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REVIEW

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Men who self-harm—A scoping review of a complex phenomenon

Randi Tofthagen[1] | Sebastian Gabrielsson[2] | Lisbeth Fagerström[3,4] | Lena-Maria Haugerud[5] | Bitt-Marie Lindgren[6]

[1]Faculty of Health Science, Department of Nursing and Health Promotion, Oslo Metropolitan University, Oslo, Norway

[2]Department of Health, Education and Technology, Luleå University of Technology, Luleå, Sweden

[3]Faculty of Education and Welfare Studies, Åbo Akademi University, Vaasa, Finland

[4]Faculty of Health and Social Sciences, University of South-Eastern Norway, Drammen, Norway

[5]National Association for Prevention of Self-Harm and Suicide, Oslo, Norway

[6]Department of Nursing, Umeå University, Umeå, Sweden

Correspondence
Britt-Marie Lindgren, Department of Nursing, The Biology Building, Umeå University, SE-901 87 Umeå, Sweden.
Email: britt-marie.lindgren@umu.se

Abstract

Background: To understand and care for men who self-harm, it is important that healthcare professionals have understanding of how and why men self-harm, men's experiences of self-harm and what can be done to hinder or prevent self-harm.

Aims: The aim of this study was to synthesize the existing knowledge on men who self-harm, with a special emphasis on background, self-harming methods, experiences and reported therapeutic interventions and/or care approaches.

Design: Scoping review of internationally published and grey literature, based on a methodological framework by Arksey and O'Malley.

Data sources: Systematic electronic database searches were conducted in CINAHL, MEDLINE (Ovid) and PsycINFO. From a total of 684 studies found, 24 studies met the inclusion criteria: full-text, published in English, peer-reviewed studies and grey literature including a focus on men who self-harm, men aged between 18 and 65 years, and published between 2010 and 2019.

Results: Men's self-harm was understood as being related to mental disorders, a means of affect regulation, a loss of self-control, and a means of interpersonal communication. Self-harm can be a positive or negative experience, and there is a wide variety in the methods that men use to self-harm: sharp objects, injection, ingestion, without aids or riskful behaviour. Few studies reported on therapeutic interventions and/or care approaches for men who self-harm.

Conclusion: Men's self-harm should be understood as a complex, socially and culturally conditioned phenomenon and studied from a multitude of perspectives.

Impact: This scoping review concludes that self-harm among men should be understood as a complex, socially and culturally conditioned phenomenon. To empower men and support their recovery from self-harm, a person-centred approach should be incorporated into research on the subject and practice.

KEYWORDS
male, men, nursing, scoping review, self-harm, self-inflicted, self-injuries, self-injurious, self-injurious behaviour/or self-mutilation/self-harm, self-injury, self-mutilation

1 | INTRODUCTION

Self-harm affects millions of people and constitutes a major public health problem. Research on men who self-harm seems limited and contradictory, and men's self-harm might be an increasing and underreported phenomenon. To inform clinical practice and promote future research in this area, there exists a need to map the existing literature and identify knowledge gaps.

2 | BACKGROUND

In a review of general population studies of self-harm among all ages from various countries, Swannell et al. (2014) found that the average prevalence rates of self-harm increased from 1990 to 2012. However, in Swannell's study, the prevalence rates were seen to vary systematically in accordance with various methodological factors, e.g., response format, incentive, anonymity, mode of measurement, and research focus. When such factors were taken into consideration, the adjusted average prevalence rate was seen to be stable over time. As seen in a research report by the International Society for the Study of Self Injury (2016), between 6% and 8% of adolescents and young adults report a more frequent self-harming behaviour. Klonsky (2011) found that 18.9% of those aged 30 years and younger endorse self-harm. In a review of 56 studies from various countries, Gillies et al. (2018) revealed that the average life-time prevalence of self-harm increased significantly among adolescents over a 25-year period from 1990 to 2015. Tørmoen et al. (2020) also found that the prevalence of self-harm increased from 4.1% to 16.2% over a 15-year period from 2002 to 2017/18 among Norwegian adolescents, i.e., a 4-fold increase. The increase in Tørmoen et al.'s (2020) study was seen to be relatively larger among girls compared to boys and among 8th graders compared to 10th graders.

The focus of this scoping review was adult men who self-harm. Research reports on men who self-harm are contradictory. Researchers have found both that women are more prone to self-harm than men (Arkins et al., 2013; Hartberg & Hegna, 2013; Landstedt & Gillander Gådin, 2011; Madge al., 2008; Straiton et al., 2013) and that women and men are equally prone to self-harm (Klonsky, 2011; Marchetto, 2006; Victor et al., 2018). Hawton and Harris (2008) found an overall overrepresentation of men but with different men to women ratios in different age groups. Some researchers suggest that the number of men who self-harm is increasing in Western countries (Adamson & Braham, 2011; Clements et al., 2019).

As seen in clinical studies to date, more women than men self-harm, while in general population studies this ratio shifts. This might be related to more women than men turning to psychiatric services for help (Bresin & Schoenleber, 2015; Whitlock et al., 2011). Men have been found to be more reluctant to disclose and talk about self-harm and negative emotions (Claes et al., 2007). Furthermore, because of unrecorded self-harm linked to the avoidance of medical help and feelings of shame or guilt, there is uncertainty in the number of people who self-harm (Hicks & Hinck, 2008; Long et al., 2013).

Researchers have found previously that how men self-harm differs from how women self-harm. Men harm themselves more often, inflict greater pain and are less prone to care for their wounds (Claes et al., 2007). Men are also more likely to burn their skin, hit themselves, bang their heads, hit a wall or other objects, or engage in riskful behaviour with unclear intentions, while women are more likely to cut their skin or scratch themselves (Andover et al., 2010; Bresin & Schoenleber, 2015; Claes et al., 2007; Sornberger et al., 2012; Whitlock et al., 2011).

Conceptualizations of self-harm have changed over time. Currently, a variety of terms are used in clinical settings and research, e.g., deliberate self-harm, self-mutilation and/or cutting (Lindgren et al., 2018; Tofthagen & Fagerström, 2010). For the purpose of this study, we defined self-harm as intentional self-inflicted injury toward one's body without suicidal intent. This is in line with a widely used definition of nonsuicidal self-injury, in which self-harm is defined as self-inflicted destruction of body tissue without suicidal intent and for purposes not socially sanctioned, including behaviours such as cutting, burning, biting and/or scratching skin (International Society for the Study of Self-Injury, 2016).

Research on men who self-harm seems limited and contradictory, and men's self-harm might be an increasing and underreported phenomenon. To inform clinical practice and promote future research in this area, there exists a need to map the existing literature and identify knowledge gaps.

3 | REVIEW

3.1 | Aims

The aim of this study was to synthesize the existing knowledge on men who self-harm, with a special emphasis on background, self-harming methods, experiences and reported therapeutic interventions and/or care approaches.

3.2 | Design

A scoping review design based on a methodological framework by Arksey and O'Malley (2005) and further enhanced by Levac et al. (2010) and the methodology for Scoping Reviews (The Joanna Briggs Institute, 2015) was used to review the available literature on men who self-harm.

Steps 1 to 5 of the Arksey and O'Malley (2005) methodological framework were followed during the course of this study: identifying the research question, identifying relevant studies, study selection, charting the data, and collaborating, summarizing and reporting the results. For the reporting in this review, the PRISMA-ScR checklist has served as a guideline (Tricco et al., 2018).

3.3 | Identifying the research question

Our main research question was: What research exists on men who self-harm? The following interrelated research questions guided the scope of the study:

How is self-harm among men explained?

Which self-harming methods are used?

How do men describe their experiences of self-harm?

Which therapeutic interventions and/or care approaches are used and reported?

To enhance the rigour of the research process and provide clarification for questions that could arise during analysis, a review protocol was developed prior to undertaking the scoping review (The Joanna Briggs Institute, 2015).

3.4 | Search strategy and information sources

The aim of a scoping review is to be as comprehensive as possible in identifying published studies and reviews (Arksey & O'Malley, 2005). While there is a tendency when using a systematic review to focus on highly defined research questions and studies with a randomized controlled research design, we included both qualitative scientific and grey literature, i.e., reports, discussion papers. Electronic database searches were conducted in CINAHL, MEDLINE (Ovid) and PsycINFO. Thesaurus/medical subject headings (MeSH) and the following key terms were used: self-injurious behaviour/or self-mutilation/self-harm, self-injury or self-injuries, self-injurious, self-mutilation, self-inflicted, male/or men/where possible. Boolean operators (OR, AND) were used to narrow and expand the search. Additionally, to identify grey literature, we performed a general Internet search (Google/Google Scholar, websites, Twitter) and a manual search of key journals' reference lists.

The first author, together with a librarian, conducted the literature search, which involved the systematic database search, manual search and refining of search strategy. All four academic researchers conducted a manual search of key journals' reference lists, identifying of grey literature and reviewing of articles for study inclusion (Levac et al., 2010).

3.5 | Inclusion criteria

The inclusion criteria included full-text, published in English, peer-reviewed studies and grey literature including a focus on men who self-harm, men aged between 18 and 65 years, and published between 2010 and 2019. To be included, the research studies (regardless of design) were required to include a focus on men who self-harm. Systematic reviews were also considered eligible sources of information (Peters et al., 2015). Grey literature accepted for review were development reports and statement papers; excluded were, e.g., advertisements and personal blogs.

3.6 | Data charting and analysis

The screening of potentially relevant papers for inclusion occurred after the development and implementation of the search strategy. From the electronic database search (n = 684) and general Internet and manual searches (n = 11), a total of 695 references were identified. After removing duplicates (n = 80), 615 papers remained. Level one testing included screening of title and abstract, initially performed by the first author, and then discussed among the academic researchers to achieve consensus. Papers reporting on men with learning disabilities (because such men predominantly engage in severe and stereotypic forms of self-mutilation rather than nonsuicidal self-injury as defined in this study) and single-case studies were excluded. Relevant papers were kept for full-text review at level two testing. The full-text papers (n = 26) were divided among the academic researchers who read the papers. A further two papers were excluded (n = 2), because those studies included both men and women and it was impossible to extract the data on men. Subsequently, a total of 24 papers were included in the study and further discussed among all academic researchers (Figure 1).

Charting data is an iterative process, because it involves extracting data from included studies (Levac et al., 2010). The academic researchers extracted the following data from each paper included in this review (n = 24): author(s), year of publication, country of origin, aim, population and sample size, context, data collection methods and data analysis, definition of self-harm and results answering the research questions.

4 | RESULTS

The study results are based on 24 studies that met the inclusion criteria and were published from 2010 to 2019. The studies were from the following countries: the United States of America (n = 9), the United Kingdom (n = 8), Italy (n = 2), Turkey (n = 2), Canada (n = 1), Greece (n = 1) and Spain (n = 1).

The methods used were qualitative (n = 6), quantitative (n = 13), mixed method (n = 1), literature review (n = 3) and discussion paper (n = 1). Nine of the included studies, of which one was a review, were conducted in prison setting. Other contexts were high-security hospital (n = 4), psychiatric hospital/mental health service (n = 3), among veterans (n = 2), non-clinical sample (n = 2) and emergency hospital (n = 1; Table 1).

In this study, we defined self-harm as intentional self-inflicted injury toward one's body without suicidal intent, in line with a widely used definition of nonsuicidal self-injury. Other definitions seen in the studies included in this review were: deliberate self-harm, deliberate self-injury, self-mutilation in combination with suicide attempts, intentional self-mutilation and self-injurious behaviour (Table 1).

4.1 | How self-harm is explained

In the included studies, men's self-harm was explained as related to mental disorders, a means of affect regulation, a loss of self-control, and a means of interpersonal communication.

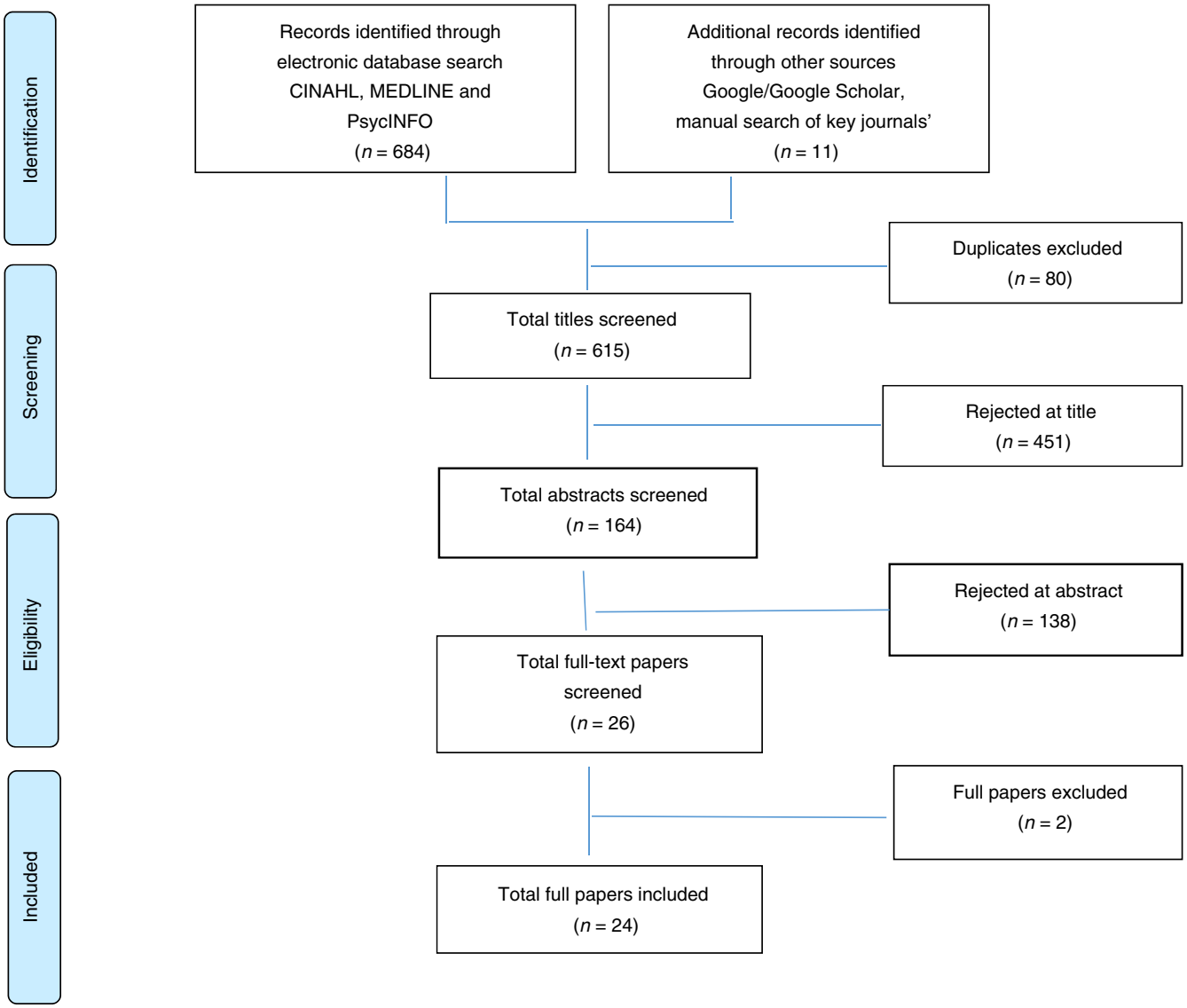

FIGURE 1 PRISMA flow diagram of paper selection

4.1.1 | Related to mental disorders

An explanation of men's self-harm as related to mental disorders was seen often in the included articles. Self-harm was associated with substance use disorders (Carli et al., 2010; Claes et al., 2012; Evren et al., 2012; Kimbrel, Wilson, et al., 2017; Pope, 2018; Power et al., 2015; Russell et al., 2010; Sakelliadis et al., 2010; Taşören, 2017; Veeder & Leo, 2017), schizophrenia (Adamson & Braham, 2011; Russell et al., 2010; Veeder & Leo, 2017; Verdolini et al., 2017), depression (Kimbrel, Wilson, et al., 2017; Pope, 2018; Power et al., 2015), borderline personality disorder (Pope, 2018; Russell et al., 2010; Verdolini et al., 2017), psychosis (Carli et al., 2010; Verdolini et al., 2017), affective disorders (Russell et al., 2010; Verdolini et al., 2017), attention deficit hyperactivity disorder (Kimbrel, Wilson, et al., 2017), personality disorder (Veeder & Leo, 2017), eating disorders (Bennet & Moss, 2013), posttraumatic stress disorder (Kimbrel, Wilson, et al., 2017), and/or gender dysphoric disorder (Veeder & Leo, 2017).

4.1.2 | A means of affect regulation

An explanation of men's self-harm as a means of affect regulation was seen (Evren et al., 2012; Gardner et al., 2016; Morales & Guarnero, 2014; Power et al., 2015; Ramluggun, 2013). Men might use self-harm to alleviate negative emotions like anger (Evren et al., 2012; Gardner et al., 2016; Pope, 2018; Sakelliadis et al., 2010; Taşören, 2017; Vernham et al., 2016), hopelessness (Pope, 2018; Power et al., 2015), anxiety (Evren et al., 2012; Gardner et al., 2016; Pope, 2018), stress (Pope, 2018; Ramluggun, 2013), worthlessness (Bennet & Moss, 2013; Power et al., 2015), loneliness (Morales & Guarnero, 2014; Power et al., 2015), frustration (Evren et al., 2012), boredom (Power et al., 2015), ambivalence (Adamson & Braham, 2011), and/or loss (Power et al., 2015).

Men's self-harm might also function as a self-stimulating repetitive behaviour (Morales & Guarnero, 2014; Sakelliadis et al., 2010), e.g., a way to see if one can stand the pain (Gardner et al., 2016) or

self-preservation (Russell et al., 2010). Self-harm can also function as self-medication (Russell et al., 2010) and self-punishment (Evren et al., 2012). In one study, the severity of men's deliberate self-injury was seen to increase over years, with cuts becoming more frequent, deeper and more dangerous (Bennet & Moss, 2013).

4.1.3 | A loss of self-control

Men who self-harm can experience impulsivity, a lack of control over their own behaviour (Adamson & Braham, 2011; Sakelliadis et al., 2010) or a lack of insight into why they self-harm (Bennet & Moss, 2013). Men's self-harm can be linked to, e.g., being abused when young or a sense of losing control over one's body (Andover et al., 2010; Bennet & Moss, 2013; Evren et al., 2012; Sakelliadis et al., 2010; Taşören, 2017), or dissociation (Gardner et al., 2016; Power et al., 2015; Russell et al., 2010; Veeder & Leo, 2017; Verdolini et al., 2017).

4.1.4 | A means of communication

Men who self-harm might lack the ability to verbally express emotions, e.g., self-hate (Adamson & Braham, 2011) or vulnerability/invulnerability (Russell et al., 2010). Men's self-harm might function as a means to silently communicate the need for help (Evren et al., 2012; Gardner et al., 2016; Marzano et al., 2015; Ramluggun, 2013) or let others know about one's emotional pain (Evren et al., 2012) or might even be linked to relational conflicts (Bennet & Moss, 2013; Power et al., 2015) or used to establish relational bonds between oneself and others (Evren et al., 2012; Gardner et al., 2016). In some studies, healthcare professionals were reported to perceive those men could use self-harm to gain attention in a relationship (Marzano et al., 2015; Ramluggun, 2013) and/or manipulate others (Ramluggun, 2013). Men might also self-harm instead of harming others (Power et al., 2015).

4.2 | How men self-harm

In the included studies, there is a wide variety in the methods that men use to self-harm.

4.2.1 | Sharp objects

One way that men can bodily self-harm is by using sharp objects to cut their skin (Adamson & Braham, 2011; Andover et al., 2010; Bennet & Moss, 2013; Bresin & Schoenleber, 2015; Claes et al., 2012; Evren et al., 2012; Gardner et al., 2016; Green et al., 2018; Kimbrel et al., 2014; Kimbrel, Calhoun, et al., 2017; Marzano et al., 2015; Morales & Guarnero, 2014; Ramluggun, 2013; Russell et al., 2010; Sakelliadis et al., 2010; Taşören, 2017). Men can also use sharp objects to stick themselves (Morales & Guarnero, 2014), cut deeper into the body (throat or tendon cuts; Power et al., 2015), slash themselves (Power et al., 2015; Russell et al., 2010), carve themselves (Andover et al., 2010; Gardner et al., 2016), stab themselves in the chest (Adamson & Braham, 2011; Bresin & Schoenleber, 2015), remove part of their ears (Bennet & Moss, 2013), mutilate their genitalia, amputate their penis, castrate themselves (Veeder & Leo, 2017) or self-circumcise (Adamson & Braham, 2011).

4.2.2 | Injection and ingestion

Men's bodily self-harm can take the form of injection, e.g., needle sticking (Andover et al., 2010; Gardner et al., 2016; Verdolini et al., 2017) or injecting lighter fluid (Russell et al., 2010). Also, men's bodily self-harm can take the form of medication or drug overdoses through injections or by way of mouth (Adamson & Braham, 2011; Carli et al., 2010; Gardner et al., 2016; Russell et al., 2010) or ingesting harmful objects by way of mouth (Bennet & Moss, 2013).

4.2.3 | Without aids

Men's bodily self-harm can be performed without aids, e.g., banging own body parts (Bennet & Moss, 2013; Bresin & Schoenleber, 2015; Evren et al., 2012; Gardner et al., 2016; Green et al., 2018; Morales & Guarnero, 2014; Sakelliadis et al., 2010), self-hitting (Andover et al., 2010; Gardner et al., 2016; Kimbrel et al., 2014; Taşören, 2017), head-banging (Adamson & Braham, 2011; Bresin & Schoenleber, 2015; Morales & Guarnero, 2014), biting oneself (Bresin & Schoenleber, 2015; Gardner et al., 2016; Morales & Guarnero, 2014), scratching one's skin (Andover et al., 2010; Bennet & Moss, 2013; Bresin & Schoenleber, 2015; Gardner et al., 2016; Green et al., 2018; Kimbrel, Calhoun, et al., 2017; Morales & Guarnero, 2014; Power et al., 2015; Sakelliadis et al., 2010), pinching body parts (Bresin & Schoenleber, 2015; Gardner et al., 2016), punching a wall or object (Green et al., 2018; Power et al., 2015), pulling hair (Bresin & Schoenleber, 2015; Evren et al., 2012) or/and gouging out one's eye (Adamson & Braham, 2011).

4.2.4 | Other methods

Men can even use other methods to bodily self-harm, e.g., skin burning (Adamson & Braham, 2011; Bennet & Moss, 2013; Bresin & Schoenleber, 2015; Claes et al., 2012; Evren et al., 2012; Gardner et al., 2016; Green et al., 2018; Kimbrel, Calhoun, et al., 2017; Kimbrel et al., 2014; Morales & Guarnero, 2014; Sakelliadis et al., 2010), electric shocks, hanging (Adamson & Braham, 2011), drawing blood with a syringe (Russell et al., 2010), drowning (Adamson & Braham, 2011), abusing alcohol (Bennet & Moss, 2013; Evren et al., 2012; Sakelliadis et al., 2010), wound picking (Bresin & Schoenleber, 2015; Gardner et al., 2016; Green et al.,

TABLE 1 Overview of included articles

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
1. Adamson and Braham (2011) United Kingdom	- Seven men (24–44 years) with a history of repetitive deliberate self-harm. - High-secure hospital.	- Qualitative design. - Audio-taped semi-structured interviews. - Grounded theory.	Described as deliberate self-harm behaviours in which individuals engage in self-poisoning or self-injury, irrespective of the apparent purpose of the act and including previously used concepts such as attempted suicide, para suicide, self-poisoning, self-wounding, self-injury and self-mutilation as seen within the literature.
2. Andover et al. (2010) United States of America	- 103 undergraduate students (men and women) participated. Nearly half were male (45.6%, $n = 47$). The majority was Caucasian (71.8%, $n = 74$). The mean age was 18.49 (*SD* 1.03). Forty-seven percent ($n = 48$) reported a history of non-suicidal self-injury; 39.6% of those were male ($n = 19$). - Non-clinical sample.	- Quantitative design. - Self-mutilative behaviours interview. - Frequency of activities scale. - Symptom checklist-90-revised. - Statistical analysis.	Defined as deliberate harm to the body without suicidal intent and can incorporate behaviours such as cutting, burning, carving, scratching or skin-picking.
3. Bennet and Moss (2013) United Kingdom	- Four male prisoners (23–34 years) who had met the criteria for dangerous and severe personality disorder and had PCL-R scores in at least 95th percentile. - High-secure units.	- Small-scale case study design. - In-depth interviews. - Interpretative phenomenological analysis.	Defined as deliberate self-injury where an individual purposefully and directly injures themselves without the intention of ending their life.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
- Ambivalent feelings. - Impulsive. - A lack of expression of self-hatred. - Hearing voices instructing one to self-harm or delusional thinking.	- Cutting. - Overdoses. - Using prescribed medication. - Hanging. - Jumping. - Head-banging. - Stabbing oneself in the chest. - Drowning. - Electrocution. - Burning. - Gouging out ones' eye. - Self-circumcise.	- A relief. - An expression of self-hatred. - A response to mental health problems.	
	- The most common method reported among men was self-hitting. - Men were significantly more likely than women to report burning behaviours. - No gender differences in methods: carving, intervening with wound healing, needle sticking and self-hitting.	- Subjective reporting of physical pain. - Men report a greater sense of control over non-suicidal self-injury than women.	
- Varying levels of insight into their deliberate self-injury. - Turbulent relationship within family. - Unstable family-life. - Family with violence and criminal behaviour. - Subjected to emotional, violent and sexual abuse. - Antisocial peers. - Children's home and foster placement. - Truanted from school. - Alcohol abuse. - Own criminal behaviour. - Chaotic lifestyle. - An unsettled lifestyle.	- Scratching. - Cutting. - Swallowing objects. - Banging body parts. - Ingesting harmful objects. - Mutilating body parts. - Burning. - Object insertion into chest and penis. - Not eating. - To torment oneself with core-beliefs of worthlessness as emotional pain. - Punching oneself. - Deliberate self-injury increased in severity, frequency, and methods. - Used harm-minimization techniques to control the frequency and depth of cuts.	- Fascinated by the sight of blood. - Being in a relationship reduced self-injury, equated to never being alone with problematic emotions. - Self-punishment as comfort. - As anger relief for mother's violence. - Self-hate. - Feeling no pain. - Telling oneself one is useless and worthless. - A limited amount of control when in prison, could only control deliberate self-injury as a private experience. - Feel comfortable with self-harm. - Deliberate self-injury as a valued possession, a cherished belonging. - Feeling better when relieving anger due to deaths in family. - An alternative to being aggressive toward people or objects when angered. - Attention seeking. - Sensation seeking, felt nice, an adrenaline kick, became addicted to it. - Proud of having status as a self-harmer.	

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
4. Bresin and Schoenleber (2015) United States of America	- 116 papers. - Included studies are from: United States of America, Europe, Canada, Australia, New Zealand, China, Japan and Indonesia.	- Literature review.	Defined as purposeful acts of self-inflicted physical harm with the potential to damage body tissue but performed without the intent to die.
5. Carli et al. (2010) Italy	- 1265 males. - Penitentiary institutions.	- Quantitative design. - Diagnostic psychiatric interviews based on the Italian version of the structured Mini - International - Neuropsychiatric Interview to discriminate between - suicide attempters, suicide ideators and self-mutilators. - Barratt Impulsivity - Scale. - Childhood Trauma - Questionnaire. - Eysenck Personality - Questionnaire. - Connor-Davidson - Resilience Scale. - Brown-Goodwin - Assessment for - Lifetime History of - Aggression. - Buss and Durkee - Hostility Inventory. - Descriptive statistics and - Binary logistic regression	Self-mutilators were defined as those without a history of suicide attempt or suicide ideation. Suicide attempt was defined as an act of self-harm with intent to die that was not self-mutilatory in nature. Suicide ideators were defined as a separate group of people, the ones who had thoughts about committing suicide.
6. Claes et al. (2012) Spain	- 130 male patients with eating disorders. - Mean 26.10 years.Department of Psychiatry, University Hospital of Bellvitge, Barcelona.	- Quantitative design. - Listing of 10 impulse-control problems (including non-suicidal self-injury). - The eating disorder inventory. - The symptom checklist-90-revised. - The temperament and character inventory. - Statistical analysis/multivariate analysis of variance and Chi-square test statistic.	Defined as any socially unaccepted behaviour involving deliberate and direct injury to one's own body surface without suicidal intent, such as cutting, carving and burning of the skin.
7. Evren et al. (2012) Turkey	- 200 male substance-dependent inpatients. - Bakirkoy state hospital for psychiatric and neurological diseases, alcohol and drug research treatment and training centrer in Istanbul.	- Quantitative design. - Interviews conducted after detoxification period, 3 to 4 weeks after the last day of alcohol use and 2 to 3 weeks after the last day of drug use. - Self-mutilative Behaviour Questionnaire. - Childhood Trauma Reports. - Buss-Perry's Aggression Questionnaire. - State-Trait Anger Expression Inventory. - Beck Depression Inventory. - State-Trait Anxiety Inventory. - Descriptive statistics and backward logistic regression.	Defined as self-mutilation: deliberate self-injury to body tissue without the intent to die.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
	- Burning. - Banging one's head. - Pinching. - Punching. - Cutting - Biting - Scratching, - Hair pulling - Wound healing.		
High-impulsive subjects were: - Younger. - More often single. - More prominent psychoticism, extraversion, aggression, hostility and resilience capacity. - More frequently diagnosed with substance use disorders and engaged in self-mutilating behaviour. - More prone to suicidal behaviour.			
	- Cutting. - Carving. - Burning of the skin.		
- Anger control. - Physical aggression. - History of childhood trauma such as physical abuse, emotional abuse, and sexual abuse. - Substance use (alcohol).	- Self-cutting. - Hitting hard places with fist or head. - Burning with cigarette. - Pulling hair.	- Emotional regulation - Reducing anxiety. - Control of anger and aggression - Self-punishment.	

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
8. Gardner et al. (2016) United Kingdom	- 179 adult male offenders. Mean age 37.7 and in prison between 1–10 years. - Prisons.	- Quantitative design. - Self-report measures of non-suicidal self-harm. - Inventory of Statements About Self-injury comprises two sections which measures (1) the frequency of a range of non-suicidal self-harm behaviours over the person's lifetime, and (2) the function of non-suicidal self-harm. - Items from the Personality Diagnostic Questionnaire 4th Edition. - Suicide Behaviours Questionnaire-Revised. - Centrer for Epidemiologic Studies Depression Scale. - Descriptive Statistics.	Defined as any deliberate self-injurious behaviour that does not involve suicidal intent, irrespective of degree of lethality. The definition included direct methods of self-injury vis-à-vis the skin and body, and self-poisoning, referred to as non-suicidal self-harm.
9. Green et al. (2018) United States of America	- 912 emerging adults, aged 18–24 years of which 32% were male.Two college campus in the Northeastern United States.	- Quantitative design. - Deliberate Self-Harm Inventory. - Conformity to Masculine Norms Inventory–22-Item - Version. - Number of self-injurers known. - Positive and Negative Affect Schedule. - Harvard Department of Psychiatry/National Depression - Screening Day Scale. - Hierarchical logistic regression.	Defined as the deliberate and self-inflicted damage to one's body tissue (e.g., cutting, burning) with the absence of suicidal intent.
10. Kimbrel et al. (2014) United States of America	- 214 treatment-seeking male U.S. - Iraq/Afghanistan-era veterans. The sample consisted of Caucasian (55.1%, $n = 118$), African American (39.7%, $n = 85$), and Latino (5.6%, $n = 12$). - On average, participants were 32.99 years of age (*SD* 8.91). - The Durham Veterans Affairs Medical Centrer PTSD Clinic.	- Cross-sectional study. - Habit Questionnaire. - Analyses were limited to the 4-item Deliberate Self Harm (DSH) subscale of the Habit Questionnaire, which included the following items: (1) "Have you ever scratched or picked at skin so that it left a mark?" (2) "Have you ever deliberately cut yourself in any way?" (3) "Have you ever hit yourself?" and (4) "Have you ever burned yourself with a cigarette, match or other way?" - Clinician-Administered PTSD Scale. - Beck Depression Inventory-II. - Combat Exposure Scale. - Descriptive statistics, and logistic regression.	Defined as deliberately destroying one's own body tissue without conscious suicidal intent.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
Intrapersonal: - Affect regulation (releasing emotional pressure, reducing anxiety, frustration and anger). - Anti-dissociation. - Anti-suicide. - Marking distress. - Self-punishment (punishing oneself, expressing anger toward oneself, reacting to feeling unhappy or disgusted with oneself). - Autonomy. - Interpersonal: - Interpersonal boundaries (creating a boundary between oneself and others). - Interpersonal Influence (letting others know the extent of one's emotional pain, seeking care or help from others). - Peer bonding. - Revenge. - Self-care (creating a physical injury that is easier to care for). - Sensation seeking. - Toughness (seeing if one can stand the pain).	- Banging or hitting self. - Hair pulling. - Pinching. - Cutting. - Biting. - Wound picking. - Severe scratching. - Rubbing skin against rough surfaces. - Burning. - Needle sticking. - Carving. - Swallowing dangerous substances. - Other.		
- A stronger adherence to masculine norms predicted chronic non-suicidal self-injury.	- Cutting. - Punching a wall or object. - Burning with lighter/cigarette. - Carving pictures or design into skin. - Severely scratching. - Sticking sharp objects into skin. - Banging head against something. - Preventing wounds from healing.		
	- Any type of deliberate self-harm. - Scratching/picking oneself. - Hitting oneself. - Burning oneself. - Cutting oneself.		

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
11. Kimbrel, Calhoun, et al. (2017) United States of America		- Discussion paper.	Defined as the act of deliberately destroying one's own body tissue without conscious intent to die and for reasons that are not socially sanctioned. Common methods include cutting, scratching, and burning oneself.
12. Kimbrel, Wilson, et al. (2017) United States of America	- 140 males from a previously used dataset (in total 186 recruited through mailings, advertisements, and recruitment by Veteran's Administration healthcare providers) of Iraq/Afghanistan-era veterans. On average, participants were 40.2 (*SD* 10.0) years of age.The majority was White (68%) and non-Hispanic (85%).	- Cross-sectional study.Instruments: - Adult ADHD Self-Report Scale. - Deliberate Self-Harm Inventory. - Clinician-Administered PTSD Scale for DSM-IV. - Diagnostic interview: - Mini International Neuropsychiatric - Interview for DSM-IV. - Chi-square tests and logistic regression.	Defined as the act of intentionally destroying one's own body tissue without suicidal intent for reasons that are not socially sanctioned.
13. Mackie et al. (2017) Canada	- 7 adult men with intentional self-harm were included and 6 of them participated in the interview. Between 19–41 years of age ($M = 27$). - Hospital emergency department in Ottawa.	- Mixed method. - Semi-structured qualitative interviews. - Patient Health Questionnaire (PHQ-9). - Recorded any adverse events including further episodes of self-harm during the therapy. - Thematic grounded theory approach. - Descriptive statistics.	Defined according to the National Institute for Health and Care Excellence guidelines, referring to any act of self-poisoning or self-injury carried out by a person, irrespective of their motivation.
14. Marzano et al. (2015) United Kingdom	- 15 officers, 13 nurses (4 general nurses, 6 mental health nurses, 2 substance misuse nurses, 1 substance misuse and mental health nurse), and 2 doctors (general practitioners). - A local prison in the Southeast of England (large and overcrowded local establishment, with a predominately male staff sample).	- Qualitative design. - Semi-structured face-to-face interviews. - Thematic analysis.	Defined as repeated self-harm, without apparent suicidal intent.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
	Most common but often not included/ mentioned in risk assessment with questionnaires or interviews: - Wall/Object punching. Sometimes used: - Cutting - Burning - Scratching.		
- Attention deficit hyperactivity disorder symptoms were independently associated with increased risk for non-suicidal self-injury in male veterans, above and beyond the effects of post-traumatic stress disorder, depression and alcohol-use disorder.			
	- Cutting. - Overdose of medication. - Substance abuse.		- Computerized therapy: 6–10-week face-to-face therapy with a smartphone. - Baseline intake appointment had a mean PHQ-9 score of 18.3 (*SD* 5.5), indicating moderately severe depression. - At their final face-to-face PST session, participants reported a mean PHQ-9 score of 13.7 (*SD* 10.0). - At the final study visit, three participants had improved by 50% or more or scored less than 10 on the PHQ-9. - There were no repeat presentations to hospital with self-harm during the study.
- Attention seeking. - A cry for help. - Manipulate staff.	- Cutting.		- Lack of resources and skills. - Feeling powerless: Not being able to decide how to respond to their behaviour. - Medication/ medicalization. - Lack of ability and understanding. - Intolerance; staff angry, cynical and blasé.

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
15. Morales and Guarnero (2014) United States of America	- 42 adult males of which 40% were Hispanic ($n = 17$) and 60% were non-Hispanic (Caucasian $n = 15$, African American $n = 6$, American Indian $n = 4$). Mean age 36.9 years. - Three New Mexico prisons.	- Quantitative design. - Deliberate self-harm inventory. - Self-injury motivational scale-II. - Demographic questionnaire. - Descriptive statistics.	Defined as synonymous with self-mutilation, which is defined as the deliberate destruction or alteration of body tissue without conscious suicidal intent.
16. Pope (2018) United Kingdom	- 16 studies met the inclusion criteria for the review. - The review focused on male prisoners over the age of 18. To be selected for inclusion, studies had to clearly distinguish self-harm as a separate behaviour or outcome from suicide. - Studies published in English in the last 15 years were included. - The studies were from Germany, International, the United Kingdom, and the United States of America.	- Literature review using Rapid Evidence Assessment (REA) methodology.	Her Majesty's Prison and Probation Service (HMPPS) definition of self-harm was used: any act where a prisoner deliberately harms themselves irrespective of the method, intent or severity of any injury' in which no underlying assumptions of intent or motivation are made.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
- Self-stimulation. - Magical control. - Desolation. - Putative duality affect modulation. - Motivational factors associated with cutting were predominantly mood dysregulation, communications, and addictive qualities.	- Cutting (93%). - Head banging (78%). - Sticking oneself with sharp objects (71.4%). - Preventing wounds from healing (23%). - Severe scratching (22%). - Bit self (17%). - Burned self with cigarette (14%). - Burned self with match or lighter (13%). - Broke bones (9%). - Carved word into skin (5%). - Rubbed glass into skin (3%). - Dripped acid on skin (2%). - Rubbed sandpaper on skin (2%).15 of the 16 forms of non-suicidal self-injury were endorsed by at least one of the participants.		- 93% of the participants got medical attention or hospitalization due to non-suicidal self-injury behaviours.
The relationships between risk and protective factors for men who self-harm in prison included the following. Socio-demographic factors: - Age (younger men have a higher rate of self-harm than older men in prison, but older men (30+) who self-harm tend to do so in ways that result in more serious injury). - Ethnicity (self-harm rates are higher among white men). - Educational background (increased risk of self-harm among those lacking in formal education). - Relationship status (increased risk of self-harm among those who are single and/or have experienced a recent breakdown of relationship). - Accommodation (increased risk of self-harm among those who have no fixed abode). Custodial/prison-related factors: - People are at increased risk of self-harm in their early days in prison. - There are higher rates of self-harm in prisoners on remand or unsentenced and those serving a life sentence. - Higher rates of self-harm are seen in local prisons, high security prisons, and Young Offender Institutes. - There are higher rates of self-harm in prisoners who have a high number of disciplinary infractions. Psychological/psychiatric factors: - History of self-harm – having a history of self-harm is a good predictor of future self-harming behaviour both prior to and in custody. - Depression/hopelessness - Borderline personality disorder. - Substance misuse. Other factors: - A potential link between self-harm and violence/aggression. - Poor staff knowledge and attitudes play a role in influencing self-harm.		- A form of coping with emotional distress or as a result of emotional dysregulation. - Emerging evidence to support the separation of non-suicidal self-harm from suicide attempts/suicidal behaviours. - Evidence suggests differences in lethality/severity, method and intent should be considered in distinguishing and managing the risk and function of these behaviours.	- An absence of research on effective forms of treatment for men who self-harm in prison. - The strongest evidence showing a reduction in self-harming behaviour comes from Dialectical Behaviour Therapy developed for (female) patients with BPD. Treatment is directed at developing emotion regulation skills for coping with situations that trigger self-harm. - Good relationships between staff, and between staff and prisoners are important. Conflicts in responsibility over care planning and poor communication can leave both staff and prisoners feeling unsupported. The wider prison management system has an important role to encourage joint working and support and assist staff and prisoners dealing with self-harm. These problems could be addressed through staff training/peer support/safer custody leads/the Assessment, Care in Custody and Teamwork (ACCT) process and a range of information sharing strategies.

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
17. Power et al. (2015) United States of America	- 104 male offenders with an average age of 38.4 years (*SD* 10.0). The majority was White (65.7%; *n* = 67), followed by Aboriginal - (29.4%; *n* = 30), and Black (4.9%; *n* = 5). - Five medium and five maximum security institutions in each of the five geographical regions in Canada.	- Mixed method. - Semi-structured interviews. - Content analysis (qualitative and quantitative).	Defined as the intentional destruction of body tissue without suicidal intent and for purposes not socially sanctioned. This definition provides enhanced clarity over other terms such as self-injury or self-harm because it emphasizes the differentiation from suicide attempts.
18. Ramluggun (2013) United Kingdom	- Thirty-seven participants consisting of registered nurses and prison officers, including managers and the Governing Governor. - A Local Category B adult male prison (for prisoners requiring high levels of security) with a Type 3 healthcare centrer, which means that it offers 24-h in-patient care.	- Qualitative design. - Semi-structured interviews. - Thematic analysis.	Defined as individuals who purposely and consciously engage in harming themselves by employing different methods but where the intended outcome is non-fatal and the individuals understand the meaning and consequences of their actions.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
Motivations: - Coping (e.g., affect regulation). - Institution specific instrumental reasons (e.g., medications, attention from staff, transfer). - Non-institution-specific instrumental reasons (e.g., prevent partner from ending relationship). - Hurt self instead of others. - Anti-Dissociation. - Other reasons (e.g., self-punishment, boredom/game, alcohol and drugs). Precipitating events: - Segregation. - Interpersonal conflict. - Emotional episode (e.g., stressful events, prolonged anxiety). - Sentencing or Court-Related Events. - Other events (e.g., neglect, loss, abuse). Emotions prior to non-suicidal self-injury: - Anger or frustration. - Depression or sadness. - Anxiety or fear. - Stress. - Positive or unaffected. - Other (hopeless, lonely, isolated, defiant, empty, worthless, confused).	- Punching a wall. - Cutting. - Cutting throat. - Cutting tendon. - Slashing. - Slashing arm.	Emotions experienced after non-suicidal self-injury: - Relief. - Regret. - Same (no change). - Rush. - Other emotions (anger, frustration, disappointed, sad, worried, confused).	
Explanation of self-harm: - A manipulative act. - A cry for help. - A reaction to their situation. - A coping mechanism. - Intrapersonal factors (inability to adapt to prison life, getting attention). - Mental illness. - Behavioural problem.	Cutting with razor.		Building relationships: - Difficult to engage. Occupational Issues: - Pressured to err on the side of caution and sought to avoid blame. - More paperwork and less talking. - Blame culture. - Lack of training and understanding. - Negative attitudes. - Lack of formal staff support. Organizational issues: - Lack of communication and clarity of staff roles. Care Management: - Assessment Care in Custody and Teamwork (ACCT) document: designed to provide flexible and individualized care. Based on principles of case management. - Medicalization. - Normalization. - Self-harm minimization.

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
19. Russell et al. (2010) United Kingdom	- 4 men aged between 37 and 58, White and British. - Significant histories of self-harm (at least 5 years). - In close and regular contact with mental health services. - In heterosexual relationships.	- Qualitative design. - Two interviews with each participant. - Hermeneutic phenomenology.	Defined as a deliberate, self-initiated, and non-fatal act, carried out in the knowledge that it is potentially harmful and as the deliberate, direct destruction or alteration of body tissue without conscious suicidal intent.
20. Sakelliadis et al. (2010) Greece	- 173 male prisoners. - Chalkida prison, Greece.	- Quantitative design. - Self-administered questionnaire. - Univariate non-parametric statistics, logistic regression analyses.	Defined as direct self-harm acts without the intention to die.
21. Taşören (2017) Turkey	- 43 incarcerated males ages 18–23 years. - Istanbul prison.	- Quantitative design. - Self-reports of drug-use and self-harm. - Childhood Trauma Questionnaire. - State-Trait Anger Expression Inventory. - The Trail Making Test. - Backward stepwise binary logistic regression model.	Defined as injurious behaviour directed toward oneself without suicidal intention.
22. Veeder and Leo (2017) United States of America	- 173 case reports examined for injury subtype, psychiatric diagnoses and psychosocial factors. - International studies included from all over the world.	- Systematic literature review. - Chi-square analyses.	Defined as deliberate and direct physical self-injury including superficial or moderate tissue damage. - Major self-mutilation involving major trauma and tissue injury. - Genital self-mutilation is among the most dramatic examples. - Intentional genital self-mutilation constitutes catastrophic events that are often, but not solely, encountered within the context of severe mental illness.

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
- Dissociation or disconnection from reality. - Self-preservation. - Vulnerability-invulnerability. - Machismo. - Humiliation of abuse.	- Cutting. - Injecting lighter fluid. - Slashing. - Overdose. - Violence. - Drawing blood with syringe. - Running at cars.	- Pleasurable anticipation. - Good that never lasts. - A release. - Self-harm as normal. - A relief from something. - Self-harm as communication. - Self-preservation. - Self-sacrifice. - Self-medication.	- Dialectic Behaviour Therapy.
Self-injurious behaviour associated with: - Low education. - Physical/sexual abuse in childhood. - Parental neglect in childhood. - Parental divorce. - Alcoholism in family. - Psychiatric condition in family. - Recidivism. - Sentence already served. - Impulsivity. - Aggression. - Alcohol dependence. - Self-reported diagnosed psychiatric condition. - Illicit substance use. - Aggression.	- Hitting own head. - Wrist cutting. - Scratching oneself. - Interfering with wound healing. - Burning oneself.	- To obtain emotional release. - To release anger. - To spite their lover or parents. - Other (withdrawal syndrome, blackmail, fill a gap, undetermined).	
- 58% of the sample used drugs, and 60.5% showed self-harming behaviour. - Likelihood of using drugs was determined by executive function measured by the Trail Making Test form A, childhood abuse, anger and self-harm. - Self-harm was determined by childhood abuse, anger and drug use.	- Cutting oneself. - Hitting oneself. - Punching oneself and objects.		
- Schizophrenia spectrum 49%. - Substance use 18.5%. - Personality disorder 15.9% - Gender dysphoric disorder 15.3%.	- Genital mutilation ($n = 21$). - Penile amputation ($n = 62$). - Castration ($n = 56$). - Combined amputation/castration ($n = 34$).		

(Continues)

TABLE 1 (Continued)

Author(s), Year of publication, Country of origin	Population and sample size	Study design, data collection methods and data analysis	Definition of self-harm
23. Verdolini et al. (2017) Italy	- 526 male prisoners. - Aged 18+ years. - Spoleto Prison, Umbria Italy.	- Cross-sectional - Study. - Current and lifetime psychiatric diagnoses were assessed with Structured Clinical Interview for DSM-IV - Addiction Severity Index. - Multivariable logistic regression models to identify independent correlates of lifetime deliberate self-harm.	Defined as the deliberate, voluntary and not accidental, direct destruction or alteration of body tissue without conscious suicidal intent.
24. Vernham et al. (2016) United Kingdom	- 204 high-secure forensic inpatients. - One high-security hospital.	- A retrospective quasi-experimental and correlational study design. - Recorded incident data at 12-, 24-, and 48- months following baseline assessment using Chart of Interpersonal Reactions in Closed Living Environment assessments. - Descriptive statistics. (means comparisons, correlations and receiver operating characteristics).	Not defined.

2018; Morales & Guarnero, 2014; Sakelliadis et al., 2010) or object insertion into chest and/or penis (Bennet & Moss, 2013). Carved words or pictures into skin (Claes et al., 2012; Green et al., 2018; Morales & Guarnero, 2014). Broke bones, dripped acid on skin, rubbed sandpaper and glass into skin (Morales & Guarnero, 2014), and pinching (Bresin & Schoenleber, 2015).

4.2.5 | Riskful behaviour

Men's bodily self-harm can even take the form of riskful behaviour, e.g., running at cars (Russell et al., 2010) or jumping from heights (Adamson & Braham, 2011).

4.3 | Men's experiences of self-harm

Men's experiences of self-harm are diverse, and self-harm can be experienced as something positive but also more difficult. Through self-harm men can experience a sense of relief (Adamson & Brahman, 2011; Bennet & Moss, 2013; Power et al., 2015; Russell et al., 2010; Sakelliadis et al., 2010), regret or a rush (Power et al., 2015). Men can experience self-harm as normal behaviour or a way to communicate (Bennet & Moss, 2013; Russell et al., 2010; Sakelliadis et al., 2010). Men also can experience a sense of anger, frustration, disappointment, sadness, worry, confusion (Power et al., 2015; Sakelliadis et al., 2010), self-sacrifice or self-hate (Adamson & Braham, 2011; Bennet & Moss, 2013) as a trigger for self-harm. Men can experience self-harm as a form of self-medication, self-preservation (Russell et al., 2010), self-punishment (Bennet & Moss, 2013; Gardner et al., 2016; Morales & Guarnero, 2014) or a response to mental health problems (Adamson & Brahman, 2011).

4.4 | Therapeutic interventions and/or care approaches for men who self-harm

In the included studies, a wide range of therapeutic interventions and/or care approaches for men who self-harm were described.

4.4.1 | Therapeutic interventions

Few studies reported on therapeutic interventions for men who self-harm. One intervention reported on was Dialectical Behaviour Therapy, which was developed for female patients with borderline

Explanations of self-harm	Methods of self-harm	Experiences of self-harm	Therapeutic interventions and/or care approaches
- Ninety-three of 526 inmates (17.7%) reported at least one lifetime deliberate self-harm behaviour and 58/93 (62.4%) of those reported a deliberate self-harm act while in prison. - After multivariable adjustment deliberate self-harm was significantly associated with: Lifetime psychotic disorders. - Borderline personality disorder. - Affective disorders. - Misuse of multiple substances. - Borderline personality disorder and misuse of multiple substances are established risk factors of deliberate self-harm, but psychotic and affective disorders were also associated with deliberate self-harm in male prison inmates.			
- Dominant and coercive interpersonal styles were significant predictors of aggression. - A coercive interpersonal style was a significant predictor of self-harm. - When categorizing the inpatients on the basis of short- and long-term admissions, these findings were only replicated for inpatients with shorter lengths of stay.			

personality disorders and is considered to demonstrate the strongest evidence for a reduction in self-harming behaviour (Pope, 2018). Another intervention was computerized therapy for men, which entailed face-to-face therapy with a smartphone for 6–10 weeks (Mackie et al., 2017). Other interventions directed at men who self-harm were normalization, self-harm minimization (Ramluggun, 2013), medication (Marzano et al., 2015; Ramluggun, 2013) or anger management control (Evren et al., 2012).

4.4.2 | Care approaches

Poor knowledge and attitudes among healthcare professionals impacts care approaches to self-harm, and a lack of knowledge leaves some professionals feeling ill-equipped to care for men who bodily self-harm (Marzano et al., 2015). Men who self-harm can often encounter healthcare professionals who lack ability, understanding, resources and/or skills in treating self-harm (Marzano et al., 2015; Ramluggun, 2013). In one study, problem-solving therapy was combined with a customized smartphone app, with the finding that healthcare professionals must pay attention to the therapeutic relationship when technology is used, because trust and good communication can be easily impaired (Mackie et al., 2017). In another study, the Care in Custody and Teamwork programme was used but described by healthcare professionals as being open to abuse and a limited prescriptive tool (Ramluggun, 2013). Ninety-three percent of the men included in a third study did get medical attention or hospitalization due to their nonsuicidal self-injury behaviours (Morales & Guarnero, 2014).

5 | DISCUSSION

The aim of this scoping review was to synthesize the existing knowledge on men who self-harm, with a special emphasis on background, self-harming methods, experiences and reported therapeutic interventions and/or care approaches.

Various definitions of self-harm were seen in the included studies, e.g., nonsuicidal self-injury, deliberate self-harm, deliberate self-injury, self-mutilation, intentional self-mutilation, and self-injurious behaviour. Common to several of the terms used is that self-harm was considered to be intentional, direct and without suicidal intent. However, the way in which terms were used and defined could differ. For example, Adamson and Bremen (2011) defined deliberate self-harm in reference to attempted suicide, parasuicide and self-poisoning. Conversely, Kimbrel et al. (2014) defined deliberate

self-harm as lacking suicidal intent. The use of diverse and overlapping definitions of self-harm constitute a barrier for knowledge synthesis and the comparison of research.

From the included studies we saw that men's self-harm was understood as being related to mental disorders, a means of affect regulation, a loss of self-control, and a means of interpersonal communication. This would appear to reinforce that comorbidity among men who self-harm is a common phenomenon (cf. Green et al., 2018).

We saw in the included studies that there is a wide variety in the methods that men use to self-harm: sharp objects, injection, ingestion, without aids and riskful behaviour. As seen in the included studies, men primarily self-harm using different types of direct self-injury, e.g., cutting, injection, hitting or burning. Indirect forms of self-harm like sexual risk-taking behaviours, substance abuse or eating disorders were absent or rarely described. We also note that some of the papers excluded from this review for being case studies, reported on men who self-harmed using genital mutilation – a phenomenon rarely described in the included papers. Whitlock et al. (2011) showed that men report self-harm with greater severity than intended and are more likely to report suicidality than women who self-harm. Masculine gender socialization also seems to affect the methods men use to self-harm (Adler & Adler, 2011; Green & Jakupcak, 2015). It is possible that gender norms affect not only how men self-harm but also whether certain behaviours are recognized as self-harm or not. Given the importance of gender norms in relation to self-harm, it is surprising that self-harm was not described with regard to issues of gender identity or sexual orientation in any of the included studies. Green and Jakupcak (2015) concluded in their study that because men's self-damaging behaviours are informed by traditional male gender norms, men who self-harm may be overlooked by professionals and consequently inadequately represented in current definitions. Gender norms may also affect men's help-seeking behaviour. The pressure on men to be invulnerable and independent constrains their help-seeking behaviours and the provision of services for men who self-harm (Inckle, 2014).

As seen in the studies included in this review, there appears to be a strong tendency toward framing men's self-harm as a medical or behavioural disorder. Nonetheless, it is important to acknowledge other perspectives as well. Our findings describing men's experiences of self-harm offers some insights into the complexity of the rationale of male self-harm, as they put forth both desirable and positive effects of self-harm as well as the possibility to understand self-harm as a normal means of communication or as self-preservation. These findings are in line with other research describing how self-harm might be understood as a coping strategy (Pope, 2018; Power et al., 2015; Ramluggun, 2013) or a socially and culturally conditioned phenomenon (Gardner et al., 2016). We believe a more complex understanding of male self-harm carries important implications as it highlights the necessity to also consider recovery in self-harm from multiple perspectives. Challenging the bio-medical clinical recovery model, the concept of personal mental health recovery emphasises an understanding of recovery as a complex, indidvualised process involving the development of connectedness, hope, identity, meaning, and empowerment (Leamy et al., 2011; Slade et al., 2012). Thus, clinicians and researchers should be aware that cessation of self-harm is not necessarily the primary focus of recovery for people who self-harm, nor is the act of self-harm necessarily a primary cause of suffering.

Few studies reported on therapeutic interventions and/or care approaches for men who self-harm. One possible explanation for this might be that a substantial proportion (nine out of 24) of the papers included in this review employed a focus on men and self-harm in the context of prison settings. This might be due to prisons being custodial rather than caring institutions. The considerable number of studies set in a prison context is not surprising. Rates of self-harm among prisoners are much higher than in the general population (Dixon Gordon et al., 2012) and women only make up 7% of the global prison population (Walmsley, 2017). In most countries, there are no specific policies or procedures to address the needs of men who self-harm in prisons, who often self-harm repeatedly and with no suicidal intent. There is a rather limited evidence base to suggest what the needs of such men may actually be (Marzano et al., 2016). Considering the complexity of male self-harm reflected in our findings, the future development of therapeutic interventions and/or care approaches might benefit from addressing both clinical and personal aspects of recovery.

In addition to the lack of knowledge on therapeutic interventions and care approaches, we saw a lack of geographical diversity in the studies included in this review; 17 of the 24 included studies were from the United States of America or the United Kingdom. However, we note an increase in studies on men who self-harm during the last few years, which may possibly indicate increasing research interest on the topic.

5.1 | Strengths and limitations

A five-step scoping review design based on a methodological framework by Arksey and O'Malley (2005) and further enhanced by Levac et al. (2010) and the methodology for Scoping Reviews (The Joanna Briggs Institute, 2015) was followed. A strength is that the rigour of this study was enhanced when the review protocol was developed before undertaking the scoping review (The Joanna Briggs Institute, 2015). Also, during the electronic database search, several synonyms for self-harm and men/male were used to give the search depth. The searches were conducted in CINAHL, MEDLINE and PsycINFO and performed by a special librarian. We even conducted a general Internet search (Google/Google Scholar, websites, Twitter) and a manual search of key journals' reference lists to identify grey literature.

This review may have been limited by the decision to exclude papers for which no English, Norwegian or Swedish language version existed. Initially, we sought studies including men who self-harm in a clinical setting. It may be a limit that we did not investigate other contexts. Men who self-harm is a complex phenomenon and can be understood in relation to drugs, mental illness, men's social behaviour and more, but as seen in this review more research is needed.

5.2 | Implications for future research

We sought to synthesize the existing knowledge on men who self-harm, with a special emphasis on background, self-harming methods, experiences and reported therapeutic interventions and/or care approaches. We found a lack of research in which a recovery perspective on men's self-harm was included, where men's empowerment is in focus. To develop intervention research, it is important to understand recovery from men's point of view. How do men understand their background, why do they self-harm and what can empower them? Do they at all understand self-harm as being a problem? Often men who self-harm do not seek professional help, but it is essential that intervention developers collaborate with men who have lived experience of self-harm. Men's socialization into groups might provide an understanding self-harm in relation to a gender perspective.

There is a lack of research on interventions supporting men who self-harm. Further research is needed both concerning men who self-harm in general populations and specific clinical and institutional populations. Future research should also encompass men's indirect forms of self-harm, e.g., sexual risk-taking behaviours, substance abuse, eating disorders.

6 | CONCLUSION

While research on men and self-harm remains limited and contradictory, this scoping review provides some knowledge on men who self-harm, as well as directions for future research. Men's self-harm should be understood as a complex, socially and culturally conditioned phenomenon and studied from a multitude of perspectives. The findings of this review can inform healthcare professionals' education and practice. To empower men and support their recovery from self-harm, a person-centred approach should be incorporated into research on the subject and practice. It is important that more is understood about the specific needs of men in prison and other vulnerable populations. It is reasonable to believe that many men who self-harm refrain from seeking help, therefore a focus on the needs and experiences of men in the general population should be included in future research.

CONFLICT OF INTEREST

None.

AUTHOR CONTRIBUTIONS

Randi Tofthagen, Sebastian Gabrielsson, Lisbeth Fagerström and Bitt-Marie Lindgren made substantial contributions to conception and design, or acquisition of data, or analysis of data. All authors were involved in drafting the manuscript or revising it critically for important intellectual content. All authors gave final approval of the version to be published, and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

DATA AVAILABILITY STATEMENT

Data is available upon request.

ORCID

Randi Tofthagen https://orcid.org/0000-0002-9844-7585
Sebastian Gabrielsson https://orcid.org/0000-0002-1624-1795
Lisbeth Fagerström https://orcid.org/0000-0002-9932-3592
Bitt-Marie Lindgren https://orcid.org/0000-0002-3360-5589

REFERENCES

*References included in this scoping review.

*Adamson, V., & Braham, L. (2011). Pathways to episodes of deliberate self-harm experienced by mentally ill men in a high-secure hospital over the course of their lives: An exploratory study. *The British Journal of Forensic Practice*, *13*(3), 169–182. https://doi.org/10.1108/14636641111157814

Adler, P. A., & Adler, P. (2011). *The tender cut: Inside the hidden world of self-injury*. NYU Press.

*Andover, M. S., Primack, J. M., Brandon, E. G., & Pepper, C. M. (2010). An examination of nonsuicidal self-injury in men: Do men differ from women in basic NSSI characteristics? *Archives of Suicide Research*, *14*(1), 79–88. https://doi.org/10.1080/13811110903479086

Arkins, B., Tyrrell, M., Herlihy, E., Crowley, B., & Lynch, R. (2013). Assessing the reasons for deliberate self- harm in young people: Brigid Arkins and colleagues describe the risk factors common to individuals who attended an emergency department in Ireland. *Mental Health Practice*, *16*(7), 28–32. https://doi.org/10.7748/mhp2013.04.16.7.28.e804

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Sociological Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

*Bennet, A. L., & Moss, M. (2013). Functions of deliberate self-injury of personality disordered prisoners: A small scale study. *Journal of Forensic Practice*, *15*(3), 171–181. https://doi.org/10.1108/JFP-08-2012-0003

*Bresin, K., & Schoenleber, M. (2015). Gender differences in the prevalence of nonsuicidal self-injury: A meta-analysis. *Clinical Psychology Review*, *38*, 55–64. https://doi.org/10.1016/j.cpr.2015.02.009

Carli, V., Jovanović, N., Podlešek, A., Roy, A., Rihmer, Z., Maggi, S., Marusic, D., Cesaro, C., Marusic, A., & Sarchiapone, M. (2010). The role of impulsivity in self-mutilators, suicide ideators and suicide attempters—A study of 1265 male incarcerated individuals. *Journal of Affective Disorders*, *123*(1–3), 116–122. https://doi.org/10.1016/j.jad.2010.02.119

*Claes, L., Jiménez-Murcia, S., Agüera, Z., Castro, R., Sánchez, I., Menchón, J. M., & Fernández-Aranda, F. (2012). Male eating disorder patients with and without non-suicidal self-injury: A comparison of psychopathological and personality features. *European Eating Disorders Review*, *20*(4), 335–338. https://doi.org/10.1002/erv.1161

Claes, L., Vandereycken, W., & Vertommen, H. (2007). Self-injury in female versus male psychiatric patients: A comparison of characteristics, psychopathology and aggression regulation. *Personality and Individual Differences*, *42*, 611–621. https://doi.org/10.1016/j.paid.2006.07.021

Clements, C., Hawton, K., Geulayov, G., Waters, K., Ness, J., Rehman, M., Townsend, E., Appleby, L., & Kapur, N. (2019). Self-harm in midlife: Analysis using data from the multicentre study of self-harm in England. *The British Journal of Psychiatry*, *215*(4), 600–607. https://doi.org/10.1192/bjp.2019.90

Dixon-Gordon, K., Harrison, N., & Roesch, R. (2012). Non-suicidal self-injury within offender populations: A systematic review. *International Journal of Forensic Mental Health*, *11*(1), 33–50. https://doi.org/10.1080/14999013.2012.667513

*Evren, C., Cınar, O., Evren, B., & Celik, S. (2012). Self-mutilative behaviors in male substance-dependent inpatients and relationship with anger and aggression: Mediator effect of childhood trauma. *Comprehensive Psychiatry*, *53*(3), 252–258. https://doi.org/10.1016/j.comppsych.2011.04.061

*Gardner, K. J., Dodsworth, J., & Klonsky, D. E. (2016). Reasons for non-suicidal self-harm in adult male offenders with and without borderline personality traits. *Archives of Suicide Research*, *20*(4), 614–634. https://doi.org/10.1080/13811118.2016.1158683

Gillies, D., Christou, A. A., Dixon, A. C., Featherston, O. J., Rapti, I., Garcia-Anguita, A., Villasis-Keever, M., Reebye, P., Christou, E., Al Kabir, N., & Christou, P. A. (2018). Prevalence and characteristics of self-harm in adolescents: Meta-analyses of community-based studies 1990–2015. *Journal of the American Academy of Child & Adolescent Psychiatry*, *57*(10), 733–741. https://doi.org/10.1016/j.aac.2018.06.018

Green, J. D., & Jakupcak, M. (2015). Masculinity and men's self-harm behaviors: Implications for non-suicidal self-injury disorder. *Psychology of Men & Masculinity*, *17*(2), 147–155. https://doi.org/10.1037/a0039691

*Green, J. D., Keams, J. C., Ledoux, A. M., Addis, M. E., & Marx, B. P. (2018). The association between masculinity and nonsuicidal self-injury. *American Journal of Men's Health*, *12*, 30–40. https://doi.org/10.1177/1557988315624508

Hartberg, S., & Hegna, N. (2013). Hør på meg [Listen to me]. Ungdomsundersøkelsen i Stavanger 2013. Norsk institutt for forskning om oppvekst, velferd og aldring, NOVA Rapport 2/2014.

Hawton, K., & Harris, L. (2008). The changing gender ratio in occurrence of deliberate self-harm across the lifecycle. *Crises*, *29*, 4–10. https://doi.org/10.1027/0227-5910.29.1.4

Hicks, K. M., & Hinck, S. M. (2008). Concept analysis of self-mutilation. *Journal of Advanced Nursing*, *64*, 408–413. https://doi.org/10.1111/j.1365-2648.2008.04822.x

Inckle, K. (2014). Strong and silent: Men, masculinity, and self-injury. *Men and Masculinities*, *17*(1), 3–21. https://doi.org/10.1177/1097184X13516960

International Society for the Study of Self Injury. (2016). *Fast facts*. ISSS. https://itriples.org/category/about-self-injury/

*Kimbrel, N. A., Calhoun, P. S., & Beckham, J. C. (2017). Nonsuicidal self-injury in men: A serious problem that has been overlooked for too long. *World Psychiatry*, *16*(1), 108–109. https://doi.org/10.1002/wps.20358

*Kimbrel, N. A., Johnson, M. E., Clancy, C., Hertzberg, M., Collie, C., Van Voorhees, E. E., Dennis, M. F., Calhoun, P. S., & Beckham, J. C. (2014). Deliberate self-harm and suicidal ideation among male Iraq/Afghanistan-era veterans seeking treatment for PTSD. *Journal of Traumatic Stress*, *27*(4), 474–477. https://doi.org/10.1002/jts.21932

*Kimbrel, N. A., Wilson, L. C., Mitchell, J. T., Meyer, E. C., DeBeer, B. B., Silvia, P. J., Gratz, K. L., Calhoun, P. S., Beckham, J. C., & Morissettek, S. B. (2017). ADHD and nonsuicidal self-injury in male veterans with and without PTSD. *Psychiatry Research*, *252*, 161–163. https://doi.org/10.1016/j.psychres.2017.02.015

Klonsky, E. D. (2011). Non-suicidal self-injury in United States adults: Prevalence, sociodemographics, topography and functions. *Psychological Medicine*, *41*(9), 1981–1986. https://doi.org/10.1017/S0033291710002497

Landstedt, E., & Gillander Gådin, K. (2011). Deliberate self-harm and associated factors in 17-year-old Swedish students. *Scandinavian Journal of Public Health*, *39*(1), 17–25. https://doi.org/10.1177/1403494810382941

Leamy, M., Bird, V., Le Boutillier, C., Williams, J., & Slade, M. (2011). Conceptual framework for personal recovery in mental health: Systematic review and narrative synthesis. *The British Journal of Psychiatry*, *199*, 445–452. https://doi.org/10.1192/bjp.bp.110.083733

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, *5*, *69*. https://doi.org/10.1186/1748-5908-5-69

Lindgren, B.-M., Svedin, C.-G., & Werkö, S. (2018). A systematic literature review of experiences of professional care and support among people who self-harm. *Archives of Suicide Research*, *22*(2), 173–192. https://doi.org/10.1080/13811118.2017.1319309

Long, M., Manktelow, R., & Tracey, A. (2013). We are all in this together: Working towards a holistic understanding of self-harm. *Journal of Psychiatric and Mental Health Nursing*, *20*(2), 105–113. https://doi.org/10.1111/j.1365-2850.2012.01893.x

*Mackie, C., Dunn, N., Maclean, S., Testa, V., Heisel, M., & Hatcher, S. (2017). A qualitative study of a blended therapy using problem solving therapy with a customised smartphone app in men who present to hospital with intentional self-harm. *Evidence Based Mental Health*, *20*(4), 118–122. https://doi.org/10.1136/eb-2017-102764

Madge, N., Hewitt, A., Hawton, K., de Wilde, E. J., Corcoran, P., Fekete, S., van Heeringen, K., Leo, D. D., & Ystgaard, M. (2008). Deliberate self-harm within an international community sample of young people: Comparative findings from the Child & Adolescent Self-harm in Europe (CASE) Study. *Journal of Child Psychology and Psychiatry*, *49*(6), 667–677.

Marchetto, M. J. (2006). Repetitive skin-cutting: Parental bonding, personality and gender. *Psychology and Psychotherapy: Theory, Research and Practice*, *79*(3), 445–459. https://doi.org/10.1348/147608305X69795

*Marzano, L., Adler, J. R., & Ciclitira, K. (2015). Responding to repetitive, non-suicidal self-harm in an English male prison: Staff experiences, reactions, and concerns. *Legal and Criminological Psychology*, *20*(2), 241–254. https://doi.org/10.1111/lcrp.12025

Marzano, L., Ciclitira, K., & Adler, J. R. (2016). Non-suicidal self-harm amongst incarcerated men: A qualitative study. *Journal of Criminal Psychology*, *6*(4), 157–172. https://doi.org/10.1108/JCP-04-2016-0017

*Morales, Y. M., & Guarnero, P. A. (2014). Non-suicidal self-injury among adult males in a correctional setting. *Issues in Mental Health Nursing*, *35*(8), 628–634. https://doi.org/10.3109/01612840.2014.927943

Peters, M., Godfrey, C., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015). Guidance for conducting systematic scoping reviews. *International Journal of Evidence-Based Healthcare*, *13*(3), 141–146. https://doi.org/10.1097/XEB.0000000000000050

*Pope, L. (2018). *Self-harm by adult men in prison: A rapid evidence assessment (REA)*. HM Prison & Probation Service. Ministry of Justice Analytical Services.

*Power, J., Usher, A. M., & Beaudette, J. N. (2015). Non-suicidal self-injury in male offenders: Initiation, motivation emotions, and precipitating events. *The International Journal of Forensic Mental Health*, *14*(3), 147–160. https://doi.org/10.1080/14999013.2015.1073196

*Ramluggun, P. (2013). A critical exploration of the management of self-harm in a male custodial setting: Qualitative findings of a comparative analysis of prison staff views on self-harm. *Journal of Forensic Nursing*, *9*(1), 23–34. https://doi.org/10.1097/JFN.0b013e31827a5984

*Russell, G., Moss, D., & Miller, J. (2010). Appalling and appealing: A qualitative study of the character of men's self-harm. *Psychology & Psychotherapy: Theory, Research & Practice*, *83*(1), 91–109. https://doi.org/10.1348/147608309X466826

*Sakelliadis, E. I., Papadodima, S. A., Sergentanis, T. N., Giotakos, O., & Spiliopoulou, C. A. (2010). Self-injurious behavior among Greek male prisoners: Prevalence and risk factors. *European Psychiatry*, *25*(3), 151–158. https://doi.org/10.1016/j.eurpsy.2009.07.014

Slade, M., Leamy, M., Bacon, F., Janosik, M., Le Boutillier, C., Williams, J., & Bird, V. (2012). International differences in understanding

recovery: Systemic review. *Epidemiology and Psychiatric Sciences*, *21*, 353–364. https://doi.org/10.1017/S2045796012000133

Sornberger, M. J., Heath, N. L., Toste, J. R., & McLouth, R. (2012). Nonsuicidal self-injury and gender: Patterns of prevalence, methods, and locations among adolescents. *Suicide and Life-Threatening Behavior*, *42*(3), 266–278. https://doi.org/10.1111/j.1943-278X.2012.00088.x

Straiton, M., Roen, K., Dieserud, G., & Hjelmeland, H. (2013). Pushing the boundaries: Understanding self-harm in a non-clinical population. *Archives of Psychiatric Nursing*, *27*(2), 78–83. https://doi.org/10.1016/j.apnu.2012.10.008

Swannell, S. V., Martin, G. E., Page, A., Hasking, P., & St John, N. J. (2014). Prevalence of nonsuicidal self-injury in nonclinical samples: Systematic review, meta-analysis and meta-regression. *Suicide and Life-Threatening Behavior*, *44*(3), 273–303. https://doi.org/10.1111/sltb.12070

Taşören, A. B. (2017). Drug use and self-harming behavior among incarcerated men: Does childhood abuse, anger, and executive function make a difference? *Journal of Aggression, Maltreatment & Trauma*, *26*(9), 1006–1023. https://doi.org/10.1080/10926771.2017.1346028

The Joanna Briggs Institute. (2015). *Joanna Briggs Institute reviewer's manual: 2015 edition/supplement. Methodology for JBI scoping reviews*. Author.

Tofthagen, R., & Fagerström, L. (2010). Clarifying self-harm thorough evolutionary concept analysis. *Scandinavian Journal of Caring Sciences*, *24*(3), 610–619. https://doi.org/10.1111/j.1471-6712.2009.00749x

Tørmoen, A. J., Myhre, M. Ø., Walby, F. A., Grøholt, B., & Rossow, I. M. (2020). Change in prevalence of self-harm from 2002 to 2018 among Norwegian adolescents. *European Journal of Public Health*, *30*(4), 688–692. https://doi.org/10.1093/eurpub/ckaa042

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., … Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*(7), 467–473. https://doi.org/10.7326/m18-0850

*Veeder, T. A., & Leo, R. J. (2017). Male genital self-mutilation: A systematic review of psychiatric disorders and psychosocial factors. *General Hospital Psychiatry*, *44*, 43–50. https://doi.org/10.1016/j.genhosppsych.2016.09.003

*Verdolini, N., Murru, A., Attademo, L., Garinella, R., Pacchiarotti, I., del-Mar Bonnin, C., Samalin, L., Pauselli, L., Piselli, M., Tamantini, A., Quartesan, R., Carvalho, A. F., Vieta, E., & Tortorella, A. (2017). The aggressor at the mirror: Psychiatric correlates of deliberate self-harm in male prison inmates. *European Psychiatry*, *44*, 153–160. https://doi.org/10.1016/j.eurpsy.2017.04.002

*Vernham, Z., Tapp, J., & Moore, E. (2016). Observer ratings of interpersonal behavior as predictors of aggression and self-harm in a high-security sample of male forensic inpatients. *Journal of Interpersonal Violence*, *31*(9), 1597–1617. https://doi.org/10.1177/0886260515569060

Victor, S. E., Muehlenkamp, J. J., Hayes, N. A., Lengel, G. J., Styer, D. M., & Washburn, J. J. (2018). Characterizing gender differences in nonsuicidal self-injury: Evidence from a large clinical sample of adolescents and adults. *Comprehensive Psychiatry*, *82*, 53–60. https://doi.org/10.1016/j.comppsych.2018.01.009

Walmsley, R. (2017). *World female imprisonment list (fourth edition)*. https://www.prisonstudies.org/sites/default/files/resources/downloads/world_female_prison_4th_edn_v4_web.pdf

Whitlock, J., Muehlenkamp, J., Purington, A., Eckenrode, J., Barreira, P., Baral Abrams, G., Marchell, T., Kress, V., Girard, K., Chin, C., & Knox, K. (2011). Nonsuicidal self-injury in a college population: General trends and sex differences. *Journal of American College Health*, *59*(8), 691–698. https://doi.org/10.1080/07448481.2010.529626

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