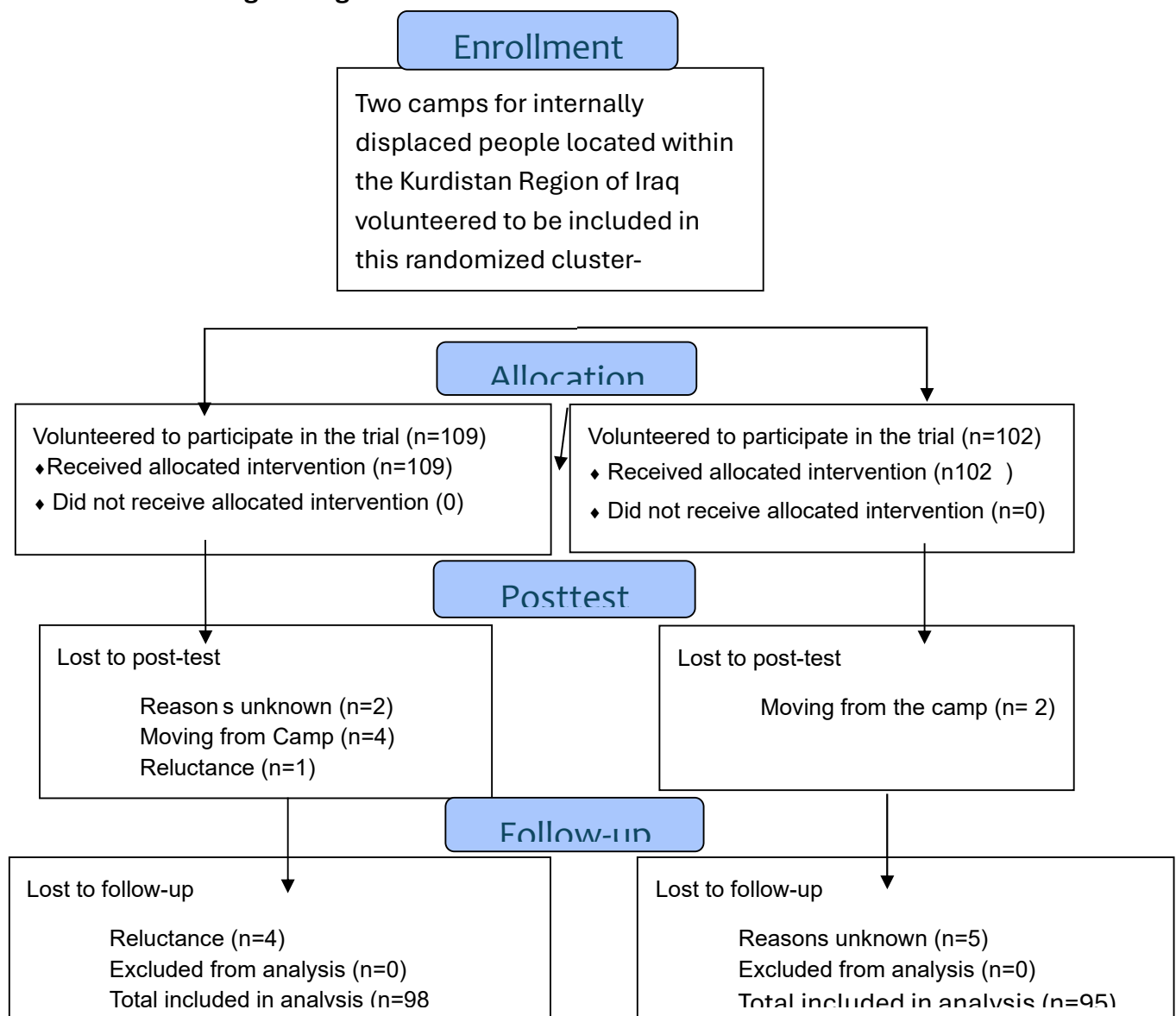


Results

Sociodemographic characteristics

At the beginning of the study, 109 people in the intervention group and 102 people in the relaxation group completed the pre-test. In the post-test and follow-up phase, the number of people in the intervention group decreased to 98 (50.8%) and the number in the relaxation group 95 (49.2%). This finding shows approximately a 10% drop in the intervention group and a 7% drop in the relaxation group. Another 6.86 % (n=7) of the participants in the control group and 10.09% (n=11) of the participants in the TFT group stopped cooperating for various reasons or were not available at the follow-up stage (figure1). There are several potential reasons for the observed drop in participant numbers in both the intervention and relaxation groups like attrition due to personal reasons, lack of engagement or interest, lack of engagement or interest, or time constraints.

CONSORT Flow Diagram Figure 1



The age range of participants was between 24-67 years and the average age was 40.77 with a standard deviation of 9.62. The mean age in intervention and control groups were 41.47 ± 10.33 and 40.05 ± 8.82 respectively. The duration of sessions ranged between 6-15 (10.94 ± 2.06) minutes in TFT and 11.08 ± 2.12 for control group.

As shown in figure 1 the majority of the participants were from Waisti region (41.5 %) and the least number were from Salāh ad-Dīn (1.3 %). Fifty people (25.9%) were from Baghdād, Al-Qādisiyyah (16.1 percent), Arbīl (8.8 %), Sulaymāniyyah (1.6%) and Al-Muthannā (1.6%)(figure2).

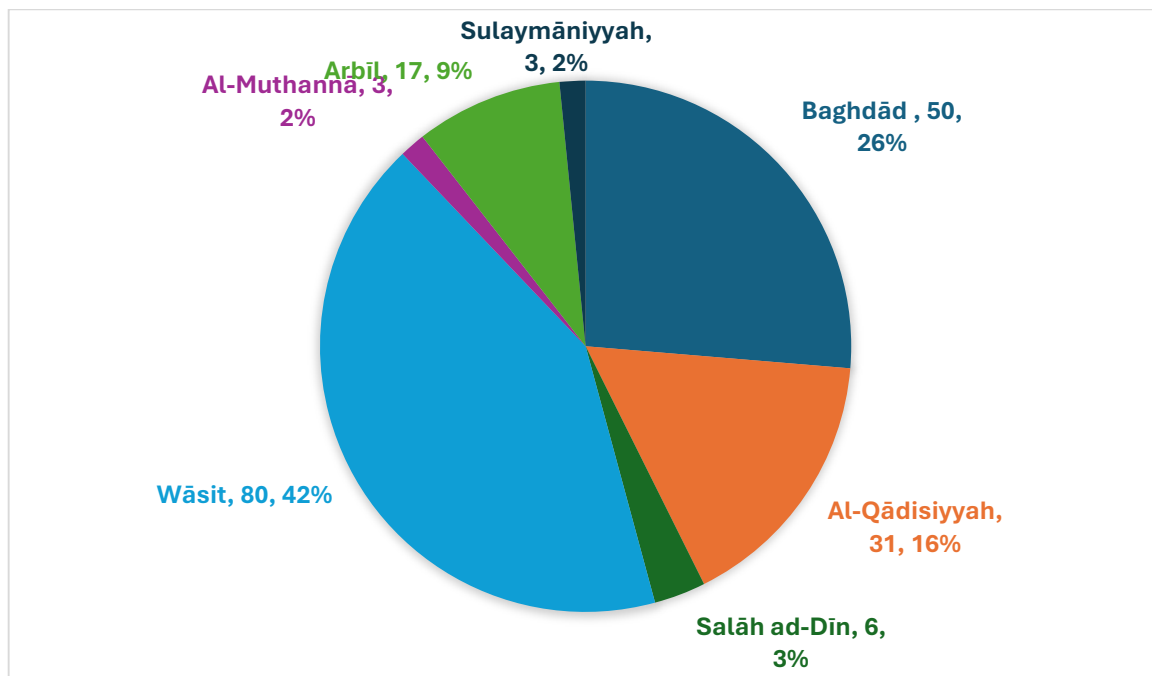


Figure2. Region of participants

They reported different kinds of PTSD-related experiences, i.e. 18 (9.3 %) of cases experienced being abused, 29 (15%) experienced being beaten, 54 (28%) witnessed other being beaten, 16 (8.3%) cases witnessed other being killed (Figure 5). Almost all of the cases had heard others being hit or beaten, 111 cases (57.5%) heard about others being hit, beaten or killed (Figure 7), 30 cases (15.5 %) forced to do things one is against. Among the 193 cases in the follow-up phase, 9.3 % already have spoken to someone like a

counselor or community leader about experiences and only 10 cases (5.2%) sought treatment for problems experienced since then (Table 1).

Table 1. Trauma related experiences frequency among participants

Questions	F	%
Experienced being abused	18	9.3
experienced being beaten	29	15
witnessed other being beaten	54	28
witnessed other being killed	16	8.3
had heard others being hit or beaten	211	100
heard about others being hit, beaten or killed	111	57.5
forced to do things one is against	30	15.5
already have spoken to someone like a counselor or community leader about experiences	18	9.3
sought treatment for problems experienced since then	10	5.2

In the following Table 2, the descriptive indices of the two studied variables are given, which show the changes in the scores from the pre-test to the post-test and follow-up (Table 2). Comparing sociodemographic variables between the 2 groups showed no difference ($P > 0.05$).

Table2. Descriptive indexes of PTSD and GHQ in pre-post and follow up

variable	index	baseline	immediately after intervention	Follow up
		Mean± SD ^a		Mean± SD
TFT group(n=98)				
PTSD	Mean± SD	28.70±4.38	22.75±3.58	18.44±3.27
	Below23 ^b	13(13.3)	59(60.2)	92(93.9)
	Above 23	85(86.7)	39(39.8)	6(6.1)
GHQ	Mean± SD	45.61±5.26	39.30±4.38	36.75±4.63
relaxation group(n=95)				
PTSD	Mean± SD	26.12±3.84	24.37±4.02	22.68±4.05
	Below23	26(27.4)	47(49.5)	59(62.1)
	Above 23	69(72.6)	48(50.5)	36(37.9)
GHQ	Mean± SD	45.40±5.18	43.88±4.94	42.96±4.19

The findings in Table 2 show that at the beginning of the study in the TFT intervention group, 86.7 had PTSD symptoms at the clinical level, which reached 39.8% in the post-intervention phase, and 6.1% in the follow-up phase. In the relaxation group, the number of participants who received a score above the cut-off line in the GHQ questionnaire was 72.6%, which reached 50.5% in the post-test phase and 37.9% in the follow-up phase. In terms of GHQ, the cut-off point is considered to be 24 in the questionnaire.

The effectiveness of TFT

The main assumption for performing the parametric test is the normal distribution of the data. The normal distribution of the data was checked by the Kolmogorov Smirnov statistical test. The results showed that none of the test statistics are significant at the 0.05 level. Therefore, a parametric test can be run for data. Another index that is necessary to confirm before running repeated measures analysis of variance (ANOVA) is to check the equal variances is Levene's test (Levene 1960). In this study, the results of Leven test showed PTSD variable (pretest $F=2.28$, $P=0.13$) and (post-test $F=0.65$, $P=0.41$). For the GHQ variable, the F value was 0.64 in the pre-test and 0.14 in the post-test stage, which is not significant at the 0.05 level. Another assumption, Mauchly's sphericity test or Mauchly's W ,

is a statistical test used to validate a repeated measures analysis of variance. Therefore, the main assumptions for repeated analysis of variance have been confirmed, and the results of repeated analysis of variance are presented in Table 3.

Table 3. The effectiveness of TFT & relaxation between groups, during time and time group interaction

	variable	SS ^c	df	MS ^d	F	sig	Eta
GHQ	time	3226.12	1.64	1965.71	1242.80*	<0.001	0.86 ^e
	Time*group	1075.88	1.64	655.53	414.45*	<0.001	0.68
	error	495.80	313.46	1.58			
	group	1799.59	1	1799.59	25.95*	<0.001	0.12
	error	13241.82	191	69.32			
PTSD	time	4554.66	1.55	2923.88	1534.68	<0.001	0.88
	Time*group	1142.96	1.55	733.73	385.12	<0.001	0.66
	error	566.85	297.52	1.90			
	Group	174.20	1	174.20	4.13	0.04	0.02
	error	8049.19	191	42.14			

The results obtained for GHQ showed between-group and within-group analysis show that the changes of the two groups are significantly different in terms of time from pretest to posttest ($p<0.001$) which means the TFT intervention effectively improved general health of our participants. Also, the interaction between time and group ($F=414.45$, $P>0.001$) shows a significant difference. Based on the obtained Eta coefficient, the effect size of time and group interaction was 0.68, which is considered high effectiveness. The examination of the two groups also showed that the two groups show a significant difference ($F=25.59$, $P>0.001$). The level of effectiveness based on the results obtained shows an effect size of 0.12, which indicates a medium effect size. In terms of PTSD, the results obtained from between-group and within-group analysis show that the changes of the two groups are significantly different in terms of time ($p<0.001$), which means the effectiveness of TFT has not decreased over the time (Table 2). Also, the interaction between time and group ($F=385.12$, $P>0.001$) shows a significant difference. Based on the obtained Eta coefficient,

the effect size of time and group interaction was 0.66, which is considered highly effective. The examination of the two groups also showed that the two groups show a significant difference ($F=4.13$, $P>0.001$). The level of effectiveness based on the results obtained shows an effect size of 0.02, which indicates a small effect size (Table 2). The pairwise comparison showed significant mean score change from baseline to immediately after intervention, baseline to follow up and immediately after intervention to follow up in 0.001 level of significance. The effect size of the TFT group was medium for the GHQ variable in baseline to immediately after intervention, baseline to follow up ($d=0.5-0.8$) stage, and small for the immediately after intervention to follow-up stage ($d=20-50$). The effectiveness of the relaxation intervention was small in baseline to follow up stage ($d=0.24$). For the PTSD variable, in the TFT group, the effectiveness was moderate in all stages ($d=0.5-0.8$), and in the relaxation group, the effectiveness was small in all time intervals ($d=20-50$) (Table 3).

Table 4. Pairwise comparison of mean scores for the GHQ and PTSD of groups over time for the TFT (n = 98) and relaxation (n = 95) groups

[illegible]

TFT	baseline	After intervention	5.94*	0.17	5.52	6.36	0.59
	baseline	Follow up	10.26*	0.23	9.69	10.83	0.79
	After intervention	Follow up	4.31*	0.16	3.92	4.71	0.75
relaxation	baseline	After intervention	1.74*	0.12	1.73	2.05	0.21
	baseline	Follow up	3.44*	0.20	2.95	3.92	0.39
	After intervention	Follow up	1.69*	0.13	1.37	2.01	0.20

Table 5. SUD scores compare in pre-post and follow up

Groups	pretest	posttest	Follow up
	Mean± SD		
Intervention	7.95±1.74	2.67±1.62	0.32±0.53
Relaxation	7.38±1.75	5.45±1.78	3.23±1.51
Compare (Kruskal-Wallis)	$\chi=3.29$	$\chi=78.08$	$\chi=132.10$
	P=0.07	P=0.001	P=0.001

Table5 shows the frequency, the average standard deviation of the SUD variable. Moreover, the result of the comparison with the Kruskal-Wallis test shows that this variable has changed to normal, a non-parametric test was used. There were no adverse events associated with this study.