Report to the Children and War Foundation

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Pilot Project - Evaluation of the Children and War Foundation Recovery Manual across Palestinian (West Bank) Schools

Ian Barron and Ghassan Abdullah

Abstract

The current study evaluated the effectiveness of the Children and War Foundation Recovery Manual delivered within a context of ongoing occupation and violence. Five sessions were delivered over five weeks by nine school counsellors to 83 Palestinian students in Nablus aged 11 to 14 years and to a waiting-list comparison group of 50 students. A range of normative measures were used to assess the extent of students' traumatic stress before and after delivery of the Manual. An adapted Exposure to War Stressors Questionnaire gave a measure of students' traumatic events exposure. Students and counsellors' subjective experience of the Recovery Manual was assessed through the use of focus groups. Program fidelity was measured by counsellor and observer adherence questionnaires.

Students who received the Recovery Manual reported experiencing significant decreases in PTSD, depression and traumatic grief symptoms compared to students within the comparison group. Students also reported significant reductions in conduct problems, peer-relationship difficulties and hyper-arousal as well as improvements in pro-social behaviour. Teachers noticed a significant increase in students' pro-social behaviour however parents reported a small increase in peer-problem behaviour. Reasonable levels of adherence to Manual protocols were achieved. Programme adaptation occurred in response to students' emotionality, reluctance in communication and levels of comprehension. No additional war stressors were reported during the duration of the evaluation. Counsellors experienced the project as positive, enabling and skill-building.

Introduction

The current study sought to address a gap in trauma recovery research in Palestine, i.e. the limited number of trauma recovery programmes delivered and the small number of evaluation studies conducted. Specifically, the study sought to evaluate the impact of the Children and War Foundation Recovery Manual with students in Nablus. Nablus was selected because of the high levels of political violence experienced and witnessed by children compared to other cities and towns in the West Bank.

Methods

Sampling
School counsellors

Twenty school counsellors in Nablus were selected on a voluntary basis to be trained in the Recovery Manual. Nablus was identified as the location for training as it was the city within the West Bank which had experienced the highest level of political violence. Counsellors were randomly assigned to intervention and comparison groups. In the intervention group there were three males and six females and three males and two females in the comparison group. Schools were of five types, i.e. public male; public female; UNWRA male; UNWRA female; and private mixed gender schools. Table 1 presents the spread of counsellor gender and school type by condition. One counsellor in the intervention group delivered the sessions to a group of 15-16 year olds and was not included in the study. Five counsellors did not administer pre-test questionnaires in the comparison group and were not included in the study, leaving 5 counsellors. Political occupation, domestic pressures and confusion were given as reasons for non-administration.

Table 1: Type of school and gender of counsellor by condition

Condition	Intervention		Comparison		Totals
Counsellor gender/ School type	Male	Female	Male	Female	
Public male	3	2	3	-	8
Public female	-	1	-	1	2
UNWRA male	-	-	-	1	1
UNWRA female	-	2	-	-	2
Private mixed gender	-	1	-	-	1
Totals	3	6	3	2	14

Students

Each counsellor identified the largest class of 11-13 year olds. The Children's Impact of Events Scale (CRIES) was administered to the class and ten students with the highest CRIES scores were selected for participation in the study.

In the intervention group the average age was 11 years 9 months with an age-range of 11 to 14 years (SD = 1.19). Four students were 14 years old. In the comparison group the average age was 11 years 6 months with an age-range of 11 to 13 years (SD = 0.70). All were Palestinian by ethnicity. In total there were 73 males and 60 females. Table 2 details the gender split across intervention and comparison conditions across the four types of school.

The attrition rate for the comparison group was 50% (n=50) and 17% (n=17) in the intervention group. The later included incomplete data sets across a number of questionnaires. All students in the intervention group received all the Recovery Manual sessions.

Table 2: Type of school and student gender by condition

Condition/ Student gender & School type	Intervention Total	Comparison Totals	Total
Public male	44m 53%	25m 50%	69m 51.9%
Public female	10f 12%	16f 32%	26 19.5%
UNWRA female	19f 22.9%	9m 15%	28 21.1%
Private mixed gender	N=10 (12%) 4m; 6f	-	10 (7.5%) 4m; 6f
Totals	48m 35f	25m 25f	73m 60f

The program
The Arabic translation of the Recovery Manual provided by the Children and War Foundation was used. Five sessions were delivered over five consecutive weeks. Sessions lasted one hour and thirty minutes on average. All counsellors received three days of training in the delivery of the Manual from two trainers from the Children and War Foundation. Training covered the values, content and the process of delivering the Manual utilising information giving, modelling, experiential learning, reflection and feedback as well as the timing and organisation of the sessions. In schools, two counsellors were present during the delivery of each session, one to present, the other to observe.

Procedure
A pre/post-test waiting-list comparison group design (random allocation of schools to intervention or comparison group) was utilised. The evaluation began in October. The Manual was delivered to the students in the intervention group in November and December within the school day during social education lessons. The waiting-list comparison group received the usual health education curriculum covering health and social issues. The research followed ethics procedures which required active informed consent by students, parents and teachers. The CRIES questionnaire for screening purposes was delivered one month prior to the beginning of the Manual. All other pre-test measures were delivered two weeks prior to the delivery of sessions. All post-test questionnaires were delivered two weeks after the delivery of the Manual.

Questionnaires were translated into Arabic and back-translated by another Palestinian to ensure accuracy.

Measures
A range of normative measures were used to assess the extent of students' traumatic stress before and after the delivery of the Manual, i.e. the Children's Impact of Events Scale, the Depression Self-rating Scale for Children, the Traumatic Grief Inventory for Children, the Impact on School Performance Scale and the Strength and Difficulties Questionnaire completed by parents, teachers and students. The Exposure to War Stressors Questionnaire gave a measure of students' traumatic exposure. An adapted version omitting questions 1 and 8 matched better with the context of violent occupation as opposed to war.

Students' subjective experience of the delivery of the Manual was assessed through use of a small random sample focus group (ten students). The sample was stratified for equal numbers of males and females. Counsellors' subjective experience of delivering the Manual was assessed through a focus group of the nine intervention group counsellors. The focus groups were held in a school classroom and lasted one hour each. Questions covered what students and counsellors liked/disliked about the Manual, what students/counsellors had learned, benefits and any negative consequences for students/counsellors. No students gave their permission for responses to be audio-recorded. The focus groups were facilitated by one research assistant while a second research assistant recorded responses verbatim.

Since sufficient numbers of students did not give their permission for Manual sessions to be audio-recorded, program fidelity was assessed by counsellors and observers (n=18) completing a fidelity questionnaire following the delivery of the five sessions. Questions covered, adherence to the number of sessions, session structure and content, the process of delivery and the extent of adaptation of sessions and the reasons this occurred.

Analysis
All normative measure scores and sub-scales were analysed using paired t-tests (pre/post-test measures) and analysis of variance comparing intervention and comparison groups. Analysis of focus group and program fidelity questionnaire data involved each participants full contribution being taken from the overall transcript and redrafted into tabular form so the researcher could see at a glance each participants' contribution. An adapted six step systematic thematic analysis approach was used (Braum and Clarke, 2006) to analyse the group data. The steps in the process involved familiarisation with the data, the generating of initial codes, the search for themes, the rank ordering of the initial codes based on prevalence, the reviewing and naming of themes and drafting the report.

Results

Exposure to war events
There was no difference between intervention and comparison groups in the pre and post-test scores in the frequency of exposure to war stressors. In the intervention group the average number of war stressors was 13.49 (sd = 7.19), ranging from 0 to

26. The mode was 6 and 9 stressors, reported by 7 students each. The five most frequently reported war stressors for the intervention group were: experiencing shelling at close distance (79%); seeing a dead body (78.3%); member of family injured 77.1%), seeing someone being killed (74%) and seeing someone being tortured (72.3%). See Appendix 1: Intervention group - rank order, frequency and percentage of wars stressors.

In the comparison group the average was 12.66 (sd = 3.19) ranging from 8 to 21 stressors. The mode was 11 stressors reported by 9 students. The five most frequently reported war stressors for the comparison group were: someone being raped (100%); someone being tortured (92%); in basement for long time (shelling)/seeing dead body (84%); experiencing close shooting/member of family injured (80%) and seeing someone being killed (72%). See Appendix 2: Comparison group - rank order, frequency and percentage of wars stressors

Children's Impact of Events Scale
A significant difference was found in the intervention group (t = 11.050, p< .001) with an average score decrease of 10.32, i.e. 32.10 (sd = 12.24) to 21.78 (sd = 14.98). No significance was found in the comparison group (t = 0.055, p = 0.957) with little difference of 0.04, i.e. 26.32 (sd = 9.82) to 26.28 (sd = 9.74).

There was a significant difference between intervention group and comparison groups at pre-test [F(1,131) = 8.050, p = .005) with a higher mean score in the intervention group (+5.78). At post-test there was a close to significant difference between the groups [F(1,131) = 3.585, p = .061) with the intervention group scoring 4.50 on average lower.

The effect size (intervention compared to the comparison) was small (d = 0.36), however this is likely to be an underestimate given the significant difference in the two groups at pre-test. As a result a correlated design was used to compute the effect size of the pre and post-test measures of the intervention group using the original standard deviations (Dunlop et al., 1996). A large effect size (d = 0.76) was discovered.

Sub-scales
In the intervention group significant results were found across all three sub-scales. Intrusion (t = 8.362, p < .001) decreased on average by 3 (sd = 3.26), i.e. 9.86 to 6.86; avoidance (t = 10.17, p < .001) decreased on average by 3.1 (sd = 2.79), i.e. 9.69 to 6.59; and arousal (t = 10.243, p < .001) decreased on average by 4.28 points (sd = 3.80), i.e. 12.67 to 8.39. In contrast no significant difference was found in the comparison group across the three sub-scales with little change to average scores. Intrusion (t = -0.134, p = .894), 8.28 to 8.32 (sd = 2.11); avoidance (t = 0.221, p = .826), 7.46 to 7.42 (sd = 1.28); and arousal (t = 0.926, p = .359), 10.28 to 10.14 (sd = 1.07).

Depression Self-rating Scale
A significant difference was found in the intervention group (t = 12.563, p<.001) with an average score decrease of 5 points, i.e. 17.58 (sd = 4.35) to 12.58 (sd = 3.69). There was a wide range of scores pre-test from 6 to 35 (mode = 18; 18 scores) and post-test 3-23 (mode = 13; 12 scores). No significance was found in the comparison

group (t = -1.853, p = 0.07), with a small increase of 0.24, i.e. 14.88 (sd = 3.04) to 15.12 (sd = 2.93). In the comparison group scores ranged from 8 to 20 at pre and post-test, with modes of 15 and 17 pre-test (8 scores) and 17 post-test (9 scores).

There was a significant difference between intervention group and control groups at pre-test [F(1,131) = 14.869, p = .000) with a higher average score in the intervention group (+2.50). At post-test there was a significant difference between the groups [F(1,131) = 17.197, p = .000) with the intervention group scoring 2.52 on average lower. The effect size for the intervention compared to the control group was large (d = 0.76) as was the effect size for the intervention group pre and post-test (d = 1.24).

Traumatic Grief Inventory for Children
A significant difference was found in the intervention group (t = 7.435, p<.001) with an average score decrease of 6.51, i.e. 61.31 (sd = 15.71) to 54.80 (sd = 10.60). A significance difference was also found in the comparison group (t = 2.909, p = 0.01), with a small decrease of 0.18, i.e. 65.32 (sd = 10.97) to 65.14 (sd = 10.83).

There was no significant difference between intervention and comparison groups at pre-test [F(1,131) = 2,511, p = .115) however there was a significant difference between the groups at post-test [F(1,131) = 19.762, p = .000) with the intervention group scoring 10.34 on average lower. The effect size for the intervention compared to the control group was large (d = 0.96).

Impact on School Performance Scale
A significant difference was found in the intervention group (t = 9.700, p<.001) with an average score decrease of 2.38, i.e. 17.65 (sd = 7.27) to 15.27 (sd = 6.26). No significance difference was found in the comparison group (t = 0.275, p = .785), with a small decrease of 0.02 i.e. 20.04 (sd = 2.65) to 20.02 (sd = 2.70).

A significant difference between intervention group and control groups was found at pre-test [F(1,131) = 4.994, p = .027), with a higher mean score in the comparison group (+2.39). A considerably increased significant result was found at post-test between the groups [F(1,131) = 25.923, p = .000) with the intervention group scoring 4.85 on average lower. The effect size for the intervention compared to the control group was large (d = -0.99). The effect size for the intervention group pre/post-test however was medium (d = 0.35).

Strength and Difficulties Questionnaires
Student Self-report Scores
In the intervention group significant results were found for the SDQS score and all the sub-scales (see table 3). In contrast only the SDQS score and the emotional sub-scale score were significant for the comparison group (see table 4).

A significant difference between intervention group and comparison group was found at pre-test [F(1,131) = 55.072, p = . 000) with a mean difference of 3.66. The significance difference remained at post-test [F(1,131) = 9.189, p = .003) with a mean difference score of 1.54. A large effect size (d = 0.90) was found with a mean decrease of 2.36 between pre and post-test for the intervention group.

Table 3: Intervention group pre/post-test – scale, mean and t-test

Scale	Mean Pre-test Post-test	Mean difference	sd	t	df	p
Emotional	8.17 7.89	-0.28	1.20 1.38	4.273	82	<.001*
Conduct	8.39 7.93	-0.45	1.06 1.36	4.892	82	<.001*
Hyper activity	5.05 4.05	-01.00	1.57 1.30	5.863	82	<.001*
Peer problems	4.54 3.93	-0.61	1.24 1.22	5.988	82	<.001*
Pro-social	7.53 8.34	+1.81	1.09 0.91	-8.396	82	<.001*
SDQS Total	26.14 23.78	-2.36	2.55 2.70	10.005	82	<.001*

* statistically significant

Table 4: Comparison group pre/post-test – scale, mean and t-test

Scale	Mean pre-post (range)	Mean +/-	sd	t	df	p
Emotional	7.46 (4-10) 7.32 (3-10)	-0.14	1.56 1.53	2.189	49	<.05*
Conduct	5.98 (3-9) 5.96 (3-9)	-0.02	1.56 1.60	0.375	49	.709
Hyper activity	4.80 (2-7) 4.82 (2-7)	+0.02	1.32 1.34	-0.573	49	.569
Peer problems	4.36 (2-6) 4.30 (2-6)	-0.06	1.14 1.15	1.353	49	.182
Pro-social	4.88 (2-8) 4.84 (2-8)	-0.04	1.67 1.66	1.429	49	.159
SDQS Total	22.48 (16-27) 22.24 (15-27)	-0.24	3.07 3.07	2.271	49	<.05*

Teacher SDQ Scores

No significant difference was found in the intervention group (t = 0.000, p = 1.00) with no change in the mean score, i.e. 15.99 (sd = 2.19-2.18). Likewise no significance difference was found in the comparison group (t = -0.629, p = .533), with little difference in the mean scores, i.e. 20.22 (sd = 2.78) to 20.26 (sd = 2.73). A significant difference between intervention group and comparison groups was found at pre-test [F(1,131) = 94.395, p = 000), and at post-test between the groups [F(1,131) = 98.338, p = .000) with a mean difference of 4.23 and 4.27.

Across pre and post-test no significant differences were found in any of the sub-scales in either condition except for the pro-social sub-scale. In the intervention group (t = -3.519, p = 001) there was a small average score increase of 0.17, i.e. 7.06 (sd = 1.17) to 7.23 (sd = 1.20) compared to a significant mean decrease in scores (0.10) in the

comparison group (t = 2.333, p = .05). Scores ranged from 3.76 (sd = 1.53) to 3.66 (sd = 1.47). Both groups were significantly different at pre-test [F(1,131) = 195.420, p = .000). The pre/post-test measures effect size for the intervention group was small (d = 0.13).

Parent SDQ scores
No significant difference was found pre and post-test in the intervention group (t = 1.825, p = 0.072) with a small mean increase of 0.11, i.e. 15.76 (sd = 2.44) to 15.86 (sd = 2.37). Likewise no significance difference was found in the comparison group (t = 0.000, p = 1.000) with no difference in mean score (18.54, sd = 3.16-3.37). There was a significant difference between the groups at pre-test [F(1,131) = 32.403, p = .000).

Pre and post-test, all the sub-scales in the intervention and comparison groups were not significant apart from the peer-problem scale which was significant in the intervention group (t = -2.425, p< .05) with a small mean increase of 0.12, i.e. 5.43 (sd = 1.12) to 5.55 (sd = 1.06). This was a small effect size (d = 0.11). There was a significant difference at pre-test between the two groups [F(1,131) = 67.826, p = .000).

Students' subjective experience (see appendix 3)
What students liked about the Manual?
Eight main codes were identified from 18 different statements about what the students liked. This was summarised into the theme of 'inclusion and the sharing of experiences.' All codes fitted with the theme which included feeling part of the group, cooperating with others and liking and feeling comfortable in the group - all of which appears to have enabled students to share their difficult experiences, thoughts and feelings.

How students felt before and after?
There was a clear difference between the feelings students reported 'prior to' compared to 'after' the programme . From the six codes from 12 statements feelings before the programme were all negative and mostly fearful fitting a theme of 'fear and anxiety'. In contrast, after the programme, the five codes from 12 statements indicated that students felt a reduction in fear, some felt relaxed and cared for and others more hopeful about the future. All fitted with the theme 'stabilising emotions'.

What students learned from the Manual?
From ten codes from 16 statements the main theme was identified as 'improved social communication.' The most frequent code was learning how to cooperate with others (five occurrances), with other codes naming sub-skills of communication such as awareness of self and others, listening, trust, self-responsibility skills, the sharing of experiences and the desire to include others.

What students noticed was different following the Manual?
From the six codes from 11 statements the named theme of 'positive behaviour change' was identified. This included codes covering improved behaviour in school, at home and with friends as well as improved learning and wanting to help others. The codes about feeling secure at home and reduced nightmares did not fit this theme

What students disliked about the Manual and any negative consequences?
One code from six statements indicated students disliked 'nothing' about the programme. The only other code was that of 'more sessions' (4 students). The named themes was 'nothing disliked but need more.'

Counsellors' subjective experience (see appendix 4)
What counsellors liked about the Manual?
Seven codes were identified from 14 statements. The theme of 'Quality programme' included the perception of CAW and CARE as reputable organisations. Counsellors appreciated learning new skills in delivering a developmentally appropriate programme within a colleagiate context. This was experienced as a motivating process.

Counsellors feelings before and after the Manual?
All the fears reported (five statements into one code) were based on either presenting the Manual for the first time, concern about parental reactions or worry about how children would respond to the programme. The identified theme was named as 'anticipatory anxiety'. Following delivery the counsellors fears abated with the theme of 'happy and proud' coming from five codes and 13 statements.

What counsellors learned from delivering the Manual?
Five codes were identified from 12 statements. The named theme was 'skill development' covering learning (i) group listening and facilitation skills, (ii) trauma recovery techniques and (iii) how to enable students to share their experiences.

What differences counsellors noticed in children?
Counsellor observations were general rather than specific with five statements into two codes summarised under the theme of 'positive behavioural change.' Behaviour changed occurred in school and at home and was reported as noticed by some parents and teachers.

What counsellors disliked about the Manual and any negative impact observered?
Nothing was specifically reported as disliked about the Manual. One code referred to a delayed response by the Education Directorate, another named the need for more training for counsellors and a third noted the limited opportunity to repeat the Manual for children (five codes, 11 statements).

Programme fidelity
All the counsellors and observers reported that 100% of the activities were delivered. All students were present for all the sessions. Each session was one hour and a half in length. Across the five sessions, the counsellors reported that 94% [range over five sessions 90-100] of the objectives were achieved and 79% [75-83] of Manual guidelines were followed. In contrast observers reported that 60% [10-90] of objectives were achieved and 74% [70-76] of Manual guidelines were followed.

In terms of the process of delivering the Manual, counsellors and observers rated the following: the quality of counsellor-student interaction (74% and 73% respectively); the counsellors communication with students (79% and 74%); the counsellors enthusiasm (77% and 73%); how positive the counsellor was during the session (79%

and 71%); the time the group spent on task (76 and 73%); and the time interactive activities focused on desired outcomes (77% and 75%).

The percentage of time the counsellors on average adapted the sessions was reported as 22% [17-27] and 27% [22-31]) by the observers. Such adaptations were mostly reported as fitting into theoretical guidelines (77% [71-86] and 71% [67-77]). The reasons for adaptation were mostly due to students 'not talking' (16 statements). This included students reported as shy; ashamed (2); hesitant to talk; afraid to express personal things; unwilling to talk; not motivated (2); lack of trust; not ready to talk in front of others; need to talk more; distracted - scared missing classes; football game on at the same time and the lack of verbal feedback. In addition, three statements referred to students being surprised by the new material and having difficulty understanding the content of the sessions. Two further statements referred to the counsellor either being confused or unwell. Other adaptations occurred because of the activities awakening feelings in students and the sharing of lots of difficult experiences (3 statements).

Adaptations were of 4 main types:
1. *Supporting students' understanding*: explanation why doing activities (4); explanation of what doing and when; explanation of why activities took so long; giving more examples; telling about others experiences and repetition (3).
2. *Encouraging students to talk*: asking children to talk up more; prompting students to start; asking students to get to the point and motivating students - unspecific comments (3).
3. *Responding to students experience*: listening more carefully (2); trying to avoid embarrassment for students, leaving time for students after sharing to show respect for their feelings; and opportunities for students to meet the counsellor after the sessions.
4. *Managing time with the sessions*: shortening breaks (3) and shortening activities.

Discussion

Extent of exposure to war stressors
The current study sought to explore the effectiveness of the Recovery Manual within a situation of ongoing violent occupation, rather than a post-war context. Students in the intervention and comparison groups had similar levels of exposure to a wide range of violence, on average 13 different types of war event. There was a wide range of experience from zero to all 26 stressors for individual children; however the most frequent occurrence of event was 9 in the intervention and 11 in the comparison group. This appears to give a picture of children in Nablus witnessing and experiencing loss, injury, torture and sexual violence as the context of violent occupation. It is of specific concern that all children in the comparison group reported either witnessing or experienced rape/sexual violence, suggesting the pervasive nature of such abuse. During the study however students experienced no further war stressors.

Prevalence and reduction in post-traumatic stress
The probability of a diagnosis of PTSD, i.e. scaling 17 or more on the intrusion and avoidance sub-scales (Children and War Foundation, 1998), covered 59.4% of the whole sample with the prevalence of PTSD slightly higher in the intervention group,

i.e. 63.9%. In terms of total CRIES scores the gap was larger with the intervention group reporting significantly higher distress levels, on average 4.78 points more than the comparison group.

Distress levels for students who experienced the Manual significantly dropped below those who were waiting to receive the Manual (4.5 points lower on average) thus indicating a large effect size. Such progress was comparable across the three sub-scales, i.e. students intrusion, arousal and avoidance symptoms all significantly reduced by at least 3 points with little to no change for students who did not receive the Manual. Within these significant average scores some students also made substantial clinically significant gains e.g. 33 to 1; 29 to 0; 29 to 8; 31 to 2; 27 to 4; 31 to 2; 37 to 2; and 29 to 1. In these examples, students' PTSD symptoms had all but gone.

Prevalence and reduction in depression
According to Birleson and others (1987) students who score 15 or more on the DSRS are likely to have a depressive disorder. In the whole sample 75.2% of students fitted the criteria reporting clinically significant levels of depressive symptoms. It appears that depressive symptoms are both pervasive and severe in the Nablus student population. Following delivery of the Manual students who received the programme achieved a statistically significant decrease in their depressive symptoms, i.e. 5 points on average. Underlying this figure is a dramatic drop in the percentage of students fitting the criteria for a depressive condition, i.e. 84.3% to 25.3%. In contrast, students who did not receive the Manual made on average a small but statistically non-significant increase in depressive symptoms. This resulted in a 4% increase in the number of students fitting the criteria for depression while they waited for the delivery of the Manual.

Prevalence and reduction in traumatic grief
Intervention and comparison groups were similar at pre-test with regard to the extent of symptoms of traumatic grief which is clearly severe and pervasive at clinically significant levels within the student population in Gaza. Although the comparison group made a small average reduction in traumatic symptoms over the five week period (0.18), the reduction in symptoms by students who experienced the Manual was statistically and clinically greater (6.51) with the Manual achieving a large effect size.

Reduced impact on school performance
Students who received the Manual made gains in school across a range of learning behaviours including the capacity to concentrate, improved memory, capacity to learn and motivation, In contrast there were no such differences for students who did not receive the Manual. A medium to large effect size was found indicating that the Recovery Manual had an impact on improving students learning capacity within school.

Strengths and difficulties - student perception
Prior to experiencing the Manual, students rated themselves as within the 'abnormal' banding of scores, i.e. scores of 20 and above indicates the likelihood of mental health disorders (Goodman, 1977). After students experienced the Manual, students made significant but small average reductions in emotional problems (e.g. managing fear,

worry, anxiety, feeling down and physical symptoms), conduct problems (e.g. losing temper, fighting, lying and stealing), peer problems (e.g. being picked on, not being liked, being alone and getting on better with adults) as well as hyperactivity (e.g. restlessness, fidgeting, distracted, impulsivity and poor task completion). Significant gains were also evidenced for students' pro-social behaviour (e.g. sharing, kind and helpful to others and volunteering). Overall students who received the Manual experienced a reduction in a range of mental health difficulties however students still rated themselves as likely to have mental health problems requiring further support. Students who did not receive the Manual only made gains in the managing of emotions.

Strengths and difficulties – teacher perception
Teacher perceptions of student mental health difficulties range from borderline to abnormal across intervention and comparison groups respectively. The only significantly improvement noticed after the delivery of the Manual was an improvement in children's pro-social behaviour in school for children who experienced the Manual. The effect size indicated that only a small difference was noticed. Teacher perception does not appear to support student perception of the extent of difficulty nor the extent of improvement. Either students are misguided in their judgment or teachers have failed to notice just how traumatized students were and how much improvement they made following the Manual.

Strengths and difficulties - parental perception
Like teachers, parents rated students as showing borderline signs of mental health disorders across both groups. Parents noticed no difference in students' emotion and conduct problems and overall SDQ scores apart from a small increase in peer-problems. Again it would appear that parent perception does not support student self-report or like teachers, parents have also either failed to notice the extent of student distress and improvement.

Student subjective experience
Students reported that they liked feeling included and having the opportunity to share experiences within the Manual sessions. Prior to the Manual students reported feeling fear and anxiety, however following the Manual, feelings appeared to have stabilized leading to a new sense of hope for the future for some. Students reported they gained a wide range of social communication skills including awareness of self and others, listening, trust, self-responsibility skills, the sharing of experiences and the desire to include others. Although students noticed a positive behaviour change in themselves, they identified their need for further sessions. This may be an important issue in terms of the maintenance and development of gains.

Counsellor views
The quality of the Manual and the supporting organizations appears to have been tangible for counsellors. The experience of delivering the Manual was empowering for counselors in terms of feeling supported as well as gaining knowledge and skills. Specifically counselors learned i) group listening and facilitation skills, (ii) trauma recovery techniques and (iii) how to enable students to share their experiences. Most counsellors experienced anticipatory anxiety prior to delivering the programme however following delivery counselors felt happiness and pride in their involvement.

Counsellors noticed positive behavioural change in students, however like the students, they identified the need for longer running programmes

Programme fidelity
Counsellors reported that programme protocols were followed to high levels whereas observers reported that just over half the objectives were achieved and three quarter of the guidelines followed. The latter finding may be significant in terms of impacting on student outcomes. Counsellors and observers were similar in their assessment of the quality of counsellor student interaction; the counsellors communication with students; the counsellors enthusiasm; how positive the counsellor was during the session; the time the group spent on task; and the time interactive activities focused on desired outcomes. All ratings were over 70% indicating on the one hand fairly high levels of adherence and on the other possible areas for development for improving the process of delivering the Recovery Manual effectively.

Counsellors adapted Manual delivery for a number of reasons, i.e. students' limited comprehension of content and tasks, their anxiety and reticence in talking, their need to share their experiences more and the limitations on time. Counsellors adapted the Manual by providing further explanations, encouragement and prompts to talk, listening more and reducing time for breaks and some activities. All could have impacted on Manual effectiveness and may need to be a focus of further training.

Limitations
The current study had a number of limitations. The sample size was smaller than planned due to a high attrition rate in the comparison group, a consequence of which may have been higher average distress levels in the intervention group. This partly reflects the challenge of conducting research within an ongoing context of occupation and violence and the consequent pressures on school counsellors at a variety of levels. Participant selection was based on the randomisation of counsellors rather than students and student selection was based on top ten class CRIES scores. This may have led to more variable levels of distress within and across groups. Finally, verbatim recording of focus groups and the retrospective reports of programme fidelity were both prone to introduction of bias.

Recommendations
1. The Manual requires to be culturally sensitised for Palestinian Arabic.
2. Many students appear to need and indeed requested a longer running programme.
3. Training for counsellors may need to address the issues which led to reduced Manual adherence including (i) advice about the communicative processes underpinning delivery and (ii) guidance to address the specific challenges for adaptation within theoretical and procedural guidelines
4. Other students of different ages should have access to Manual delivery
5. Future evaluation requires a larger sample, across a wider age-range within a randomised control trial. Sessions should be audio-recorded to check programme fidelity. Longitudinal evaluation would be of value to assess maintenance of gains and the impact of longer running programmes.

References

Braun, V. and Clarke, V. (2006). Using thematic analysis in Psychology Qualitative. *Research in Psychology*, *3*, 77-101.

Birleson, P., Hudson, I., Grey-Buchanan, D., and Wolff, S. (1987). Clinical Evaluation of a Self-Rating Scale for Depressive Disorder in Childhood (Depression Self-Rating Scale). Journal of Child Psychology and Psychiatry, 28, 43-60.

Children and War Foundation (1998). The Children's Impact of Events Scale. Bergen: Children and War Foundation.

Dunlop, W. P., Cortina, J. M., Vaslow, J. B., & Burke, M. J. (1996). Meta-analysis of experiments with matched groups or repeated measures designs. *Psychological Methods, 1,* 170-177.

Goodman, R. (1997). The Strengths and Difficulties Questtionnaire: A research note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581-586.

Appendix One: Intervention group - rank order, frequency and percentage of wars stressors

Rank order	Q, Freq, & %.	Question content
1	Q1 66 (79%)	Experience shelling at close distance
2	Q14 65 (78.3%)	See dead body
3	Q8 64 (77.1%)	Member of family injured
4	Q18 62 (74%)	See someone being killed
5	Q19 60 (72.3%)	See someone tortured
6	Q3/Q9 57 (68.7%)	Experience shooting at close distance Your home shelled
7	Q2 51 (61.4%)	Stay in basement long time for shelling
8	Q26 49 (59%)	See someone raped/sexually assaulted
9	Q13 48 (57.8%)	Soldiers forcibly enter your home
10	Q23 46 (55.4%)	See many people being killed at once
11	Q7 43 (51.8%)	See people recently injured
12	Q15 39 (47%)	So hungry thought you would die
13	Q17 38 (45.8%)	Ever so could thought you would die
14	Q5/Q22 36 (43.3%)	Expelled from home Help to carry wounded or dead people
15	Q24 35 (42.2%)	Were you injured
16	Q20 34 (41%)	Directly threaten to kill you
17	Q6/Q25 33 (39.8%)	Situation thought going to be killed Used as a human shield
18	Q16 31 (37.3%)	Separated from family
19	Q4 31 (37.3%)	Forced to leave town
20	Q21 29 (34.9%)	Held in a detention camp
21	Q11/Q12 26 (31.3%)	Ever shot at by snipers Member of family killed
22	Q10 27 (32.5%)	Parents separated

Appendix Two: Comparison group - rank order, frequency and percentage of wars stressors

Rank order	Q, Freq, & %.	Question content
1	Q26 50 (100%)	See someone being raped
2	Q19 46 (92%)	See someone being tortured
3	Q2/Q14 42 (84%)	Basement for long time (shelling) See dead body
4	Q3/Q8 40 (80%)	Experience close shooting Member of family injured
5	Q18 26 (72%)	See someone being killed
6	Q25 34 (68%)	Used as human shield
7	Q24 28 (56%)	Injured
8	Q6 26 (52%)	Situation thought be killed
9	Q9/ Q10/Q13/Q22 22 (44%)	
10	Q21 20 (40%)	Held in detention
11	Q7 18 (36%)	See people recently injured
12	Q5 14 (24%)	Expelled from home
13	Q22/Q12 12 (24%)	Carry wounded or dead Member of family killed
14	Q16/Q20 10 (20%)	Separated from family Threaten to kill you
15	Q23/Q15/Q11 6 (12%)	See many people killed at once So hungry thought would die Shot by snipers

Appendix Three: Students' subjective experience

Liked	Feelings before	Feelings after	Learned	Differences noticed	Disliked and negative impact
Shared memories, experiences, fears and nightmares (5,6,7,9,10,11)* Liked very much (3,4,8) Part of the group (6,8,11) Peer cooperation (1,2) Not feel embarrassed (7) Helpful (10) Supportive (10) Role plays (10)	Fear/Afraid about the occupation(2,3,5,6,7,9, 10) Anxiety about participation (4) Upset (1) Frustrated (1) Reluctant to participate (4) Painful memories (11)	Fears reduced (2,7,9,10,1 1) Relaxed (3,4) Cared for (6,8) Frustration reduced (1) Not scared about the future (7) Reduced painful memories (11)	Cooperating with others (1,3,4,6,9) A lot (1, 11) Express experiences and feelings (1,4) Like & trust peers more (10) How self and others feeling (8) Learning better (2) Less cautious (7) Listen to others (6) Taking responsibility (3) Other students need the program (5)	Improvement in behaviour (1,2,4,5) Family, friends, teacher noticed change in behaviour (5,6,8) Academic improvement (2) No nightmares (2) Feel more secure at home (3) Wanted to be with and help others (8)	None (1,3,7,9, 10,11) Need more sessions (5,6,9,10) No comment (2,4)
"I was so pleased to be with others in the group." (6) "It was good opportunity for me to talk about my fears and nightmares." (5)	I was upset and frustrated before joining the group." (1) "I was afraid and reluctant at the beginning to participate." (4)	"The program... reduced my fears from the Israelis." (7) "Speaking helped much in reducing the effects of the painful memories." (11)	"I learned a lot such as cooperative working, how to express my feelings and why." (1) "I learned responsibility and cooperating with the group." (3)	"My learning has improved and also my daily behaviour." (2) "I started to feel secure at home and with others." (3)	"There was nothing negative in the program except it was short." (10)

* Numbers in brackets refer to student number

Appendix Four: Counsellor views

Liked	Feelings before	Feelings after	Learned	Differences noticed	Disliked and negative impact
Working with quality organisations (1,5,7,8,11) Excellent (4,9,10) Exposed to new techniques (2,8) Age appropriate programme(3) New colleagues (7) Source of motivation (8) Felt relaxed in group (6)	Fears about participation [working with group, children's reactions, parental response](1,2, 3,4,10) No comment (5,6)	Happy [noticing change in children's behaviour in & out of school, children talk about experiences, children learn](4,5,6,7,9,10, 11) Faced up to fears of presenting (10,3) Relaxed [children sharing] (6,9) Less fearful for children (2) Proud (5)	How to make children express their feelings and vent (1,5,7) New skills in working with children (2,8,4) Group facilitation and listening skills (3,6,9) New approaches to address PTSD in children (3,11) Families liked the idea (3)	Positive change in children's behaviour [home, school(1,2,3 ,4,6) Some teachers and parents noticed difference in children (2)	None for self (1,7,8,10) None for children (7,10) More training for counsellors (1,3) Delayed Directorate response (2, 4) Limited opportunity to repeat programme (5)
"The main enrichment I had was getting to be exposed to new techniques and knowing both new colleagues and new serious organisations like CARE and CAW." (8)	"I was afraid before starting to implement the sessions, mainly that the families would not cooperate ..." (3)	"I felt happy when I noticed the change in the students behaviour." (10)	"I learned a lot from the programme, techniques and approaches that help much in making the students able to express themselves and vent." (5)	"noticeable change in the students behaviour inside school and outside it." (4)	"The programme had no negative effect on me or the children." (1)