# Article Title: Rethinking pathways to completed suicide by female prisoners.

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### Brief professional biography of each author.

Sophie Oakes-Rogers graduated from Nottingham Trent University in 2013 with a BSc (Hons) Psychology degree and completed MSc Forensic Psychology in 2014. Her current area of research is the relationship between adverse life events, self-harm and suicidal behaviour in prisoners.

Dr. Karen Slade is a chartered and registered forensic psychologist and senior lecturer in psychology at Nottingham Trent University (UK). She has 16 years' experience as a practicing forensic psychologist including within HM Prison Service and applied forensic research. She has published refereed research papers regarding imprisonment, suicide and mental health.

Abstract

**Purpose**: Explore the role of trauma experience in pathways to self-harm or

attempted suicide in female prisoners who died through self-inflicted death in

England and Wales.

**Design**: Quantitative study using the Prison and Probation Ombudsmen's

independent reports on deaths in custody. 32 cases of female self-inflicted death in

custody were coded on the presence of Direct or Interpersonal Trauma, presence of

superficial self-harm, near-lethal self-harm, suicide attempts and recent significant

life event. The number of previous suicide attempts and age at time of death was

recorded.

**Findings**: Direct trauma is linked with repeated suicide attempts but decreased the

likelihood of superficial self-harm prior to suicide. Neither interpersonal trauma nor

age increased likelihood of pre-suicide behaviours. Near-lethal self-harm was not

predicted by either traumatic experience. Amongst these completed suicide cases,

56% were not reported as having experienced trauma, 46% had no recorded

previous suicide attempts and 12% also had no previous self-harm reported.

Research limitations/implications: The small sample limited statistical power and

specificity of classifications. Provides support for direct trauma in developing

capacity for repeated suicidal behaviour as indicated in theoretical models of suicide

(Joiner, 2005; O'Connor, 2011).

**Practical implications**: Different pathways to suicide likely to exist for female

prisoners and importance of trauma intervention services.

**Originality/value**: Using cases of completed suicide in female prisoners to

investigate the pathway to suicide from trauma through previous self-harm and

attempted suicide.

**Keywords**: Prison, suicide, self-harm, female, trauma, significant life event,

**Article type**: Research paper

#### Introduction

The prevention of suicide remains a key government priority as outlined in the cross-government strategy 'Preventing Suicide in England' (Department of Health (DoH), 2012), as rates remaining stubbornly high. Within this strategy, a key priority group are offenders –and with female offender suicides at rates of 51 per 100,000 compared with community rates of 3.7 per 100,000 (Department of Health, 2014; Ministry of Justice, 2015) there is a critical need to develop practice with this high-risk and vulnerable group. Recent reports have concluded that women in custody remain at a substantially higher risk of suicide than their male counterparts (Hawton et al. 2013; Webb, Qin, Stevens, Pratt, Mortenson, Appleby & Shaw, 2011). With the female prison population rising (Ministry of Justice, 2015), research to identify the factors leading to suicide in female prisoners to inform practice has become vital.

Although there is a paucity of literature around the pathways to suicide in female offenders, it is beginning to take shape and provide guidance on key factors and areas which distinguish female from male offenders (Clements-Nolle, Wolden and Bargmann-Losche, 2009; Mazarno, Hawton, Rivlin and Fazel, 2011). One factor deserving close attention for both male and female suicide is the disproportionate prevalence of deliberate self-harm (DSH), a factor consistently identified with a strong link with suicide (Hawton et al, 2014; Van Orden et al, 2010). This is of particular interest for female offenders given the disturbing rates of deliberate self-harming behaviour within female offenders (Ministry of Justice (MoJ), 2015). Despite women representing only 5% of the prison population, they account for over 28% of all recorded DSH and suicide incidents in prison (Ministry of Justice, 2015). In addition to frequency, the lethality of the method is also relevant in this population with female prisoners more likely to engage in highly lethal forms of DSH including ligaturing and overdosing (Hawton et al. 2014). The lethality of the method has been shown to be linked to suicide risk, with female offenders who favour these more lethal methods of DSH, and repeatedly self-harm being at increased risk of completed suicide (Hawton et al, 2014). Whilst these findings indicate an association between the

lethality and suicide, it is important to acknowledge the small number of 12 completed suicides, makes generalization difficult, but provides an avenue for further exploration into the choice of method and its link with suicide risk.

Although deliberate self-harm (DSH) would appear to be a central factor, it is clear that it is not the only factor in play, since similar numbers of offenders who commit suicide have not self-harmed as have engaged in the behaviour (Hawton et al., 2014). Therefore, in order for practitioners to understand the role of DSH in the pathway to suicide, DSH needs to be considered alongside other identified strongly linked factors including previous trauma and other significant negative life events (Marzano, Hawton, Rivlin & Fazel, 2011).

There are other considerations for educators and practitioners around suicide in female offenders. These considerations include the need to ensure that training packages and practice systems have taken suitable account of the uniqueness of female and other sub-groups of offenders. The current suicide prevention training and interventions available are often based upon the experiences of male prisoners (Dye, 2011; Hayward, Karavitz, Goldman & Freeman, 2000) probably due to men accounting for over 90% of the prison population in most countries (Walmsley, 2009), but arguably these systems do not yet fully integrate the unique needs of female offenders. Partially this is due to a limited understanding of the unique needs of female offenders who complete suicide.

The need for additional research into female custodial suicide was highlighted during a recent study commissioned by the Prisons and Probation Ombudsman (PPO) in 2014, reviewing deaths in custody. The report identified the reoccurring presence of trauma, previous self-harm and recent significant life events as "key vulnerabilities" associated with suicide in custody, also highlighting the sparse amount of research on women. Indeed, their own two qualitative studies focused primarily on male suicides, generalising the identified risk factors to females. The importance of evaluating when and indeed, whether, knowledge and practice based on male offender research should be applied to female offenders was also highlighted in a study commissioned by the

US National Strategy for Suicide Prevention (2011) as they also emphasised differences in the vulnerabilities between male and female offenders.

In considering these 'key vulnerabilities', it is important to consider the strength and form of their link with suicide and the differing pathways from trauma experience. Psychological models of suicide pathways have been developed which attempt to integrate these vulnerability and risk factors into a coherent model and may provide a model to consider the complexity. One such model is O'Connor (2011) Interpersonal, Motivational, Volitional (IMV) model which integrates factors from the Interpersonal-Psychological Theory of suicide (IPT) (Joiner, 2010) and Arrested Flight model (Gilbert and Allen, 1998). Within both the IMV and IPT models, whilst the desire to die is essential, desire alone is not a sufficient contributor to result in death by suicide (Joiner, 2005). Individuals who die by suicide must also acquire the capacity to carry out such lethal behavior. It is suggested that this acquisition of Capacity may occur through habituation to pain and the fear involved in harming the self. The theory suggests that habituation may occur through deliberate self-harm (DSH) but research suggests it can also develop through exposure to other fearful or painful experiences such as trauma and significant negative life events (Joiner, 2005; Riberio & Joiner, 2009).

Research confirms that experiencing a range of significant negative life events, including childhood trauma and more recent events, may contribute to the development of suicidal behaviour. Many studies have confirmed that amongst those who engage in suicidal behavior, there is a greater likelihood of trauma experience amongst community females and male offenders (Blauuw, 2005; Joiner et al. 2007; Swogger et al., 2010) and female offenders (Clements-Nolle, Wolden & Bargmann-Losche, 2009). There is also some differentiation of pathways to suicidal behaviour. For example, Tripodi, Onifade & Pettus-Davis, (2013) found differences between the types and repetitiveness of childhood trauma on suicidal behavior, and Blaauw et al (2002) found that suicide amongst male prisoners was associated with previous events that had threatened a

person's interpersonal network, including sexual trauma and emotional maltreatment.

Whilst this research highlights trauma (and especially childhood trauma) as a risk factor for suicidal behaviour in female offenders, studies rarely include participants who have completed suicide nor consider its connections with non-suicidal deliberate self-harm. It could therefore be argued that although trauma has been detailed as a risk factor for suicidal behaviour, the strength of its relationship and its interactions with other key risk factors is yet to be confirmed for completed suicide in female offenders.

The potential contribution of the on-going effects of trauma on suicide risk requires special attention within a female offending sample, given the striking rates of trauma reported by this group, with 78% of female offenders reporting a history of either sexual or physical trauma (McDaniels-Wilson & Belknap, 2008; Tripodi & Pettus-Davis, 2013). Marzano et al (2010) advocates that childhood trauma has numerous life-long adverse effects for female offenders and may provide the start of a pathway to suicide. Indeed, it could be argued that the disproportionate level trauma experience, compared with males, may go some way in explaining the heightened risk in female offenders of enacting suicidal behaviour (Pompili et al, 2009) or near lethal self-harm (Marzano, Hawton, Rivlin & Fazel, 2011). However the relationship is complex within a high-risk female offender population, where trauma exposure and deliberate self-harm is very high, but completed suicide is comparatively low. It is therefore important to develop a clearer picture of this complexity, and in particular the roles of trauma and self-harm within the pathways to suicide.

Finally, prisoners who complete suicide but do not have a history of DSH or trauma, remain a largely neglected cohort in academic research, with few references to the pathways to suicide of these offenders. Whilst it may be uncommon to discover a female custodial suicide without some history of DSH or trauma (Shaw, Baker, Hunt, Moloney & Appleby, 2004; McDaniels-Wilson & Belknap, 2008) failing to further investigate these cohorts may leave a

proportion of female offenders at risk without clear assessment and intervention strategies. Therefore, research considering the differing pathways to suicide, including the interaction of DSH and trauma can contribute to the training of professionals in best practices for the identification and management of suicide risk in female offenders.

Using investigation reports on the self-inflicted deaths of female offenders when held within prisons in England and Wales, this study aims to explore the interaction between traumatic experiences, recent life events and deliberate self-harm for female prisoners who died by self-inflicted method in England and Wales.

In particular, the study will consider:

- 1. The prevalence and type of trauma experience, presence of recent serious life-event and the presence and lethality of Deliberate self-harm.
- 2. Whether a history of trauma (direct or interpersonal) will increase the prevalence and number of attempted suicide episodes, over those with no history of trauma.
- 3. Whether history of trauma (direct or interpersonal) will increase the likelihood of engagement in either superficial or near-lethal self-harm.

# Methodology

# **Participants**

Participants were obtained from the Fatal Incident Reports held on the Prison and Probation Ombudsman Independent Investigation (PPO) website (http://www.ppo.gov.uk/prison-investigations.html). PPO reports are freely available for use under the terms of the Open Government License. The PPO has a statutory obligation to investigate all deaths in prison custody and includes an investigation utilizing prison records, interviews with prison staff and family and a clinical review of health records and services.

Thirty-two adult female (over 18) prisoners were selected as appropriate for the study (Age Mean = 30.2, SD = 7.6). Twenty-six participants (81.25%) were

sentenced, of which 7 (37.2%) were serving life sentences. Four (14.3%) were convicted but not yet sentenced and 2 (7.1%) were on remand.

Participants included adult female prisoners who died either in prison or at a nearby hospital as a result of self-inflicted actions, and whose death had been deemed intentional by an independent Coroner. All participants were detained in a prison or secure setting across England and Wales at the time of their death and therefore their suicide was treated as a 'Death in Custody'. Only participants for whom an Independent Coroner's report had been completed between 2003 and 2014 were included in the sample. In order to control for external variables, the sample only included offenders who committed suicide whilst being held in prison or under the care of the prison, and excluded those who killed themselves post-release.

This study obtained ethical approval from the relevant University Research Ethics Committee.

#### **Procedure**

A coding system was developed to allow the history of trauma, previous self-harm, lethality of self-harm and previous suicidal behaviour to be utilised in quantitative analysis.

### Trauma Type

All participants were coded on the reported type of trauma experienced. Following suggestions from Price et al (2013) trauma experiences were categorised as either 'interpersonal' or 'direct' trauma. Experiences that involve sexual contact or an invasion of personal space were coded as 'interpersonal trauma'. Experiences that involved physical or violent abuse, (but not those with a sexual element), and exposure to death or threatened violence (DSM-5, 2013) were coded as 'direct trauma'. Based on trauma experience, participants were allocated to one of four groups: 'No reported trauma' (n = 14), 'Direct trauma' (n = 7), 'Interpersonal trauma' (n = 7) or 'Both trauma types' (n = 4).

# Significant Life Events:

Significant life events (SLE) refer to events that occurred within 0-6 months prior to suicide and were defined as 'a negative event that changed an individual's life and resulted in a significant state of distress' (Foster, 2011). Incidents included were: relationship breakdown; change in prison sentence; serious disputes with other prisoners; or loss of prison job. Significant life events were coded as 'present' (N = 16) or 'not present' (N = 16).

# History of Self-Harm

A history of self-harm was recorded for all participants. Those with a recorded history of self-harm were coded as 'present' (N=26) and those without a recorded history of self-harm were coded as 'not present' (N=6). For the purpose of study, an act of self-harm has been defined as 'any deliberately enacted behaviour that is intended to physically harm oneself; with or without suicidal intent' (Dear, 2006)

### Lethality of self-harm

Previous acts of self-harm were recorded and categorised based on the lethality of their self-harm methods including any incidents recorded as being suicide attempts. The lethality of self-harm and suicidal incidents was coded according to the level of medical attention required. Adopting Marzano et al (2010) definition, self-harm incidents were classified as near lethal and superficial. Acts defined as 'Near lethal self-harm' were acts which required fast medical response and included hanging, ligaturing, severe cuts and lacerations, swallowing foreign objects and overdosing. 'Superficial self-harm' was rated as present when acts of self-harm required basic medical attention, including scratching, burning and wound reopening.

Participants were coded as 'Present' or 'Not Present' for 'Near lethal self-harm' (NLSH) (N=21) and 'Superficial self-harm' (SSH) (N=16). Participants who had recorded acts of both NLSH and SSH were coded as 'present' in both categories and placed in a separate 'Both Levels of Severity' category (N=11).

Number of Suicide Attempts

The number of suicide attempts reported within the PPO report for each participant was also recorded. All suicide attempts were also coded as present in the 'Near-lethal self-harm' (NLSH) group. Mean and SD are provided below for trauma experience (Table 1) and self-harm (Table 2).

Place Table 1 here

Place Table 2 here

#### **Results**

Previous Self-Harm

Of the 32 participants, 4 did not have a recorded history of self-harm or suicide attempt and the same participants also had no history of trauma. Two of these four participants had experienced a significant life event but group numbers were too small to conduct meaningful analysis.

Significant Life Events

Due to low numbers the 'No SH' group was excluded from the following analysis; and the groups were compressed into two groups: 'SSH' and 'High Lethality' (a combination of the 'NLSH' and 'Both Levels of Lethality' groups). A Chi-square test was performed and indicates no significant difference in the proportion of participants with significant life events between the two groups based on lethality of previous self-harm, x2(1, 26) = 0.09, p = .54.

Near Lethal Self-Harm

A binary logistic regression was carried out to establish the strength of the relationship between two predictors: Direct trauma and Interpersonal traumatic on the presence or absence of near lethal self-harm (NLSH) in the history of participants. All 32 participants were included in the analysis. All assumptions of the analysis were met. The full model containing both predictors was not significantly significant,  $x^2$ , (3, N = 32) = 1.48, p = .68, indicating that the model was not able to distinguish between participants who had a history of NLSH prior to suicide and those who did not. The analysis indicated that only between 4.5% and 6.1% of the variance in this model is explained by this set of variables and correctly classifies only 59% of cases.

### Superficial Self-Harm:

A binary logistic regression was run to establish the strength of the relationship between the same three predictors: Direct trauma, Interpersonal trauma and age, on distinguishing those with the presence or absence of superficial self-harm (SSH). The full model containing all predictors was significant,  $x^2$ , (3, N= 32) = 9.67, p= .022, meaning the model was able to distinguish between the participants who had a history of SSH prior to suicide and those who did not. The analysis indicated that between 26.1% and 36.7% of the variance in this model was explained by the set of variables and correctly classified 84.4% of cases. One variable made a uniquely statistically significant contribution to the model: Direct Trauma (p = .05) with an Odds ratio of .082. This indicates that those with superficial self-harm are up to 10 times less likely to have experienced direct trauma than those without reported superficial self-harm.

# Presence of Suicide Attempts

A binary logistic regression was run to establish the strength of the relationship between the same three predictors: Direct trauma, Interpersonal trauma and age, on distinguishing those with the presence or absence of previous suicide attempt (PSA). The full model containing all predictors was not significant, x2, (3, N=32) = 41.09, p=.42, meaning the model was not able to distinguish between the participants who had a history of PSA prior to suicide and those who did not. The analysis indicated that only between 8.4% and 11.2% of the variance in this

model was explained by the set of variables and only correctly classified 59.4% of cases. None of the variables made a uniquely statistically significant contribution to the model. This indicates that previous interpersonal or direct trauma do not significantly independently contribute to the risk of suicide attempt prior to completed suicide.

# Number of Suicide Attempts

Multiple regression was used to assess the ability of Interpersonal and Direct Trauma to predict levels of suicide attempt. Preliminary analysis was performed to ensure no violation of assumptions. Two variables: Interpersonal Trauma and Direct Trauma were entered into the model and the total variance explained by the model was 16.9%, F(2,29) = 2.95, p = .068. In the final model, only one variable was statistically significant: Direct Trauma recording a beta value of (beta = 0.411, p = .022). This indicates that Direct Trauma is likely to have an independent effect on the likelihood of previous suicide attempts in a group who complete suicide.

### **Discussion**

The interaction between trauma and deliberate self-harm (DSH) in the pathways to completed suicide, especially in female offenders, remains a complex area with a paucity of quality studies to inform and educate professionals working with this group. The research supports the assertion that, traumatic experience affects the pathway to completed suicide with differing profiles for those who engage in superficial self-harm, near-lethal self-harm, repeated attempted suicide or those who do not engage in these behaviours prior to their death. The data identified only two DSH behaviours linked with trauma experience: repeated suicide attempts were linked with the experience of direct trauma; and direct trauma was less likely to lead to superficial self-harm (SSH) prior to suicide. Neither interpersonal trauma nor age increased the likelihood of presuicide behaviours.

Consistent with other research, (Blaauw, Kraij, Arensman, Winkel and Bour, 2002; Clement-Noelle et al, 2009; Lopez et al., 2013; Tripodi, Onifade & Pettus-Davis, 2013; PPO Investigation report, 2014), this research confirmed a role for trauma in suicidal behaviour by female prisoners, with direct trauma strongly linked to an increasing number of suicide attempts prior to completed suicide. Unlike previous studies (Marzano, et al., 2010; Pompili et al., 2009) the likelihood of engaging in near-lethal self-harm was not found to be related to history of trauma. Indeed, those with experience of direct trauma were less likely to engage in SSH prior to completed suicide. This supports the notion that there are differences in the risk pathways for those with trauma experience and whether they will engage in superficial self-harm or non-fatal suicidal behavior before completing suicide. Interestingly, Interpersonal Trauma was not linked with any pre-suicide behaviour, but with a level of interpersonal trauma within all cases at 34% it is likely to still play a role in completed suicide.

When considering recent life events prior to suicide, there were no significant differences in the presence of events between the self-harm groups; but overall, 50% were recorded as having a significant life event within 6 months. This

indicates that for many female prisoners significant life events may be a trigger event, which could be identified, and support provided.

The results in this study build on the current literature to support a role for trauma in the course to complete suicide by many females in prison. It is however not necessary or sufficient to explain the pathway to suicide, with some women not having reported such experiences. The study also provides evidence of a path via suicide attempts for an experience of Direct Trauma prior to death but not for Interpersonal Trauma; not does it do the results suggest that the presence of trauma will increase the risk of near-lethal self-harm. In fact, there is a reduced risk that trauma experience will lead to superficial self-harm prior to completed suicide. This raises questions regarding the pathways for female prisoners and suggests that it may not the experience in itself, but the intensity or impact of the experience that is most relevant (Clements-Nolle et al., 2009).

The role for direct trauma in attempted suicide lends support for the application of theoretical pathways to suicide in this population. As posited by Joiner (2005) and incorporated by O'Connor (2011), habituation to the fear of death or pain increases the capacity to engage in suicidal behaviour. The experience of direct trauma, including violence or fear of death, may provide the background to developing capacity to engage in repeated suicidal behaviours. As the entire sample had completed suicide, it is not only understanding the differing risk pathways, but the support of wider theories of suicide that may develop the knowledge and practice in this area. As one of the first studies on female offenders who completed suicide to include sufficient numbers to complete statistical analysis, there are implications for both education and practice. Of note, is the multifaceted picture on the links between trauma and self-harm prior to suicide; and similarities and contradictions when compared with previous research from proxy groups (e.g. attempted suicide, near-lethal self-harm). The implications of the study therefore reflect the benefits of clarifying the different trajectories for suicide within a high-risk population and being able to place them within a wider theoretical framework. For educators, the study aids with ensuring both theory and empirical research can be used to inform evidencebased practice and in developing curriculum to reflect the changing knowledge-base. For practitioners, a greater understanding of the risk pathways can aid the effective detection of suicide risk and the identification of suitable treatment pathways, especially for those clients engaging in repeated non-fatal suicidal behaviours or early trauma. With regards to future research, this study advocates some caution when relating research from proxy groups to completed suicide, plus the need for research to consider the complex interlinking of risk factors and the heterogeneity of the pathways to suicide.

Whilst this research focused on the role of trauma and significant life events on self-harm and suicidal behaviour, the study highlighted a significant group who do not exhibit the risk factors identified. Of the 32 females who completed suicide, 46% did not report previous trauma, 19% had no history of previous self-harm, nor suicide attempts and 50% did not have a known significant life event within 6 months prior to their suicide. This is in keeping with previous research (Marzano, et al., 2011b), which highlights that whilst risk is raised within some groups, these risks alone are not sufficient to identify risk. Therefore the risk of suicide within this population could be underestimated if practitioners look for the presence of specific factors and risk assessments must take into account this significant 'absence' group when considering indicators of risk.

With this in mind, consideration should be given to preventative measures for completed suicide. This study confirmed that trauma experiences and previous self-harm is prevalent in this group and assessments to establish history of trauma, self-harm methods and identify at risk prisoners could be considered as part of the current health assessments on arrival to prison (Ministry of Justice, 2011). The identification of risk requires the provision of theoretically driven care and intervention models (Slade, 2014; Forrester and Slade, 2014) but given the high prevalence of trauma experience within female prisoners, this will require extensive resource. However, the study has highlighted prevalence rates for different presentations which may guide resource allocation; and future

research should focus on developing further clarity of these risk pathways and their distinctive indicators of risk.

The sample size of this study is a significant limitation, which must be considered when interpreting the results. We welcome the small number of female deaths in custody but as they are over-represented as a population in suicide figures, it is vital that research concentrates on this group. A result of a small sample size can make it difficult to detect statistical differences between groups and many analyses were not possible due to small numbers. This does not however negate the importance of studying the behavioural pathways to female prisoner suicide, as there are important lessons to be learnt to help develop appropriate preventative policies. It is therefore encouraged that this study is viewed as exploratory, and a preliminary examination of factors that could contribute to suicide using a unique cohort.

A primary strength of this study was the data as it was collected from official published reports that had undergone a stringent investigation process. In doing so, it can be assumed that the information held within the incident reports is correct to the best of the knowledge available. In addition, unlike the majority of previous studies on female prisoner suicide, there were no set exclusion criteria for women with severe mental health illness, specific offences, age or sentence length, allowing the sample to adequately represent the population. The sample also included women from prisons across England and Wales and therefore the results can be applied to female offenders in different geographical locations. A final limitation was difficulties in extracting comprehensive details of the frequency and duration of trauma, as the reports often did not provide sufficient detail. Such information may be beneficial to predict onset of suicidal behaviour in female offenders who had a history of trauma.

Much prison suicide research focuses on male prisoners, due to their greater number. Therefore it is important to undertake investigation of gender differences in prisoner suicide, comparing suicide pathways and the differences between genders. Doing so would contribute to the development of effective prevention and treatment programmes that target gender specific needs.

# **Conclusion**

The current moves in the NHS towards reducing suicide nationally (Department of Health, 2012) and becoming a major focus across many health and government services (Office of Deputy Prime Minister, 2015), provides a key opportunity to integrate recent findings into practice. The interlinking of trauma with repeated suicidal behaviour and completed suicide remains an important and fruitful area for risk assessment, intervention options and research exploration (Briggs, Goldblatt, Lindner, Maltsberger & Fieldler, 2012). Nevertheless, the pathways to suicide are complex and our understanding of the pathways to suicide for different vulnerable groups remain undetermined, emphasizing the need for individualized risk assessment and intervention within this most high-risk group. Whilst findings in this study need to be viewed as tentative and exploratory, it is clear that important lessons can be learnt. Further research is necessary to confirm the relationships between direct trauma, self-harm lethality, suicidal behaviour with completed suicide in female prisoners; and continuing to identify the myriad of different pathways to suicide.

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Table 1: Mean (SD) of suicide attempts by trauma experience

	Mean	(SD)	
No trauma	.06	.85	
Interpersonal Trauma	1.29	1.38	
Direct Trauma	5.00	8.00	
Both trauma types	3.25	3.4	

Table 2: Number and percentage coded as Present; Mean (and SD) of age and suicide attempts, by self-harm coding.

	No. of cases (%)	Presence of IP trauma (%)	Presence of Direct Trauma (%)	No presence of trauma (%)	Presence of Sig Life Event (%)	Presence of Suicide Attempt	No. Suicide Attempt Mean (SD)	Age Mean (SD)
No SH	4 (12.5%)	0 (0%)	0 (0%)	4 (12.5%)	2 (6.3%)	0 (0%)	0	29.75 (5.44)
SSH Only	11 (34.3%)	5 (15.6%)	4 (12.5%)	3 (9.4%)	5 15.6%)	6 (18.7%)	2.0 (4.1)	32.82 (8.19)
NLSH Only	6 (18.7%)	1 (3.1%)	1 (3.1%)	4 (12.5%)	5 (15.6%)	2 (6.3%)	1.17 (1.47)	29.5 (4.84)
Both Levels of Severity	11 (34.3%)	5 (15.6%)	6 (18.7%)	3 (9.4%)	4 (12.5%)	8 (25%)	3.27 (5.69)	28.54 (8.94)
Total Present	n/a	11 (34.4%)	11 (34.4%)	14 (46%)	16 (50%)	18 (56%)	2.03 (4.17)	30.34 (7.59)
Total Not present	n/a	21 (65.6%)	21 (65.6%)	18 (56%)	16 (50%)	14 (46%)	n/a	n/a