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RUNNING TITLE: STAFF BELIEFS AND SELF-INJURIOUS BEHAVIOUR IN SECURE
CARE

Staff beliefs towards self-injurious behaviour in patients: A study of secure services

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Abstract

Staff beliefs towards patient self-harm in secure forensic services are explored, capturing forensic nurses and other clinical staff from four secure units from one NHS Trust, comprising high through to low and forensic learning disability. One hundred and fifty-five respondents took part (overall completion rate 61%). The Theory-driven Measure of Self-Injurious Behaviour and the Suicide Competency Assessment Form were completed. It was predicted that higher competency and increased levels of training would associate with beliefs towards patient self-harm. Beliefs differed in accordance to location; perceiving self-injurious behaviour as planned and within patient control was endorsed more in high security settings, by forensic nurses, with nurses in high security also more likely to endorse the perception that patients engaging in such behaviour were able to cope and felt valued. Competence and training experience were identified as factors of relevance. The study offers suggestions for future research, including a focus on capturing the environment, exploring 'endorsed beliefs' as opposed to 'negative attitudes', and proposing the concept of 'professional exposure to self-harm' as an important variable.

KEY WORDS: self injurious behaviour; self-harm; secure patients; staff beliefs; competence

Staff beliefs towards patient self-injurious behaviour in female and male patients: A study of secure services

The link between self-injurious behaviour and suicide and mental health is well recognised (Masden et al, 2017), with completed suicides identified particularly for those connected to psychiatric services in hospital (Williams et al, 2018) and those who are detained (Zhong et al, 2021). Galappathie et al (2018), for example, reported more frequent episodes of self-harm among forensic patients detained in a secure hospital than civil patients, with Leonard et al (2020) reporting that 30% of their sample of secure forensic patients (17% of those with a severe mental illness and 47% for those with a personality disorder), who were returned to prison, engaged in self-injurious behaviour. An important area to consider when discussing self-harm are the beliefs held by those caring for patients. Most research focuses on negative or positive attitudes, with these generally described as negative, comprising of staff considering self-harm as time wasting and manipulative (Ramluggen, 2013). More recently, there is recognition that focusing on attitudes through training and reflection can develop professional skill sets for nursing, with a focus on the development of therapeutic optimism particularly important (Barnfield et al, 2018).

Regarding patients detained in secure mental health settings; reported attitudes towards self-injurious behaviour have been mixed. Gough and Hawkins (2000), for example, found staff held *both* positive and negative attitudes, which were not moderated by sex, age or profession. They suggest, instead, that attitudes might be based on personal factors, such as punitiveness. In a later study, Sandy and Shaw (2012) interviewed mental health nurses from a secure service; these patients were labelled as attention seekers and time wasters, undeserving of support and would receive restrictive punishments. In contrast, Tapola et al. (2016) explored attitudes in non-secure based psychiatric clinic staff that attended suicide and self-harm training. Attitudes were described as neutral and increased in positivity after training, suggesting that training could have an impact. However, those who frequently encountered self-harm had more negative

attitudes, and it was suggested that this was attributed to staff increasingly experiencing frustration at being unable to help.

Evidence from patients also indicates their self-harm is not an attempt to manipulate or seek attention but instead to cope with negative emotions (Claes et al, 2010) and informed by a range of additional factors. This has not been captured when exploring staff attitudes, with such investigations not been commonly informed by theoretical understandings of why patients self-harm or how beliefs may relate to factors such as staff role (e.g. nursing staff versus other clinical staff) or the environment (e.g. location of practice). This also links to another area of related interest, namely staff training in patient self-harm and how competent/confident they feel in responding to such behaviour.

It has been suggested that training can reduce negative beliefs towards self-harm (e.g. Wheatley & Austin-Payne, 2009; Barnfield et al, 2018), with increased training leading to more staff confidence, competence, and more positive attitudes towards self-harm (Wheatley & Austin-Payne, 2009; Kool et al, 2014). In contrast, Chan et al (2009), in an evaluation of their training course to nursing staff, found that although there was an immediate increase in competency and positive attitudes, this effect declined over the following six months. Competency is arguably an important variable to account for. It is multifactorial, comprising of attitudes, knowledge, and skills, all of which are required to provide optimal care (Notarnicola et al., 2016). It is intertwined with confidence, with an increase in one potentially leading to an increase in the other, with a lack of confidence in working with patients who self-harm argued to result in negative attitudes (Gough & Hawkins, 2000).

How theory can contribute

Social Identity Theory (Tajfel & Turner, 1979) can offer some understanding of an apparent polarisation in held beliefs, through its core concept of out-group and in-group membership. Staff members could view patients as the 'out group' and staff as the 'in group'. If the out-group's behaviour evokes a strong emotional reaction, such as anger, this can result in a negative attitude being formed (Smith, 1993). Working with individuals who self-harm can

certainly evoke emotional reactions in staff, such as frustration (Conlon & O'Tuathail, 2012), particularly when professionals are repeatedly exposed (Tapola et al, 2016). Once the 'out-group' (patient) behaviour evokes negative emotions, this can arguably result in negative beliefs forming in the 'in group'. This could include failure to providing appropriate care and judging patients negatively (Sandy & Shaw, 2012)

Attention can also be drawn to Ajzen's *Theory of Planned Behaviour* (TPB; Ajzen, 1991), a model for predicting behaviour, where behavioural intent is considered crucial and comprises the motivation to perform a specific behaviour. However, for intent to arise, *perceived behavioural control*, *subjective norm*, and *attitudes* must be met. Perceived behavioural control influences the strength of intent. This can be based on previous experience with the same behaviour. Subjective norm represents how an individual perceives society's acceptance of the behaviour, with attitudes being either negative or positive. These three factors can strengthen or weaken intent, which can then lead to behaviour (Ajzen, 1991, 2011). TBP focuses on individual factors, however, and there are competing theories that extend to capture a role for the environment. This includes, for example, the *Interpersonal Psychological Theory of Suicidal Behaviour* (IPTSB; Joiner, 2005). This theory states that perceiving oneself as a burden to others can lead to a desire for death. However, for an individual to act on this, they must be capable of performing the act. Repeated exposure to fearful or painful experiences, such as self-harm, can increase capacity for the behaviour. Low self-perceived value and high burdensomeness are also well-recognised predictors. The IPTSB states that suicide will not occur unless the individual has the desire *and* ability to end their life. If an individual experiences perceived burdensomeness and low belongingness, suicidal ideation might develop (Batterham et al., 2018; Joiner et al., 2009), with the most significant predictor increasingly felt to be that of burdensomeness (Chu et al., 2017; Duffy et al, 2020).

These latter theories have had some application to staff beliefs regarding self-injurious behaviour in secure samples. Caton et al (2021), using a Theory-driven Measure of Self-Injurious Behaviour, which encompassed items from the TPB (intent) and the IPTSB (capacity

and burdensomeness), noted that patients emphasised capacity as a reinforcing factor for self-harm. Staff, however, reported that patients were in control of their actions and intended to self-harm, with this view more prevalent for female staff. Patients did not consider control to be important, with this suggesting that self-harm for patients could be an impulsive act used to regulate emotion. Staff also perceived burdensomeness differently than patients, with staff including coping, and patients focusing on affect.

The current study

Beliefs towards patient self-harm will be explored, with attention to the Theory of Planned Behaviour (TPB) and Interpersonal Psychological Theory of Suicidal Behaviour (IPTSP). This is achieved by exploring staff beliefs across secure services and examining a potential role for training and perceptions of competence. Perceived competency and acquired training regarding patient self-harm were predicted to associate with views towards self-harm (Gough & Hawkins, 2000; Kool et al., 2014).

Method

Respondents

Respondents were staff members working in four secure units in the NHS, from a single NHS Trust. The units captured high secure (N = 1), medium and low (N = 2) and Learning Disability (N = 1). Forty-five percent were forensic nurses and 52 percent listed as 'other clinical staff'. The remainder did not identify their designation. Respondent age ranged from 21 to 65+ years, with the median 21- 25 years. The final sample comprised 155 respondents (51 men, 99 women, two other, and three who did not report their sex). Across services, 64.5% were primarily based in high secure services, 16.8 percent in medium and low secure, and 18.7 percent in secure Learning Disability services. The overall survey completion rate was 61%: n = 155 out of 254). High secure services were given hard copies to complete, with a response rate of 54.5% (n = 67 completed out of n = 123). For the remaining units, 67.1% completed the online measures, once commenced (n = 88 out of 131 who accessed the link).

Measures

Theory Driven Measure of Self-Injurious Behaviour - Staff Version (TM-SIB-SV; Caton et al., 2021), consisting of 14 statements taken from the principles of TPB and IPTSB. It comprises three factors; *Intent to self-injure* (e.g. ‘patients intend to injure themselves’); *Coping and not feeling a burden* (e.g. ‘patients feel part of a valued group’); *Raised capacity for self harm* (e.g. ‘For patients, injuring themselves is easier after the first time they injury themselves’). Items were rated on a 7-point Likert scale, with α ranging from .63 - .69² (Caton et al, 2021).

The Suicide Competency Assessment Form (SCAF; Cramer et al, 2013) was used, which assesses perceived competence in patient suicidal behaviour. It consists of 10 main competencies, totalled to produce an overall rating of competency. Example competencies included, ‘being able to determine the level of risk’ and ‘knowing and managing their attitudes and reactions toward suicide’. Competencies were rated on a 4-point scale, ranging from incapable to advanced. Respondents also rated their overall total competency on a scale of 1 to 8 (unacceptable to advanced). The measure has shown good internal reliability ($\alpha=.88$; Cramer et al, 2019).

Procedure

Ethical approval was obtained from Maastricht University, with service approval by the NHS Trust. Staff members were invited to complete an online or hardcopy version of the questionnaires, depending on preference and access. The high secure unit preferred hard copy as accessing online was not pragmatic. Copies were taken to the wards for completion by the researcher (LS), with a bank envelope to return. Online was utilised for the remaining units and advertised to staff via the intranet systems. Prior to commencement, respondents were informed about the aims and objectives of the study, confidentiality and the withdrawal procedure. A debrief sheet was provided upon completion.

²Considered good considering the small number of items within each factor.

Results

Data analysis

Analysis was preceded by data-screening and checks for appropriateness of tests. No multivariate outliers were detected using Mahalanobis distance. Only two extreme univariate outliers were identified and these were transformed to make them less extreme. Appropriate assumptions were tested (i.e. equal variances and linearity), demonstrating parametric tests could be applied, accounting further for the sample size (e.g. central limit theorem).

The analysis commences with examination of differences in perceptions towards patients, accounting for job title and work location. It captures perceptions towards male patients first, followed by female patients. For this analysis a MANCOVA was applied in relation to each component of the TM-SIB-SV since they comprise elements of perception. Respondent sex and experience of working with men/women patients were held as covariates, with follow up univariate tests using Wilks' Lambda applied. Results then proceeded to examine a role for competence in patient suicidal behaviour, using the SCAF, and how this presented across job title and work location. Two ANCOVAs were applied owing to the correlation between the competence variables, to avoid multicollinearity.

The results will then consider all core variables together (e.g. TM-SIB-SV, SCAF) to determine evidence for predictors for self-injurious behaviour perceptions. This is preceded by associations, examined using partial correlations and controlling again for respondent sex and experience of working with men/women patients. This proceeds to a determination of competence as a potential predictor of TM-SIB-SV variables, using Multiple Regression.

Perceptions towards self-injurious behaviour

The Theory Driven Self-Injurious Behaviour – Staff Version (TM-SIB-SV) and Suicide Competency Assessment Form (SCAF) are presented in Table 1.

<Insert Table 1 here>

In relation to perceptions towards male patients, there was a main effect in relation to job title (Roy's Largest Root = 0.08, $F(3, 133) = 3.69, p = .01$), and work location (Roy's

Largest Root = 0.09, $F(3, 134) = 4.12, p = .04$), with an interaction (Roy's Largest Root = 0.06, $F(3, 134) = 2.95, p = .03$). Follow up univariate tests indicated that 'other clinical staff' reported higher scores on the TM-SIB-SV factor 'Coping and not feeling a burden' in comparison to nursing staff ($F(1, 143) = 8.67, p = .004$), indicating their greater perception than nursing staff that such patients were able to cope and they felt valued. There was a significant difference across work location in relation to the TM-SIB-SV factor 'Intent to self-injure' ($F(2, 142) = 5.66, p = .004$), with high secure more likely to consider patients in control of/more planning of their self-injurious behaviour. The significant interaction between job title and work location was restricted to the TM-SIB-SV factor 'Coping and not feeling a burden' ($F(2, 142) = 4.42, p = .01$), where there was a difference across work location; nursing staff in High Secure were more likely to report this factor ($M = 11.86$ versus 9.36 Medium/Low secure, 9.66 Learning Disability Services), whereas for medium/low secure it was 'other clinical staff' who were more likely to endorse this ($M = 13.78$ versus 11.7 High Secure, 11.2 Learning Disability Services).

The analysis was repeated in relation to perceptions regarding female patients. There was a significant main effect in relation to work location (Roy's Largest Root = 0.06, $F(3, 131) = 2.71, p = .048$) and an interaction between job title and work location (Roy's Largest Root = 0.08, $F(3, 131) = 3.56, p = .01$). Follow up univariate tests indicated that the difference in relation to work location was restricted to the TM-SIB-SV factor 'Intent to self-injure' ($F(2, 139) = 3.56, p = .03$), where those in High Secure and Medium/Low were reporting higher scores on this than Learning Disability. The significant interaction between job title and work location was restricted to the TM-SIB-SV factor 'Coping and not feeling a burden' ($F(2, 139) = 4.99, p = .008$), where there was a difference across work location; nursing staff in High Secure were more likely to report this factor ($M = 12.67$ versus 10.36 Medium/Low secure, 10.33 Learning Disability Services), whereas for medium/low secure it was 'other clinical staff' who were more likely to endorse this ($M = 14.1$ versus 11.9 High Secure, 11.7 Learning Disability Services).

Competence

There was no significant difference in relation to SCAF reported competency ($F = .007ns$ for location and $F = .16ns$ for job title) or overall rating of competence ($F = .63ns$ for location and $F = .003ns$ for job title).

Associations across variables and competence as a predictor of TM-SIB-SV

Partial correlations across measures, controlling for respondent sex and experience of working with men/women patients, are presented in Table 2.

<Insert Table 2 here>

Significant correlations between the factors of the TM-SIB-SV were noted, although these were not large in magnitude, reaching moderate at most in relation to intent and coping. In addition, the factors were not correlated with perceived competence on the SCAF, overall perceived competence or the amount of training acquired. There was no correlation between training acquired and competence. A series of Multiple Regressions were then conducted to determine if perceived competence (SCAF total and overall rating of competence) predicted the factors of the TM-SIB-CV. None were significant (all F 's $\leq 1.31ns$). This held even if the sample was considered separately for nurses and 'other clinical staff' (all F 's $\leq 1.93ns$).

Discussion

When considering male patients, non-nursing staff were more likely than nursing staff to endorse beliefs that patients who self-harmed were able to cope and felt valued ('Coping and not feeling a burden'). However, in high secure this was reversed, with forensic nurses endorsing these beliefs more than other clinical staff. For female patients, the higher endorsement of these beliefs were also found among nursing staff in high security, suggesting that the environment was presenting as a factor of particular interest. Indeed, the specific location of work was clearly impacting on beliefs; staff in high secure were perceiving male patients to have greater intent to self-injure than lower secure and learning disability settings. Such staff thus held the view that patients engaging in self-injurious behavior were more in control and planning of their actions. This also extended to views regarding female patients,

although here it was *both* high secure and medium/low that endorsed these beliefs more than learning disability services. Consequently, there appears a general finding that nurses in higher secure settings were likely to consider patient intent as well formed, planned and within patient control, with this also extending to female patients for medium/lower secure services. Nurses in higher secure services were also more likely to consider patients, regardless of their presented sex, to be able to cope and feel valued, more so than other clinical staff, suggesting that they did not consider the concept of burdensomeness to apply (Joiner, 2005; Joiner et al, 2009; Duffy et al, 2020).

Staff perceived competency regarding dealing with and understanding patient self-injurious behaviour was not of relevance. This was inconsistent with the prediction that reported competency would associate with views towards self-harm (Kool et al., 2014). The lack of association also extended to training experience. This did not support the prediction regarding a role for training and was inconsistent with previous research, which demonstrated that training did impact on attitudes (Gough & Hawkins, 2000; Tapola et al., 2016). Indeed, the level of training reported had no correlation with competence, which is also inconsistent with previous research (e.g. Wheatley & Austin-Payne, 2009). It perhaps raises issues over the nature and type of training provided and whether it was truly preparing staff to develop competence. Equally, the lack of association, could be consistent with Chan et al (2009), who found that long-term competence gains were not sustained from training. Thus, passage of time between training and perceived competence could be important to capture in future research.

Overall, the findings are demonstrating clear differences between profession and across environment in the endorsement of beliefs regarding patients who engage in self-injurious behaviour. Using the term 'positive' or 'negative' in capturing these beliefs would seem a rather crude representation of the findings and fail to capture the more nuanced aspects of the beliefs noted here. For example, the perception of patients being in control and to have planned their actions (i.e. 'Intent to self-injure') could be considered negative. This clearly has greater endorsement in higher secure settings, including by forensic nurses, and is consistent with

previous research using the TM-SIB-SV in a high secure setting (Caton et al, 2021). Although at first sight this may serve to support previous research indicating evidence of ‘negative attitudes’ among professionals (e.g. Gough and Hawkins, 2000; Ramluggen, 2013), it could equally demonstrate a lack of knowledge or, arguably, have a basis in reality owing to the nature of the environment and those housed within it. For example, recognising intent as a salient factor certainly fits with Ajzen’s Theory of Planned Behaviour (TPB; Ajzen, 1991) where ‘intent’ is a required aspect for behaviour to be enacted. The endorsement in the current study appears to further recognise the need for [behavioural] control, which also forms part of intent. Thus, it would seem premature to consider without reflection that this *always* represents an incorrect belief. However, it is the fact that it is endorsed more by those in higher security that suggests there may be another factor of relevance to consider, such as patient group.

Connected to environment differences, the concept of ‘raised capacity for self-harm’, which is well recognised as a feature required for self-injurious behaviour (IPTSB, Joiner, 2005) did not present differently across environments or staff groups, suggesting that any population differences are more specific. It would seem that all secure services recognise, with some uniformity, that capacity is a key required feature. Interestingly, being a burden on others, part of the broader requirements for capacity (Batterham et al., 2018; Joiner et al., 2009) was *not* supported as a feature of concern in high security, where nursing staff felt patients did have support and were valued (i.e. by endorsing more significantly the ‘coping and not feeling a burden’ factor on the TM-SIB-SV). This could, again, be accurate but, equally, could represent a misunderstanding of a patient’s circumstances and a desire to view a patient’s situation as more positive than they are. Failing to account for the concept of burdensomeness would seem an important omission, particularly considering this is a well-recognised risk factor for self-harm (Chu et al, 2017, Duffy et al, 2020).

Consequently, the picture of endorsed beliefs is a mixed one. In relation to ‘intent’ it may be that in more restrictive settings, where patients are generally considered a higher risk to themselves (Galappathie et al. 2018), that believing a patient intends their actions with a degree

of planning and control provides a sense for nursing staff of having a greater control over the clinical environment. The alternative, where the behaviour is perhaps as impulsive, and thus without planned/controlled intent, increases unpredictability of patient behaviour, which could be challenging for staff to manage on a continual basis. This would certainly fit with previous research, which demonstrated that ‘negative attitudes’ were associated with *more exposure* to self-injurious behaviour (Tapola et al., 2016). This is, however, speculative, but what is being suggested here is an avoidance of moving to a conclusion of ‘negative attitudes’ when the beliefs endorsed may actually serve as a way of creating perceived control over a very challenging environment among nursing staff, who aim ultimately to see the positives in their client group. Ultimately, what is being suggested here is more reflection on what we mean by ‘negative’ attitudes and how casting them as ‘endorsed beliefs’ is perhaps more helpful and engaging, as it allows us to explore the range of endorsed beliefs, their basis and the elements within them.

This could also reformulate, the potential application of Social Identity Theory (Tajfel & Turner, 1979) to understand why certain beliefs are endorsed. Thus, although an ‘out-group’ (patient) versus ‘in-group’ (staff) application could explain why more unhelpful/poorly informed beliefs could be endorsed, the issue becomes more of understanding the mechanism as to why. What is being offered here is the suggestion that there may be a higher endorsement of the ‘intent’ belief (in higher secure settings) as this allows staff some control over how events are considered or, otherwise, their work environment could be considered unpredictable and raise levels of stress and burnout. What is being ventured here, is that this negative reaction may not be frustration but rather a means of trying to bring calm to a high-risk environment where unpredictable behaviours (i.e. self-harm) occur. Thus, it is more of a reinterpretation of the behaviour to produce more equilibrium than a reaction to frustration. The current study, through a clear demonstration of the environment representing a key feature is perhaps pointing research in this direction.

Limitations

The current study is not without its limitations. There was reliance on self-report and thus reporting biases are to be expected. There were challenges in using two methods of survey delivery, with high secure services preferring hardcopy due to limitations on the availability of technology onsite and access to a private area. Equally, online studies can only report the number who accessed a link for completion and not those who saw the request but sought not to access it. These are well-recognised challenges. In addition, it is acknowledged that the sample size is not large, generates from a single NHS trust and is limited to forensic units. Consequently, the generalisability of the research is understandably limited.

Conclusion

The findings demonstrate value in considering staff endorsed beliefs concerning self-injurious behaviour and how these appear differently across environment and staff group. There is a need to capture the mechanism(s) that underpin the belief endorsement, controlling for the environment and the nature and extent of professional exposure to patient self-harm. This includes a move away from the concept of 'negative' and 'positive' attitudes to one of 'endorsed beliefs'. Such an approach is less pejorative towards nursing and other clinical staff working in challenging environments, capturing a more dynamic element.

What does this paper contribute to the wider clinical community?

- Intent to self-harm is endorsed differently by staff across location. The underlying reasons for the endorsement should be reviewed on an individual case-by-case basis.
- Viewing patients who self-harm as likely able to cope and to feel valued by others should be tested more rigorously in practice; it does not fit with research that considers being a burden/not being valued as a core risk factor for self harm.
- Training and reported competence in managing and understanding patient self-harm cannot be taken as evidence of appropriately endorsed beliefs.

Table 1.

Theory Driven Self-Injurious Behaviour – Staff Version (TM-SIB-SV) and Suicide Competency Assessment Form (SCAF) overall and across staff group, location and sex.

	Theory Driven Self-Injurious Behaviour – Staff Version					
	Intent to self-injure		Coping and not feeling a burden		Raised capacity for self-harm	
	Male patients Mean/SD (n)	Female patients Mean/SD (n)	Male patients Mean/SD (n)	Female patients Mean/SD (n)	Male patients Mean/SD (n)	Female patients Mean/SD (n)
Overall	13.03/5.05 (149)	15.9/5.51 (143)	11.5/3.4 (145)	12.1/3.35 (142)	11.4/3.4 (149)	12.02/3.85 (145)
Male staff	14.3/4.8 (50)	16/6.4 (44)	11.4/3.7 (47)	11.1/3.6 (44)	11.8/4.1 (49)	11.5/4.1 (45)
Female staff	12.3/5.0 (96)	15.9/5.2 (96)	11.6/3.38 (96)	12.5/3.2 (95)	11.1/2.9 (98)	12.1/3.6 (97)
Nursing staff	13.6/4.9 (70)	16.4/5.4 (64)	11.0/3.3 (66)	11.9/3.1 (65)	11.2/3.5 (69)	12.1/4.0 (66)
Other clinical staff	12.5/5.1 (79)	15.6/5.6 (79)	11.9/3.5 (79)	12.2/3.58 (77)	11.5/3.4 (80)	12.0/3.8 (79)
High Secure	14.4/4.9 (95)	16.1/5.37 (90)	11.7/3.21 (91)	12.3/3.1 (89)	11.8/3.5 (95)	11.9/3.8 (92)
Medium/Low	11/4.0 (25)	17.8/5.7 (25)	11.8/4.4 (25)	12.5/3.9 (25)	10.8/3.1 (25)	12.4/4.2 (25)
Learning Disability	10.4/4.5 (29)	13.8/5.3 (28)	10.6/3.3 (29)	11.1/3.6 (28)	10.5/3.2 (29)	12.0/3.6 (28)
	Suicide Competency Assessment					
	Reported competence Mean/SD (n)			Overall rating of competence Mean/SD (n)		
Overall	17.6/3.58 (114)			3.9/1.3 (125)		
Male staff	17.8/4.1 (38)			4.1/1.4 (41)		
Female staff	17.4/3.3 (75)			3.8/1.3 (83)		
Nursing staff	17.6/2.65 (58)			4.0/1.0 (59)		
Other clinical staff	17.44/4.4 (56)			3.85/1.5 (66)		
High Secure	17.2/3.5 (74)			3.78/1.34 (79)		
Medium/Low	18.3/2.7 (20)			4.3/.88 (22)		
Learning Disability	17.8/4.5 (20)			4.1/1.39 (24)		

Table 2

Correlations between TM-SIB-SV factors, perceived competency, overall perceived competency and level of overall training in patient self-harm/suicide

	N	1	2	3	4	5	6	7	8	9
1. TM-SIB-SV Intent male patient		-	.57**	.22*	.19	.22*	.20*	.02	.08	.11
2. TM-SIB-SV Intent female patient	143	.57**	-	.31**	.31**	.31**	.46**	.03	.06	.09
3. TM-SIB-SV Coping male patient	93	.22**	.31**	-	.67**	.35**	.21*	-.02	.09	-.01
4. TM-SIB-SV Coping female patient	93	.17**	.31**	.67**	-	.36**	.15	-.04	.11	.09
5. TM-SIB-SV Capacity male patient	93	.22*	.31**	.35**	.36**	-	.40**	.002	-.08	.13
6. TM-SIB-SV Capacity female patient	93	.20*	.46**	.21*	.15	.40**	-	-.05	-.06	-.07
7.SCAF perceived competence	93	.03	.03	-.02	-.04	.002	-.05	-	.63**	.16
8. Overall perceived competence	93	.08	.06	.09	.11	-.08	-.06	.63**	-	.13
9. Overall level of training	93	.10	.09	-.01	.09	.13	-.07	.16	.13	-

Note: * $p < .05$, ** $p < .01$

References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology and Health*, 26(9), 1113-1127. <https://doi.org/10.1080/08870446.2011.613995>
- Batterham, P. J., Walker, J., Leach, L. S., Ma, J., Calear, A. L. & Christensen, H. (2018). A longitudinal test of the predictions of the interpersonal-psychological theory of suicidal behaviour for passive and active suicidal ideation in a large community-based cohort. *Journal of Affective Disorders*, 227, 97-102. <https://doi.org/10.1016/j.jad.2017.10.005>
- Barnfield, J., Cross, W., & McCauley, K. (2018). Therapeutic optimism and attitudes among medical and surgical nurses towards attempted suicide. *International Journal of Mental Health Nursing*, 27(6), 1826-1833. <https://doi.org/10.1111/inm.12490>
- Caton, C., Ireland, J. L., Chu, S., Ireland, C. A. & Cramer, R., J. (2021). Understanding factors relevant to self-injurious behaviour in a high risk secure psychiatric sample: Developing the Theory driven Measure of Self-Injurious Behaviour Engagement. *Journal of Forensic Nursing*, 17 (1), 43 – 51. <https://doi.org/10.1097/JFN.0000000000000307>
- Chan, S. W., Chien, W. & Tso, S. (2009). Evaluating nurses' knowledge, attitude and competency after an education programme on suicide prevention. *Nurse Education Today*, 29, 763-769. <https://doi.org/10.1016/j.nedt.2009.03.013>
- Chu, C., Buchman-Schmitt, J. M., Stanley, I. H., Hom, M. A., Tucker, R. P., Hagan, C. R., Rogers, M. L., Podlogar, M. C., Chiurliza, B., Ringer-Moberg, C. R., Michaels, M. S., Patros, C. & Joiner, T. E., (2017). The interpersonal theory of suicide: A systematic review and meta-analysis of a decade of cross-national research. *Psychological Bulletin*, 143(12), 1313-1345. <https://doi.org/10.1037/bul0000123>

- Claes, L., Klonsky, E. D., Muehlenkamp, J., Kuppens, P. & Vandereycken, W. (2010). The affect regulation function of nonsuicidal self-injury in eating-disordered patients: which affect states are regulated? *Comprehensive Psychiatry*, 51(4), 386-392.
<https://doi.org/10.1016/j.comppsy.2009.09.001>
- Conlon, M. & O`Tuathail, C. (2012). Measuring emergency department nurses` attitudes towards deliberate self-harm using the Self-Harm Antipathy Scale. *International Emergency Nursing*, 20(1), 3-13.
<https://doi.org/10.1016/j.ienj.2010.08.001>
- Cramer, R.J., Johnson, S.M., McLaughlin, J., Rausch, E.M. & Conroy, M.A. (2013). Suicide risk assessment training for psychology doctoral programs: Core competencies and framework for training. *Training and Education in Professional Psychology*, 7(1), 1-11. <https://doi.org/10.1037/a0031836>
- Cramer, R. J., Ireland, J. L., Long, M. M., Hartley, V. & Lamis, D. A. (2019). Initial validation of the suicide competency assessment form among behavioural health staff in the National Health Services (NHS) trust. *Archives of Suicide Research*, 1-26.
<https://doi.org/10.1080/13811118.2019.1577194>
- Duffy, M. E., Mueller, N. E., Cogle, J. R., & Joiner, T. E. (2020). Perceived burdensomeness uniquely accounts for suicidal ideation severity in social anxiety disorder. *Journal of Affective Disorders*, 266, 43-48.
<https://doi.org/10.1016/j.jad.2020.01.116>
- Galappathie, N., Khan, S. T., & Hussain, A. (2017). Civil and forensic patients in secure psychiatric settings: a comparison. *BJPsych Bulletin*, 41(3), 156-159.
<https://doi.org/10.1192/pb.bp.115.052910>
- Gough, K. & Hawkins, A. (2000). Staff attitudes to self-harm and its management in a forensic psychiatric service. *The British Journal of Forensic Practice*, 2(4), 22-28.
<https://doi.org/10.1108/14636646200000030>

- Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA, US: Harvard University Press.
- Joiner, T. E., Van Orden, K. A., Witte, T. K., Selby, E. A., Ribeiro, J. D., Lewis, R. & Rudd, M. D. (2009). Main predictions of the interpersonal psychological theory of suicidal behaviour: Empirical tests in two samples of young adults. *Journal of Abnormal Psychology, 118*(3), 634-646. <https://doi.org/10.1037/a0016500>
- Kool, N., Meijel, B. V., Koekoe, B., Bijl, J. V. D. & Kerhof, A. (2014). Improving communication and practical skills in working with inpatients who self-harm: a pre-test/post-test study of the effects of a training programme. *BMC Psychiatry, 14*(1), 64. <https://doi.org/10.1186/1471-244X-14-64>
- Leonard, S. J., Webb, R. T., & Shaw, J. J. (2020). Service transitions, interventions and care pathways following remittal to prison from medium secure psychiatric services in England and Wales: national cohort study. *BJPsych Open, 6*(5), E80. <https://doi:10.1192/bjo.2020.62>
- Madsen, T., Erlangsen, A., & Nordentoft, M. (2017). Risk estimates and risk factors related to psychiatric inpatient suicide—An overview. *International Journal of Environmental Research and Public Health, 14*(3), 253. <https://doi.org/10.3390/ijerph14030253>
- Notarnicola, I., Petrucci, C., Barbosa, M. R. D. J., Giorgi, F., Stievano, A., & Lancia, L. (2016). Clinical competence in nursing: a concept analysis. *Prof Inferm, 69*(3), 174-181. <https://doi.org/10.7429/pi.2016.693181>
- Ramluggen, 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>

- Sandy, P. T. & Shaw, D. G. (2012). Attitudes of mental health nurses to self-harm in secure forensic settings: A multi-method phenomenological investigation. *Online Journal of Medicine and Medical Science Research*, 1(4), 63-75.
- Smith, E. R. (1993) Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie and D. L. Hamilton (Eds.). *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297-314). California: Academic press. <https://doi.org/10.1016/B978-0-08-088579-7.50017-X>
- Tapola, V., Wahlström, J. & Lappalainen, R. (2016). Effects of training on attitudes of psychiatric personnel towards patients who self-injure. *Nursing Open*, 3(3), 140-151. <https://doi.org/10.1002/nop2.45>
- Tajfel, H. & Turner, J. (1979). An integrative Theory of intergroup conflict. In W. G., Austin & S. Worchel (Eds.). *The Social Psychology of intergroup relations* (pp33-47). Monterey, Calif: Brooks/Cole publisher.
- Wheatley, M. & Austin-Payne, H. (2009). Nursing staff knowledge and attitudes towards deliberate self-harm in adults and adolescents in an inpatient setting. *Behavioural and Cognitive Psychotherapy*, 37(3), 293-309. <https://doi.org/10.1017/S1352465809005268>
- Williams, S. C., Schmaltz, S. P., Castro, G. M., & Baker, D. W. (2018). Incidence and method of suicide in hospitals in the United States. *The Joint Commission Journal on Quality and Patient Safety*, 44(11), 643-650. <https://doi.org/10.1016/j.jcjq.2018.08.002>
- Zhong, S., Senior, M., Yu, R., Perry, A., Hawton, K., Shaw, J., & Fazel, S. (2021). Risk factors for suicide in prisons: a systematic review and meta-analysis. *The Lancet Public Health*, 6 (3), e164 – e174. [https://doi.org/10.1016/S2468-2667\(20\)30233-4](https://doi.org/10.1016/S2468-2667(20)30233-4)