fewer examples of self or anticipated stigma within the data, likely due to the nature of questions posed to participants, which focused on direct stigma experiences. Overall, there was strong evidence of the origin domain, good evidence of concealability, course, peril, and disruptiveness, and limited evidence of aesthetics. Of the 24 codes, five were not present within the data, and eight yielded fewer than five units of data.

The NSSI Stigma Framework has utility in guiding the explanation, description, and prediction of NSSI stigma, particularly given that the questions asked of participants did not specifically tap into the proposed components of the framework. The argument that NSSI stigma comprises six underlying components was supported. NSSI stigma also appears to manifest across the contexts as proposed, with some additional complexity discovered. Future research should investigate each component more specifically to better understand NSSI stigma.

Cognitive and emotional factors associated with wanting to stop self-injury

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Background: Although self-injury may be effective as an emotion regulation strategy for many, the behaviour can lead to undesirable outcomes such as shame, guilt, scarring, and emotional distress. Given these negative correlates, it appears reasonable to assume that individuals who engage in the behaviour have a desire to stop doing so. A variety of cognitive and emotional differences exist between those who have recently engaged and those who have not engaged in the past 12 months, including differences in self-efficacy, outcome expectancies, emotion regulation, psychological distress, and the functions of self-injury. However, no studies have explored factors associated with the desire to stop self-injuring.

Method: University students ($n = 374$, 18-52 years, 80.7% female) with lived experience of self-injury completed measures of the above factors, with comparisons between those who had self-injured in the past 12 months ($n = 210$, 56.1%), and those who had not ($n = 164$, 43.9%). Additionally, we investigated group differences between individuals who expressed wanting to stop self-injuring ($n = 299$, 79.9%) and those who did not ($n = 75$, 20.1%).

Results: Consistent with previous research, there were differences on almost all factors when comparing individuals who had self-injured in the past 12 months and those who had not. However, there were few differences between individuals who wanted to stop the behaviour and those who did not. There were also interactions between recency of self-injury and wanting to stop the behaviour. For example, individuals who wanted to stop self-injuring were more likely to report self-injuring to regulate affect than individuals who did not want to stop, regardless of whether they had self-injured in the past 12 months or not.

Conclusion: Our findings suggest that the factors associated with the desire to stop are not the same as factors underlying cessation of the behaviour. Motivational approaches to behaviour change would dictate consideration of cognition in volitional behaviour. A better understanding of factors that underlie the desire to stop self-injury may facilitate future intervention efforts.

Evaluation of an NSSI Training with Pediatric Residents

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Non-mental healthcare providers, including primary care providers (PCPs), are positioned to lead important public health interventions to address NSSI among youth, yet only 1 in 4 PCPs routinely inquire about and assess NSSI among adolescents. Further, research suggests almost 50% of PCPs feel unprepared to address NSSI among adolescents, and over 70% want more training on NSSI. However, negative attitudes, misperceptions, and lack of knowledge and competence about NSSI make PCPs less likely to address this health-risk behavior.

To address gaps in training, the authors designed a new training for pediatric residents focused on teaching learners how to identify and assess NSSI among adolescents, including using the SOARS (Suicidal ideation; Onset, frequency, and methods; Aftercare; Reasons; and Stage of change) assessment method. The two-hour training included a one-hour didactic presentation, followed by an innovative, live virtual reality interactive practice session with an adolescent patient avatar who responded to residents in real-time.

Participants included 28 pediatric residents from three different programs in Florida completing their adolescent medicine rotation. Participants completed pre-training, 1-month post-training, and 3-month post-training surveys. Twenty-two participants (85%) completed the baseline and both follow-up surveys. The sample was predominantly female ($n = 14$), Non-Hispanic White ($n = 12$), and in their first year of pediatric residency ($n = 12$). After the training, residents endorsed higher confidence in talking about NSSI with youth at 1-month ($t = 6.86, p < .001$) and 3-month ($t = 7.39, p < .001$) follow-ups, compared to baseline. Attitudes also improved compared to baseline at 1-month follow-up ($t = 3.67, p = .002$) and were maintained over time (3-month follow-up: $t = 5.14, p < .001$). Residents were significantly more likely to use SOARS to assess NSSI at 1-month ($t = 2.82, p = .011$) and 3-month ($t = 2.81, p = .012$) follow-ups, compared to baseline. They also demonstrated an increase in behavioral intentions to screen for and address adolescents' NSSI behaviors at 1-month ($t = 4.92, p < .001$) and 3-months ($t = 4.20, p < .001$) following the training, compared to baseline.

Findings from this study suggest a short didactic presentation, paired with a “live” virtual reality simulation practice session, is associated with increased knowledge, improved attitudes, and changes in behavior over time.

An In-depth Study of Adolescence NSSI Behavior based on Social Media Data and Natural Language Processing Technique

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Background: Adolescent nonsuicidal self-injury (NSSI) is becoming a serious public health concern worldwide. With the widespread of internet, more teenagers are searching for, discussing, and showcasing their NSSI experience on social media. Existing studies on NSSI from internet data were mostly exploratory and limited in samples. To the best of our knowledge, this is the first work that systematically studies adolescent NSSI behavior based on social media usage and big data.

Method: We collected a corpus consisting of 10 years of NSSI related posts from the three major Chinese social media. We conducted an affective lexical analysis and descriptive analysis over factors such as demographic location, age, total number of posts per year. We performed a category analysis where posts are clustered according to content. Words association analysis was used to extract key words and analyzed association based on TF-IDF, from which we studied contributing factors to NSSI.

Results: 1) Most teenagers with NSSI in our study live in eastern and economically developed regions and their posts are mostly active between 20:00-24:00. In all social media platforms, the number of primary school users was only slightly less than the middle school and college users. Over the past decade, the total number of NSSI-related posts drastically increased each year, especially after 2017. 68%-79% of the posts have negative sentiment polarity. 2) Theme analysis reveals 3 major themes: sharing of self NSSI experience (18%-52%); sharing of others NSSI experience (30%-43%); and psychoeducation (0.1%-0.9%) with another 11 sub-themes such as motivation (10%-41%), pattern (3%-37%), encouragement (2%-23%), cyber-violence (1%-10%), social media report (0.04%-11%). 3) Word association analysis shows that academic performance, love relationships and family relationships were the most discussed issues. In addition, strategies of coping with negative emotions and life meaning were the most influencing factors to NSSI.

Conclusion: We investigated the status quo, content, categories and influencing factors of adolescent NSSI by analyzing online social media data. Our results suggest that over the past decade, NSSI is an increasingly common topic and its practice is gaining prevalence and contagiousness among young people, which calls for attention. Academic performance, interpersonal relationships, life meaning education were important considerations in preventing and intervening NSSI.

Trajectories and Predictors of Repetitive Deliberate Self-Harm through Adolescence into Young Adulthood

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Aims: We examined individual stability and change in repetitive non-suicidal self-injury (NSSI) from adolescence to young adulthood by comparing repetitive NSSI trajectories with similar patterns in adolescence. Specifically, we compared chronic repetitive NSSI (i.e. ≥ 5 instances, representing stable repetitive NSSI in adolescence and young adulthood), stable adolescence-limited repetitive NSSI (stable repetitive NSSI in adolescence but no repetitive NSSI in young adulthood), late-onset repetitive NSSI (no repetitive NSSI in adolescence but repetitive NSSI in young adulthood), and no repetitive NSSI (no repetitive NSSI in either adolescence or adulthood). We further examined whether different distal risk factors measured in adolescence (i.e., emotional symptoms, hyperactivity/inattention, conduct problems, victimization, negative emotions towards parents) and young adult psychological adjustment (including both positive [e.g. life satisfaction] and negative aspects [e.g. anxiety, depression, emotion dysregulation]) are associated with NSSI trajectory.

Methods: We recruited a community cohort of 984 youth (mean age 14.5 years), encompassing all regular school students in a municipality with around 40,000 inhabitants in southern Sweden. A prospective design involving two measurement points (T1 and T2) separated by one year (2007–2008) was adopted. Of the 984 youth, 546 (60% females) participated in a follow-up survey 10 years later (mean age 24.5 years at T3).

Results: The results showed a nonrandom gender distribution across the four NSSI trajectory groups. Compared with men, women were overrepresented in the chronic repetitive NSSI (73.7% women vs. 26.3% men) and stable adolescence-limited repetitive NSSI groups (85% women vs. 15% men). In the no repetitive NSSI (52.7% women vs. 47.3% men) and late-onset repetitive NSSI groups (54.5 % women vs. 45.5 % men), however, the gender distribution was rather equal. The results further showed that none of the distal risk factors in adolescence significantly differentiated the stable adolescence-limited and chronic groups or the late-onset and no repetitive groups. Finally, for the stable adolescence-limited group, even after ceasing NSSI, young adults still reported a heavy burden of other psychological difficulties.

Nonsuicidal Self-Injury: design of a school-based Peer Education Program for adolescents

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Background: Nonsuicidal self-injury (NSSI) emerges as a major mental-health concern, as it is highly prevalent among youth and prospectively associated with suicide attempts and negative mental health outcomes. Although NSSI represents an impairing behavior, the development of evidence-based preventive approaches for youth is still limited. Stemming from the idea that identifying vulnerability factors that predispose to the target behavior is a crucial step in planning an effective prevention, the Peer Education Program for NSSI (PEP-NSSI), grounded in the psychoanalytic tradition, implement psychoeducational modules targeting four crucial risk factors for NSSI: pubertal changes, body image, self-esteem, and emotion regulation. As puberty approaches, adolescents have to address confronting developmental milestones related to the rapid body changes. The new and frightening sensation arising from the (mature) may disrupt the developmental function of adolescence - integration of the mature sexual body - may lead to a distorted relationship to the body perceived as an enemy, responsible for a sense of worthlessness. A mindset of inadequacy can lead to an inability to regulate emotions that, consequently, may be expressed through the body. As such, adolescents are particularly vulnerable to attacking their body, mostly aggressively, even in the preadolescence years. Thus, middle school is an ideal environment for the implementation of the PEP-NSSI.

Methods: The program is a two-arms randomized controlled trial, in which 6th and 7th-grade students are eligible to receive the PEP. Selected 8th-grade students will be trained to serve as peer educators and will hold a peer-education intervention to participants for up to four weeks through group activities. Pre and two post-test assessments will be conducted in order to evaluate the program's effectiveness. Also, program feasibility data will be collected.

Results: The program is expected to effectively address the psychological risk factors for NSSI, minimizing their effects, and encouraging positive health and well-being among youth. It is expected that participants would report a higher level of self-esteem, a positive body image, and more adaptive strategies of emotion regulation.

Discussion: The program would provide a new and innovative model for preventing NSSI among youth, targeting vulnerability factors, instead directly NSSI, also avoiding the potential iatrogenic effects related to the knowledge and awareness of NSSI. Findings may help current policies to promote targeted preventive activities and produce sizable benefits to society. The NSSI-PEP is funded by the program V:ALERE 2020 (University of Campania “Luigi Vanvitelli”).

Self-harm and domestic violence among young adults during the COVID-19 pandemic

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The COVID-19 pandemic and its secondary consequences (e.g., social distancing, suspension of educational programs, home office) are serious stressors for many young people. For other young people, COVID-19-related restrictions brought a deceleration of life and stress (e.g., fewer work and education-related stressors [Shanahan et al., 2020]). To date, it is unclear whether young people's engagement in self-harm and domestic violence as (maladaptive) coping strategies have changed during the pandemic, and how pandemic related stressors are associated with such trends.

We use data from the Swiss longitudinal and community-representative z-proso study (N = 786), with one pre-pandemic assessment (2018) and four assessments between Spring and Fall 2020 (i.e., during and after the first Swiss lockdown, when participants were ~22 years old). Self-harm was assessed with one item that asked how often respondents had self-injured (e.g., cutting, tearing wounds open) on purpose during the past two weeks. Perpetration of domestic physical violence was assessed with three items (e.g., slapping or scratching someone in the household during the past two weeks).

Ten percent of the participants reported any self-harm between Spring and Fall 2020; 16% reported any perpetration of domestic physical violence. A total of 3% reported both, self-injury and domestic violence, either at the same or at different assessments. The point prevalence of self-harm was stable (4—5%). In contrast, domestic violence peaked in late May (i.e., after the re-opening of schools and restaurants, but remote studying/working ongoing), at 8%. Pre-pandemic self-harm significantly predicted during-pandemic self-harm. In contrast, during-pandemic domestic violence was not predicted by pre-pandemic dating violence. Self-harm and domestic violence were both associated with cumulative pandemic-related stressors, but the association was stronger for domestic violence. Additional models will investigate the role of perceived stress, emotional distress, and sleep problems in during-pandemic harm.

Our preliminary findings indicate that pandemic-related changes and correlates of self-harm and domestic violence differed. With our four closely spaced assessments, we are able to pinpoint the role of acute stress and its manifestations on harmful behavior. This information can be useful for researchers, politicians, and practitioners during and after the current pandemic.

The mixed COVID-19 experiences of adults with a history of nonsuicidal self-injury

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While the negative impacts of COVID-19 have been repeatedly documented, the specific experiences of at-risk populations during the pandemic remain largely understudied. Emerging research suggests that some individuals with pre-existing mental health concerns may show similar or improving mental health during the pandemic, but little is known about how individuals with a history of nonsuicidal self-injury (NSSI) respond during COVID-19. The present study thus sought to extend recent COVID-19 research to a large, ethnically diverse, non-university sample to examine how negative and positive COVID-19 experiences may vary as a function of NSSI history.

Participants were 3,731 adults ($M_{age}=39.54$, $SD=13.12$; 51.70% women) who completed an online MTurk survey assessing NSSI history and negative and positive COVID-19 experiences. Negative and positive COVID-19 experiences were determined by participants' agreement with statements such as, relative to months before COVID-19, "having been more stressed," and, "having more time to do things I enjoy," respectively.

A latent profile analysis was conducted based on responses to the negative and positive COVID-19 items and revealed four underlying profiles; a subsequent chi-square analysis revealed that 10.4% of participants with a history of NSSI versus 26.1% of participants without such a history endorsed predominantly positive experiences, 41.5% of participants with a history of NSSI versus 48% of participants without such a history endorsed moderate levels of both negative and positive experiences, 28.2% of participants with a history of NSSI versus 21.1% of participants without such a history endorsed predominantly negative experiences, and 19.9% of participants with a history of NSSI versus 4.3% of participants without such a history endorsed high levels of both negative and positive experiences. Notably, participants with a history of NSSI were less likely to endorse predominantly positive COVID-19 experiences but more likely to endorse high levels of both negative and positive COVID-19 experiences than participants without such a history. Overall, less than 30% of participants endorsed predominantly negative COVID-19 experiences.

The present findings build upon recent COVID-19 research by extending it to a large and diverse sample. Furthermore, results highlight the complexity of response to COVID-19 by groups that are generally perceived as being more vulnerable, such as those with a history of NSSI engagement.

Wall-Punching and NSSI: Relationships, Experiences, and Attitudes

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Nonsuicidal self-injury (NSSI) is characterized by the purposeful damage of one's body tissue without suicidal intent, for purposes not socially sanctioned (ISSS, 2018). Wall-punching is inconsistently included in NSSI literature, despite research revealing wall-punching in self-injuring groups. Further research is needed to explore the relationship between wall-punching and "traditional" methods. This study examines correlates of wall-punching, self-injury experiences, and attitudes regarding self-injury in a public university population.

This mixed-methods study uses online data collection on a US-based public university's Facebook page and psychology research subject pool. Data collection is ongoing; 79 surveys were analyzed (68.7% female; 80.6% white; 18-28 years). Participants completed a measure of NSSI behaviors and functions, with wall-punching added, and items assessing attitudes related to NSSI. A two-way ANOVA indicated differences in groups by self-injury and reinforcement type, approaching significance. Self-injury type was examined according to gender and sexuality. Responses to the attitude measure were examined to explore differing attitudes toward types of self-injury (cutting, burning, wall-punching).

58% of participants reported a self-injury history, 44% of which reported a history of traditional methods only. 7.5% reported a history of traditional methods and wall-punching, and 3% of participants reported a history of wall-punching only. Automatic positive reinforcement was more present in the functions of self-injury for wall-punching, whereas social positive reinforcement was more common in "traditional" histories. Participants associated wall-punching with aggression and were unlikely to socialize with a person that wall-punched. NSSI experience surveys showed that fear of discipline, and being unfamiliar with NSSI, were obstacles to reporting in the past. No significant relationship was found between gender or sexuality and NSSI history or method.

Ongoing data collection will allow for more analyses of the relationships between wall-punching and NSSI behaviors, and perceived stigma associated with different self-injury methods. Wall-punching is included inconsistently across NSSI measures, and raises questions about the intersection of social norms and NSSI. Understanding how youth experience self-injury, how self-injury functions across methods, and how others react to self-injury, is crucial for detection and treatment.

The Screen for Nonsuicidal Self-Injury (SNSI): Development and Initial Validation

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Nonsuicidal self-injury (NSSI) is increasing in prevalence with 6% of adults endorsing a lifetime history with higher prevalence estimates in veterans (e.g., 16%) where diagnosis and screening of NSSI in men has been largely overlooked (Kimbrel et al., 2017; Klonsky et al., 2011; Lear et al., 2021, Wester et al., 2018). Given that NSSI is a strong predictor of suicidality and functional impairment, there is a significant need to efficiently screen for NSSI (Selby et al., 2015; Turner et al., 2018).

The Screen for Nonsuicidal Self-Injury (SNSI) was developed to include DSM-5 criteria and NSSI methods with high prevalence rates in diverse clinical settings, including men (e.g., wall-punching; Kimbrel et al., 2018). The SNSI is a 10-item screener that assesses the presence of NSSI methods. The aim of the present study was to validate the SNSI as an efficient screening measure for NSSI in a clinically and demographically diverse sample of veterans (N = 124).

The SNSI demonstrated good internal consistency ($\alpha = .86$) and excellent performance as a screener for NSSI (Area under the curve [AUC] value identifying NSSI diagnosis = .90). The SNSI also demonstrated excellent predictive validity with NSSI diagnoses (AUC = .88) and nonsuicidal behaviors (AUC = .90) 12 months later. The diagnostic performance of the SNSI was not significantly different across age, sex, or race. The SNSI demonstrated excellent convergent validity with existing measures of NSSI (r s .59 - .90, p s <.01) and good external validity with functioning measures (r s .33 - .49, p s <.05). Divergent validity was less impressive with depression and impulsivity measures (r s .25 - .42, p s <.05).

Initial validation results suggest the SNSI is an effective screener to efficiently detect NSSI in a demographically and clinically diverse sample. Importantly, the SNSI also demonstrated predictive validity for NSSI and suicidality 12 months later. Given that NSSI is associated with suicidality and significant impairment in functioning, implementation of the SNSI as a routine screening measure may lead to improved outcomes and earlier intervention for individuals at high risk. The SNSI may also be particularly useful for the identification of men engaging in NSSI with the inclusion of items such as wall-punching. Future work is needed to validate the SNSI in larger samples across healthcare settings.

Implicit Aversion toward Self-Injury Stimuli – and Stimuli Effects on Participants Mood

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Theoretical background: A predictor that has been discussed for nonsuicidal self-injury (NSSI) is the reduced implicit aversion to self-injury stimuli. The aversion to NSSI stimuli represents an important barrier to NSSI. It has been shown that individuals engaging in NSSI overcome this instinctive aversion to self-injury stimuli. As reporting affective responses to self-injury stimuli might be biased, assessing aversions to self-injury stimuli implicitly is of interest. We used the Affect Misattribution Procedure (AMP) as a brief task measuring implicit affect to investigate implicit aversion.

Method: The sample consists of 61 participants with NSSI (53 females, age: $M = 29.52$, $SD = 9.76$) and 65 participants without NSSI (50 females, age: $M = 30.89$, $SD = 9.92$). The study was conducted online. For the present study, we created a specific AMP version, using picture stimuli indicating either self-injury (e.g., cutting, burning, scars) or a corresponding non-injured body picture e.g., an arm without an injury. The picture stimuli consisted of 10 picture pairs. We further assessed explicit valence and arousal ratings of the pictures as well as pre and post mood ratings (arousal, anxiety, sadness, anger, stress, and happiness).

Results: In the AMP, the self-injury pictures were rated significantly more positively from participants with NSSI. There was no group difference in the AMP with the non-injury pictures. The explicit valence and arousal ratings confirmed the stimuli. Further, participants with NSSI rated the self-injury stimuli significantly as more pleasant than participants without NSSI. The mood rating indicated that negative mood increased from pre to post.

Conclusion: The results confirmed the feasibility of the picture stimuli and the used AMP. Iatrogenic effects of NSSI-picture stimuli on mood have to be investigated in future studies.

Nonsuicidal Self-Injury in Sexual Minority Men: Associations of Gender-Role Conflict and Internalized Stigma

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Sexual minority youth and adults have disproportionately high rates of suicidal thoughts and behaviors (STBs) compared to their heterosexual counterparts (Ream, 2019). Lifetime prevalence of NSSI among lesbian, gay, and bisexual individuals across all ages has been estimated at nearly 30%, with estimates of NSSI among bisexual individuals specifically over 40%. Greater past year NSSI prevalence is also reported for sexual minority individuals, compared to those who are heterosexual and cisgender (Liu et al., 2019). A limited number of LGBTQ-specific constructs have been associated with increased NSSI in these populations. One such construct is internalized stigma (called internalized homophobia in sexual minority populations and internalized transphobia in trans populations), the internalized shame, negative affect, or guilt sexual and gender minorities face as a result of minority stress in a largely cisgender, heterosexual world (Plöderl et al., 2014). Studies examining internalized stigma have identified its importance as a correlate to NSSI in LGBTQ populations (Liu et al., 2019). Further, one small study with a sample of heterosexual, cisgender men found that masculine gender norms and gender role conflict are also associated with NSSI (Schillinger & Andover, 2016). To build upon the current body of literature, we examined the relationship between gender role conflict and NSSI among gay and bisexual individuals assigned male at birth, and whether this relationship was moderated by internalized stigma.

A sample of 104 participants was recruited online and completed self-report measures of gender role conflict, internalized stigma, and NSSI. Forty-seven percent of our sample reported experiences of NSSI. The majority of the sample identified as men and used he/him pronouns (95%), with some identifying as gender non-conforming (4%) and genderfluid (1%). Nearly 70% (68.3%) of the sample identified as gay, 27% as bisexual, 3% as pansexual, and 2% as demisexual. Analyses are underway and will be completed in the next month. In addition to the proposed aims, we will also conduct exploratory analyses to determine if the associations differ by sexual orientation, given the prevalence of NSSI among bisexual individuals specifically. We expect that the results of this study will add to the developing literature on NSSI among sexual minority individuals and will potentially have implications for the treatment of NSSI in this population.

The psychological and clinical significance of location of self-injury on the body: a qualitative analysis of staff perspectives

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Background: The location of self-harm upon the body could be important both psychologically and clinically, yet there are to date few empirical studies that have sought to advance our understanding of this issue or how this is understood by clinical staff.

Method: The study used thematic analysis of semi-structured interviews with 19 mental health professionals who have experience of working with individuals who self-harm, enquiring about understanding and perceptions of self-harm in different locations and in relation to visible and concealed areas of the body.

Results: Two superordinate themes emerged. The first main theme was ‘understanding self-harm and evaluating risk: the bigger picture’, which captured how staff understand self-harm in different locations and within the context of a range of characteristics and contextual factors. Subthemes around location captured perceptions of the psychological (e.g., the level of distress and function of self-harm for the individual) and clinical significance (e.g., level of suicide risk, risk of infection, access to care) of self-harm when in visible and concealed locations. The second main theme was ‘staff relationships with and reactions to individuals who self-harm’ and captured staffs’ ability to support, educate and understand individuals who self-harm and how this impacts staffs’ emotional wellbeing.

Discussion: Mental health professionals' perceptions and understanding of self-harm are influenced by a multitude of factors to do with the clinical and psychological characteristics of the behaviour, with location of the injury being one of these. Future research must identify the impact of these perceptions on clinical decision making and care provided.

SYMPOSIA PRESENTATION ABSTRACTS

ISSS Collaboration Research Program Symposium

Rania Christoforou, Germany
Saha Meheli, India
Julia Case, USA
Ana Ortin-Peralta, USA

The Collaborative Research Program aims to pair junior researchers with more senior researchers to work on a specific research project. Over the past year, four junior researchers have worked with Prof Penelope Hasking, Associate Prof Mark Boyes, Prof Stephen Lewis, Prof Elizabeth Lloyd-Richardson and Prof Marc Wilson to develop research projects suitable for publication. In this symposium, they will present their findings, and talk a little about the experience of the Collaborative Research Program.

Emotion regulation profiles of university students engaging in non-suicidal self-injury: Association with functions of self-injury and other mental health concerns

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In the current study we investigated emotion profiles among undergraduate students with experience of non-suicidal self-injury (NSSI) and associations with different NSSI functions. A secondary aim was to investigate associations between emotion profiles and other behaviors arising from emotion dysregulation, including risky drinking, as well as symptoms of borderline personality disorder, eating disorders, anxiety, depression, and stress. A sample of 270 undergraduate students (84% female, Mage = 21.5 years) with a history of self-injury completed well-validated measures of the constructs of interest. A K-means cluster analysis was conducted to extract emotion profiles from the data. One-way ANOVA and MANOVAs tested associations between emotion profiles, demographic factors, and psychological constructs. A three-cluster solution was supported. Cluster 1 was characterized by difficulties in emotion regulation, use of less helpful coping strategies, and high levels of alexithymia. Cluster 2 was characterized by less difficulties in emotion regulation, use of more helpful coping strategies, and low levels of alexithymia. Cluster 3 reflected a profile with moderate difficulties in emotion regulation, absence of any coping mechanisms, and moderate levels of alexithymia. Significant differences were reported between profiles with regards to NSSI function and engagement in other dysregulated behaviors. These emotion profiles and their association with NSSI functions could be used to develop more person-centered interventions for NSSI.

Support seeking in the context of NSSI recovery

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Recent research on non-suicidal self-injury (NSSI) recovery has focused on understanding lived experiences perspectives. Although seeking support has been identified as relevant in NSSI recovery, scant research has examined support-seeking within this context. To advance our understanding of support-seeking in this regard, the present qualitative study investigated from whom support is sought, what is helpful for individuals with lived experience of NSSI when support-seeking occurs, and what may impede seeking support altogether. To do this, 229 university students (79% female, mean age = 18.9 years) with a history of NSSI responded to online, open-ended questions about their experiences of support-seeking in the context of NSSI recovery. Text-based responses were

analyzed using an inductive thematic analysis. Findings indicated that individuals sought support from varied sources including friends, family, school resources, health and mental health professionals among others. Two sets of themes emerged pertinent to a) the benefits of support-seeking and b) the barriers of support-seeking. In the case of the former, themes indicated that participants who sought support found benefits from professional as well as informal sources. Benefits from Professional sources included receiving a diagnosis and medication, developing an improved understanding of self and learning emotion regulation strategies. Benefits from informal sources included having a support system, receiving tangible aid and having a compassionate space. In the case of the latter, themes could be organized as intrapersonal (i.e., a desire to continue NSSI, establishing agency without others' support, minimizing self-injury, and embarrassment and shame) and interpersonal (i.e., concern for others, fear of being stigmatised, and unhelpful prior experiences) barriers to support-seeking. Findings have implications for future research, clinical practice, and outreach which will be discussed.

Social networks of adolescents who engage in NSSI

Julia Case

Temple University, USA

Background: Non-suicidal self-injury (NSSI) is commonly associated with interpersonal difficulties. Previous research has examined the interpersonal functions of NSSI, including communicating distress, eliciting social support, escaping from undesired interpersonal situations or demands, and seeking belonging or acceptance within a group. However, less work has examined the features of social networks of adolescents who engage in NSSI. Here, we describe and analyze the nature of self-described social networks of adolescents with and without NSSI using social network analysis, to better understand the interpersonal context of adolescents who self-injure.

Methods: 901 New Zealand young people (M age = 15.47, SD = 0.57) from 14 secondary schools in the greater Wellington region completed a survey assessing demographics, information about NSSI engagement (methods, recency, and functions), and information about social networks (number of best friends, key relationships, and interconnectedness of key relationships). We used ANOVAs and chi-square tests to examine differences between adolescents with and without NSSI on key features of their social networks. Analysis pre-registration available at: <https://osf.io/wkqvj>.

Results: 26.10% of participants reported a history of NSSI. Controlling for gender, adolescents who reported a lifetime history of NSSI reported significantly fewer best friends (M = 6.26, SD = 4.16) than adolescents who reported no history of NSSI (M = 7.65, SD = 6.92). Adolescents with and without NSSI did not differ on the reported closeness across their social network members (MNO NSSI=4.36, SD = .65; $MNSSI$ =4.29, SD = .53), or in the density (MNO NSSI=1.15, SD = .46; $MNSSI$ =1.16, SD = .38) of their social network. Adolescents with NSSI (M proportion = 0.32, SD = 0.28) reported social networks with a greater proportion of friends who also engage in NSSI, than did adolescents without NSSI (M proportion = 0.07, SD = 0.14). Among adolescents with a history of NSSI, no differences were found between young men and young women in the proportion of their social network who they reported knew about the participants' NSSI. Finally, greater endorsement of both interpersonal and intrapersonal functions of NSSI were associated with a greater social networks knowledge of participants' NSSI.

Discussion: Compared to adolescents with no history of NSSI, adolescents who engage in NSSI have fewer best friends, but similar experiences of closeness to their friends. Young men and young women who engage in NSSI reported a similar proportion of their social networks knew about their NSSI, with a majority of participants reporting that at least one member of their social network knew about their NSSI. Finally, higher endorsement of both interpersonal and intrapersonal functions of NSSI were associated with a greater number of friends within social networks being aware of participants' NSSI. Results suggest that the social networks of adolescents who reported a history of NSSI do significantly differ from the social networks of adolescents who reported no history of NSSI, with potential implications for future intervention efforts on these behaviors in youth.

Implicit views about NSSI among university stakeholders

Ana Ortin-Peralta

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Background. Non-suicidal self-injury (NSSI) is a highly prevalent behavior among emerging adults with 13.4% reporting a lifetime history. This prevalence is even higher among university students with rates of about 20% (Swannell et al., 2014). Prior quantitative research has documented explicit and implicit stigma towards NSSI (Burke et al., 2016). Using a qualitative approach, this study aims to capture the nature of implicit views about NSSI among university stakeholders with no history of NSSI.

Methods. As part of a large multi-site mixed-method study on attitudes and knowledge about mental health, including NSSI, participants (e.g., students, managers, counselors, faculty/professors, coaches) were asked to take part in a qualitative interview inquiring about their knowledge of NSSI, its visibility on campus, and how to improve access to university mental health services. For the present study, after excluding participants with a history of NSSI, 50 interviews will be analyzed using thematic analyses to identify themes on participants' perspectives. Qualitative analysis will be conducted using MAXQDA.

Results. Preliminary analyses point to the emergence of different themes that capture participants' implicit views on people who self-injure as fragile and the behavior as scary or disgusting, and their insecurities regarding their behavior around people who self-injure.

Discussion. Our findings will help to shed light on key areas in which people hold stigmatizing views and have negative reactions towards NSSI. These areas should be targeted in interventions designed to reduce stigma.

LGBTQ+ Self-Harm and Suicide

Trans and non-binary suicide: social determinants, risk, and novel methods to establish causality

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Prevalence and determinants of mental distress have been extensively researched in Lesbian, Gay, and Bisexual (LGB) people, however, this is not the case for transgender and gender diverse people (TGD). LGB research has often included transgender people, however TGD people face a different brand of oppression and stigma that arises from cisnormativity, which is the assumption that people are cisgender (i.e. not transgender), and subsequently builds on the implicit exclusion of TGD people from many sectors in life. Many TGD people report suicidality, with lifetime prevalence of suicidal ideation at 84%, and attempt at 48% in the UK. The current evidence strongly indicates that the experiences of discrimination and stigma play a large role in the suicide disparity, however little is known about how stigma and discrimination affect daily fluctuations in mood of TGD people. Microaggressions defined as “brief and commonplace daily verbal, behavioural, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, negative slights and insults towards marginalised people” stems from the racialized interactions experienced by black and minority ethnic (BAME) people. Since the inception of microaggression theory it has been extended to other groups of individuals who are politically, culturally, and socially marginalised through structural oppression. Microaggressions can have a cumulative effect on a person’s mental health, for example LGBT people, reflected through the use of cissexist and heteronormative language, i.e., that discriminates or stigmatises TGD identities.

There is a paucity of research investigating causal associations between social determinants of poor mental health amongst TGD people and suicidality, this talk intends on highlighting this paucity whilst also introducing novel methodologies that are being employed in the pursuit of establishing causal associations between trans suicidality, microaggressions, and gender minority stress. The methods that I am employing in my PhD work, namely Ecological Momentary Assessment, offers real-time assessment of the impacts of microaggressions on suicidal ideation, attempts, and non-suicidal self-injury, and provides robust data for causal inference. I will highlight these methods, their applicability to marginalised communities, and ensuring ethical practice.

Understanding self-harm and suicide in LGBTQ+ youth: A thematic analysis

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Jon Arcelus (Institute of Mental Health, Division of Psychiatry and Applied Psychology, University of Nottingham, UK)

Ellen Townsend (Self-Harm Research Group, School of Psychology, University of Nottingham, UK)

Maria Michail (Institute for Mental Health, School of Psychology, University of Birmingham, UK)

Background: Self-harm, suicidal thoughts and suicidal behaviours are a major health concern for young people. However, the rates of these thoughts and behaviours are even higher among Lesbian, Gay, Bisexual, Transgender, and Queer or Questioning (LGBTQ+) populations. Much previous research of self-harm or suicide quantitatively examines risks, however, less is known regarding what LGBTQ+ youth feel relates to their self-harm and suicide in their own words.

Aims and objectives: The aim of this study was to explore self-harm and suicide experiences among LGBTQ+ young people.

Method: 19 semi-structured interviews took place between October 2019-May 2020. Participants were aged between 16-25, had to have had experiences of self-harm or suicide, and be part of the LGBTQ+ umbrella. 11 participants were cisgender, 6 were transgender and 2 were non-binary. A range of sexualities were represented. Interviews were transcribed verbatim and anonymised. Thematic analysis and reflective member-checking were used to develop a thematic framework.

Findings: 3 themes were developed from the interviews and evaluated by 4 participants who engaged with member-checking. These themes; 1) Processing being LGBTQ+; 2) Negative responses to being LGBTQ+; 3) Life stressors, offered insight as to what causes a young person to engage with self-harm or suicide.

Discussion: By analysing these experiences, it is hoped that it is better understood why LGBTQ+ young people engage with self-harm and suicide. While in western cultures, it is believed that life is improving for LGBTQ+ people, there is still strong evidence that heteronormative environments and discrimination exists and negatively impacts young people.

The Self-Injury in Young Bisexual People: A Longitudinal Investigation (SIBL)

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Sophie E Coleman (Division of Psychology and Mental Health, University of Manchester, Manchester, UK)

Samantha Hartley (Division of Psychology and Mental Health, University of Manchester, Manchester, UK & Pennine Care NHS Foundation Trust, Ashton-Under-Lyne, UK)

Peter J Taylor (Division of Psychology and Mental Health, University of Manchester, Manchester, UK)

Background: Bisexual people have been found to have elevated odds for engaging in Non-Suicidal Self-Injury. Research frequently analyses bisexual people as part of a larger sexual minority or LGB (Lesbian, Gay, Bisexual) group, so investigations into the psychological processes behind the elevated risk for this specific group remains unknown. Whilst Minority Stress Theory offers a framework to understand this risk, research is needed to examine specific psychological processes for bisexual people.

Aims and objectives: The Self-Injury in Young Bisexual People: A Longitudinal Investigation (SIBL) study aims to investigate the associations between urges to self-injure and the psychological processes of self-esteem, thwarted belongingness, biphobia and rumination. Such associations will be examined at the same time point, and lagged by one week, to examine whether such processes can predict urges future NSSI urges.

Methods: The design of the study was a six week micro-longitudinal online survey study. The final sample was N=204, aged between 16-25, from 25 countries worldwide.

Results: Statistical analysis using multi-level regressions is currently underway and results will be available for presentation shortly.

Discussion: If associations exist between self-esteem, thwarted belongingness, biphobia or rumination and self-injury urges, this offers an opportunity for targeted intervention for a bisexual population. Future research should continue to examine bisexual people independently from a wider 'sexual minority' group, given that there are likely to be specific nuanced psychological processes involved in NSSI.

Understanding self-harm amongst non-binary young adults: A grounded theory study

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Daniel Pratt (Division of Psychology and Mental Health, University of Manchester, Manchester, UK)

Background: Research conducted in recent years has highlighted significantly higher rates of self-harm amongst transgender and non-binary individuals compared with their cisgendered peers. However, few studies have focused on the experiences of non-binary individuals as separate from binary transgender individuals. Findings from the few studies that have, suggest that non-binary individuals experience higher rates of self-harm and different forms of minority stress compared with binary transgender individuals. Due to the paucity of research in this area, further exploration of self-harm amongst non-binary people is required.

Aims and objectives: The current study aims explore and understand self-harm behaviour and urges to self-harm amongst young non-binary adults. Furthermore, the study seeks to gain understanding of what has helped participants to manage self-harming urges and behaviours, as well as the impact of the COVID-19 pandemic.

Methods: Eleven young adults (18-30) residing in the UK were interviewed via video call. Data was analysed in line with a social constructivist grounded theory methodology.

Results: Data analysis is currently ongoing and results will be available for presentation from May 2021.

Discussion: Grounded theory analysis will allow for the development of a theory that helps aid understanding of the social and internal processes that lead to self-harm amongst young non-binary adults. These results may offer information that can help to inform intervention for non-binary people who self-harm.

Functions of nonsuicidal self-injury: What do we know and what are we missing?

Disentangling within- and between-person associations between the consequences and severity of NSSI

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Functional models propose that experiencing desirable consequences following NSSI reinforces the behavior. Yet, these models do not specify whether experiencing more desirable consequences relative to an individual's own average (within-person), relative to other people (between-person), or both, predicts future NSSI severity. To address this gap, the current study investigated the prospective associations between within- and between-person desirable NSSI consequences and two markers of NSSI severity: frequency (number of episodes) and versatility (number of methods). 210 individuals (94% female, $M_{age}=23$) with a history of NSSI completed online surveys assessing NSSI consequences (Suicide Attempt Self-Injury Interview), frequency (Questionnaire for Nonsuicidal Self-Injury), and versatility (Deliberate Self-Harm Inventory) every three months for one year. Experiencing more desirable emotional consequences following NSSI at TimeT, relative to a person's own average, was unrelated to NSSI frequency at TimeT+1, but predicted increases in NSSI versatility at TimeT+1. Conversely, experiencing more desirable social consequences following NSSI at TimeT, relative to a person's own average, predicted decreases in NSSI frequency at TimeT+1, but was unrelated to NSSI versatility at TimeT+1. At the between-person level, neither desirable emotional consequences nor desirable social consequences predicted NSSI frequency or versatility. Collectively, these findings are partially consistent with functional models of NSSI. In line with functional models, within-person increases in desirable emotional consequences after a given method of NSSI (e.g., cutting) may have led individuals to expect that other methods of NSSI (e.g., hitting, burning) would fulfill the same emotion regulatory function, and as such, resulted in selection of a wider range of methods during ensuing NSSI episodes. Contrary to functional models, within-person increases in desirable social consequences seemed to deter rather than reinforce NSSI. One explanation could be that experiencing social support after NSSI fulfills a need that was not being met, thereby eliminating the urge to repeat NSSI. Going forward, we recommend that: (1) functional models articulate the salience of within-person fluctuations in consequences, and (2) research clarifies the reinforcing or deterring role of emotional and social consequences using ecological momentary assessment.

The role of perceived social support in NSSI urges and behaviors in the daily lives of young adults

Sarah E. Victor, PhD

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Daily diary research suggests that people who engage in NSSI perceive less social support than those without NSSI; however, there is some evidence that social support after NSSI disclosures may exacerbate NSSI urges. Prior work has been unable to clarify the temporal relationships between perceived social support, NSSI urges, and NSSI behaviors as they occur in daily life over the course of minutes to hours, which will inform our understanding of the potential interpersonal functions of NSSI urges and behaviors. To address this gap, we examined ecological momentary assessment (EMA) data from a community sample of young adults with recent NSSI urges or behaviors ($n=49$; data collection is ongoing and will be completed prior to ISSS). Participants were surveyed 6 times/day regarding current perceived social support and NSSI urges, and NSSI behaviors since the last survey. Participants ($M_{age}=22.6$, $SD=3.9$) were primarily cisgender women ($n=26$) or non-cisgender ($n=17$) and non-Hispanic white ($n=29$) or Hispanic/Latinx ($n=10$). Across all EMA surveys ($n=1959$), one-third indicated some level of NSSI

urges, and 4% indicated NSSI behaviors. In a model of NSSI urges, current emotional support and NSSI urges were negatively correlated, both when assessed within-person at the same time ($B=-.37$) and when assessed between-persons over the entire EMA ($B=-.63$). However, prior emotional support did not predict later NSSI urges over time ($B=.04$), nor did prior NSSI urges predict later emotional support ($B=.02$). In a second model of NSSI behaviors, prior NSSI urges ($B=.35$), but not prior perceived emotional support ($B=.05$), significantly predicted later NSSI behaviors at the within-person level. At the between-person level, both mean NSSI urges ($B=.89$) and mean emotional support ($B=-.61$) correlated with mean levels of NSSI behaviors. Taken together, results suggest that NSSI urges co-occur with poor perceived emotional support, but that low perceived emotional support does not precipitate NSSI urges or behaviors, nor do NSSI urges or behaviors serve the function of changing perceived emotional support. When data collection is complete, we will further analyze whether disclosures of NSSI behaviors moderates the association between NSSI and perceived emotional support. Results may inform development of just-in-time interventions to improve coping with NSSI urges and prevent NSSI behaviors.

Lost in translation? Lived experience perspectives on reasons for self-injury

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Typically, understanding reasons for self-injury in both research and practice relies on the use of researcher-developed measures or interview questions. The ubiquity and utility of these approaches notwithstanding, individuals with lived experience of NSSI often describe why they self-injure in ways that do not always cohere with the wording used in these standard assessment methods. Accordingly, there may be merit in attending to lived experience framings of NSSI. Indeed, and in keeping with recent efforts to incorporate lived experience voices in research, such efforts may have value by virtue of augmenting existing approaches to assess and understand reasons for self-injury. With this in mind, the current presentation will draw on qualitative and online research to articulate some of the ways that people with lived experience describe their self-injury experiences, including why they self-injure. From here, implications of incorporating lived experience perspectives and phrasings in both research and practice will be discussed, alongside conceptual considerations for future work.

Antecedents and consequences of NSSI acts

Daily life NSSI can be triggered by interpersonal events but it is neither positively nor negatively reinforced by them

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The four-function model of non-suicidal self-injury (NSSI) suggests some individuals use NSSI for interpersonal reasons, aiming to elicit positive reactions from others (positive reinforcement) or to end unpleasant interactions (negative reinforcement). We used ambulatory assessment (AA) to test positive and negative interpersonal reinforcement of NSSI in the daily lives of 51 women. Participants reported NSSI, NSSI motives, and positive and negative interpersonal events (IPEs) for 14 days at five semi-random daily assessments and provided event-related NSSI reports. We analyzed 3,498 data-points, including 155 NSSI events in a series of multilevel models. The number of negative IPEs that occurred right before NSSI was positively associated with the probability of engaging in NSSI. In addition, perceived distress of negative IPEs predicted later NSSI acts. Contrary to the concept of negative interpersonal reinforcement, we did not find a reduction in negative IPEs following NSSI. Likewise, we saw no evidence for positive interpersonal reinforcement, as there was no increase in positive IPEs following NSSI. Participants also rarely endorsed interpersonal NSSI motives in daily life. At the trait level (in the Self-Injurious Thoughts and Behavior Interview), participants endorsed interpersonal motives for NSSI only minimally, but indicated that other persons often trigger NSSI. Taken together, trait-level and momentary results suggest that negative IPEs trigger NSSI, but that individuals rarely use NSSI to elicit interpersonal positive or negative reinforcement. Therefore, a focus on interpersonal triggers may benefit the field's understanding of NSSI motives and associated treatment approaches more than a focus on interpersonal reinforcement.

Does rejection and support by a virtual other influence physiological and psychological reactivity in NSSI?

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Introduction: Interpersonal problems and social stress can trigger NSSI acts. Current research indicated that acute social stress caused via digital media resulted in autonomous activation. Further, digitally mediated social support has been revealed to decrease stress-responses to subsequent stressors. However, the differential effects of social exclusion and social support in patients with NSSI are still unclear.

Aims: The study aimed to investigate affective responses and reactivity of the autonomous nervous system (ANS) to a social exclusion situation or a social support situation in a virtual reality adaption of Cyberball.

Methods: In our preliminary study, data of 10 patients with NSSI and 10 healthy controls are analyzed. A virtual reality adaption of the well-known Cyberball paradigm is used to provoke experiences of social rejection and support. Individuals were randomly assigned to either social exclusion or social support (excluded or included). All interactions were be monitored using a mobile ECG, assessing both heart rate and parasympathic heart rate

variability (rMSSD), and participants were asked to rate aversive tension, valence, and negative thoughts between the interactions.

Results: Overall, there was a significant increase of ANS reactivity to the social exclusion situation during the virtual reality adaption of Cyberball. Moreover, participants assigned to the social support condition, compared with those of the exclusion group, showed less ANS increase and reported significantly lower aversive tension, lower distress levels and less negative thoughts after the Cyberball paradigm.

Implications: In the present pilot study, we were able to show that social exclusion in a virtual reality setting provokes an ANS response in patients with NSSI and healthy controls, and that digital social support lowers tension and distress after the paradigm significantly.

Time heals all wounds? The effect of NSSI acts on emotion regulation exceeds the effect of time in daily life.

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According to the four-function model of NSSI, intrapersonal positive and negative reinforcement plays a crucial role for the engagement in and the maintenance of NSSI. Studies assessing NSSI in daily life showed that changes of positive and negative affect are associated with engagement in NSSI acts. Limitations of previous work are that the effects of NSSI were often investigated in rather long time-periods, and that the effects of NSSI acts on negative affect were not compared to time-points with comparable negative affect but without NSSI. In the current ambulatory assessment study, we tried to address these limitations.

During a study period of two weeks, 51 woman with NSSI disorder responded to five semi-randomized time-points per day. At each random prompt, they were asked to report positive and negative affect, interpersonal events, dissociation, aversive tension, as well as urge for NSSI and NSSI acts since the last prompt. Additionally, in the case of an NSSI event, participants were asked to initialize additional event-related prompts, answering detailed questions about the NSSI event. Directly after an NSSI act, the course of affect and aversive tension were closely monitored for 30 minutes by using high-frequent sampling. Furthermore, we included a control condition with high urge for NSSI. For the control condition, we likewise monitored negative affect and aversive tension by high-frequent sampling.

Results show that negative affect was increased in the random prompt prior to the NSSI event, and decreased following NSSI. The decrease in negative affect was stronger after NSSI acts as compared with the control condition with high urge for NSSI. Decreases in both conditions were stronger as compared to random other time-series. However, during time-points with high urge for NSSI, negative affect also significantly decreased over time. For positive effect, we did not find significant alterations prior to or following NSSI.

In our study, the effects of NSSI acts on negative affect were significantly larger than the effect of time. Importantly, significant reductions in negative affect were also true for the control condition with high urge for NSSI, but no NSSI acts. Existing therapeutic approaches, focusing on distress tolerance skills to manage behavioral responses, might help to bridge the gap until negative feelings subside.

Affect and Cardiac Autonomic Activity as Proximal Predictors of Adolescent Non-Suicidal Self-Injury

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Introduction: Altered functioning of the autonomous nervous system (ANS) has been associated with emotion dysregulation, which is one of the major correlates of nonsuicidal self-injury (NSSI). Existing research on NSSI has yet investigated ANS activity under resting and experimental conditions pointing to a potential involvement of the ANS in stress- and affect-dependent states that commonly result in NSSI.

Aims: The study aimed to investigate both affective states and states of ANS activity as proximal predictors of thoughts and incidents of NSSI. Investigating proximal predictors of at-risk states for NSSI could potentially assist early warning systems for patients.

Methods: The sample consisted of $N = 30$ adolescents with NSSI disorder. We examined whether negative affective states, derived from ecological momentary assessment (EMA), and cardiac autonomic activity, indexed by heart rate (HR) and vagally-mediated heart rate variability (vmHRV) and derived from 48 hours of ambulatory ECG recordings (missing ECG data for $N = 1$ participant), adds independently to a predictive model for the prediction of thoughts and incidents of NSSI.

Results: Data analyses are ongoing and results will be presented at the conference. According to our initial and preliminary analyses, both negative affect ($B = .63, z = 23.27, p < .001$) and HR ($B = -.09, z = -2.16, p = .030$), but not vmHRV ($B = .07, z = 1.88, p = .060$), significantly predicted thoughts of NSSI. Moreover, negative affect ($OR = 11.69, z = 4.35, p < .001$), as well as HR ($OR = .30, z = -4.54, p < .001$) and vmHRV ($OR = 1.40, z = 2.05, p = .041$) independently predicted actual incidents of NSSI.

Implications: In the present study, we show that ANS functioning may serve as a proximal predictor of at-risk states for NSSI. Given that HR and vmHRV can be measured via wearables in daily life, the next step would be to extend these findings to a real-world setting and investigate, whether daily-life measurement can assist with prediction and prevention of NSSI in affected adolescents.