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The impact of a parent psychoeducation group on treatment outcomes of suicidal young people

Masters of Clinical Psychology

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Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968.

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Jennifer Fisher

Declarations

The authors declare that they have no competing interests. Jennifer Fisher and Alex Hains previously worked in the Suicide Prevention Program conducting both individual therapy with young people, and the psychoeducation group with parents. Neither author is currently involved in the service and have no competing interests in the current research.

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Abstract

Background: Suicide continues to be the lead cause of death for Australian young people aged 15-24 years. This is alarming given adolescence is often seen as the time which reflects the most productive, social, and positive years of life. Research on effective interventions for adolescent suicide has recommended a focus on improving protective factors against suicide, including education to parents about effective parental support and monitoring.

Aim: To assess the relationship between a single session parent psychoeducation session on specific clinical outcomes of psychological distress, hopelessness, non-suicidal self-injury, thwarted belongingness, perceived burdensomeness, and suicidal ideation and planning in young people accessing short term psychological support for suicide risk. *Method:* Baseline and final session data of clinical outcome measures of 182 young people aged 12 to 25 years (M = 16) who were participating in an individual intervention for suicide risk. Data from 34 young people (27 females; 7 males) who had one or more parent attend a single-session psychoeducation group was compared with 148 young people (107 females; 41 males) whose parent did not attend the group. *Results:* Findings indicated a decrease in youth-reported frequency of non-suicidal self-injury across the intervention was associated with parent attendance in the group. *Limitations:* Significant limitations of the current study were due to the data being collected from a clinical setting. Group allocation was not randomised, rather was based on whether parents accepted an invitation to attend the group. Due to this no conclusions of causation could be made. *Conclusions:* Findings provide preliminary support for the importance of including parental psychoeducation in the individual treatment of young people accessing support for suicide risk.

Keywords: suicide, young people, non-suicidal self-injury, parents

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Suicide is the lead cause of death for Australian young people aged 15-25 years (Australian Bureau of Statistics, 2016). Of particularly concern are the prevalence rates of suicidal behaviours in young people given adolescence is often seen as the time which reflects the most productive and positive years of life. In addition to the significant toll on the individual's family and community, suicidal behaviours in adolescence are associated with both poor mental and physical health in adulthood (Goldman-Mellor et al., 2014). For the purpose of this paper, the following terms will be used to describe behaviours; *Non-Suicidal Self-Injury (NSSI)* will be defined as "direct, deliberate destruction of one's own body tissue in the absence of intent to die" (Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006); *suicidal behaviours* referring to both suicide attempts, with intent to die, and suicidal ideation; and *self-injury* referring to deliberate destruction of one's own body tissue with an unknown intent. Zubrick and colleagues (2016b) estimated a lifetime prevalence of suicide attempts in Australian adolescents aged 12-17 years of 3.2%. Related to this is the prevalence rates of NSSI in this population (Zubrick et al., 2016a). Lifetime prevalence rates of NSSI in Australian adolescent populations is estimated at 10.9%, with 8% of surveyed adolescents reporting to engage in NSSI in the past 12 months (Zubrick et al., 2016a). Although suicidal behaviours and NSSI have distinct characteristics regarding frequency, prevalence, intent, means, and severity, it has been argued that more exposure to NSSI increases the risk of escalation to suicide attempts (Joiner, 2005; Fortune, Sinclair, & Hawton, 2008; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006; Ribeiro et al., 2016). Nock and colleagues (2006), found that 70% of adolescents engaging in NSSI reported a lifetime history of at least one suicide attempt.

Suicide risk factors and interventions

Risk factors for suicide include a wide range of concerns. Table 1 outlines a list of example risk factors used for Australian based suicide risk assessments (Black Dog Institute, 2015). Risk factors are not conclusive rather can act as a way to prioritise assessment of suicidal risk. Mental illness, including both affective and anxiety disorders, and past suicidal behaviours have been documented as significant risk factors (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999; Page et al., 2014; Ougrin, Tranah, Leigh, Taylor, & Rosenbaum-Asarnow, 2012). Further to this, social and interpersonal factors have been found to be significant factors in adolescent populations (King & Merchant, 2008; Consoli et al., 2013; Miller, Esposito-Smythers, & Leichtweis, 2015; Fotti, Katz, Afifi, & Cox, 2006). This includes perceived isolation, invalidation, and a sense of burdensomeness, as well as low family functioning have (King & Merchant, 2008; Wilkinson, Kelvin, Roberts, Dubicka, & Goodyer, 2011). Hopelessness about the likelihood of changing current distressing circumstances has been identified as a way in which the presence of risk factors may lead an individual to engage in suicidal behaviours (Joiner, 2005; Thompson, Mazza, Herting, Randell, & Eggert, 2005). Hopelessness has been an identified risk factor for both the development of suicidal ideation, and attempting suicide (Beck, Brown, Berchick, Stewart, & Steer, 1990; Thompson et al., 2005). Thompson and colleagues (2005) demonstrated support for a model in which hopelessness, anxiety and depression, acted as mediating factors in between distressing life circumstances and suicidal behaviours in adolescents. Hopelessness was found to have a direct and indirect role on suicidal behaviours.

Table 1

Examples of risk factors and warning signs for suicide

Risk factors	Warning signs
Male	Planning for suicide
Mental illness	Mood lability
Previous attempt	Increased anxiety or agitation
Family history of suicide	Withdrawal from others
Social isolation	Impulsivity
Drug and alcohol abuse	Feelings of burdensomeness
Culturally diverse background	Feeling hopeless
Sexual diversity	Recent significant stressor
Homeless	
Rural living	
Unemployment	
Bereavement/separation	
Access to lethal means	

Note. Adapted from "Advanced Training in Suicide Prevention", by the Black Dog Institute. Copyright 2015.

Psychological interventions for suicide risk in adolescents aim to assess and intervene typically with psychosocial risk factors for suicide in an attempt to increase an individual's coping strategies for dealing with distressing mood states and interpersonal stressors (Carr, 2016). A 2012 review of interventions for adolescent self-harm, including both NSSI and suicidal behaviours, found psychological interventions targeted a range of risk factors, including depressed mood states, negative thinking styles including hopelessness, emotional dysregulation, interpersonal concerns, and parenting concerns (Ougrin et al., 2012). The authors of the review concluded that further research was needed to determine the effectiveness of all interventions. A 2015 review of similar intervention studies targeting adolescent self-harming behaviours showed no interventions were found to be classified as *Level 1: Well established treatments*, according to the Journal of Clinical Child and Adolescent Psychology evaluation criteria (Glenn, Franklin, & Nock, 2015). Five interventions were found to be classified as *Level 2: Probably efficacious treatments*, four of which had family involvement in differing degrees - Mentalisation-based Treatment for Adolescents (MBT-A) (Rossouw & Fonagy, 2012); Attachment-Based Family Therapy

(ABFT) (Diamond et al., 2010); Integrated Cognitive Behaviour Therapy (I-CBT) (Esposito-Smythers, Spirito, Kahler, Hunt, & Monti, 2011); and Resourceful Adolescent Parent Program (RAP-P) (Pineda & Dadds, 2013).

Review of the *Level 2* intervention studies showed they significantly reduced adolescent suicidal behaviours, along with other risk factors, when compared with treatment as usual (TAU) in the community. However, three of the four studies did not specifically test the outcome of involving family in the therapy between the treatment and the TAU groups, as the TAU in the community was not controlled for and in many cases involved family intervention to some degree. The fourth *Level 2* intervention which yielded promising results was an Australian based RCT looking directly at the effects of a strengths-based family education program, *Resourceful Adolescent Parent Program* (RAP-P) on reducing adolescent suicidality and psychiatric impairment (Pineda & Dadds, 2013). Participants were allocated to the Routine Care (RC) plus RAP-P group, or RC only (control group). RAP-P is a manualised psycho-educational program for parents designed to build resilience and foster positive mental health for adolescents in their care (Pineda & Dadds, 2013). Due to suicide risk, RAP-P was modified to provide information on self-harming, practical strategies in harm minimisation, and appropriate referral information. Adolescent suicidality and psychiatric symptoms in the intervention group were shown to be significantly reduced compared to that of the control. These effects were shown within a 4-week period of intervention, indicating short term intervention is possible (Pineda & Dadds, 2013). This study directly compared the independent variable of parental involvement in RC on adolescent suicide risk. Positive results were shown in reductions in youth suicidality when parents were involved. The study also showed evidence for reducing parental distress and ongoing positive involvement in their child's care.

Interpersonal aspects of suicide risk

One theory which examines the role between social (including both family and peer) connectedness and the development of suicide risk is the Interpersonal-Psychological Theory of Suicide (IPTS; Joiner, 2005). According to the IPTS, suicidal desire is the result of hopelessness about interpersonal constructs of perceived burdensomeness and thwarted belongingness (Van Orden et al., 2010). Perceived burdensomeness refers to the feeling that an individual's life is a burden on their friends, family, and society (Joiner, 2005; Ribeiro & Joiner, 2009). Thwarted belongingness refers to feeling disconnected from family, friends and social connections (Joiner, 2005; Ribeiro & Joiner, 2009). According to the IPTS, not all individuals who have the desire for suicide will engage in suicidal behaviours. Rather, individuals are more at risk if they have both the desire to suicide and the capacity to engage in significant self-injurious behaviours (Joiner, 2005; Ribeiro & Joiner, 2009). It is theorised that an individual's capacity for suicide will be increased with repeated exposure to painful experiences, including NSSI. A study looking into the impact of thwarted belongingness and perceived burdensomeness in adolescents found perceived burdensomeness and thwarted belongingness, when present together, were significantly correlated with more severe suicidal ideation (Opperman, Czyz, Gipson, & King, 2015). Results from the study suggested that feelings of disconnection from family, and a sense of burdensomeness on others, are significant risk factors in adolescent suicide (Opperman et al., 2015). A sense of disconnection from, and feeling a burden on, family may also act as potential barriers to help-seeking for suicidal behaviours. Higher levels of suicidal ideation are associated with lower levels of help-seeking behaviours in adolescents. (Carlton & Deane, 2000). Research into the level of help-seeking for NSSI shows similar results. Young people are more likely to seek help from their peers than their family, with many not seeking help at all (Fortune et al., 2008). An important factor to consider here is the changes in social development occurring

throughout adolescence. Marked changes in parent-child relationships and dependency are seen in adolescence (Steinberg & Morris, 2001). This may further reduce help-seeking from parents. Feelings of burdensomeness do, however, appear to be a factor in seeking help from family. An Australian study of high school students found young people who engaged in NSSI felt they needed to cope alone as they did not want to burden their parents, thus reducing their help-seeking behaviours (Berger, Hasking, & Martin, 2013). When asked what could increase the likelihood of seeking help from their parents, participant responses included parents being able to respond calmly to reports of risk, rather than becoming distressed. Adolescent opinions about what may help prevent suicidal behaviours include having family members they felt they could communicate with about their distress; and seek advice from (Fortune et al., 2008).

Support for parents

Research into parent's own feelings regarding supporting their young person experiencing suicidal behaviours and NSSI, found reports of hopelessness and helplessness (Raphael, Clarke, & Kumar, 2006). Byrne et al. (2008) conducted, a qualitative study on a focus group of parents of young people who had recently engaged in self-injury and found a high prevalence of reports of feeling unsupported by health professionals, not knowing how to minimise harm or intervene effectively, feeling a loss of confidence in their parenting abilities, feeling overwhelmed with self-blame and guilt, and feeling increased frustration and anger directed towards their young person. Further to this, a solely parent based intervention aimed at decreasing psychological distress in parents of adolescents who self-injured showed significant improvements in parent psychological distress, parental satisfaction in their role as parent, and parents' ratings of their child's difficulties (Power et al., 2009). Providing information about the phenomenon of youth self-injury and ways to engage in communication were described by parents as essential. Parents reported struggling with

ignorance about the topic and sought education on harm-minimisation and removal of means, ways to show their continued care and understanding, and being confident to interact with professionals in their young person's care (Rissanen, Kylma, & Laukkanen, 2009). Despite struggling with their own emotional reactions to the self-injury, parents are often essential in the emergency care of adolescents (McLaughlin, McGowan, O'Neill, & Kernohan, 2014). Emergency services will often discharge the young person from hospital after an episode of self-injury into the primary care of their parents who feel they are unsure of how to maintain safety. Qualitative research into parent perspectives of responsibility show parents seeing themselves as the primary point of intervention, and the main support for young people in times of crisis (Rissanen et al., 2009). By providing education and contact with health professionals involved in youth suicide intervention, parents may be better equipped to help, and connect with, their young person, which may help to reduce subsequent adolescent suicidal behaviours.

Aims and Hypotheses

This study aimed to extend current research on whether including parent psychoeducation reduces suicide risk factors of psychological distress including depressed mood and anxiety; feelings of hopelessness, NSSI, interpersonal constructs of TB and PB, and suicidal ideation and planning, in the treatment of young people accessing psychological support for suicide risk. De-identified data of consenting young people engaged in a suicide prevention program was used. It was hypothesised that young people accessing individual psychological support for suicide risk, whose parents were involved in a psychoeducation group would have a greater decrease in suicide risk factors, over the course of their individual intervention, compared to young people accessing the same individual intervention, but whose parents were not involved in a psychoeducation group.

Method

Participants

Participant data was drawn from a dataset of young people who, during the course of clinical intervention for suicide risk, had consented to their data being stored and used for research purposes. Data was collected while the young person was involved in a Suicide Prevention (SP) Program within a Non-Government Organisation (NGO). The NGO was federally funded to provide direct intervention for people at mild to moderate risk of suicide in a local regional area of New South Wales, Australia. Referrals to the SP Program came from a range of sources including General Practitioners, local hospitals, schools, family members, and self-referrals. The service was free and time limited for a two-month period, or three-month period if the individual identified as Aboriginal or Torres Strait Islander. Participants included 182 young people (134 females, 48 males), aged between 12 and 24 years. Participant data was grouped according to whether the young person had a parent attend a single session psychoeducation group throughout their involvement in the SP Program. For the purpose of the study, data from participants who had one or more parent attend the group made up the *intervention* group, whilst data from participants who did not have parental attend the group made up the *control* group. It is important to note, the participants were not randomly allocated into groups for comparison, rather group allocation was based on whether parents accepted an invitation to attend a psychoeducation session. Attendance of parents in the group was voluntary and all parents were invited to attend the group, with only those who accepted the invitation attending. In no way did the attendance of parents in the group impact the ongoing intervention of the young person in the SP Program. All participants and parents involved in the current study had provided informed consent for their involvement in the program and their de-identified data to be collected, stored, and used

for research purposes. The University of Newcastle Human Ethics Research Committee approved the current project.

Demographic information and baseline clinical data for both groups is presented in Table 2. For both groups, the average age of the participants was just over 16 years old. There were more female participants in the intervention group than in the control group, with females making up most participants in both groups. The average number of individual treatment sessions was similar for participants in both groups. All participants in the intervention group lived with their family, compared to approximately 85% in the control group. Under 10% of participants in both groups identified as Aboriginal and/or Torres Strait Islander. Clinicians assessed approximately 60% of participants in both groups as having a primary diagnosis of depressive disorder and having receiving past psychological intervention. Approximately 30% of participants in both groups had received past medical intervention for their mental health. Over 70% of participants in both groups reported a history of both suicidal ideation and NSSI. Slightly higher numbers of participants in the control group reported a history of trauma, compared to the intervention group. Over half of participants in the intervention group reported at least one previous suicide attempt, compared to under 50% in the control group. There were similar results across both groups for a family history of suicide, however more participants in the intervention group reported a family history of NSSI. Mean scores of emotional distress, hopelessness, and interpersonal constructs measured at the initial session were similar across both groups. Similar percentages of participants in both groups reported engaging in at least five occasions of NSSI in the past week. More participants in the intervention group were rated by their clinician as within a mild to moderate range of suicide risk, compared to the control group.

Table 2

Demographic and baseline clinical data for both intervention and control groups

	Intervention group (*n* = 34)		Control group (*n* = 148)	
	Mean (SD)	%	Mean (SD)	%
Age	16.03(2.24)		16.31(2.90)	
Gender				
Female		79.4		72.3
Male		20.6		27.7
Total intervention sessions	6.35(2.21)		6.34(2.03)	
Living with family		100		87.5
Aboriginal/ Torres Strait Islander Status		6.5		8.8
Depression primary diagnosis		58.1		64.9
Past psychological treatment		67.7		60
Past medical treatment		32.3		36.1
History of suicidal ideation		71		72.8
History of NSSI		77.4		77.9
History of trauma		34.5		42.4
Previous suicide attempts				
None		41.4		56
One		34.5		24
Two		17.2		12
Three		3.4		4
Four		3.4		4
Family history of suicide		40		36.2
Family history of NSSI		43.3		26
DASS21	45.47(8.34)		43.13(10.19)	
Total INQ	66.31(10.14)		64.55(11.78)	
BHS	15.10(4.41)		15.10(4.23)	
5+ occasions NSSI in week		61.3		60.3
Mild-Moderate MSSI		61.8		51.4

Young person intervention. Participants in both groups received weekly 50-minute sessions of psychological treatment for a two- to three-month period. The treatment was based on the Cognitive-Behavioural Therapy for Suicide Prevention (CBT-SP), developed by Stanley and colleagues (2009). Family involvement in these sessions was not controlled, as it

was based on the needs and consent of the young person. However, the vast majority of sessions were with the young person alone.

Parent intervention. All parents of consenting young people were invited to participate in a psychoeducation group session. Content for the group was determined by parents and young people previously involved in the service. Asking families for their input into the group was based on research indicating this as essential for providing adequate support and education to families (Byrne et al., 2008; Berger et al., 2013). The content of the parent group included information such as the importance of involving families, psychoeducation about suicidal behaviours and NSSI, parenting young people at risk of suicide, safety and warning signs of suicide, self-care, and additional resources and services for support. The content was manualised and once essential topics were covered, there was opportunity for flexible discussion based on the specific needs of the group. The parents were also provided a booklet with the information covered in the group, to review in their own time. The group was facilitated by clinicians in the program who were not providing individual therapy to the young people whose parents were attending. Young people whose parents attended the group session were included in the intervention group.

Measures

Outcome measures were based on the following risk factors for suicide: psychological distress, hopelessness, NSSI, interpersonal constructs, and suicidal ideation and planning. Risk outcomes in the SP program were chosen based on Joiner's (2005) model of the Interpersonal-Psychological Theory of Suicidal Behaviour. Outcome measures were gathered through paper questionnaires at each session and were used for clinical practice as well as stored for research.

Psychological distress. Psychological distress was measured with the short version of the Depression, Anxiety and Stress Scale (DASS-21; Lovibond & Lovibond, 1995). The

DASS-21 is a self-report measure of 21 items rated on a 4-point scale ranging from 0 = *Never* to 3 = *Almost always*. The DASS-21 has demonstrated strong reliability and validity in clinical and non-clinical samples (Antony, Bieling, Cox, Enns, & Swinson, 1998).

Hopelessness. Hopelessness was measured with the Beck Hopelessness Scale (BHS; Beck et al., 1974). The BHS is a self-report measure of 20 items rated as *True* or *False* (e.g. "My future seems dark to me"). The BHS has been used frequently in research for measuring hopelessness related to suicide and has demonstrated good construct and predictive validity for future suicidal behaviours (Beck et al., 1974; McMillan, Gilbody, Beresford, & Neilly, 2007; Beck et al., 1990).

Non-suicidal self-injury (NSSI). Section one the Inventory of Statements about Self-Injury (ISAS; Klonsky & Glenn, 2009) was used to assess participant's frequency of NSSI. Section one of the ISAS provides a self-reported numeric value of NSSI occurrences in the past week as well as historical occurrences. For the purpose of this study only the value of NSSI occurrences in the past week was used in order to identify the change in frequency over the time period of the intervention.

Interpersonal constructs. The interpersonal constructs relating to perceived burdensomeness (PB) and thwarted belongingness (TB) were measured using the Interpersonal Needs Questionnaire (INQ-15). The INQ-15 is a self-report measure of 15 items rated on a 7-point scale ranging from 1 = *Not at all true for me* to 7 = *Very true for me.* PB is measured on six items of the scale (e.g. "These days, the people in my life would be better off if I were gone") and TB is measured on the remaining nine items (e.g. "These days, I feel disconnected from other people"). The INQ-15 was developed specifically to measure these two constructs as mediating factors of a desire for suicide (Van Orden, Cukrowicz, Witte, & Joiner, 2012). Van Orden and colleagues (2012) provided evidence for the validity, reliability, and clinical utility of this measure across a range of populations.

Suicidal ideation and planning. Suicidal ideation and planning was measured through a structured clinical interview measuring thoughts and planning over the past 48 hours outlined in the Modified Scale for Suicide Ideation (MSSI; Miller, Norman, Bishop, & Dow, 1991). Individual clinicians rated participant's answers to items on a 4-point scale ranging from 0 = *None* to 3 = *Strong*. The first four items act as screening questions with more severe answers leading to the entire measure being administered. The MSSI measures two constructs: suicidal desire and ideation (e.g. "Over the past day or two, have you thought about wanting to die?") and resolved plans and preparation (e.g. "Over the past day or two have you been thinking about a way to kill yourself, the method you might use?"). Joiner and colleagues (1997) demonstrated the reliability of the scale in predicting suicide attempts and ideation in suicidal young adults.

Procedure

The current project involved secondary data analysis of de-identified datasets of young people involved in the SP Program between 2013 and 2016. Data was cleaned to identify missing data or inaccuracies. After cleaning, the data consisted of 529 de-identified datasets. Suicide risk (outcome) variables were measured across two time points. Baseline data was taken from the initial session for all outcome variables except NSSI, which was taken at the second session in order to gain a weekly total. Initial session NSSI data focuses on the total historical number of occasions of NSSI, while subsequent sessions focus on the previous weekly frequency. Final data for all measures was taken from the final session the young person attended. The average number of weekly sessions attended by participants in the intervention group was 6.35 (SD = 2.21), and in the control group was 6.34 (SD = 2.03). This difference was not statistically different.

From the sample of 529 consenting young people, participants who attended fewer than three sessions were excluded (n = 98). Reasons for this were two-fold; firstly, baseline

data for NSSI scores was taken from session two rather than session one, meaning participants had to attend at least one additional treatment session to obtain measures across two time periods. Secondly, the CBT-SP intervention was semi-manualised with the initial two sessions including orientation to the program and weekly measures, informed consent, and addressing current safety concerns through safety planning. Drivers behind the young person's suicidality were typically not addressed until session three. Participants were also excluded if their current presentation did not warrant sufficient suicidality as measured on the Modified Scale Suicide Ideation (n = 249). Participants with a score of less than three on the MSSI were excluded. This left a final sample of 182 participants. *Figure 1* shows the selection process for obtaining the final sample of datasets used in the analyses. Chi-squared tests and independent t-tests ($\alpha = 0.05$) showed the two groups were independent on clinical baseline variables and all demographics except for age (Field, 2013; Pallant, 2011). Age of participants in the intervention group was significantly younger compared with the control group. The final sample size was sufficient to detect a large effect size for two groups over two time points (p = .05 and power = 0.99; Van Baardewijk, 2011). Previous studies, measuring similar outcomes, have had smaller sample sizes and gained significant results (n=46; Power et al., 2009; and n=48; Pineda & Dadds, 2013).

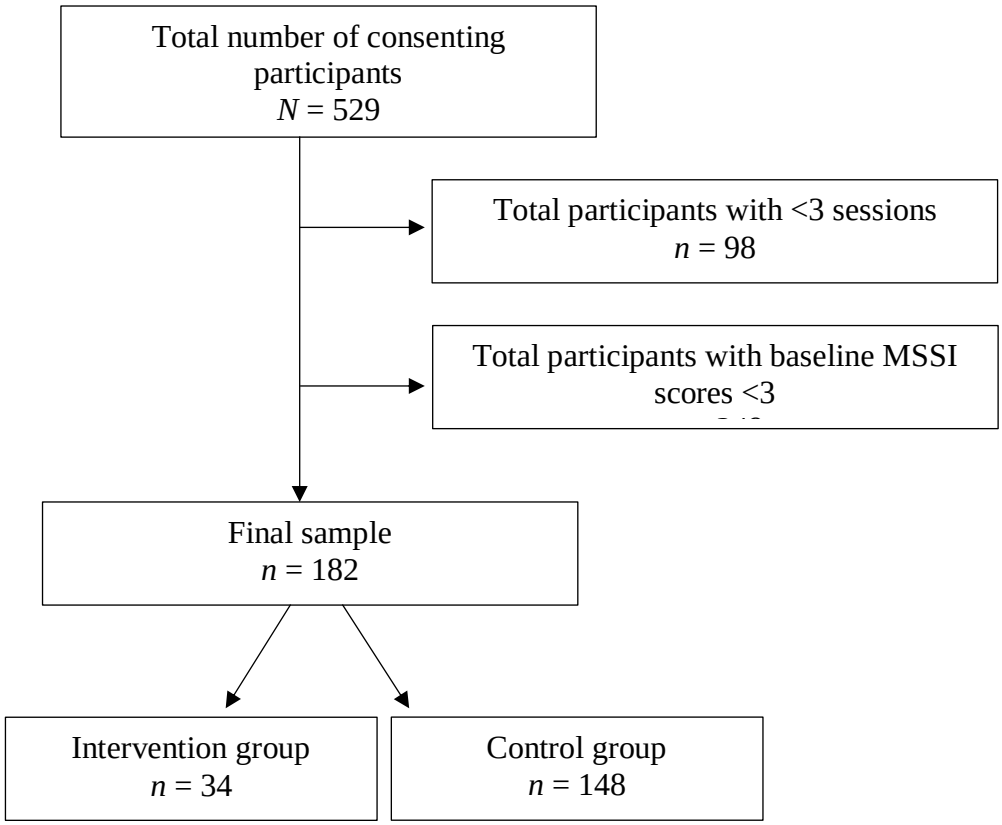


Figure 1. Participant selection flowchart

Data analysis

Statistical analyses were used to test the effect of missing data in the final sample. Little MCAR test was not significant, χ^2 (511) = 428.30, p = 0.99, indicating that the missing data was random. Due to the missing data being completely random, pairwise deletion was chosen to account for missing data for subsequent analyses. This was preferred over listwise deletion in order to maintain the sample size (Pallant, 2011). Tests of correlation were used to measure relationships between the change in outcome variables across treatment, parent attendance in the psychoeducation group, and covariates of age, sex, and number of CBT-SP intervention sessions attended. Spearman's rho was used as the correlation coefficient due to some clinical variables not being normally distributed and the inclusion of data which was not continuous (Brace, Snelgar, & Kemp, 2012; Pallant, 2011). Covariates of age, sex, and

number of sessions attended were chosen based on previous research indicating these factors may influence suicide risk and treatment outcomes (Steele, Thrower, Noroian, & Saleh, 2018; Turecki & Brent, 2016; Bolton, Gunnell, & Turecki, 2015). Univariate analyses of variance were used to test the independence of the covariates on parent attendance. No main effects of parent attendance were found, indicating the covariates were equivalent between the two treatment groups (Field, 2013).

Preliminary analyses showed significant outliers in the data from the ISAS (measuring NSSI) and the MSSI (measuring suicidal ideation and planning). Outliers on these measures are common due to the MSSI being either discontinued after the first four screening items, or completed in full, leading to significant differences in total scores between participants (Miller et al., 1991). To minimise the effect of outliers on further analyses, the data was transformed using the MSSI scoring procedure outlined by Miller and colleagues (1991). Raw scores were collapsed into categories of low, mild-moderate, and severe suicidal ideation. These cut off points were used to recode both baseline and final scores into new variables (Brace et al., 2012). Outliers are also common in the ISAS data, due to significant differences in self-reporting of NSSI between participants (Klonsky & Glenn, 2009). Categories into which ISAS data was collapsed were based on the interquartile range of the baseline data. This allowed for four groups of data categorised by percentiles (Brace et al., 2012). Total scores for the DASS-21 and the INQ-15 were used due to consistent patterns of results obtained when subscales were separated.

In order to test the hypothesis of a greater decrease in suicide risk outcomes, over the course of individual intervention, for young people whose parents attended a psychoeducation group, compared to young people whose parents did not attend, mixed analyses of covariance (ANCOVA) were used. The effect of time in treatment and parent attendance on clinical outcomes was analysed, whilst controlling for the effect of other

variables (Brace et al., 2012; Field, 2013). Five separate ANCOVA's were run in order to test the effect of parent attendance on the five outcomes variables of psychological distress, hopelessness, NSSI, interpersonal constructs, and suicidal ideation and planning (Brace et al., 2012; Field, 2013). Given the number of planned analyses, a Bonferroni adjustment was made to reduce the chance of Type I error. A more conservative alpha level (.05/5; $p < .01$) was used to judge statistical significance for main effects (Field, 2013; Pallant, 2011).

Results

Correlations

Table 2 displays bivariate correlations between parent attendance, changes in outcome variables across the intervention, and covariates. Moderate positive correlations were found between most outcome variables, $p < .05$. Covariates of age and sex were not correlated with any outcome variables or parent attendance. Between the covariates, small correlations were found between age and sex, $p < .01$, and age and number of sessions, $p < .01$, indicating that females tended to be younger in age and younger participants attended more treatment sessions in this sample. A small correlation was found between the number of sessions participants attended and the change in NSSI frequency across the intervention, $p < .05$, indicating that attending a greater number of treatment sessions was associated with greater decreases in frequency of NSSI across the intervention. A small correlation was found between parent attendance and change in participants scores of hopelessness across the intervention, $p < .05$, indicating that parent attendance was associated with greater decreases in reports of hopelessness across the intervention.

Table 3

Bivariate correlations of covariates, parent attendance, and change in outcome variables across treatment

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Sex[a]	-								
2. Age	-.213**	-							
3. No. of Sessions	.077	-.224**	-						
4. Parent Attended	-.053	-.057	-.035	-					
5. Interpersonal Constructs	.042	-.025	-.110	-.028	-				
6. Psychological Distress	-.046	-.060	.119	-.145	.409**	-			
7. Hopelessness	.053	-.066	.069	-.164*	.390**	.555**	-		
8. Past week NSSI	.043	-.067	.185*	-.085	.167*	.194*	.112	-	
9. Suicide Risk	-.007	-.025	.087	-.085	.193*	.413**	.254**	.134	-

Note. [a]Point-biserial correlation, male = 1, female = 2, parent attended = 1, parent did not attend = 2
** $p < .01$; * $p < .05$

Effects of parent attendance on suicide risk factors

To test the hypothesis that there would be a greater decrease in suicide risk outcomes in young people involved in individual intervention for suicide risk who have at least one parent attend a psychoeducation group, compared to those young people who do not have parent attendance in the group, a series of mixed analysis of covariance were conducted. Separate analyses of covariance were used to test the effect of both time in treatment and parent attendance for each outcome variable.

NSSI

A significant interaction between parent attendance and time in treatment on weekly reports of NSSI was found after controlling for the covariates $F(1, 157) = 8.99$, p .003. Figure 2

shows a greater reduction over time in treatment in mean weekly reports of NSSI, as measured on the ISAS, in the intervention group compared to the control group.

Hopelessness

The interaction between parent attendance and time in treatment on scores of hopelessness was close to significance, yet still outside statistical significance $F(1, 169) = 5.53$, $p = .02$, after controlling for the covariates. There were no main effects of time in treatment $F(1, 169) = 1.38$, $p = .24$, or parent attendance $F(1, 169) = 2.63$, $p = .11$, on scores of hopelessness, after controlling for the covariates.

Psychological distress

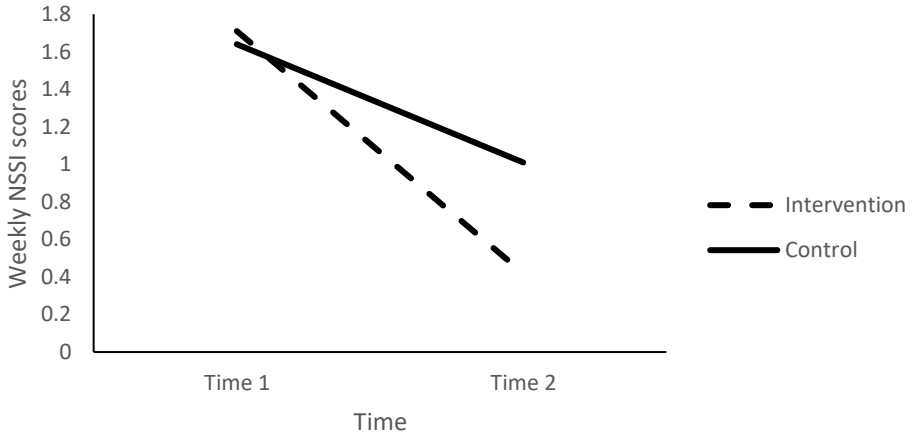
There was no significant interaction between parent attendance and time in treatment $F(1, 170) = 3.24$, $p = .07$, nor any main effects of parent attendance $F(1, 170) = 0.11$, $p = .74$ or time $F(1, 170) = 0.63$, $p = .80$ on scores of psychological distress, after controlling for the covariates.

Interpersonal constructs

There was no significant interaction between parent attendance and time in treatment $F(1, 164) = 5.99$, $p = .44$, nor any main effects of parent attendance $F(1, 164) = 0.01$, $p = .93$, or time $F(1, 164) = 3.07$, $p = 0.09$ on scores of interpersonal constructs of PB and TB, after controlling for the covariates.

Suicidal ideation and planning

There was no significant interaction between parent attendance and time in treatment $F(1, 160) = 0.73$, $p = .40$, nor any main effects of parent attendance $F(1, 160) = 0.20$, $p = .66$, or time $F(1, 160) = 1.03$, $p = .31$, on reports of suicidal ideation and planning after controlling for the covariates.



Note. Coded means for NSSI based in interquartile ranges of data. Score of 1 = occasions of NSSI ranging from 0-15 in past week; Score of 2 = occasions of NSSI ranging from 16-50 in past week.

Figure 2. Changes in mean weekly ratings of NSSI across time in therapy for young people who did (Intervention) and did not (Control) have a parent attend a group psychoeducation group.

Discussion

This study aimed to identify the impact of a parent psychoeducation group on suicide risk outcomes of young people engaged in individual psychological treatment for suicide risk. Data from young people, aged 12-24 years, who were involved in an intervention consisting of weekly psychological sessions whose parents attended a single-session psychoeducation group was compared to data from young people involved in the same intervention whose parents did not attend the group. The study drew from data from a clinical setting, in which participant data was collected weekly throughout the young person's intervention to inform both their own individual clinical intervention and future research.

Main findings

This study provided preliminary support for the hypothesis that a single session psychoeducation group for parents of suicidal young people involved in psychological treatment for suicide risk may have an impact on reducing young people's frequency of

NSSI. We found that in a clinical sample, in which participants were not randomised, nor external variables controlled for, that involving parents in a psychoeducation group session may be beneficial.

Reductions in NSSI frequency is an important finding due to higher numbers of suicide attempts found in adolescents who engage in NSSI for longer periods of time (Nock et al., 2006). In aiming to reduce the likelihood of a suicide attempt, NSSI has been found to have predictive value for adolescent suicide attempts, and as such is frequently regarded in a significant risk factor for suicidal behaviours (Klonsky, May & Glenn, 2013; Ribeiro et al., 2016). Interestingly, Klonsky and colleagues (2013) found NSSI had more predictive value for future suicide attempts than a diagnosis of Borderline Personality Disorder, anxiety, depression, and impulsivity. In a study of young people experiencing treatment-resistant depression, a history of NSSI at baseline was found to be stronger predictor of future suicide attempts than baseline suicide attempts (Asarnow et al., 2011). The authors concluded that, due to the close associations between NSSI and suicidal self-injury, both need to be targeted in youth interventions for suicide risk. As the onset of NSSI typically occurs during the adolescent period and increases in prevalence with age; timely, early intervention for NSSI, with the involvement of parents or carers may to be essential in reducing ongoing NSSI and future suicidal behaviours (Klonsky, 2011; Zubrick et al., 2016a).

Support for the findings that NSSI frequency reduced without reductions seen in other risk factors is seen in reviews of intervention effectiveness on NSSI compared with suicidal risk. Ougrin and colleagues (2015) review of psychological interventions targeting both NSSI and suicidal behaviours found interventions were more effective for reducing NSSI than overall suicide risk. A separate review of adolescent risk factors for NSSI showed family factors including poor quality parent-child relationship and poor parental support elevate the risk of NSSI in young people (Arbuthnott & Lewis, 2015). A longitudinal study found family

support was the most important interpersonal factor relating to the onset, maintenance, and cessation of adolescent NSSI (Tatnell, Kelada, Hasking, & Martin, 2014). Results from a meta-analysis of randomised controlled trials aiming to reduce self-injury in adolescents found that when the effects of the interventions were tested separately for NSSI compared to suicide attempts, the results indicated a higher efficacy for reducing NSSI than for reducing suicide attempts (Ougrin, et al. 2015). When studies which focused primarily on NSSI were excluded from the analysis the effect of treatment efficacy was weaker. The authors suggested that treatments targeting suicide attempts need to differ from those targeting NSSI and highlighted the need for further studies to focus attention on increasing knowledge about effective treatment interventions specific for young people engaging in suicidal behaviours. This review of studies, as well as the current findings may point the well documented differences between NSSI and suicidal behaviours, (Muehlenkamp & Gutierrez, 2007; Guertin, Lloyd-Richardson, Spirito, Donaldson, & Boergers, 2001). It is theorised that individuals who engage in NSSI have difficulty with emotion regulation skills and NSSI is a functional behaviour to cope with difficult emotions, rather than a behaviour with intent to die (Nock & Prinstein, 2004). Therefore, individuals who engage NSSI are theorised as motivated to live rather than attempt to end their life (Muehlenkamp & Gutierrez, 2004). NSSI in individuals has been found to be significantly associated with the presence of emotional disorders as may act as a way to escape from or avoid distressing emotions (Bentley, Cassiello-Robbins, Vittorio, Sauer-Zavala, & Barlow, 2015). NSSI serves different functions in different individuals, both intrapersonal and interpersonal in nature (Klonsky, 2007). It may be likely that by providing support for parents to better communicate, validate, and support their young person, the interpersonal function behind the NSSI may have been met in more healthy and adaptive means. Improving communication skills to include expressing empathy, emotional validation, and problem-solving with the young person, in a

calm manner has been identified by young people has a way parents can support with reducing self-injury (Fortune et al., 2008). Young people often find it difficult to seek professional help for mental ill-health and can feel a sense of burdensomeness seeking help from their parents (Berger et al., 2013). Therefore, having parents educated and confident to ask about their young person's distress may reduce barriers to accessing help in the long term. Having parents be willing and confident to be involved in their young person's care may also reduce the young person's belief that they need to cope alone, thus possibly increasing hope for change. The participants in the current study were already involved in psychological intervention and therefore it is assumed they have sought and accepted help for their current distress, however as psychological treatment is often time limited, developing parents' skills to help their young person into the future may increase the chance of longer term positive outcomes. The current study attempted to control for the separate constructs of NSSI and suicidal behaviours by excluding participants who did not endorse current suicidal ideation. However, the close relationship between the constructs makes accurate separation of these behaviours in a clinical sample difficult to achieve. The findings may provide support for parental education having a role in helping young people find alternate coping strategies to deal with psychological distress, however does not indicate that overall suicide risk is impacted by parental psychoeducation. The greater efficacy of parental education on reducing NSSI compared to overall suicide risk in young people supports previous research in which family alliance was found to be stronger in adolescents who engaged in NSSI without suicidal behaviours, than for adolescents who engage in both NSSI and suicidal behaviours (Muehlenkamp & Gutierrez, 2007). Not engaging in suicidal behaviours was found to be a protective factor for seeking external support primarily from parents. The current study did not separate those adolescents who endorsed a high degree of suicidal planning nor those who had a history of suicidal behaviours from those who endorsed a low level of suicidal planning

with no previous attempts. This may have highlighted further the impact suicidal behaviours have on the effectiveness of parental support.

The overall hypothesis was not supported by the findings due to psychological distress, hopelessness, interpersonal constructs of perceptions of PB and TB, and suicidal ideation and planning not appearing to be influenced by parent attendance in the psychoeducation group. A potential reason is the possibility that these factors are often covert in nature and may be much more difficult for parents to notice and act on. Research into the psychoeducation sought by parents shows a bias toward overt risk factors (Byrne et al., 2008). Acting on overt risk factors, including NSSI, may be easier for parents compared with supporting depressed mood, hopelessness, and suicidal thinking. This is supported by both reports from clinicians in the present study as to what topics typically arose in the group discussions, as well as previous research indicating parents are quick to raise concerns about responding to self-injury, when to contact emergency services, or reducing access to means for self-injury (Byrne et al., 2008). The lack of significant results may also be due to relationship changes occurring during adolescence. Adolescence is a time when peer support is strengthened, reducing the impact parents may have on young people's psychological distress (Steinberg & Morris, 2001).

Strengths and limitations of the study

Strengths of the study include the ecological validity, clinical utility and ease of replication. The intervention was brief and the results have provided a possible way to involve parents in young people's psychological treatment without direct parental involvement in sessions. This study indicated that providing relevant, yet generalised information to parents and encouraging helpful communication skills may be a way to assist in reducing the frequency of NSSI in young people seeking psychological treatment.

Significant limitations of the current study were due to participants being part of a clinical treatment program, in a real-world setting, and were not randomised. This reduced the ability to control external variables thus reducing the ability to draw causal links between the parent group attendance and the results found. It is not known the extent of involvement the parents had in their young person's care throughout the intervention, nor how much they acted on the information provided in the psychoeducation group. Perhaps parents who attended the group were already more involved in their young person's care, compared to those who did not attend the group. This is of particular note, due to all parents being invited to attend the group. Those parents who accepted the offer were potentially more involved in, and supportive of, their young person's psychological treatment. The age difference between the groups may have also impacted the amount of involvement from parents. Younger age was also associated with attending more sessions. Given the intervention group had a younger average age than the control group, this may have further influenced outcomes. There was a higher percentage of young people in the intervention group who were currently living with their parents, compared to the control group, which may have impacted the amount of influence parents had on assisting with risk factors. Additional limitations include the absence of follow-up data available for young people once they had completed the intervention. The difference in group sizes was a further limitation. Having equal numbers of participants in both groups would strengthen findings. The time at which the parents attended the group was also not controlled for. Parents were invited to attend throughout the young person's intervention. For some this may have been after the first session, resulting in greater opportunities to support their young person throughout treatment. Others may have attended after the final session, with the impact from the education not contributing to the young person's final data.

While this study supports the notion that parental involvement in a single session psychoeducation group is associated with reductions in NSSI, it does not uncover the specific mechanisms of change. That is, the present study did not identify what specific parental factors influenced outcomes. Research into the long-term factors related to suicide risk identifies the importance of *family functioning (*Zubrick, et al., 2016b), which was not a variable in this study. Future studies should look more specifically at this, given its documented importance.

Conclusion

This study strengthens research on the importance of including parents in individual treatment for adolescent suicide risk. It may also provide further support for providing education to parents based on what parents and young people suggest is important for outcomes. Providing parents with information about how to help and support their young person was associated with decreased levels of weekly engagement of NSSI, however it was not associated with changes in other suicide risk factors of psychological distress, hopelessness, TB and PB, and suicidal ideation and planning. This study has significant clinical utility and can be replicated to strengthen findings. As it was based in a clinical setting, randomisation of many factors did not occur. Findings need to be viewed as preliminary and useful for informing further research.

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Appendix A

Ethics Approval

HUMAN RESEARCH ETHICS COMMITTEE

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Notification of Expedited Approval

To Chief Investigator or Project Supervisor:	**Doctor Sean Halpin**
Cc Co-investigators / Research Students:	**Miss Jennifer Fisher** **Dr Alex Hains**
Re Protocol:	**Suicide and self-harm prevention: The nature of risk and the response to psychological treatment**
Date:	**23-Nov-2017**
Reference No:	**H-2017-0373**
Date of Initial Approval:	**23-Nov-2017**

Thank you for your **Initial Application** submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under **L1 Low Risk Research Expedited** review by the Ethics Administrator.

I am pleased to advise that the decision on your submission is **Approved** effective **23-Nov-2017**.

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of annual progress reports. *If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.*

The full Committee will be asked to ratify this decision at its next scheduled meeting. A formal *Certificate of Approval* will be available upon request. Your approval number is **H-2017-0373**.

If the research requires the use of an Information Statement, ensure this number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants You may then proceed with the research.

Note - In granting this approval, consideration was given to the prior approval granted by the UOW & ISLHD Health and Medical Research Ethics Committee.

Conditions of Approval

This approval has been granted subject to you complying with the requirements for *Monitoring of Progress*, *Reporting of Adverse Events*, and *Variations to the Approved Protocol* as detailed below.

PLEASE NOTE:
In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

- ***Monitoring of Progress***

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

- ***Reporting of Adverse Events***

1. It is the responsibility of the person **first named on this Approval Advice** to report adverse events.
2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.
3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form (via RIMS at https://rims.newcastle.edu.au/login.asp) within 72 hours of the occurrence of the event or the investigator receiving advice of the event.
4. Serious adverse events are defined as:
    - Causing death, life threatening or serious disability.
    - Causing or prolonging hospitalisation.
    - Overdoses, cancers, congenital abnormalities, tissue damage, whether or not they are judged to be caused by the investigational agent or procedure.
    - Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
    - Any other event which might affect the continued ethical acceptability of the project.

5. Reports of adverse events must include:
    - Participant's study identification number;
    - date of birth;
    - date of entry into the study;
    - treatment arm (if applicable);
    - date of event;
    - details of event;
    - the investigator's opinion as to whether the event is related to the research procedures; and
    - action taken in response to the event.

6. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

- ***Variations to approved protocol***

If you wish to change, or deviate from, the approved protocol, you will need to submit an *Application for Variation to Approved Human Research* (via RIMS at https://rims.newcastle.edu.au/login.asp). Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. **Variations must be approved by the (HREC) before they are implemented** except when Registering an approval of a variation from an external HREC which has been designated the lead HREC, in which case you may proceed as soon as you receive an acknowledgement of your Registration.

Linkage of ethics approval to a new Grant

HREC approvals cannot be assigned to a new grant or award (ie those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Associate Professor Helen Warren-Forward
Chair, Human Research Ethics Committee

For communications and enquiries:
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Research & Innovation Services
Research Integrity Unit
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 17894
Human-Ethics@newcastle.edu.au

RIMS website - https://RIMS.newcastle.edu.au/login.asp

Linked University of Newcastle administered funding:

Funding body	Funding project title	First named investigator	Grant Ref

Appendix B

Journal Instructions to Authors

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Instructions to Authors

Crisis: The Journal of Crisis Intervention and Suicide Prevention

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Aims and Scope of *Crisis – The Journal of Crisis Intervention and Suicide Prevention*

Crisis – The Journal of Crisis Intervention and Suicide Prevention is an international periodical that publishes original articles on suicidology and crisis intervention. Papers presenting basic research as well as practical experience in the field are welcome. *Crisis* also publishes potentially life-saving information for all those involved in crisis intervention and suicide prevention, making it important reading for clinicians, counselors, hotlines, and crisis intervention centers.

Crisis – The Journal of Crisis Intervention and Suicide Prevention publishes the following types of articles

Research Trends

Papers for this section may be up to 4,500 words, including abstract, text, references, notes, appendices, as well as figures and tables.

Short Reports

Papers for this section may be up to 2,000 words, including abstract, text, references, notes, appendices, as well as figures and tables.

Clinical Insights

These are clinically oriented papers and may be up to 4,500 words, including abstract, text, references, notes, appendices, as well as figures and tables.

Important: An allowance for any tables and figures should be included in the totals depending on their size. A typical table or figure takes up a quarter, half, or full page. Each quarter page equals about 200 words per quarter print page.

Manuscript Submission

Manuscripts should be submitted online at http://www.editorialmanager.com/cri. Only papers that have not previously appeared in or are currently under consideration for another publication can be considered for publication. Manuscripts are subject to peer review and may be returned to authors for revision. Should you have any editorial/content questions, please contact the Editorial Assistant, Wendy Iverson (E-mail crisisjournalea@gmail.com, Tel. +61 7 3735-3379, Fax +61 7 3735-3450). Please direct any technical queries regarding the submission through Editorial Manager to production@hogrefe.com.

Manuscript Format

Manuscripts should be prepared according to the *Publication Manual of the American Psychological Association* (6th ed.) as regards both style and presentation. In particular, statistical and mathematical copy as well as references and their text citations, should conform to the *Publication Manual*. In the reference list make sure to provide the DOIs (Digital Object Identifier) of the cited journal articles.

Important: All parts of the submission, with the exception of the title page and the letter to the editors, must be free of any potentially identifying information to ensure anonymous peer review. Authors must replace names and any indication of the university/institution where a study was conducted by neutral place-holders, including file names.

The Title Page of each paper should include, in the following order: title of the article; author name(s) preceded by first names with ORCID IDs, but without academic titles; name of the institute or clinic (if there is more than one author or institution, affiliations should be indicated using superscript Arabic

numerals); an address for correspondence (including the name of the corresponding author with fax and phone numbers); and the author note (including acknowledgments, disclosures, and funding sources).

An Abstract (maximum length 200 words) is required for all manuscripts. For Short Reports and Research Trends manuscript, a structured Abstract is required. This should be divided into the following sections: Background, Aims, Method, Results, Limitations, Conclusion. For a Clinical Insights manuscript, an unstructured Abstract may be submitted, if applicable. A maximum of 5 keywords should be given after the abstract.

Figures and tables should be numbered using Arabic numerals. Each table and figure must be cited in the text and should be accompanied by a legend. Please submit tables and figures via Editorial Manager as separate files. Figures must be supplied in a form suitable for reproduction: preferably high-resolution bitmaps (e.g., jpg, 300 dpi) or as vector graphics files. Figures will normally be reproduced in black and white only. While it is possible to reproduce color illustrations, authors are reminded that they will be invoiced for the extra costs involved.

Authors should follow the guidelines of the APA Manual regarding style and nomenclature. It is recommended that authors who are not native speakers of English have their papers checked and corrected by a native-speaker colleague before submission. Standard US American spelling and punctuation as given in *Webster's New Collegiate Dictionary* should be followed.

Please make sure to avoid stigmatizing language concerning suicidal behavior by using neutral terms. Here are some examples:

Stigmatizing Language	Neutral Language
to commit / complete suicide	to die by suicide; to end his/her life
a successful suicide / attempt	a fatal suicide attempt
an unsuccessful suicide	a non-fatal suicide attempt
a failed attempt	a non-fatal suicide attempt
suicide victims	those who died by suicide

Reviews and Decisions

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February 2018