

Empirical and thematic findings from a novel self-harm assessment: The Five Self-Harm Behaviour Groupings (5S-HM)

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Overview

- Contributions from the National Self-Harm Project
 - Understudied areas in self-harm research
 - Indirect and sexual self-harm
- Rationale for a Unified Model of Self-Harm Measurement
 - Development of the 5S-HM
- Study testing 5S-HM
- Aims, participants, procedure and Methods
- Empirical and thematic findings
 - Novel contributions in relation to sexual self-harm
- Future directions

Self-harm assessment

- Measurement instruments exist that query non-suicidal self-injury (NSSI) (Gratz, 2001) as well as self-harm without specifying suicidality (Hawton et al., 2002).
- Other measures assess suicide attempts and intentional self-injury (Linehan, 2006), the functions NSSI and self-harm serve (Klonsky & Glenn, 2009; Nock & Prinstein, 2004), and motivation for suicide attempts (May & Klonsky, 2013).
- **In sum:** Many specific self-harm measures exist.
 - A comprehensive assessment of both direct and indirect self-harm useful to clinicians and researchers alike is missing from the existing literature.

Self-harm research update

- Self-harm predictors and associated behaviours have been studied extensively over time, towards the effort of eliminating self-harm effectively.
 - Two recent meta analyses spanning over 50 years of self-harm research concluded that:
 - Previous suicidal thoughts and behaviours are not robust predictors for future suicidal thoughts and behaviours (Franklin, Ribeiro & Fox et al., 2017)
 - Previous self-harming thoughts and behaviours generated diagnostic accuracy estimates that were only slightly better than chance (Ribeiro, Franklin & Fox et al., 2016).
- ***Recommendations:*** Research should focus on gaps in many areas of the literature including assessment as well as mechanisms driving self-harm

National self-harm project (Liljedahl & Westling, 2014)

- We proposed that accurate mental health functioning in self-harming individuals can only be arrived at by effectively capturing self-harm in its various forms
 - Importantly also considering changes in the forms of self-harming behaviour over time.
- Given the tendency for co-occurrence of suicide attempts in individuals who self-harm, suicidal intent must also be queried alongside the forms and functions of self-harm evaluated in clinical practice.
- This is particularly so amongst clinical populations who may experience frequent emotion dysregulation and chronic suicidality as in the case of Borderline Personality Disorder (BPD)

Self-harm measurement during treatment

- Individuals receiving DBT ([Linehan, 1993; 2015](#)) have contributed much to our understanding of self-harm in clinical research.
 - While individuals in DBT complete weekly diary cards designed to track self-harm and other relevant behaviours, some forms of self-harm may go undetected or change form over time, escaping therapeutic notice
- Indirect self-harm ([St. Germain & Hooley, 2012](#)) and sexual self-harm ([Svensson et al., 2017](#)) and are more recently recognized forms of self-harm that may be difficult to recognize compared to behaviours that are easier to identify, such as cutting.
- To the best of our knowledge no existing assessment systematically evaluates self-harm behaviour over directness and lethality spectra.

Indirect and sexual self-harm

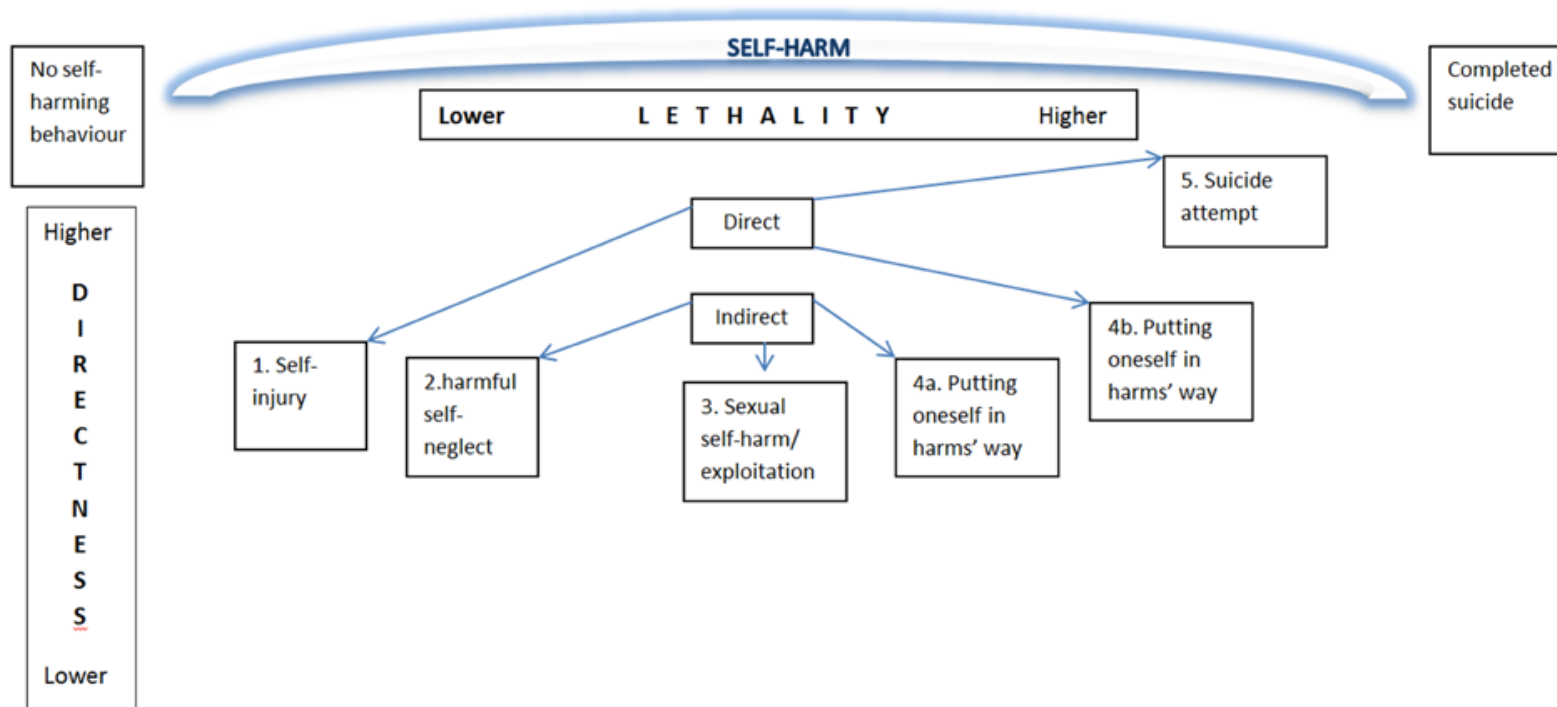
- **Indirect self-harm behaviours** that are not well investigated in the literature is harmful self-neglect or putting oneself in harms' way, such as:
 - walking into traffic without checking for safety,
 - provoking physical fights for the purpose of exposing oneself to harm, affiliating with gang members for the purpose of exposing oneself to harm, and so on ([Green, Hatgis, Kearns, Nock, and Marx](#))
- First publications defining **sexual self-harm** and evaluating the phenomena amongst adolescents in Sweden ([Fredlund et al., 2017](#)) followed from a report from the Swedish Children's Welfare Foundation
 - The report articulated this line of enquiry as a priority ([Jonsson & Mattsson, 2012](#)). Fredlund et al. formulated sexual self-harm as an indirect form of self-harm since its damaging effects are not always readily apparent and it does not always cause tissue damage.

A unified measure of self-harm: The 5S-HM

- The five self-harm behavior groupings measure (5S-HM) is a unified measure of self-harm that may help clinicians support the people they treat in therapy to better recognize and understand how and why self-harm develops and is maintained, both episodically and over time.
 - This in turn may help to refine therapy as indicated by forms of self-harm and reasons for self-harming particular to the person, increasing the possibility bespoke treatment.
- Data from the 5S-HM may be used in clinical research to capture all possible forms of self-harming behavior within a single measure.
- This is desirable because it reduces participant burden in filling out multiple overlapping measures.
- Further, there is room to query meaning and purpose of self-harm in the section on “reasons” following each type of behavior grouping.
- The 5S-HM takes between 30-45 minutes to administer by interview, and approximately 15 minutes to complete in its online version

Unified Model of Self-Harm Behaviour

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Aims

- 1) To evaluate a new self-harm assessment via empirical analyses,
- 2) To determine novel contributions from the 5S-HM in understanding the forms and functions of self-harm via reasons given for engaging in each type of behavior within a clinical sample,
- 3) To test the utility and novel contributions of the *Unified Model* and 5S-HM by extension in understanding and assessing all forms of self-harm for use in both clinical and research settings.

Participants and recruitment (1)

- This was a multi-site study of patients recruited from specialized settings, using two different data collection methods: interviews and online self-ratings.
- The samples were convenience samples, with participating research sites joining the study to contribute to the development of a novel and comprehensive self-harm assessment, the 5S-HM.
- For this reason, an eating disorder site participated alongside sites offering evidence-based treatment and novel interventions for individuals with borderline personality disorder and pervasive suicidality.

Participant Demographics 1

- Participants were N=199 adults; age ranged from 18 to 54.
 - (M age = 29.98, SD = 8.41)
 - n = 172, 86.4% female,
 - n = 221 22, 11.1% male,
 - n = 5, 2.5% other/non-binary gender).

 - Participants' living situation:
 - n=58, 29.1% "other living situations"
 - n=48, 24.6% Alone
 - n=31, 15.9% In a treatment center
 - n=29, 14.9% with partner(s)
 - n=20, 10.3% with parents
 - n=9, 224 4.6% with friends
- *four participants did not respond to this question.

Participant demographics (2)

- Most participants did not describe their ethnicity.
 - Of those who did, the majority (n=78, 91.8%) described themselves as European.
 - Other ethnicities were described at the individual (n=1) level, which is omitted to avoid the risk of identification
- A total of 190 participants reported their highest level of completed education, with
 - n=24 (24.2%) completing grade school,
 - n=94 (49.5%) completing high school,
 - n=35 (18.4%) completing University, and
 - n=15 (7.9%) completing another form of education.

Diagnostic status of participants

- Most participants had a diagnosis of borderline personality disorder (BPD: 58.8%).
- Further diagnoses included:
 - neurodevelopmental disorders (25.1%) such as ADHD,
 - affective disorders (20.6%),
 - trauma- and stressor related disorders (16.1%),
 - eating disorders (13.1%), and
 - anxiety disorders (10.1%).

Inclusion and exclusion criteria

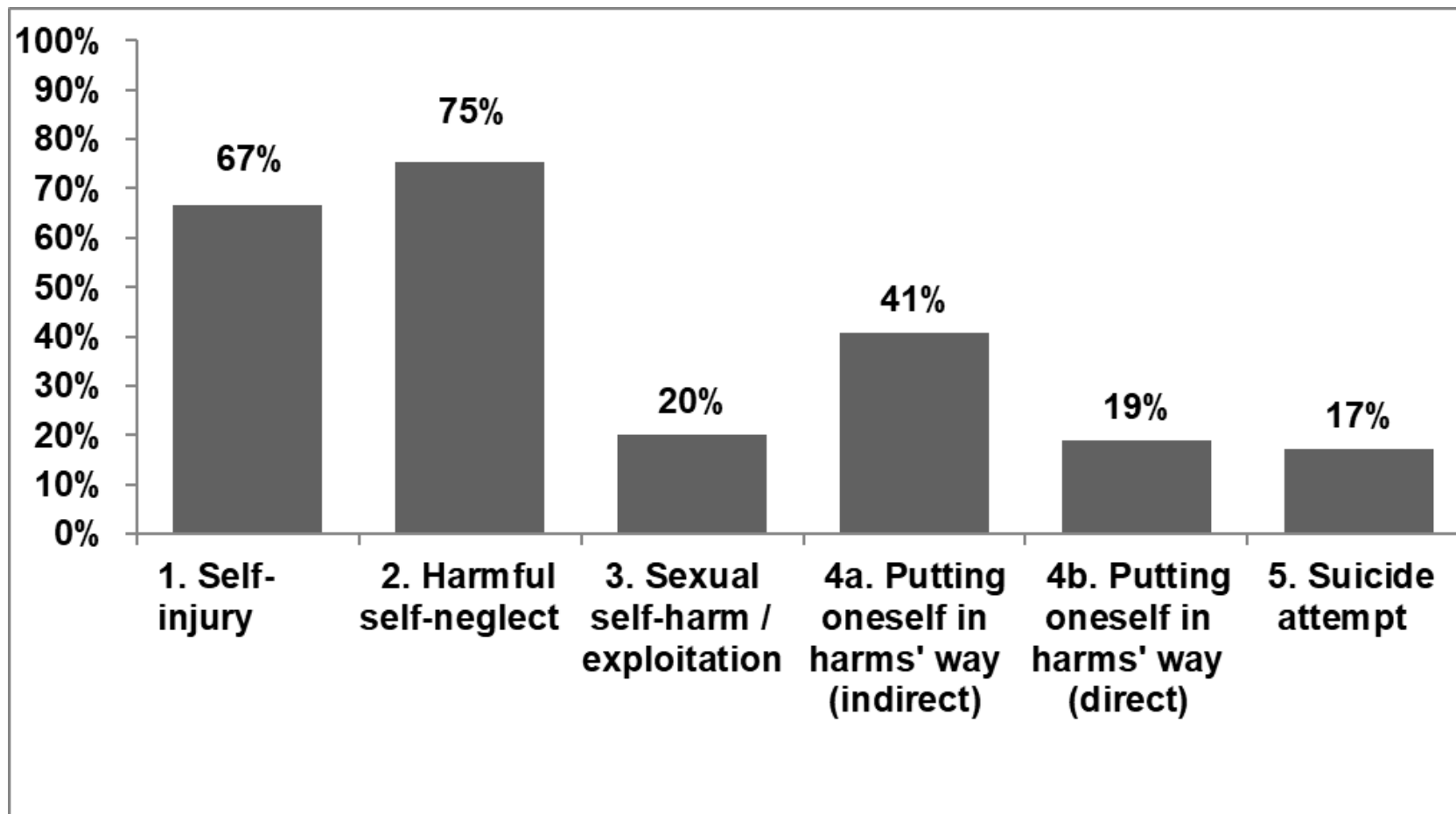
- Inclusion criteria: Adult age (18-years-old and older),
- Being a current recipient of mental health services
- Willingness, and ability to give informed consent, and
- Having self-harmed or attempted suicide on two or more occasions over the past six months.
- Exclusion criterion was intellectual disability (ID).
 - While we do believe that reflecting and describing emotions and reasons for behaviours are possible amongst individuals with ID with support, we lacked the resources to work with them in doing so.

Measures

- Inventory of Statements About Self-Injury (ISAS) (Klonsky & Glenn, 2009; Lindholm, Bjärehed & Lundh, 2011).
- The Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004; Bjureberg, Ljótsson & Tull et al., 2016)
- The Five Self-Harm Behavior Groupings Measure. (5S-HM; Liljedahl & Westling 2014)
 - The 5S-HM queries whether ppts engaged in each of the 35 5S-HM behaviors over the past two weeks (Y/N), followed with the statement: “*If yes, how many times over the last two weeks?*”
 - Response options included four categories: “One time, 2-3 times, 4-5 times, 6 or more times”.
 - These response options are weighted so that more frequent and more severe behaviors have a higher score.

Selected Findings

Figure 1. Rates of self-harm measured by the 5S-HM over the past two weeks.



Results of empirical analyses

- Cronbach's alpha of the 5S-HM total score was .75 indicating acceptable to good internal consistency according to widely accepted standards.
- The test-retest reliability is supported by an intraclass correlation of .68 considered good (e.g., according to the guideline by [Cicchetti, \(1994\)](#))
- The construct validity of the 5S-HM is supported by significant positive correlations between the 5S-HM total score and (i) the total number of NSSI behaviors as assessed with the ISAS ([Klonsky & Glenn, 2009](#)) ($\rho=.40, 446 p<.01$)

Results of thematic analyses

- Inductive thematic analysis was used to describe data by examining the reasons given for engaging in each type of self-harming behavior (Braun & Clarke, 2006)
- Five main themes and 13 subthemes were developed through thematic analysis (TA) of the primary reasons given by the participants for engaging in the different types of self-harming behavior.

Discussion: Robustness of 5S-HM

- We aimed to evaluate a new self-harm assessment through empirical analysis and to determine the novel contributions from the 5S-HM in understanding the forms and functions of self-harm via qualitative analysis of reasons given for using each type of self-harm behavior described.
 - We also aimed to test the utility and novel contributions of the *Unified Model* (Liljedahl & Westling, 2014) and 5S-HM by extension in understanding and assessing all forms of self-harm for use in both clinical and research settings.
- In this study we generated initial analyses regarding internal consistency, test-retest reliability, and construct validity, which indicate that **the 5S-HM is suitable for the assessment of a spectrum of behaviors encompassed by self-harm.**

Discussion: Scope of self-harm

- Our results indicate that indirect forms of self-harm, such as harmful self-neglect are common.
 - *This suggests that mapping the entire self-harming repertoire may be critical for accurate case formulation and treatment, as much of an individual's experience may be shaped by, for example, chronically under-sleeping, deliberately not drinking enough fluid in order to induce dissociation, allowing treatable conditions to become chronic through lack of intervention, and so on. In fact, not tending to these concerns may contribute to lack of clinical improvement.*
- In sum, we believe that clinical and research assessment of harmful self-neglect is a vital and under-studied area.
- Novel findings from this study are also present in the rates of indirect (41%) and direct (19%) self-harm related to putting oneself in harms' way.
- A further novel finding was that one fifth of participants reported engaging in sexual self-harm over the previous two weeks.

Discussion: Reasons for self-harm

- Thematic analyses indicated that reasons for self-harming sometimes were expressed in terms of **intolerable emotional states** leading up to self-harming, sometimes in terms of consequences awaited to follow self-harming.
- Participants described **Negative emotional states and Self-intolerance** as culminations of suffering and self-hatred respectively.
- The **weariness of being ill** and the **habit of self-harm** led to further self-harming behavior for some, as did the **sense of deservingness to feel pain and lose dignity**, particularly in relation to feeling obliged to have sex and engaging in sexual self-harm for others.
- Participants also described **Relief from negative states** as the purpose of self-harm, as well as intentions to either **Improving one's situation** or **Worsening one's situation** through self-harm.
- Being motivated by relief from negative states is a relatively well-documented function of self-harm ([Kleindienst, Bohus, Ludäscher, et al., 2008](#); [Klonsky & Glenn, 2009](#)), as is the intrapersonal function of attempting to improve one's situation (intrapersonal reasons) ([Gardner et al., 2021](#)).

Novel findings in relation to sexual self-harm

- Using sexual self-harm to change one's situation for the worse is a novel contribution of the current study.
 - We interpret this finding as a way of expressing one's self-hatred rather than masochism, as there was no element of enjoyment or gratification described by our participants who engaged in sexual self-harm.
- With respect to worsening one's situation participants engaged in sexual self-harm to express their self-hatred by allowing someone else to hurt them, in some instances with awareness that the pain would be greater than what they had the capability to inflict on themselves.
- Using sexual self-harm to improve one's situation:
 - participants engaged in sexual self-harm to try to "guarantee" relationships with people they allowed to hurt them at best or at least to avoid being abandoned.
- Other participants described using sexual self-harm to feel desired, affirmed or validated.

Novel findings in relation to sexual self-harm (2)

- Deserving to feel pain and lose dignity
 - This reason generates insight into how sexual self-harm may be initiated and maintained from an interpersonal/transactional perspective.
 - In other words, it seems likely that others have reinforced beliefs maintaining these behaviors, possibly in the form of earlier sexual trauma ([Fredlund, Svedin & Priebe et al., 2017](#))
- Further qualitative study is needed to clearly differentiate between sexual self-harm and sexual abuse.
- Within the 5S-HM we define sexual self-harm as
 - “Engaging in sexual activity without interest, curiosity, or lust, but rather for the purpose of harming yourself. That is, deliberately having sex despite not wanting to and with the skills/ability to say no to a partner you feel confident would have stopped without consequence if you had said no”.*

Future directions

- The vulnerability to exploitation emerging from the reasons participants gave for engaging in sexual self-harm suggests consideration for the development of specific skills training interventions.
- A format beginning with psychoeducation regarding fundamental rights in relation to having one's dignity and body integrity respected in public and private appears warranted.
 - Skills training focused upon learning to value oneself outside of sexual arenas could help to undo the formulation of the self as only valuable for sexual use by others.
 - "Deservingness to suffer" also warrants future study.
- Future research will explore if a brief version of the 5S-HM will yield consistent data as the 5S-HM in its current format
- Our study presents thematic and empirical analyses illustrating the novel aspects and robustness of the 5S-HM for use in clinical and research settings.

Questions?

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