Recovery & Resilience: Gender Differences in Suicide Intervention Treatment at Pieta House

Surgenor, P. W. G.

Paper presented at the 27th World Congress of The International Association for Suicide Prevention, Oslo, September 2013

Abstract

Pieta House is a crisis intervention charity that averts suicidal crises by exploring reasons for dying and promoting reasons for living, in a caring and compassionate manner. While a previous study has established the effectiveness of the treatment model (the Pieta House Suicide Intervention Model, or PH-SIM) the aim of this research was to explore the extent to which the PH-SIM promotes resilience by developing personalised protective factors, and to establish the extent of gender differences in this process. Resilience was measured by changes in levels of self-esteem, depression, and positive and negative suicidal ideation in the six months following completion of treatment at Pieta House. This involved a quasi-experimental, one-group, repeated measures design with a total of 109 adults who completed treatment at Pieta House, and responded to all questionnaire items across the three treatment conditions. Questionnaires were administered pre-treatment by the therapist and at two points post-treatment (3 months after and 6 months after) by independent researchers via telephone. Levels of depression and negative suicidal ideation (i.e., reasons for dying) were significantly lower, and self-esteem and positive suicidal ideation (i.e., reasons for living) were significantly higher than crisis levels one month and three months after treatment had been completed. There was no interaction effect for gender for any of the measures, indicating that gender did not significantly interact with treatment to predict how clients would respond to treatment. The findings suggest that engagement in the PH-SIM is likely to be equally effective for male and female clients in terms of recovery and establishing resilience; this demonstrates that there is no requirement for separate, gender-specific treatment models; and that the focus for addressing male suicide should not be on whether intervention models work, but on how to convince males to seek help in the first instance.
Introduction

The aim of any suicide intervention model is to address the immediate crisis, and then provide the individual with the skills and strategies needed to help them through future periods of difficulty. Previous research has provided evidence for the effectiveness of the dialogue-based treatment (the Pieta House Suicide Intervention Model (PH-SIM)) used at Pieta House (Surgenor, 2013), regardless of the sex of the client. The next stage, and the aim of this paper therefore, is to explore the extent to which the PH-SIM promotes resilience by developing personalised protective factors, and to examine the presence and role of gender differences in this process.

Pieta House

Pieta House, the Centre for the Prevention of Self-Harm or Suicide, is a crisis intervention charity that provides 15 hours of free treatment for people who have suicidal thoughts or engage in deliberate self-harm. Treatment at Pieta House is based on the Pieta House Suicide Intervention Model (PH-SIM) as outlined in Figure 1, and strives to promote a range of supportive structures and coping strategies to help clients to confront and overcome their reasons for dying, while also identifying and promoting reasons for living. The underlying principle is that rather than seeking death, the suicidal individual is seeking an end to their psychological turmoil (Granello & Granello, 2007) and so their suicidal crisis, if successfully navigated in a compassionate and supportive manner, does not have to be fatal (Granello, 2010). Although designed to be a brief crisis intervention service to help clients through their time of difficulty and not a long term support service, there was an expectation that the improvements observed at the end of their treatment (Surgenor, 2013) may result in longer term resilience.

Recovery and Resilience

Research has suggested a distinction between resilience and recovery in relation to trauma (Bonanno, Galea, Bucciarelli, and Vlahov, 2006). Along with resistance and chronic dysfunction, both are possible patterns of symptom change (Norris, Tracy, & Galea, 2009). ‘Recovery’ indicates that a degree of psychopathology occurs as a result of a traumatic event before returning to pre-trauma levels, while ‘resilience’ reflects the ability of individuals to maintain relatively stable mental function throughout the course of events.

In the context of this study recovery relates to the process of returning a client’s reasons for living and for dying to pre-crisis levels. Previous research conducted at Pieta House (Surgenor, 2013) has established significantly higher self-esteem and positive suicidal ideation (i.e., reasons for living) and significantly lower levels of depression and negative suicidal ideation (i.e., reasons for dying) following engagement in the PH-SIM. The comparison of scores attained by clients on these measures before and one month after treatment provides an indication of gender equality in rates of recovery of those attending treatment at Pieta House.

In this study Norris et al.’s (2009) conceptualisation of resilience was applied to the development and promotion of individual protective factors to prevent future crises. In this way, resilience can therefore be construed as emerging and developing after recovery. This study was concerned with
Figure 1: The Pieta House Suicide Intervention Model (PH-SIM)
establishing the differences in the resilience of male and female clients, as measured by comparing levels of self-esteem, depression, and positive and negative suicidal ideation during crisis (i.e., before treatment had commenced) and three months after treatment had been completed.

**Gender Differences in Recovery and Resilience**

Monnin et al. (2012) emphasised the need for greater consideration of the difference in the risk of recurrence among males and females. However, evidence for gender differences in recovery and resilience has been somewhat mixed. Some studies have found no differences (e.g., Mostafazadeh & Farzaneh, 2013), others have reported that females have greater risk of repeated suicide attempts (e.g., Courtet & Thuile, 2010; Groholt & Ekeberg, 2009), while others have suggested that females show a better response to treatment (Leung & Chue, 2000) and that risk for repeated suicide attempts declined for females over time (Brådvik & Berglund, 2009).

**Aims**

The aim of this research was to establish the extent of gender differences in resilience after engaging in treatment at Pieta House.

**Method**

As a continuation of the study investigating the effectiveness of engagement in treatment at Pieta House (Surgenor, 2013) a full description of the sampling, procedure, and assessment tools can be found in that research. The following is a brief synopsis of the method employed.

A quasi-experimental, one-group, repeated measures design was employed. The sample comprised of Pieta House clients who had completed their treatment, were over 18 years old, and consented to participate. A total of 109 (55% female, average age of 38 years old) were included, based on the number that completed all items in both the pre-treatment and post-treatment conditions. This exceeded the recommended sampled size of 12 needed to detect large effects (d=.8) with 96% power using a repeated measures, within factors MANOVA with alpha at .05 (calculated using the power analysis software programme G*Power 3 (Faul et al. 2009)).

The questionnaire contained measures for self-esteem (the Single-Item Self-Esteem Indicator, Robins, Hendin, & Trzesniewski, 2001), depression (the Patient Health Questionnaire, Kroenke, Spitzer, & Williams, 2001), and positive and negative suicidal ideation (the Positive and Negative Suicide Ideation Inventory, Osman et al., 1998) and was administered by a therapist before any treatment had commenced, and via telephone by independent researchers a month after treatment had ended.

The study received the ethical approval of the research ethics committee at the Adelaide & Meath Hospital, Incorporating the National Children’s Hospital in Dublin.
Results

Repeated measures MANOVAs and follow-up independent samples t-tests were used for each of the four measures. Baseline refers to the pre-treatment condition while follow-up 1 and follow-up 2 refer to the follow-ups conducted at one month and three months respectively.

**Measure 1: Self-Esteem**

Analyses were based on 31 females and 34 males and using a Likert scale ranging from 1 (Low self-esteem) to 5 (High self-esteem). The mean values (displayed in Figure 2) suggest that levels of self-esteem increased for males and females between baseline and follow-up 1, and increased again between follow-up 1 and follow-up 2.

Results of a within-subjects repeated-measures MANOVA revealed a statistically significant overall effect for self-esteem (F(2, 62) = 27.58, p < .01, ηp. 2 = .47). Statistically significant differences in mean self-esteem ratings were noted between baseline and follow-up 1 (mean difference = .95, SE = .19 , p<.01), baseline and follow-up 2 (mean difference = 1.33, SE = .18, p<.01), and also between follow-up 1 and 2 (mean difference = .37, SE = .16, p<.01).

There was no significant interaction effect for gender, suggesting that gender did not interact with treatment to predict trends in self-esteem (F(2, 126) = .29, p = .75, ηp. 2 = .005). However, between-subjects analyses suggest statistically significant overall differences for gender in levels of self-esteem, with higher male than female scores (F(1, 63) = 5.07, p < .05, ηp. 2 = .074). Comparison of mean scores using independent samples t-test revealed a statistically significant difference in levels of self-esteem at follow-up 1 (t(96) = -2.6, p < .01), but not follow-up 2.

**Measure 2: Depression**

Analyses were conducted on a sample of n=63 (32 females and 31 males). The PHQ-9 ranged from 1 (reflecting low levels of depression) to 3 (reflecting high levels of depression) and had a Cronbach’s alpha of 0.90. The values presented in Figure 3 suggest that levels of depression decreased following treatment and continued to remain lower than the baseline value after three months.

The within-subjects repeated-measures MANOVA revealed a statistically significant overall effect, suggesting that treatment was a significant predictor of depression (F(1.63, 99.5) = 15.34, p < .01, ηp. 2 = .20). The mean differences between baseline and follow-up 1 (12.6, SE=2.45) and baseline and follow-up 2 (10.14, SE=2.85) were both statistically significant (p<.01) and indicate that scores remained lower than baseline values following treatment.

There was no significant interaction effect for gender (F(1.63, 99.5) = 1.69, P = .20, ηp. 2 = .03) and between-subjects analyses suggests that overall differences for gender in levels of depression were not statistically significant (F(1, 61) = 3.16, p = < .06, ηp. 2 = .05). Follow-up independent t-tests reveal a statistically significant difference in levels of depression at follow-up 1 (t(96) = 26, p < .01), with males reporting lower levels of depression than females, but no significant difference at follow-up 2.
Figure 2: Levels of Self-Esteem at Baseline and Follow-Up, by Gender

Figure 3: Levels of Depression at Baseline and Follow-Up, by Gender

Figure 4: Levels of Positive Suicidal Ideation at Baseline and Follow-Up, by Gender

Figure 5: Levels of Negative Suicidal Ideation at Baseline and Follow-Up, by Gender
Measure 3: Positive Suicide Ideation

The Positive Suicide Ideation Inventory ranged from 1 (reflecting low levels) to 5 (reflecting high levels), was conducted on a sample of n=58 (25 females and 33 males), and had a Cronbach’s alpha of 0.99. The data presented in Figure 4 suggest that levels of positive suicidal ideation were higher following treatment at follow-up 1 and follow-up 2.

Results of a within-subjects repeated-measures MANOVA revealed a statistically significant overall effect, suggesting that treatment was a significant predictor of positive suicidal ideation (F(2, 55) = 26.0, p < .01, ηp. 2 = .49). The mean differences between baseline and follow-up 1 (4.52, SE=.66) and baseline and follow-up 2 (4.62, SE=.74) were statistically significant (p<.01), indicating that positive suicidal ideation was higher one month and three months after treatment had finished.

There was no interaction effect for gender, and between-subjects analyses reveal that while differences approached significance (F(1, 56) = 2.91, p = .09, ηp. 2 = .05) they were, nevertheless, not statistically significant at the 0.5 level. Independent t-tests reveal a statistically significant difference in levels of positive suicidal ideation between males and females at follow-up 2 (t(102) = -2.32, p < .05) suggesting greater levels of positive suicide ideation for males than females 3 months after treatment. Differences at baseline and at follow-up 1 were not statistically significant.

Measure 4: Negative Suicide Ideation

Analysis on the Negative Suicide Ideation Inventory included 25 females and 31 males (n=56) and the scale ranged from 1 (reflecting low levels) to 5 (reflecting high levels), with a Cronbach’s alpha of 0.99. Figure 5 displays these mean values for males and females. Mean levels of negative suicidal ideation decreased for both males and females between baseline and both follow-ups.

A within-subjects repeated-measures MANOVA revealed a statistically significant overall effect, indicating that treatment was a significant predictor of NSI (F(2, 53) = 38.7, p < .01, ηp. 2 = .59). The mean differences between baseline and follow-up 1 (5.84, SE=.67) and baseline and follow-up 2 (5.66, SE=.78) indicate that negative suicidal ideation was significant lower (p<.01) one month and three months after treatment had finished.

Between-subjects effects analyses reveal no overall significant differences for gender in levels of negative suicidal ideation (F(1, 54) = 0.33, p = .57, ηp. 2 = .01), and independent t-tests reveal that there were no statistically significant differences between males and females on mean scores at baseline, follow-up 1 or follow-up 2.

Summary and Discussion

This research aimed to establish the extent of gender differences in resilience after engaging in treatment at Pieta House.

A main effect was noted for treatment on each measure, demonstrating that engaging in therapy at Pieta House was associated with significantly higher self-esteem and positive suicidal ideation, and significantly lower depression and negative suicidal ideation. The fact that levels were in the expected direction one month after treatment ended suggests recovery; that these levels continued to improve three months after the end of treatment suggests developing resilience. This was
particularly noticeable for self-esteem, which was significantly higher after three months than it was after one.

There was no interaction effect for gender across any of the four measures, indicating that gender did not significantly interact with treatment to predict how clients would respond to treatment. This lack of interaction effect further suggests that the recovery and resilience of a client cannot be predicted by their gender.

There were no overall gender differences in the levels of depression, or positive and negative suicidal ideation. Follow-up analyses, however, revealed that males had significantly lower levels of depression (at Follow-up 1 only) and higher levels of positive suicidal ideation (at Follow-up 2 only). This differs slightly from existing research that has demonstrated the course and outcome of mental illness are usually more severe and disabling in males (Barajas, Baños, Ochoa et al., 2010) with females show negative and affective symptoms less frequently than men (Hayashi, Igarashi, Yamashina, & Suda, 2002; Køster, Lajer, Lindhardt, & Rosenbaum, 2008), while in relation to depression, greater rumination had a deleterious effect for women, contributing to depressive symptoms (Dalgaard, Dowrick, Lehtinen, et al., 2006) and anxiety over time (Afifi, 2007).

There was an overall, statistically significant gender difference for levels of self-esteem. Closer consideration revealed a significant difference at Follow-up 1 only, after which the difference was both smaller and not statistically significant. This is largely congruous with recent research that suggests that gender differences in self-esteem are either small (Gentile et al., 2009, Orth et al., 2010) or non-significant (Donnellan et al., 2007, Erol & Orth, 2011).

The lack of gender difference in overall treatment outcome and the absence of interaction effect for gender demonstrate that engagement in the PH-SIM is likely to be equally effective for male and female clients in terms of recovery (Follow-up 1) and establishing resilience (Follow-up 2). This provides initial evidence that the concept of promoting fulfilment, upon which the PH-SIM is based, is effective in developing personal protective factors for clients. The implications are that there is no requirement for separate, gender-specific treatment models, and that the focus for addressing male suicide should not be on whether intervention models work, but on how to convince males to seek help in the first instance.

Future research in this area includes a third follow-up with the same cohort which involves administering the questionnaire to clients six months after treatment has been completed. This will provide clearer insight into the issue of resilience over a longer period of time.

References


