Title

Suicidal histories in adults experiencing psychological trauma: exploring vulnerability and protective factors

Running Head

Emotional abuse, employment, suicide

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Abstract

Objective This study aimed to identify vulnerability and protective factors for suicidal histories among adults experiencing psychological trauma.

Method Adults seeking treatment for psychological trauma (N=113) completed self-report questionnaires measuring childhood trauma history, self-concept, relational functioning, emotion regulation, living arrangements, employment status, marital status, and suicidal history. Independent samples t-tests were used to determine variables on which those with and without suicidal histories differed significantly. These variables were then entered into a binary logistic regression model to identify factors which independently distinguished between those with and without a suicidal history.

Results Univariate differences were found for childhood emotional abuse (CEA), childhood emotional neglect (CEN), emotion deactivation, and employment status, with those in the suicidal history group scoring higher on all of these. CEA (OR=1.13, 95% CI=1.01-1.27) and employment status (OR=4.12, 95% CI=1.23-13.73) remained significant predictors of suicidal status in the multivariable logistic regression.

Conclusions CEA was an independent vulnerability factor for suicidal risk, highlighting the need for clinicians to assess exposure to such trauma in those presenting with proximal traumatic experiences. Being in employment was an independent protective factor against suicidal risk, highlighting the importance of social buffers or networks when faced with traumatic situations.

Key Words: Childhood trauma; Emotional abuse; Suicidal; Unemployment

Introduction

There are estimated to be 800,000 suicide deaths globally every year, equating to one death every forty seconds (World Health Organisation: WHO, 2018). It is therefore imperative to understand the factors which underpin suicide risk. Experiences of trauma have been identified by the WHO as a key risk factor for suicide (WHO, 2014). Indeed, a review of psychological autopsy studies identified there being at least one adverse life event in the year preceding suicide in up to 91% of suicide deaths (Foster, 2011). Events such as physical illness, serious injury, serious assault, and domestic violence were all found to be prevalent amongst suicide deaths (Foster, 2011). Similarly, a cross-national study of 21 countries found the presence of traumatic events, such as interpersonal violence, combat exposure, and experiencing natural disasters, to be positively associated with suicide attempts (Stein et al., 2010).

Repeated or pervasive traumatic events, such as childhood trauma, are known to further increase suicide risk (Angelakis, Gillespie & Panagioti, 2019). Childhood trauma refers to experiences of emotional abuse (CEA), physical abuse (CPA), sexual abuse (CSA), emotional neglect (CEN), or physical neglect (CPN) before the age of 18 (Bernstein & Fink, 1998). The results of three meta-analyses conducted in recent years suggest that CEA, CPA, CSA, CEN, and CPN each confer significant suicide risk (Angelakis et al., 2019; Liu et al., 2017; Zatti et al., 2017). Slight differences are present within these with regards to which trauma type has the strongest effect on suicide risk, with CPA (Zatti et al., 2017), CEA (Liu et al., 2017), and CSA (Angelakis et al., 2019) each emerging as the strongest determinant of suicidal behaviour. Findings highlighting suicide risk following childhood trauma have been drawn from the general population, homeless youth, substance dependent adults, and adults with psychiatric disorders. However, no study has yet explored suicide risk associated with childhood trauma within a sample of traumatised adults.

As outlined previously, the association between childhood trauma and suicidal ideation and behaviour is well established in the literature (e.g. Zatti et al., 2017). A number of factors which may increase risk for suicidal ideation and behaviours have additionally been explored. For example, difficulties in regulating impulsive and aggressive behaviours (Swogger, You, Cashman-Brown & Conner, 2011; McGirr et al., 2009), impaired social functioning (Yang & Clum, 2000), and maladaptive self-perceptions (Chapman et al., 2005) are all understood to increase suicide risk. Each of these has additionally been demonstrated as emerging following childhood trauma (Busby, Walker & Holman, 2010; Gabalda, Broth, Thompson & Kaslow, 2009; Somer, Ginzburg & Kramer, 2012; Swogger et al., 2011). Beyond these bivariate associations, a number of variables relating to perceptions of the self and others, and dysregulated affective experiences have been explored between childhood trauma and suicidal histories. For example, a negative self-description has been found to mediate relationships between CSA, CPA, and CPN, and suicidal behaviours (Twomey, Kaslow & Croft, 2000), low levels of acceptance of others has been shown to mediate the relationship between childhood adversity and suicidal behaviour (Godet-Mardirossian, Jehel & Falissard, 2011), while affective lability- described as rapid shifts in emotional experience- has been demonstrated as mediating the relationship between severity of childhood trauma and suicidal behaviour (Aas et al., 2017). There is a dearth, however, of studies which have sought to explore such risk factors for suicide in combination. An understanding of how risk factors fit together may be vital in best intervening to alleviate suicide risk.

Our theoretical understanding of the development of suicide risk following childhood trauma remains limited. A three-pathway model has been previously proposed for explaining the pathways through which childhood trauma leads to non-suicidal self-harm (Yates, 2009). Specifically, Yates (2009) proposed that childhood trauma impairs perceptions of the self and other people (representational pathway), inhibits connections between affect and cognition

(regulatory pathway), and leads to difficulties in regulating physiological arousal (reactive pathway) (Yates, 2009). The representational pathway suggests that experiences of trauma in childhood are internalised leading to a negative perception of the self, or when externalised they lead to negative perceptions of other people, with self-harm functioning as a mechanism for self-punishment or self-soothing (Yates, 2009). The regulatory pathway suggests that maltreatment from caregivers impairs the ability to access affectively generated information, with cognitively-generated information relied upon instead. As a consequence, those experiencing traumatic caregiving may have difficulty in understanding their emotions, with self-harming behaviours representing a mode of impulsive emotional expression (Yates, 2009). The reactive pathway suggests that biological responses to stress are modified due to the maltreatment experienced. Under usual circumstances, short- and long-term stress-regulatory systems will modulate behavioural, affective, cognitive, or somatic responses to stress (Yates, 2009). Following early-life maltreatment, these systems are altered, with subsequent self-harming behaviours being understood as attempts to alter states of arousal (Yates, 2009). To summarise, Yates posits that self-harming behaviours function as punitive or soothing behaviours, attempts at emotional expression, and a method of moderating affective arousal.

While an understanding of the factors which may increase the risk of suicide within high risk populations, such as those experiencing psychological trauma is vital, identifying protective factors is also crucial. A lack of feeling connected to others, or a sense loneliness are understood as key moderators of the stress-suicide risk relationship (Van Orden et al., 2010). As such, the current study examined sociodemographic features which may be taken to represent areas of connectedness to others, namely living with other people, being in employment, and being in a relationship, in order to identify whether any of these represent protective factors against a suicidal history within the trauma population. These have each

been previously shown to act as protective factors against suicide (McLean, Maxwell, Platt, Harris & Jepson, 2008), however, this protection has yet to be tested within the trauma population. Given the nature of traumatic events as extreme stressors, the identification of factors which may be protective against suicide within this population would have great clinical utility.

Aims of the current study

In sum, we identified three gaps in the research literature: First, there is a limited understanding of which childhood trauma types are uniquely associated with increased suicide risk in the trauma population; second, the theoretical understanding of the pathways from childhood trauma to suicide requires clarification; and third, an understanding of the protective effects of demographic factors against suicide within the trauma population is lacking. To address these gaps, there were three broad aims of this study. First, to test CEA, CPA, CSA, CEN, and CPN for their independent relationships with suicidal history. Based on the results of previous meta-analyses (Angelakis et al., 2019; Liu et al., 2017; Zatti et al, 2017) it was hypothesised that CEA, CPA, and CSA would all demonstrate independent relationships with suicidal history. Second, to test elements of Yates' representative, regulatory, and reactive pathways for their relationship with suicidal history. It was hypothesised that the representative, regulatory, and reactive elements would each be independently associated with suicidal history. Third, to test associations between being in a relationship, being in employment, and living with others, and suicidal history, with each hypothesised to be independently related to reduced suicidal history risk.

Methods

Participants

Participants comprised a consecutive sample of adults referred to an NHS trauma service in Scotland (n=113). All new referrals to the service between February 2014 and August 2015 were asked to complete the survey. Eligibility criteria for participation were as follows: Having been referred to the service for psychological therapy within the recruitment period, being aged 18 years or over, providing written, informed consent, possessing adequate competency in written and spoken English to allow for the completion of self-report questionnaires. Ethical approval for the collection and use of these data was provided by NHS Clinical Governance and institutional research ethics committee.

Procedure

The data used in the current study were collected during a service audit being conducted by an NHS trauma service, with all new referrals asked to complete a battery of psychometric measures assessing posttraumatic symptoms, emotion regulation difficulties, childhood trauma history, and suicidal history. Questionnaires were completed by participants on site at the trauma service. All questionnaires were self-report measures and were completed in the presence of an Assistant Psychologist from the trauma service. The rationale for this was to achieve the highest rate of completed data as possible by offering explanations for any items not understood, as well as to monitor any distress being experienced by participants.

Research Measures

Demographic Characteristics

Demographic characteristics were recorded upon registration with the trauma service. Information collected included age, gender, living arrangements, employment status, and marital status. Living arrangements were recorded as “living alone”, “living with partner only”, “living with family”, or “other”, employment status was recorded as “in full-time employment”, “in part-time employment”, “unemployed”, “retired”, or “other”, and marital

status was recorded as “married”, “divorced”, “cohabiting”, “single”, or “other”. For data analysis purposes, each of these was recoded into binary variables. Living arrangements was coded as “living with other” and “living alone”, employment status was coded as “in employment” and “not in employment”, and marital status was coded as “in a relationship” and “not in a relationship”.

Childhood Trauma

Childhood trauma histories were measured using the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998). The CTQ is a 28-item self-report questionnaire assessing histories of five abuse types: childhood emotional abuse, childhood physical abuse, childhood sexual abuse, childhood emotional neglect, and childhood physical neglect. Each abuse type is measured across a subscale containing 5 items, with items scored on a 5-point Likert scale ranging from “never true” (1) to “very often true” (5). The CTQ contains an additional 3-item Minimisation/Denial scale designed to identify the potential underreporting of maltreatment experiences, however this scale was not used in the current study as it was not deemed relevant to the research questions under investigation. In the current sample, internal consistency was acceptable for the five subscales, ranging from $\alpha = .69$ for CPN to $\alpha = .96$ for CSA.

The Representative and Reactive Pathways

The representative and reactive pathways were examined using items from the International Trauma Questionnaire (ITQ: Cloitre, Roberts, Bisson & Brewin, 2014). The ITQ is a 42-item self-report measure developed to assess Complex Posttraumatic Stress Disorder (CPTSD) symptomatology. Two CPTSD symptom clusters, negative self-concept and disturbed relationships, were used as markers for the representative pathway. A further two CPTSD symptoms, emotion hyperactivation and emotion deactivation, were used as markers for the

Reactive pathway. Items are scored on a 5-point Likert scale ranging from “not at all” (0) to “Extremely” (4). Although a relatively new measure, the ITQ has been previously validated in a clinical population similar to that used in the current study- recruited from the same trauma service and having been subject to similar eligibility criteria (Karatzias et al, 2016). In the current sample, internal consistency was acceptable for all symptom clusters, ranging from $\alpha = .69$ for emotion deactivation to $\alpha = .91$ for negative self-concept.

The Regulatory Pathway

The regulatory pathway was examined using two scales from the Difficulties in Emotion Regulation Questionnaire (DERS: Gratz & Roemer, 2004). The DERS is a 36-item self-report questionnaire assessing emotion regulation difficulties across six subscales: non-acceptance of emotional responses (6 items), difficulties in engaging in goal-directed behaviour (5 items), impulse control difficulties (6 items), lack of emotional awareness (6 items), limited access to emotion regulation strategies (8 items), and lack of emotional clarity (5 items). Impulse control difficulties and limited access to emotion regulation strategies were used as markers for the regulatory pathway in the current study. The DERS has previously demonstrated adequate construct and predictive validities (Gratz & Roemer, 2004). In the current sample, the two subscales used demonstrated good internal consistency, ranging from $\alpha = .87$ for lack of limited access to strategies, to $\alpha = .90$ for impulse control difficulties.

Suicidal History

Suicidal history was assessed using a single item, with respondents ask to answer yes or no to, “Have you tried to hurt or kill yourself or threatened to do so?”. This item was chosen for its covering of both suicidal threats and actions, as well as its identification of both historic and current suicidal episodes.

Statistical analyses

All statistical analyses were run using the Statistical Package for the Social Sciences (SPSS) version 23. Means and standard deviations (SDs) were calculated for continuous variables and frequencies for categorical variables. To explore group differences, a series of independent samples t-tests were run, comparing those with and without suicidal histories across all continuous experimental variables. Chi-square statistics were used to explore associations between categorical demographic variables and suicidal histories. Subsequently, logistic regression analyses were conducted to determine the factors which uniquely predict the presence of lifetime suicidal history within a multivariate framework. The dependent variable in this was the presence of lifetime suicidal history and the reference group was no suicidal history (0=no suicidal history, 1=suicidal history). A model was tested containing variables found through bivariate analyses to be associated with a suicidal history. It should be noted that we consider this to be an exploratory study, as such p-values have not been adjusted for multiple comparisons, in line with the recommendations of Bender and Lange (2001).

Missing data

The original sample consisted of n=113 cases. Cases missing more than 50% of responses for any subscale under investigation were removed from further analyses (n=18), as were cases with missing data for the dichotomous outcome variable (n=2). Removal of these cases left a dataset of 93 cases. Descriptive statistics demonstrated that for no research item was the level of missing data above 5%, as such missing values were replaced with their series means.

Results

Descriptive statistics

The majority of the sample was female (n=89, 95.7%) and age ranged from 19-62 years (mean=38.24, SD=10.856) (see Table 1). Just over half of the participants were unemployed at the time of participation (n=50, 53.8%), with around a third in either full- or part-time employment (n=29, 31.2%). A little over half of the sample was single (n=52, 55.9%), with all but 4 of the remainder either married (n=10, 10.8%), divorced (n=16, 17.2%), or cohabiting (n=11, 11.8%). In addition, around three quarters (n=71, 76.3%) had a lifetime suicidal history.

Table 1 around here

Demographic variables and suicidal history

Chi-square analyses were run to explore associations between categorical demographic variables and suicidal history. Current employment status, marital status, and living arrangements were coded into binary categories. Chi-square results suggest that those with a suicidal history are more likely to be out of employment than individuals without a suicidal history (X^2 (1, n=93) = 4.76, *p*=.029, OR=.34 (95% CI=.13-.92)). No associations were found between suicidal history and marital status (X^2 (1, n=93) = .75, *p*=.388, OR=1.63 (95% CI=.54-4.96)), or living arrangements (X^2 (1, n=93) = .05, *p*=.825, OR=1.12 (95% CI=.41-3.04)).

Childhood trauma and suicidal history

Independent-samples t-test results suggest that individuals with a suicidal history scored significantly higher than individuals without a suicidal history for CEA (t (91) = -2.77, *p*=.026, *d*=.62), CEN (t (91) = -2.63, *p*=.010, *d*=.*60*), CTQ-total (t (91) = -2.54, *p*=.013, *d*=.59), and CPTSD emotion deactivation (reactive pathway) (t (91) = -2.05, *p*=.043, *d*=.51). Results of t-tests comparing those with and without a suicidal history are presented in table 2.

Table 2 around here

Multivariate analyses

A binary logistic regression analysis was performed testing the unique associations between childhood emotional abuse, emotional neglect, deactivated emotion regulation, lack of emotional awareness, and employment status on the likelihood of having a suicidal history compared to no suicidal history. A test of the full model against a constant only model was statistically significant (X^2 (4, n=93) = 15.97, p=.002). This indicates that the model was able to distinguish between those with and without a suicidal history. The model as a whole explained between 15.8% (Cox and Snell R^2) and 23.7% (Nagelkerke R^2) of variance in suicidal history status, and correctly classified 77.4% of cases. As shown in table 3, results suggest that being out of employment (OR=4.12, p=.021) and childhood emotional abuse (OR=1.13, p=.045) were both significantly related to a suicidal history.

Table 3 around here

Discussion

It was found that greater severity of both CEA and CEN were experienced by those with a suicidal history than those with no such history. Examining these within a multivariate framework found only CEA to be independently associated with suicidal history. Results do not support the presence of the representative pathway, with neither negative self-concept nor disturbed relationships being related to suicidal history. The presence of the regulatory pathway was also not supported, with neither difficulties in impulse control, nor limited access to regulation strategies being significantly higher among those with a suicidal history than those without. Partial support was found for the presence of the reactive pathway, with higher levels of emotion deactivation among those with a suicidal history. Again though, this difference did not retain significance when examined within the multivariate framework. Finally, of the demographic moderators explored, only employment status was found to be

associated with suicide, with those out of employment being around four times more likely to have a suicidal history than those in employment.

The lack of significance of both negative self-concept and relational disturbances in relation to suicidal history is surprising, with these featuring prominently in contemporary perspectives on suicide, such as the Interpersonal Theory (IPT: Van Orden et al., 2010) and the Integrated Motivational Volitional (IMV) model (O'Connor & Kirtley, 2018). Each of these proposes that the lack of a sense of belonging or connectedness to others is a key determinant of suicidal ideations and behaviour (Van Orden et al., 2010; O'Connor & Kirtley, 2018). Additionally, the IPT suggests suicidal ideation emerges due to an interaction between this absence of belonging and perceiving oneself to be a burden, with this sense of burdensomeness being underpinned by self-hatred (Van Orden et al., 2010). These models have not previously been tested within populations of highly traumatised adults. The discrepancy between these prominent perspectives on suicide and the findings of the current study highlights the need for the development of theoretical perspectives on suicide specific to the trauma population.

While there was partial support for the presence of reactive elements in relation to suicidal history, with heightened emotion deactivation among those with a suicidal history, the loss of significance when controlling for additional predictors is noteworthy. This may suggest that there is not an independent pathway to suicide through emotion dysregulation, but potentially, a more complex network of vulnerability factors working in combination to infer suicide risk. Unfortunately, the limited sample used in the current study precluded the conducting of more sophisticated, multi-level modelling, such as structural equation modelling, which may have allowed for the exploration of such networks.

The identification of the unique predictive utility of CEA suggests that suicide risk may be specific to specific trauma types. Existing evidence in this regard is mixed. CEA, CPA, CSA, CEN, and CPN have all been previously found uniquely infer suicide risk (Liu et al., 2017; Zatti et al., 2017). However, there is also evidence suggesting none of these are independently related to suicide risk when controlling for the effects of the remaining trauma types (Torchalla, Strehlau, Schuetz & Krausz, 2012).

CEA is particularly impactful on the developing person's attributions of themselves, as a result of the continual messages of worthlessness which characterise it (Puzia, Kraines, Liu & Kleiman, 2014). While other trauma types, such as CPA or CSA, occur externally to any attributions of blame, or attributions about the self, CEA is unique in that its impact results due to the repeated messages being received of being worthless, or deserving of abuse (Rose & Abramson, 1992). Internalising such massages may prevent the formation of a positive self-perception, which may be drawn upon in times of stress. This inability to identify positivity about the self in times of stress will increase the impact these stressors have, subsequently increasing the risk of a suicidal outcome. This may be of particular relevance to the trauma population, where subsequent traumas could be expected to have a more severe impact when an emotional abuse history is present.

While CEA emerged as an independent risk factor for suicidal histories, being in employment emerged as an independent protective factor against suicide. Epidemiological data have consistently found fluctuations in suicide rates to follow fluctuations in employment rates, such that when unemployment rates increase, so do suicide rates (Yip & Caine, 2010). Case control studies have generally identified a similar relationship to this, with unemployment being implicated as a strong risk factor for suicide (Milner, Page & LaMontagne, 2014). However, most existing literature focuses on suicide deaths rather than suicide attempts, as well as on the general population as opposed to specific clinical or "at risk" groups. One

study conducted using a sample of recently discharged psychiatric patients found, among this population, being in employment to be a risk for suicide, suggesting population level trends may not necessarily translate across to clinical populations (Hunt et al., 2009). The identification of being out of employment as the strongest risk factor for a suicidal history within the current study is therefore particularly noteworthy.

It has been proposed that unemployment's relationship with suicide may come directly, through its increasing of life stressors, indirectly, through it increasing the likelihood of mental health difficulties or financial problems, or through a non-causal relationship where common factors represent vulnerability for both unemployment and suicide (Blakely, Collings & Atkinson, 2003). The retention of a strong significance between employment status and suicidal history when controlling for additional predictors suggests that there may indeed be a unique effect of unemployment on suicide risk over and above any potential common causes. Any direct or indirect route from unemployment to suicide risk is of particular pertinence within the trauma population, given the already potentially catastrophic mental health outcomes resulting from traumatic events. It is therefore of the utmost priority to minimise situations which may further exacerbate these outcomes.

Clinical Implications

Two key findings emerged from the current results: an increase in suicide risk among those with a history of CEA, and reduced rates of suicidal histories among those in employment. Among childhood trauma types, CEA has previously been found to have the strongest association with psychiatric disturbances such as depression, anxiety, and PTSD (Burns, Jackson & Harding, 2010; Norman, Byambaa, De, Butchart, Scott & Vos, 2012), with each of these representing unique suicide risk (Harwood, Hawton, Hope & Jacoby, 2001; Kanwar et al., 2013; Krysinska & Lester, 2010). This may suggest that such disturbances represent

stop-offs on the route from CEA to suicide. As such, it may be efficacious to base interventions for those with CEA histories, in part, around the diminishment of these symptom groups, in order to mitigate suicide risk.

Beyond this, and as has been discussed above, CEA may be particularly impactful on self-attributions, due it being characterised by messages of worthlessness. The presence of negative self-esteem, or negative self-worth, is known to increase suicide risk (Wichstrom, 2000; Wilburn & Smith, 2005). Indeed, the presence of positive self-appraisals are considered a key buffer against suicidality in response to stressful life events (Johnson, Gooding, Wood & Tarrier, 2010). Interventions aimed at enhancing ones self-concept, or boosting their sense of self-worth, may then be a further step towards minimising suicide risk in those with a history of CEA.

The second key finding from the current study was an association between unemployment and suicidal history. Unemployment's impact on mental health can be mitigated through the presence of features such as feeling valued by others, having a sense of purpose in life, contact from friends and acquaintances, being able to do things which match your skills and interests, and having a sense of order and regularity in life (Taris (2002). Experiences of psychological trauma are known to be associated with diminished self-esteem, reduced self-worth, and social isolation (Coates, Dinger, Donovan & Phares, 2013; Nilsson, Dahlstom, Priebe & Svedin, 2014; Sheikh, 2018). Interventions focusing in part on the latent benefits of employment, such as building self-esteem, and identifying ways in which to introduce feelings of value and purpose in life appear to be one way in which suicide risk may be attenuated within the trauma population.

Limitations and future directions

While the outcome measure used in the present study was selected due to its breadth, the lack of specificity in it, including as it does suicidal and self-harming threats and behaviours, cannot be ruled out as the main reason for the lack of findings. Future research may seek to refine the suicidal construct used. In addition, it cannot be ruled out that the lack of findings in the present study may result from the measures used to test Yates' pathways. These measures were selected for their being closely related to the pathways put forth by Yates, however it should be noted that they are not an exact match for these pathways. The findings presented within the current study were drawn from a cross-sectional design, limiting the possibility to determine causality within the relationships discussed. Further, it is not possible to state conclusively the causal ordering of suicidal experiences within the research variables. It cannot be determined through these data whether or not the protective demographic variables explored preceded the suicidal history, and can instead be viewed as indicative of potential associations between suicidal history and current functioning. The sample used was relatively small, meaning the necessary statistical power was not present to allow for all variables to be examined within a single multi-variate framework, instead it was necessary to only include those which had demonstrated univariate significance with suicidal history. The sample for the current sample was purposively drawn from a clinical sample in order to identify relationships which may be specific to those seeking treatment for psychological trauma. This inherently impacts upon the generalisability of our findings. In addition, around 95% of the sample was female, further limiting the generalisability of the findings. Finally, the suicidal history outcome measure used may be considered overly general in the experiences it captures, with it exploring both self-harming and suicidal threats and behaviours. Future research may seek to address these limitations through the use of large-scale, representative general-population samples, with outcome measures specific to suicidal behaviours.

Conclusions

This study contributes to the literature by highlighting the role of emotional abuse in childhood, as well as the protective nature of being in employment, in suicidal experiences in traumatised adults. We found suicidal histories to be common among the sample, with around three-quarters reporting a suicidal history. There was clear evidence for a relationship between childhood trauma and suicidal histories, in particular a unique impact from childhood emotional abuse was identified. In addition, it was found that being out of employment equated to a four-fold increase in suicidality risk. Each of these key findings has practical utility for clinicians assessing suicide vulnerability within the psychological trauma population.

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Table 1: Demographic characteristics

Age Range (Mean±SD)	19-62 (38.24±10.86)
Gender Female/Male (%)	89/4 (95.7/4.3)
Employment type	
Full-time n (%)	16 (17.2)
Part-time n (%)	13 (14.0)
Unemployed n (%)	50 (53.8)
Retired n (%)	2 (2.2)
Off sick n (%)	10 (10.8)
Living Arrangements	
Alone n (%)	31 (33.3)
With partner only n (%)	18 (19.4)
With family n (%)	14 (15.1)
Other n (%)	30 (32.3)
Marital status	
Married	10 (10.8)
Divorced	16 (17.2)
Cohabiting	11 (11.8)
Single	52 (55.9)
Other	30 (32.3)
Suicidal History Yes n (%)	71 (76.3)

Table 2: T-Test results comparing those with and without lifetime suicidality

	Suicidal History Mean (SD)	No Suicidal History Mean (SD)	Significance	Cohen's d
Childhood Trauma Questionnaire				
CTQ-total	78.77 (18.29)	66.96 (21.58)	.013*	.59
CEA	19.29 (4.78)	15.76 (6.51)	.026*	.62
CPA	12.71 (5.24)	11.23 (5.30)	.252	.28
CSA	16.36 (7.44)	14.19 (8.26)	.248	.28
CEN	17.99 (4.92)	14.64 (6.09)	.010**	.60
CPN	12.42 (4.42)	11.14 (5.09)	.253	.27
International Trauma Questionnaire				
DSO-total	45.61 (11.57)	40.86 (10.50)	.089	.43
Emotion hyperactivation	12.53 (4.18)	11.13 (3.36)	.156	.37
Emotion deactivation	10.97 (3.59)	9.18 (3.50)	.043*	.51
Neg self-concept	12.90 (3.72)	11.86 (4.32)	.273	.26
Disturbed relationships	9.21 (2.69)	8.68 (2.48)	.415	.21
Difficulties in Emotion Regulation Scale				
Impulse	18.26 (6.15)	15.91 (5.97)	.118	.39
Strategies	27.42 (6.96)	26.91 (7.24)	.767	.07

*Significant differences between means at .05 level **Significant difference at .01 level

Table 3: Binary logistic regression predicting likelihood of experiencing lifetime suicidal history

Predictor	*B*	Wald X^2	*P*	Odds Ratio	C.I for Odds ratio	
CEA	.12	4.02	.045*	1.13	1.01	1.27
CEN	.07	1.36	.243	1.07	.96	1.19
Emotion deactivation	.02	.05	.825	1.02	.87	1.20
Unemployment	1.42	5.23	.021*	4.12	1.23	13.73

*Significant association at .05 level