

# Reduction of trauma symptoms following group therapy

Denise A. Nisbet Wallis

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**Objective:** We examined the effect of a group programme for the treatment of adults suffering the sequelae of childhood abuse and/or neglect. Symptom reduction was the indicator of whether this group programme was an effective treatment modality.

**Method:** This was an experimental field study using a prepost design and General Linear Model (GLM) analyses. The group programme was conducted for adult survivors of child abuse and neglect and took place at Specialty Clinics, Central Coast Mental Health Services. There were 83 participants, comprising 64 women and 19 men; 56 were in the experimental group, and 17 in the control (waitlist) group. The Trauma Symptom Inventory (TSI) was administered to both experimental and control groups prior to receiving treatment and again three months later.

**Results:** General Linear Model analyses indicated there was a reduction of trauma symptoms for the experimental group on seven of the 10 scales of the TSI and on the three composite scales; no similar reduction was found for the control group.

**Conclusions:** The study indicates that this group programme may have been an effective treatment modality for abuse survivors. The level of symptomatology was reduced for those in the group programme compared with the control group for whom there were no changes.

**Key words:** group treatment, survivors of child abuse, trauma.

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Clinicians who work with adult survivors of child abuse and trauma have a growing understanding of, and respect for, the impacts and effects of childhood trauma on adult function; however, this growth of understanding has been a slow change. For example, the connections between self-harm, suicidality, and a trauma history have not always been made. Consequently many patients were treated for a symptom (such as depression) rather than for a constellation of symptoms and problems that comprise the outcome of childhood trauma.

Recently some long-term effects, such as dissociation and the dissociative disorders, have been formally linked with childhood trauma [1,2]. The relationship of other symptoms to abuse history, for example, mood disorders,

suicidality, self-harm, drug-abuse, hypervigilance, and personality disorders, may be less well understood although all may have an aetiology in childhood abuse and/or neglect. Recent literature indicates many somatic symptoms and somatoform disorders may also originate in childhood abuse [3]. Twenty-three percent of patients in psychiatric hospitals may have suffered some form of trauma related to childhood abuse and neglect, but few are receiving treatment aimed at the problems created by that history [4].

At a recent conference (*Psychological trauma: maturational processes and therapeutic interventions*, Boston, 2000), presentations highlighted how many areas of function were impacted for survivors of child abuse. Neurobiological involvements of the parasympathetic nervous system, physiological abnormalities in the hippocampus and amygdala, and differences in brain chemicals such as serotonin, opioids, noradrenaline and the thyroid hormones are all involved, and impact homeostasis and allostasis [5,6,7]. These physiological

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Denise A. N. Wallis, Clinical Psychologist (Correspondence)

Specialty Clinics, CCHS, 77 Holden Street, PO Box 361, Gosford, New South Wales 2250, Australia. Email: [dwallis@doh.health.nsw.gov](mailto:dwallis@doh.health.nsw.gov)

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abnormalities contribute to anxiety, depression, hostility, aggression, and perturbation of diurnal rhythms. They may also influence those brain structures and functions that affect learning.

In his longitudinal study, Putnam followed into adulthood the lives of young girls who had been identified as victims of sexual abuse [7]. The most consistent and salient outcome was disturbed relationships. The onset of puberty heralded the emergence of suicidality, self-mutilation, somatization, conduct disorders, attentional and impulse problems, sexual precocity, early age of voluntary intercourse, early pregnancies, and revictimization. Comorbidity was high, and including influenza, migraines and problems related to obesity.

Medical disorders related to past sexual abuse include premenstrual syndrome, chronic pelvic pain and irritable bowel syndrome [8,9]. Sexually abused patients are more likely to undergo major surgery [9] and to have gynaecological problems [10] than the general population. Psychological outcomes of child abuse (not specifically sexual abuse) include revictimization, alexithymia, interpersonal problems, dissociation, self-mutilation, suicidality, depression, anxiety, sexual dysfunction, substance abuse, eating disorders, hypervigilance, self-blame, and maladaptive coping strategies [11–16]. These effects include a plethora of life-skills difficulties and deficits [1,17] together with a constellation of symptoms needing management.

In Australia, McFarlane concluded the impact of traumatic events on long-term psychological adjustment and on physical health have been under-estimated. He cites the growth in notification figures for child abuse and neglect over the past 10 years and on the need for appropriate follow-up treatment by trained professionals. He remarks on the ‘demonstrable and chronic long-term effects [of trauma] on psychological and physical health’, on the existence of appropriate and validated treatments, on the need for greater understanding of the problems traumatic experiences create, and states that ‘attempting to prevent these adverse effects is a critical public health issue’ [18].

### Treatment considerations

The value of group programmes for the treatment of trauma has been well established in the literature. Research that supports group therapies for survivors of child abuse examines the impact of abuse on female survivors, including sexual abuse [19–25], male abuse survivors [26,27] and survivors of both sexes [28]. In all these cases group therapy was found to be an effective treatment modality.

The efficacy of certain group processes for the treatment of trauma has been studied. The therapeutic factors

of universality and the reduction in isolation [20,21], the instillation of hope, and interpersonal learning are instrumental in creating healing group environments [22,29]. Certain types of group therapy can be identified as effective, for example, Chew’s work with a variety of treatment modalities [19], and Hall and King’s [20] analysis approach. Some treatments focus on specific problematic areas including dissociation [30], affect management [25], gender issues [28], attachment and attachment deficits [30], and skill development [24]. Nevertheless, we need many more empirically supported therapies and to know more specifically what works in therapy [32]. We also need to understand more about why certain factors appear to be therapeutically effective in group programmes and what the specific outcomes of particular interventions are. This knowledge can then be used to guide treatment planning and formulation.

### Group therapy and symptom changes

DiNunno [33] states while a variety of therapeutic approaches are needed, group therapy provides the following advantages: (i) the interpersonal nature of group therapy provides an environment where relationship deficits can be worked on; (ii) isolation reduces with the sense of belonging in a group; (iii) group acceptance can give freedom to air painful feelings; (iv) trust can develop; and (v) assertiveness and experimentation with new behaviours can be encouraged. Herman stated that although recovery is never final and complete, ‘it should be possible to recognize a gradual shift from unpredictable danger to reliable safety, from dissociated trauma to acknowledged memory, and from stigmatized isolation to restored social connection’ [34, p.155].

Talbot *et al.* studied the impact of their ‘Women’s Safety in Recovery’ inpatient programme to determine whether or not group therapy is related to significant decreases in the problems of adult function that were outcomes of childhood abuse [24]. The programme included psychoeducation about the possible effects of childhood trauma in adulthood, and help in identifying subsequent deficits in self-care; discussion of abuse *per se* was discouraged. These patients experienced reduction in anxiety, hostility, interpersonal sensitivity, phobic anxiety, paranoid ideation, and reported their abuse issues had been more thoroughly addressed than the control group. Patients and therapists reported continued improvement at 6-month follow up compared to controls.

Morgan and Cummings assessed changes in depression, anger, social maladjustment, self-blame and post-traumatic stress responses in an outpatient group treatment

programme for survivors of child abuse [23]. All the stress responses reduced significantly except anger.

Similarly in our study we evaluated specifically which symptoms changed as a result of group therapy (in this case an outpatient treatment programme) and which did not change. In this study, the Trauma Symptom Inventory (TSI) [35] was used to evaluate levels of symptomatology prior to entering group therapy treatment and re-evaluated after three months of group therapy treatment.

### Group therapy programme

The Specialty Clinics (SPC) Group Therapy Programme was run at the six community health centres in the Central Coast area of New South Wales. The programme was devised and run by two professionals who are trained to work with survivors of child abuse and neglect.

Each group ran for 12 weeks. This was dictated by practical considerations: it allowed us to conduct closed groups while leaving new referrals waiting a maximum of 12 weeks; it also promoted a safe and comfortable environment for members. There would be many practical difficulties running an open group with a time limit of 12 weeks. Patients had the option of re-entering another 12-week programme if they wished.

Five sessions were used specifically for the psycho-educational component. Psychoeducational topics covered in each session were:

1. Beginning the group, rules, and objectives for participants.
2. Signs and symptoms of childhood trauma in adulthood.
3. Boundaries.
4. Emotions and emotional regulation.
5. Attachment.

Five modules were prepared including the introductory module; of the four other topics, three were suggested by Briere [1] as those most relevant to survivors of child abuse: the sense of identity, boundaries, and affect regulation. Our patients indicated they wished to work on interpersonal relationships. The modules included information for leaders and participants and handouts for use in the group. The other sessions were used for discussion and to work through some of the issues, needs and concerns raised as participants began to make the connections between past trauma and present problems and function.

The basic assumptions guiding the work at SPC were those common to developmental psychology: that children in 'ordinary' families learn basic trust [36], security and attachment [37], and a 'fundamental assumption that the world is benevolent and meaningful and the self

worthy' [38]. Abused and neglected children develop basic assumptions that are learned by coping with danger, isolation, unworthiness, and the need to defend the self [39]. The issues of trust/mistrust, fear, emotional dysregulation, and attachment to others were dealt with as they arose as issues and were processed within the group.

## Method

### Participants

Participants were 83 individuals who had been referred for work with childhood trauma to SPC, Central Coast Mental Health Services. Childhood trauma was defined as having a history of sexual abuse, physical abuse, emotional abuse and/or neglect experienced in childhood. A comprehensive assessment, including the TSI, was completed for each patient and included a critical review of the current diagnosis. Most patients were found to have some form of posttraumatic stress disorder, dissociative identity disorder, dissociative disorder not otherwise specified, or borderline personality disorder.

Referrals to Mental Health Services were usually made by individuals themselves, by their GPs, or by concerned others. While frequently presenting with depression, anxiety or other psychological problems, health professionals in community health centres would determine whether there was underlying trauma and refer appropriate individuals to the SPC programme.

There were 111 initial referrals: 14 individuals (13.5%) dropped out of the group programme; six individuals did not give permission to use the TSI in the research; eight individuals had incomplete or spoiled responses. Sixty-four women and 19 men participated in the study. Ages ranged from 21 to 77, a 56-year range; the mean age was 39.29. Women's mean age was 39.89 and men's mean age was 37.26. There were 50 women and 16 men in the experimental cohort, and 14 women and three men in the control group.

All individuals referred to SPC were told that a research programme was in progress using the combined TSI scores of all the groups to determine whether the programme was effective. They were also told that they would be given feedback about their progress using the TSI. Their participation was requested and if they agreed, they signed informed consent forms.

### Measures

The TSI [35] was selected as the most appropriate instrument for this study. The TSI measures individuals on three validity scales (atypical responses, response level, and inconsistent response); on levels of trauma on 10 symptom scales (anxious arousal, depression, anger/irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behaviour, impaired self-reference and tension reduction behaviour); and on three composite scales (self, trauma and dysphoria). The scale descriptors appear in the discussion section. Reliability coefficients for the TSI ranged from 0.74 to 0.91 (mean  $\alpha = 0.86$ ). Details of validation and reliability of the TSI are given in detail in the *TSI Professional Manual* [35].

## Procedure

### *Group therapy*

All individuals who were referred to SPC for trauma work were offered treatment in the group therapy programme outlined above. Data were gathered from the participants in a total of 11 groups, each run by one of the two trained trauma workers and a co-therapist, usually from the community health centre in which the groups took place. In this way a consistent programme was provided where the outcomes should be comparable. There was one exception where a psychologist and a mental health nurse completed the psychoeducational component of one group. The nurse had previously co-led a group with one of the researchers and was familiar with the educational material and programme.

### *Control group*

Because of the closed-group policy and 12-week group programme, some individuals waited as long as three months after their initial assessment before entering the group programme. These patients were asked to complete the TSI a second time before they entered the group programme, forming the control group. They were reassessed after completing the 12-week programme and given feedback about symptoms and progress in the same way as the experimental group, but their second-round data were not used in this research project.

First-round data for the two groups were analysed using T-tests to determine whether there were group differences between experimental and control groups. There was initial difference on one variable, SC ( $p \leq 0.05$ ). As this scale showed no difference between groups in the final analysis the discrepancy was not considered relevant to this study.

## Results

Scores on the TSI are automatically converted to T-scores, so it was possible to analyse results using a General Linear Model (GLM) [40]. GLM analyses determined that there were differences on the levels of symptomatology as measured on the TSI at Time 1 (T1) and Time 2 (T2) after either three months on the waitlist or having completed a 12-week group programme. Results of the analyses showing reduction in trauma symptomatology are given in Table 1.

The group participants reported reductions in trauma symptomatology on seven of the 10 clinical scales of the TSI, and for all three composite scales (trauma, self and dysphoria), compared to those on the waitlist, who did not report reductions in trauma symptomatology. Three scales, sexual concerns (SC), dysfunctional sexual behaviour (DSB) and internal self-reference (ISR) showed no differences over time. The two groups had differed statistically on initial measurement on SC, and there was no change at T2.

## Discussion

Two previous studies have shown that group treatment programmes are effective in reducing some of the symptoms of long-term trauma [23,24]. In this study patients' symptoms were reduced on seven of the 10 scales of the TSI.

Sexual concerns and DSB did not reduce. Sexual issues were not addressed specifically in these groups, although this outcome indicates that it may be an important topic to include in future groups. Initial ratings on SC were different for the group participants and the control group, and there was no change over time for either group; we have no hypothesis as to why this may have been the case.

The other scale where no change was found was impaired self-reference. This scale measures inadequate sense of self and personal identity, poor boundaries, poor self-worth, neediness and internal sense of emptiness [35]. These topics were discussed and worked on in the groups, but probably more time is needed for change to occur.

The anxious arousal (AA) scale measures autonomic hyperarousal, hyperalertness and hypervigilance. Living in an abusive family is like being in a combat zone; the world is perceived as unsafe, and survival depends on awareness and alertness. What we hope to achieve in group therapy is a relearning process. Patients often laugh at our naivete because we insist on explaining and viewing the world as a relatively safe place and people as relatively benign, and the triggers as belonging to past trauma not present events.

The Depression scale measures behaviours and cognitions related to low mood. Suicide attempts are 12 times greater for female survivors of child abuse [7] and 79% of survivors of child abuse attempt suicide [12–41]. Depression related to hopelessness is a common experience for this group, sometimes the hopelessness of years of chronic psychic pain. The alleviation of these symptoms, and the instillation of hope [42] could be the single greatest contribution of the group therapy programme.

The symptoms of anger and irritability are adaptive 'fight' responses to aversive situations [43]. Survivors of child abuse may feel considerable conflict over their anger. Anger may have been modelled in family-of-origin: survivors' anger may not have been tolerated, anger may have belonged to the 'powerful' parent, and it may be destructively turned inward on the self. Irritability and mild anger are self-protective, but many survivors of child abuse report negative outcomes from the inappropriate expression of their anger and fear of their anger. To experience some control over anger is a positive step forward for them.

Intrusive experiences (IE) include nightmares, flashbacks, intrusive memories, and repetitive thoughts and are all described as ego-dystonic representations of the trauma [35]; IE reduced quite quickly after patients entered the programme, most frequently as a reduction in the number and intensity of nightmares. The very effort of suppressing re-experiencing phenomena seems to

Table 1. Descriptive statistics for the TSI at T1 and T2 for experimental and control groups

Scale/Condition	n	Pre-treatment (T1)		Post-treatment (T2)	
		Mean	SD	Mean	SD
Anxious arousal**					
Experimental	64	68.9	8.6	62.7	10.2
Control	19	69.3	9.9	68.9	10.0
Depression*					
Experimental	64	71.1	9.5	64.1	11.2
Control	19	71.2	11.8	71.9	9.7
Anger/irritability***					
Experimental	64	65.3	10.9	59.1	11.8
Control	19	68.2	12.4	66.6	11.5
Intrusive experiences***					
Experimental	64	70.6	10.1	64.6	11.2
Control	19	69.8	12.9	69.3	11.9
Defensive avoidance***					
Experimental	64	68.0	8.8	62.8	8.5
Control	19	66.4	12.9	66.5	12.3
dissociation***					
Experimental	64	75.9	12.9	69.9	11.9
Control	19	73.9	13.9	73.0	14.4
Trauma reduction behaviour***					
Experimental	64	70.4	15.2	61.0	12.6
Control	19	67.7	13.5	66.3	13.8
Trauma (IE, DA, Diss, ISR)***					
Experimental	64	74.0	8.7	67.2	10.3
Control	19	72.8	12.2	71.6	11.6
Self (ISR, SC, DSB, TRB)***					
Experimental	64	69.5	12.6	62.6	11.7
Control	19	66.8	11.7	65.3	10.4
Dysphoria (Department, AI,AA)***					
Experimental	64	69.8	10.4	63.3	10.8
Control	19	71.6	10.5	71.3	9.5

\*p ≤ 0.005; \*\* p ≤ 0.01; \*\*\* p ≤ 0.05.

keep them active, and remission comes from admitting, discussing, and reworking rather than suppressing them.

Defensive avoidance is the conscious, intentional process of avoidant responses to intrusive and aversive internal experiences. Hyperarousal and intrusive symptoms can become overwhelming, so avoidance becomes self-protective. This can be done by avoiding situations, or by attempting to eliminate unwanted thoughts and feelings in attempting to neutralize them. This inability to deal with emotions is the basis for the perceived volatility of these patients [34]. In group programmes the numbing of feelings becomes less and less possible and the group itself provides a safe venue for learning to feel, airing those feelings, and learning to cope with them in new and different ways.

Dissociation is one of the hallmarks of early childhood trauma. It is the unconscious defensive alteration of conscious awareness to avoid psychological distress. Dissociation can take the forms of cognitive disengagement, depersonalization, derealization, out-of-body experiences,

emotional numbing, distractability, spacing-out, feeling out of touch with the self and the body, and the ultimate defence mechanism of dissociated selves. The course of therapy tends to bring about a natural, gradual blending of dissociated states, so that eventually the need for and habitual use of dissociation begins to recede. Slightly different work is needed for dissociative identity disorder, but the gradual lessening of the need for the dissociation may make a more integrated experience available to patients.

Tension reduction behaviours refer to those external activities engaged in as a way to interrupt, avoid, modulate, or soothe negative internal states. These can be suicidality, aggression, sexual behaviours, self-harm, acting out, and activities to forestall abandonment. These risk-taking activities may be related to the well-documented revictimization of survivors of child abuse [44]. These behaviours are not specifically addressed in the group programme; the assumption is that with recognition, understanding, and hope for change, new ways of

dealing with stress and the need for externalizing pain is reduced.

The three composite scales of the TSI include: (i) dysphoria, related to negative mood states, (ii) trauma, a general measure of trauma, and (iii) the self, a measure of those aspects of the self that are effected by trauma history such as sense of self, self-esteem, and confidence. Clients reported reductions in those clusters of symptoms.

### Limitations

As with all quasi-experimental studies, the non-random assignment to groups, unequal cell size, and waitlist control group are all limitations to this study. However, the positive feedback from patients, and the fact that other, similar studies have yielded similar results [23,24] indicate that a group programme of this type may be an effective treatment modality for abuse survivors.

Whether groups are preferable to individual work remains an open question. The constraints of time, money, staff and other resources make group programmes the most viable for a public health agency. Certainly as an initial treatment modality there are compelling arguments for the benefit of groupwork including the long 'incubation' period needed to develop trust and relationship for these patients, and the benefits of being with similar others. Outcome studies such as this one tend to confirm the effectiveness of the group treatment modality.

### Conclusion

As we continue to learn about the impact of childhood abuse on adult function we hope that treatments such as this group programme, administered by trained professionals and tailored to the needs of this patient group, are more readily available. This study adds to evidence from other researchers that the group modality may be an effective one in the treatment of survivors of child abuse. Patient feedback about the group programme is certainly positive. The single most notable response from patients has been a sense of relief at no longer being alone in the world and realizing they are not 'crazy' (their epithet). In this study the level of symptomatology was reduced for those in the group programme compared to the control group, for whom there were no changes.

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## Appendix I.

### The 10 scales of TSI and their properties

*Anxious arousal.* This scale measures anxiety symptoms and autonomic hyperarousal. Symptoms include trembling, shaking, jumpiness, feeling 'on edge', worry, exaggerated startle response and fear of harm. Somatic symptoms are consistent with sympathetic nervous system arousal. Presentation is hyperalertness and hypervigilance and patients may have panic attacks and generalized anxiety.

*Depression.* This scale measures depressed mood and cognitions and such symptoms as tearfulness, isolation, suicidality, self-injury, feeling sad, self-perception as worthless and inadequate, seeing the future as hopeless, and thoughts of death or dying. Survivors of child abuse are at high risk for suicidality and patients with high scores on this scale should be monitored;

*Anger/irritability.* This scale is a measure of angry mood and irritable affect. It assesses the internal experience of anger, angry cognitions, angry behaviours, fantasies of hurting others, frustration, and inappropriate angry reactions. Anger is experienced by these patients as intrusive, unwanted and uncontrollable, and they may fear they will act on their violent impulses.

*Intrusive experiences.* This scale measures the intrusion of post-traumatic reactions and symptoms into current awareness. These may be nightmares, flashbacks, intrusive memories, and/or repetitive thoughts. They are usually described as ego-dystonic by patients. They are easily triggered phenomena and because they seem to be so irrational and uncontrollable many patients fear they are psychotic and may have been diagnosed as such.

*Defensive avoidance.* Defensive avoidance is the conscious, intentional process of avoidant responses to intrusive and aversive internal experiences. The scale measures the avoidance of situations, thoughts and

feelings. Patients attempt to eliminate unwanted thoughts and feelings or to neutralize them by avoiding disturbing stimuli. As a result they may be isolated, may numb feelings, or use drugs, alcohol and/or work to avoid the subjectively felt distress experienced as a result of aversive life experiences.

*Dissociation.* Dissociation is an unconscious defensive alteration of conscious awareness to avoid psychological distress. This scale measures cognitive disengagement, depersonalization, derealization, out-of-body experiences, emotional numbing, distractability, spacing-out, feeling out of touch with the self and the body, and the ultimate dissociation of Dissociative Personality Disorder.

*Sexual concerns.* Sexual distress and sexual dysfunction are marked by sexual problems, conflicts, anxiety and fearfulness regarding sexual matters, dissatisfaction and negative thoughts and feelings during sex, confusion about sexual issues, unwanted sexual preoccupation, the involuntary intrusion of aversive memories, and shame. The scale does not address sexual orientation.

*Dysfunctional sexual behaviour.* This scale measures reports of sexual behaviours that are in some way problematic or dysfunctional such as indiscriminant sexual contacts, troubles about sexual behaviours, using sex to combat loneliness or internal distress, and attraction to potentially dangerous or dysfunctional persons

*Internal self-reference.* This relates to an inadequate sense of self and personal identity. Some survivors of

child abuse may have problems discriminating their needs from those of others. They report confusion about identity and goals in life, a sense of internal emptiness, an inability to understand themselves, dependency on others for direction and structure, and difficulty resisting the demands of others. Their presentation is of having less self-knowledge and self-confidence than most people have and of being easily influenced. This scale includes possible personality disorders.

*Tension reduction behaviour.* External activities may be engaged in as a way to interrupt, avoid, modulate, or soothe these negative internal states. There can be a tendency to externalize distress through suicidality, aggression, sexual behaviours, self-harm, and activities to forestall abandonment. Presentation may include self-mutilation, acting out, negative affect, and suicidality.

*Composite Scales.* The TSI also has three composite scales that measure trauma, the self, and dysphoria. The Trauma scale measures level of trauma and its effect on current function and is a composite of the IE, DA, Diss and ISR scales. The Self scale includes ISR, SC, DSB, and AI. It is a general indicator of disorganization and fragmentation of the self and may indicate chronic difficulties with identity and self-awareness. Dysphoria includes AI, Dep and AA, and is a composite mood scale measuring heightened negative mood states.