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The Effect of Gender on Identification and Interpretation of Non-Suicidal Self-Injury

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Keywords
Gender · Non-suicidal self-injury · Self-harm

Abstract

Introduction: Reported rates of non-suicidal self-injury (NSSI) differ by gender but may be under-reported and under-recognised in men. People engaging in NSSI rarely seek professional help without encouragement, so others play a key role in its identification and potential intervention. The current research investigated others' interpretations of NSSI, examining whether gender affects the likelihood of NSSI identification and views of how common and acceptable NSSI is. ***Method:*** Participants (N = 429; 74.1% female, 23.3% male; please see below for further demographic information) responded to two vignettes describing a person self-injuring by punching a wall or by cutting themselves. The person's gender in each vignette was manipulated. Following each vignette, the participants rated the level to which they agreed the behaviour was common for the gender of the person described, as well as the level to which they agreed the behaviour was acceptable for the gender of the person described, on a 5-point Likert scale. Following both vignettes, participants were presented with a definition of NSSI and rated the level to which they agreed cutting and wall-punching were forms of NSSI on 5-point Likert scales. Independent-samples t tests and goodness of fit χ^2 tests were conducted as appropriate. ***Results:*** Participants were more likely to identify wall-punching as common for men and cutting as common for women. However, there was no significant difference in whether wall-punching was identified as NSSI or considered to be an acceptable behaviour, regardless of the gender of the person engaging in it. That is, although research suggests that men are far more likely to engage in wall-punching as a form of NSSI than women, participants did not recognise this. Overall, the results indicated a gender-dependent difference in how acceptable and common NSSI is thought to be, but no noticeable difference in identification of a behaviour as NSSI. Wall-punching, typically a form of NSSI engaged in by males, tended not to be identified as such. ***Conclusion:*** There is an effect of gender on how NSSI is interpreted, and it seems that men's NSSI is, and will continue to be, under-recognised. This has important implications for the treatment of men's NSSI, which is more likely to be seen as aggression and therefore deserving of punishment than an attempt at emotion regulation. © 2023 S. Karger AG, Basel

Introduction

Young people increasingly report deliberately injuring themselves, usually when struggling to cope with negative emotions [1, 2]. If there is no suicidal intent, this

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behaviour is known as non-suicidal self-injury (NSSI) – though there is an association between NSSI and suicidality. Perhaps the most common definition is "intentional destruction of one's own body tissue without suicidal intent and for purposes not socially sanctioned" [3]; definitions tend to focus on the behaviour (damage to the body) rather than the purpose. The reported rate of NSSI is generally much higher in women than it is in men, but it has been suggested that the reported prevalence estimates are inaccurate [4–6]. It is possible that men and women may engage in NSSI at similar rates, but that NSSI in men is under-reported and under-recognised by others because men tend to engage in behaviours which are not typically included in NSSI research.

NSSI has often been conceptualised as an issue that is predominantly the domain of young women, with cutting considered the most common form. As discussed by Patel and colleagues [7], punching objects has largely remained understudied due to many of the NSSI assessments being designed for women and adolescent girls who have historically engaged in other forms. However, punching objects seems to be a relatively common form of NSSI among young men [6, 8, 9]. The idea that NSSI is "not socially sanctioned" may also be problematic given that NSSI does appear to be more or less acceptable within some peer groups [10].

Much of the research in this area has focused on understanding why people deliberately hurt themselves. There is a well-documented link between negative emotional experiences and NSSI. It has been suggested that people may hurt themselves to alleviate uncomfortable negative emotions, to avoid experiencing negative emotions by focussing their attention on physical pain, as a form of self-directed punishment or anger, as an attempt to produce physical scars and communicate their emotional distress to other people, or to alleviate suicidal urges [10–13]. Taken together, these theories suggest that NSSI serves as a maladaptive coping strategy for some people who are experiencing negative emotions.

Studies examining the prevalence of NSSI in the general population have had varying results, with significant changes over time. Considerable heterogeneity in rates has been found, however [14]. A 2014 meta-analysis found NSSI prevalence was 17.2% among adolescents, 13.4% among young adults (typically defined as between the ages of 18 and 25 years), and 5.5% among adults [14], while a 2022 international systematic review found lifetime prevalence rates of 21% among adolescents [15]. Meanwhile, almost half of the first-year university student participants in a 2015 study reported that they had, at some point in their life, engaged in NSSI [2]. Recent studies of young people in New Zealand (the country in which the current research was conducted) found lifetime prevalence rates of 48.7% among secondary school students [1] and 69.4% among young adults, primarily university students [15]. These two studies used assessments that included a wide range of methods of NSSI, as well as the option of adding a free-text answer; this may account for the relatively high reported prevalence. It is also possible that the second study [15] overestimates prevalence as a convenience (self-selected) sample was used. The use of differing definitions, assessment items, and sampling methods is a known issue in the research on NSSI e.g., [14].

Several studies have investigated how NSSI prevalence differs between men and women, with women consistently reporting higher rates of NSSI than men [4, 17, 18]. However, some research has suggested that the reported rate of NSSI in men is an underestimate, and that the rate of NSSI is likely to be similar between men and women [5]. This raises questions as to why the reported rate of NSSI is so much higher in women than in men.

There are reported differences in the way men and women cope with negative emotions [19]. Women are more likely to focus their attention inwards, trying to alleviate negative emotions as quickly as possible, while men are more likely to try to avoid experiencing negative emotions by focussing their attention outward and engaging in impulsive and aggressive behaviour [20–22].

This pattern extends to how people engage in self-injury. Men are significantly more likely to report externalised behaviour such as punching walls, and women are more likely to report internalised behaviour such as cutting themselves [4, 5, 17, 18], although all behaviours occur across all genders to varying degrees.

It may be, then, that the NSSI methods used by men are being overlooked. Cutting is more likely to result in distinct, severe wounds that require medical attention than wall-punching [23]. When assessed, the wounds caused by wall-punching are less likely to meet diagnostic criteria for NSSI than those from cutting, and many clinical assessment measures do not include an item for punching walls or objects [23, 24]. Because wall-punching does not require any tools or planning, it can also appear to be less deliberate than cutting, and any resulting injury can be passed off as unintentional [25, 26]. Cutting is more likely to be seen as a deliberate attempt to communicate distress to others, while wall-punching is more likely to be seen as an impulsive act of aggression [27].

In addition to using different methods, men are less likely to view their NSSI behaviour as problematic and

less likely to seek help for mental health concerns [4, 17, 18, 23, 28, 29]. Men may feel pressure to appear stoical and conceal any sign of vulnerability [26]. Women are often provided with more social support when they ask for help, and people are more likely to consider it acceptable for women to self-disclose personal problems than men [30, 31]. These findings may explain why men self-report NSSI at a lower rate than women, but what remains less clear is why others identify NSSI in men at a lower rate.

When men are assessed for NSSI by clinicians, it appears to be less likely to be identified than it is in women. Men often have less clinically severe wounds than women [3, 4, 23]. However, this difference in identification is not necessarily solely due to a difference in NSSI behaviour. Men are also able to explain away wounds more easily than women, by attributing them to contact sport, physical labour, or a more active lifestyle [26]. All considered, it may be that even when men and women engage in the same form of NSSI, other people are less likely to identify it in men.

There are several reasons to expect that people will interpret NSSI behaviour differently in men and women. Gender stereotypes affect the way people attend to and interpret information about themselves and others [32]. Emotionality is more stereotypically associated with women than with men, and people interpret displays of emotion differently in men and women, attributing the same ambiguous emotional expression as anger in men but sadness in women [33–35]. People are more likely to consider the same outburst of emotion to be a rational response to external stressors in a man but a sign of an overly emotional personality in a woman [19, 36]. When presenting with similar antisocial behaviours, men are more likely to receive a diagnosis of conduct disorder, while women are more likely to be diagnosed with a mood disorder [37] and prescribed medications to treat these [38]. These findings support the seminal theory of "bad men and mad women [39]."

Another possibility is that people do not identify wall-punching as an act of NSSI in men because it resembles behaviour that is considered relatively normal for men. From a young age, men are encouraged to participate in socially acceptable displays of aggression such as contact sport or play-fighting [26]. Evidence suggests that outward acts of aggression are interpreted differently in men and women [25, 33, 39, 41, 42]. It has also been suggested that people expect men to act more aggressively than women, and an outward display of aggression is more likely to be considered abnormal in women [41, 43, 44]. A study of men's experiences with NSSI [26] found that when a man punches a wall with his fist, it is more likely to be identified as an act of aggression than an act of self-injury. Thus, it is expected that if a man injures his hand by punching a wall, it is more likely to be considered to be relatively acceptable behaviour, whereas if a woman injures her hand in the same way, it is more likely to be recognised as an inappropriate sign of distress and considered to be unacceptable behaviour.

Considered together, it could be that different behavioural expectations for men and women impact how likely observers are to think self-injury behaviour is acceptable and how likely it is to be identified as NSSI in a man or a woman. The majority of people who engage in NSSI have no contact with professional health services – especially if they are men [44–46]. Recent meta-analyses have found that between one-third and one-half of adolescents who self-injure do not seek help, and of those who do, most turn to friends and family for support [47–49]. Thus, observers' attitudes towards NSSI and the recognition of a behaviour as NSSI are important factors in the provision of support. The initial reactions of friends or family to disclosure impact help-seeking behaviour [50].

The aim of this study was to examine whether people's attitudes towards non-suicidal self-injurious behaviours are impacted by the gender of the person engaging in them. We investigated people's interpretations of NSSI behaviours in men and women. The purpose of this study was to examine the effect of gender on how observers rated the prevalence and acceptability of NSSI behaviours, and on how likely they were to identify the behaviour as NSSI. The primary reason for this research is to address the previously identified gap in knowledge regarding gender and observer attitudes towards NSSI. Based on prior literature, we expected that the gender of a person engaging in NSSI impacts the extent to which an observer is likely to consider the behaviour as acceptable. It is further hypothesised that the gender of a person engaging in NSSI impacts the extent to which an observer is likely to identify the behaviour as NSSI.

Materials and Methods

Recruitment

Participants comprised a convenience sample recruited through university intranet posts, social media posts, and posters distributed around a university campus.

Sample Demographics

Responses were gathered from 461 participants. After discarding incomplete responses, the final sample was comprised of 429 responses. Ninety participants recorded their age as 20 or younger

(21%); 166 participants recorded their age as 21–30 (38.7%); 86 participants recorded their age as 31–40 (20%); 59 participants recorded their age as 41–50 (13.8%); and 28 participants recorded their age as 51 or older (6.5%). Three-quarters of the participants identified as women (318; 74.12%); 100 participants identified as men (23.31%). Nine participants identified as gender diverse or other (2.56%); two participants declined to answer (0.45%). Most participants (82.28%) identified as Pākehā/New Zealand European/European; 40 participants identified as Māori (9.32%). All other groups comprised less than 5%. Participants were able to select more than one ethnic identification, though few did.

Procedure

Participants completed an online survey in their own time and from any location via the provided link. Participants were asked to read an information page outlining the study and indicate consent. Completion of the survey took approximately 15 min.

Measures

Participants were presented with two vignettes describing hypothetical situations in which a person experiences extreme stress and then self-injures; these are available as online supplementary material 1 (for all online suppl. material, see https://doi.org/10.1159/000531551). Vignette 1 described a person punching a wall, an externalising form of NSSI generally associated with males; vignette 2 described a person who had cut their forearm, an internalising behaviour generally associated with females. The gender of the person described in each vignette was manipulated, such that there were four possible versions in total. Participants were randomly presented with a version of vignette 1 featuring either a female or male name, followed by a version of vignette 2 featuring either a female or male name. The randomised versions were presented in equal proportion.

Following each vignette, the participant rated the behaviour described using two rating scales. The participants rated the level to which they agreed the behaviour described in each hypothetical vignette was common for the gender of the person described, as well as the level to which they agreed the behaviour was acceptable for the gender of the person described on a 5-point Likert scale (1 = strongly agree to 5 = strongly disagree). Following both vignettes, participants rated the level to which they identified each behaviour as NSSI using two rating scales. Participants were presented with a definition of NSSI: "NSSI is when someone deliberately hurts themselves without any intent of suicide. You may know this behaviour as self-harm", and rated the level to which they agreed cutting was a form of NSSI and the level to which they agreed wall-punching was a form of NSSI on a 5-point Likert scales (1 = strongly agree to 5 = strongly disagree).

The scales yielded a score for participants' perceived rating of prevalence, acceptability, and identification of the punching behaviour and of the cutting behaviour as NSSI for both males and females. Participants were also able to elaborate via open text fields in the survey. However, few meaningful elaborations were made – many were left blank or had "No," "Nothing to add," or similar comments added.

Statistical Analysis

Data were exported from Qualtrics to IBM SPSS (v25) and checked for invalid cases, which were subsequently discarded if they were incomplete. Independent-samples *t* tests were conducted to examine the effect of the independent variable "gender" on the dependent variables "acceptability" and "identification." A third independent-samples *t* test was conducted to examine the effect of gender on "prevalence." Goodness of fit χ^2 tests were conducted to explore the impact of "gender" on the response distributions for "prevalence", "acceptability", and "identification." Exploratory analyses were also conducted to determine if the gender of the participant influenced responses. Finally, a correlational analysis was conducted to examine relationships between responses for "prevalence," "acceptability," and "identification." All relevant assumptions were met.

Results

Our primary research question was as follows: are people's attitudes towards non-suicidal self-injurious behaviours impacted by the gender of the person engaging in them? We examined whether wall-punching and cutting were each considered common, acceptable, and recognised as a form of NSSI.

As shown in Figure 1, a significant difference was found in how acceptable wall-punching was rated to be for men (M = 1.57, SD = 0.88) and women (M = 1.79, SD = 1.00); M = −0.21, 95% CI: (−0.41, −0.02); $t(404) = -2.21$, $p = 0.028$. A significant difference was also found in the distribution of responses depending on the gender of the person described in the vignette. It was found that participants were more likely to disagree or strongly disagree that wall-punching was acceptable for men than for women X^2 (4, N = 406) = 10.50, p = 0.033. These results indicate that people think that wall-punching is a more acceptable behaviour for women than for men. No significant difference in whether wall-punching was rated as NSSI was found between men (M = 3.59, SD = 0.88) and women (M = 3.55, SD = 0.82); M = 0.43, 95% CI: (−0.19, 0.28); $t(405)$ = 0.36, p = 0.723. The distribution of responses to this question did not differ from the expected frequency X^2 (4, N = 407) = 7.32, p = 0.120. These results indicate that people are similarly likely to identify wall-punching as NSSI in men and women. Wall-punching was rated as more common for men (M = 2.66, SD = 1.26) than for women (M = 1.55, SD = 0.74). M: 1.10, 95% CI: (0.91, 1.30); $t(414) = -10.92$, p = <0.001, d = 1.11. The distribution of responses was significantly different depending on the gender of the person described in the vignette X^2 (4, N = 416) = 95.25, p = <0.001. The gender of the participant did not significantly impact these results, except in one regard: the acceptability of wall-punching: X^2 (4, N = 416) = 95.25, p = <0.001. However, when groups with fewer than five cases were removed, the results were no longer significant.

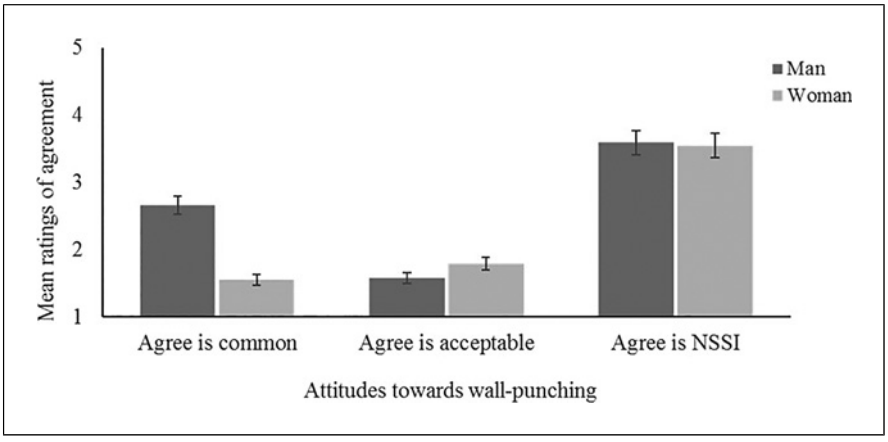

Fig. 1. Mean ratings of responses to vignette describing wall-punching behaviour. Dark grey bars represent the responses to vignettes featuring a man, and light grey bars represent the responses to a vignette featuring a woman. A rating of 5 represents strongly agree; a rating of 1 represents strongly disagree. Error bars represent 95% confidence intervals of means.

As shown in Figure 2, no significant difference was found in how acceptable cutting was rated to be for men (M = 1.42, SD = 0.77) and women (M = 1.45, SD = 089); M = −0.30, 95% CI: [−0.19, 0.13]; $t(416)$ = −0.37, p = 0.367. The responses to this question (X^2 [4, N = 418] = 2.88, p = 0.5780) indicate that people are similarly likely to disagree that cutting is an acceptable behaviour for men and women. No significant difference in whether cutting was rated as NSSI was found for men (M = 4.72, SD = 0.69) and women (M = 4.69, SD = 0.83). M = 0.38, 95% CI: (−0.11, 0.18); $t(422)$ = 0.21, p = 0.205. The distribution of responses to this question did not differ from the expected frequency, X^2 (4, N = 424) = 3.16, p = 0.532. These results indicate that people are similarly likely to identify cutting as NSSI in men and women. Cutting was rated as more common for women (M = 2.35, SD = 1.26) than for men (M = 2.00, SD = 0.91) M = −0.35, 95% CI: (−0.57, −0.14); $t(391)$ = −3.19, p = <0.001, d = 0.32. A χ^2 test showed that the gender of the person portrayed in the vignette significantly impacted responses (X^2 [4, n = 393] = 31.09, p = <0.001); however, the gender of the participant did not have an impact.

Taken together, these results suggest that people rate NSSI behaviours differently depending on the type of behaviour and the gender of the person engaging in the behaviour. We found significant differences in how common wall-punching was rated to be for men and women. There were also significant differences in how common cutting was rated to be for men and women. People were more likely to rate wall-punching as a common behaviour for men and more likely to rate cutting as a common behaviour for women; these results were not impacted by the gender of the participant.

As can be seen in Table 1, a significant weak positive interaction was found between participant responses to "prevalence" and responses to "acceptability" for wall-punching ($r(392)$ = 0.140, p = 0.005). A significant weak positive interaction was also found between participant responses to "acceptability" and responses to "identification" for wall-punching ($r(386)$ = −0.106, p = 0.037). As shown in Table 2, a significant weak positive interaction was found between participant responses to "prevalence" and responses to "acceptability" for cutting ($r(382)$ = 0.273, p < 0.001).

Discussion

Initially, we were interested in determining whether the gender of the person described in each vignette impacted how likely participants were to agree that cutting and punching were acceptable behaviours. We expected that participants would be more likely to rate wall-punching behaviour as acceptable for men. Next, we were interested in determining whether the gender of the person described in each vignette impacted how common participants were to agree that cutting and punching were common behaviours. Research has demonstrated that men and women tend to engage in different forms of NSSI, so we expected that there would be a difference between which of the behaviours described in our vignettes was considered common for men and which behaviour was considered common for women. Finally, we were interested in determining whether the gender of the person described in each vignette affected how likely participants were to identify wall-punching and cutting as NSSI.

This study indicates that there is a difference in how likely people are to think that certain behaviours are common and acceptable depending on gender, but no

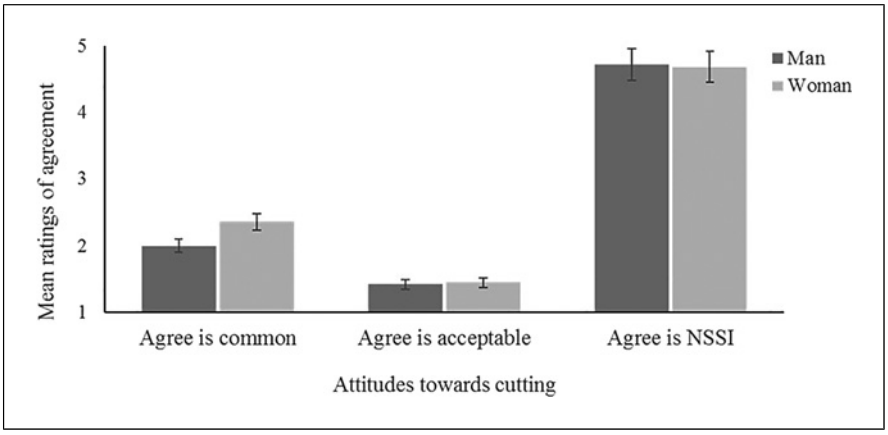

Fig. 2. Mean ratings of responses to vignette describing cutting behaviour. Dark grey bars represent the responses to vignettes featuring a man, and light grey bars represent the responses to a vignette featuring a woman. A rating of 5 represents strongly agree; a rating of 1 represents strongly disagree. Error bars represent 95% confidence intervals of means.

Table 1. Means, standard deviations, and correlations for ratings of wall-punching behaviour

Variable	M	SD	1	2	3
1. Prevalence	2.09	1.17	–		
2. Acceptability	2.68	0.98	0.140**	–	
3. Identification	3.56	1.22	0.028	−0.106*	–

*Correlation is significant at the 0.05 level (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).

Table 2. Means, standard deviations, and correlations for ratings of cutting behaviour

Variable	M	SD	1	2	3
1. Prevalence	3.82	1.11	–		
2. Acceptability	4.56	0.83	0.273**	–	
3. Identification	1.29	0.76	0.090	−0.37	–

**Correlation is significant at the 0.01 level (2-tailed).

noticeable difference in how likely people are to identify behaviour as NSSI. Thus, these results offer mixed support for our hypothesis. Based on prior findings that observers make different interpretations of behaviour in men and women, we made three specific predictions about patterns we expected to see in the results.

Our first prediction was that people would be more likely to agree that wall-punching was acceptable in men than in women. The results suggest that participants did not think that wall-punching was acceptable for men or women; indeed, the opposite was the case. These results may suggest that people think that wall-punching is a more acceptable form of self-injury for women than it is for men, but a more plausible explanation is that people interpreted the function of the behaviour differently according to gender. Although to date no research appears to have addressed observers' interpretations of wall-punching, it may be that wall-punching in men is attributed to a lack of anger management or interpreted as a threatening act. Research into the degree to which punching an object could or should be considered NSSI is relatively new [7]. As noted in the introduction, most measures of NSSI do not include wall (or object)-punching, though there are exceptions, such as the NSSI-Assessment Tool [9], and these exceptions suggest that this behaviour is the most common form of NSSI that young men engage in [8]. However, we are not able to determine how often such behaviour is NSSI rather than aggression, intimidation, and so forth. As mentioned above, participants were given the opportunity to elaborate via free-text boxes. Most participants added very little, if anything. However, text responses to the wall-punching vignette did appear to link the behaviour to anger, property destruction, or violence, with comments such as "he needs to learn better ways to control his anger." This interpretation aligns with research [23], which found that some men reported punching walls to communicate strength and avoid appearing weak while feeling emotionally vulnerable. There may also be a social reluctance to acknowledge vulnerability in men, which may have resulted in participants associating the wall-punching behaviour with violence and intimidation rather than with distress [24]. Wall-punching is often associated with family violence and is used by abusers to threaten and intimidate victims [44]. Therefore, it is also possible that in rating the behaviour as unacceptable, participants associated it with a display of anger and intimidation based on prior understandings of the

behaviour. Further, it is possible that these preconceived ideas of the behaviour may have more of an effect on how the behaviour is interpreted than the current context in which it occurs.

The research presented here challenges previous conclusions that behaviours resembling external physical aggression are likely to be considered more acceptable for men than women [5, 17]. The findings here suggest that wall-punching is not considered to be an acceptable response to emotion, regardless of the gender of the person engaging in it, but especially for men. It may also be reacted to punitively rather than as an indication of a need for emotional support. Future studies could investigate how the perceived acceptability of wall-punching is impacted by the prior understandings of the behaviour compared to the context in which it occurs.

Next, we hypothesised that participants would be much more likely to identify wall-punching as NSSI in women than in men. In fact, there was no significant difference in this regard. These results could suggest that people do recognise that wall-punching is a sign of distress in both men and women.

There was no difference in how likely cutting was to be identified as NSSI whether the person described was a man or a woman. These findings challenge prior suggestions that wounds from NSSI are more likely to be identified in women than in men [26]. It seems that participants identified the wounds described in the vignette as a sign of NSSI, and the gender of the person described did not affect this interpretation. As there was no difference by vignette gender, perhaps people make different interpretations of NSSI depending on the type of behaviour, rather than the gender of the person engaging in it. In addition, participants did not agree that the behaviour was acceptable for men or for women – and possibly is less acceptable than punching. This finding supports research by Nielsen and Townsend [50], who found that observers were less tolerant of NSSI when it was believed to be deliberate and within the person's control.

A final prediction in this study was that people would be more likely to identify wall-punching as common for men and cutting as common for women. The results in this study supported this. Our findings indicate that people are aware of the gendered nature of NSSI behaviour. While beyond the scope of the current study, future research may also investigate how a person's own gender impacts their view of NSSI behaviour in others.

Although people may identify particular behaviours as more common for men or for women, this does not translate into how acceptable they believe them to be or how likely they are to identify them as NSSI. This finding could indicate that the way people respond to NSSI does not depend on whether they understand the function of the behaviour. Though not made explicit in commonly used definitions, it is widely accepted that the primary purpose of NSSI is to regulate difficult emotions [51]. It could be argued that anger is just as much an emotion to be regulated as depression or anxiety.

Limitations

A potential limitation in the current study is the use of text vignettes to convey the context and behaviour of NSSI, in which the injury was obvious and attributed to emotional distress. This is often not the case in real life, in which NSSI is often a private act, and the function of the behaviour is not clearly communicated to others [3, 17, 19]. While this description is still a valid representation of NSSI, arguably it may not capture the nuanced context of NSSI that people are likely to observe in the real world. A potential extension to this project would be to include vignettes with vague representations of NSSI.

The order in which the vignettes were presented may have resulted in participants comparing the cutting behaviour to the wall-punching behaviour. Further research could benefit from a design that requires participants to respond to only one behaviour, reducing the likelihood of responses being primed by comparisons and allowing for analysis that compares responses to different NSSI behaviours.

Finally, the vast majority (74.1%) of participants were female. However, we controlled for the gender of participants and found that this did not significantly impact the results. In addition, most of the sample (60%) is aged under 30, and a large proportion of these are likely to be university students due to the recruitment methods. Therefore, the results of this study may not be generalisable (though New Zealand has relatively high rates of university attendance).

Conclusion

The research presented here is an initial exploration of how gender may impact interpretations of NSSI. This is important for practical reasons: few people who engage in NSSI actively seek help, especially from professionals. Therefore, friends and family potentially play an important support role, but this support seems likely to be impacted by gender biases.

Our findings indicate that gender may impact the way people interpret NSSI behaviour, but not in the way we expected. It may be that preconceived gender expectations impact how likely people are to think that the

behaviour is acceptable or to identify it as NSSI. It seems that when people observe ambiguous NSSI, such as wall-punching, they may make assumptions about its function based on gender expectations. It has been suggested that when men punch walls, it is a form of aggression and may be associated with intimidation and violence. Whereas, with women, the association appears to be different.

Our findings indicate that there is an effect of gender on how NSSI behaviour is interpreted, but that other factors may influence why certain behaviours are considered acceptable for men or women. In particular, it seems likely that men's NSSI is, and will continue to be, under-recognised.

An important focus for future research will be establishing the effect of gender on how people interpret NSSI when a behaviour is known to serve multiple functions. Future studies may investigate how preconceived understandings of behaviour influence how it is interpreted in different contexts.

Statement of Ethics

Ethical approval for this study was granted by the Human Research Ethics Committee at the University of Waikato (approval no. HREC2019#11). Participants were required to indicate informed consent before beginning the survey and were advised that they were able to withdraw consent by declining to complete the survey.

Conflict of Interest Statement

We wish to confirm that there are no known conflicts of interest associated with this publication, and there has been no significant financial support for this work that could have influenced its outcome.

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Author Contributions

Both authors developed the concept and study design. Cate Curtis advised on relevant extant literature and methodological considerations, assisted with the preparation of the research materials and ethics review process, advised on analysis, edited the manuscript and related materials, and oversaw the research overall. Michaela Terry prepared first drafts of all materials and conducted analyses.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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