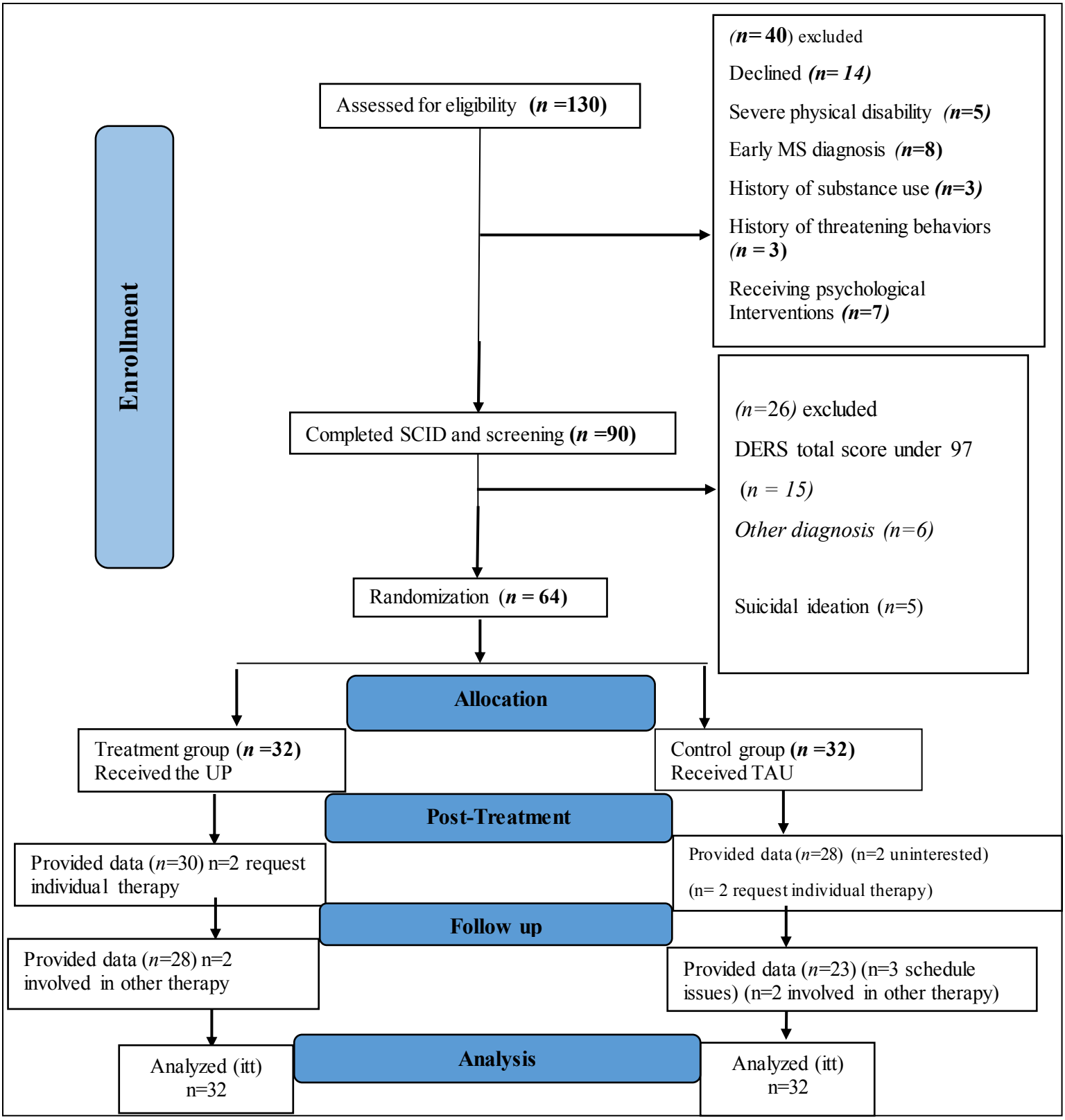
Participant flow



Basline characteristics

Baseline Assessment

Measure	**Condition**		**TEST**	
	TAU n=32	***UP n=32***	***t(62)[c]***	***p***
Age(year)	35.60[a] (5.56)[b]	34.22[a] (4.90)[b]	1.06	.293
MS duration(year)	4.97 (1.24)	4.37 (1.21)	1.03	.309
OASIS	11.28 (1.92)	10.46 (1.39)	1.93	.057
ERQ	26.56 (7.08)	24.13 (4.93)	1.60	.119
PANAS-PA	26.72 (3.97)	25.28 (3.44)	1.55	.127
PANAS-NA	27.22 (2.88)	27.63 (2.55)	-0.6	.154
ODSIS	11.31 (2.29)	10.84 (2.35)	1.28	.204
PSWQ	46.1 (9.39)	49.00 (9.45)	-1.23	.222
HADS-A	12.47 (1.29)	12.90 (1.44)	-1.88	.064
HADS-D	12.4 (1.81)	12.9 (1.80)	-1.24	.218
DERS	125.1 (17.4)	133. (15.56)	-1.5	.134
SCID-I findings				
Depressive disorder			Total n=29 (45.3%)[e]	
MDD	n=11	n=14		
Dysthymia	n=1	n= 3		
Total	n=12 (41.5%)[d]	n=17 (58.5%)[d]		
Anxiety disorder			Total n=35 (54.7%)[e]	
GAD	n=8	n=7		
agoraphobia	n=1	-		
SAD	n=6	n=4		
OCD	n=2	n=3		
PTSD	n=3	n=2		
Specific-phobia	-	n=1		
Total	n=20 (57.1%)	n=15(42.9%)		

Note: a: Mean, b: standard deviation, c: independent t-test, d: within group percentage, e:baseline frequency, OASIS: Overall Anxiety Severity and Impairment Scale, ERQ: Emotion Regulation Questionnaire, PANAS-PA: Positive and Negative Affect Schedule-Positive Affect, PANAS-NA: Positive and Negative Affect Schedule-Negative Affect, ODSIS: The Overall Depression Severity and Impairment Scale, HADS-A: The hospital anxiety and depression scale-Anxiety, HADS-D: The hospital anxiety and depression scale-Depression, PSWQ: Penn State Worry Questionnaire, DERS: Difficulties in Emotion Regulation Scale, SCID-I: Structured Clinical Interview for DSM-IV Axis I Disorders, MDD: Major Depressive Disorder, GAD: Generalized anxiety disorder, SAD: Social anxiety disorder, OCD: Obsessive-compulsive disorder, PTSD: Post-traumatic Stress disorder

Outcome measures

Outcome: Paired t-test and effect size.

Measure	Condition	Control group				*UP group*		
		t(31)	*p*	95%cl	*d*	*t(31)*	95%cl	*d*
OASIS								
	Time2-Time1	-.18	.860	[-1.17, 0.98]	0.03	9.66***	[3.57, 5.48]	1.71
	Time3-Time1	0.55	0.58	[-0.67, 1.17]	0.08	8.28***	[3.74, 6.19]	1.48
HADS-A								
	Time2-Time1	1.94	0.06	[-0.25, 1.08]	0.34	19.92***	[5.41, 6.65]	3.54
	Time3-Time1	1.97	0.05	[-0.26, 1.58]	0.35	14.45***	[5.02, 6.67]	2.56
ODSIS								
	Time2-Time1	-1.26	0.21	[-1.71, 0.40]	0.22	6.50***	[2.57, 4.93]	1.15
	Time3-Time1	1.82	0.07	[-0.11, 1.86]	0.32	6.29***	[2.18, 4.26]	1.11
HADS-D								
	Time2-Time1	-1.18	0.24	[-1.19, 0.37]	0.21	8.93***	[3.93, 6.25]	1.67
	Time3-Time1	-1.45	0.15	[-1.21, 0.20]	0.26	15.33***	[5.44, 7.11]	2.77
DERS								
	Time2-Time1	1.34	0.19	[-2.7, 12.95]	0.23	7.86***	[25.82, 43.93]	1.38
	Time3-Time1	0.02	0.98	[-7.7, 7.89]	0.01	8.02***	[29.10, 48.96]	1.41
ERQ								
	Time2-Time1	-0.37	0.71	[-4.08, 2.83]	0.06	-7.44***	[-13.34,-7.6]	1.31
	Time3-Time1	-0.42	0.67	[-4.58 ,3.02]	0.07	-9.97***	[-13.4 ,-8.85]	1.76
PANAS-PA								
	Time2-Time1	0.10	0.91	[-1.75, 1.94]	0.02	-8.96***	[-8.2, -5.16]	1.59
	Time3-Time1	-0.33	0.74	[-2.25, 1.63]	0.06	-10.9***	[-10.86,-7.45]	1.93
PANAS-NA								
	Time2-Time1	-1.07	0.29	[-2.46, 0.77]	0.19	21.03***	[11.4, 13.85]	3.72
	Time3-Time1	-1.33	0.19	[-2.53, 0.53]	0.23	15.90***	[11.58, 14.9]	2.82
PSWQ								
	Time2-Time1	-0.23	0.81	[-3.96, 3.14]	0.06	8.47***	[13.38, 21.8]	1.49
	Time3-Time1	0.73	0.47	[-3.10, 6.53]	0.12	6.50***	[10.68, 20.4]	1.15

Note: Time2-Time1*: post-treatment to baseline,* Time3-Time1*:* 3month follow-up to baseline, *d:* Cohen's d, 95%cl: confidence interval of the Difference. OASIS: Overall Anxiety Severity and Impairment Scale, ERQ: Emotion Regulation Questionnaire, PANAS-PA: Positive and Negative Affect Schedule-Positive Affect, PANAS-NA: Positive and Negative Affect Schedule-Negative Affect, ODSIS: The Overall Depression Severity and Impairment Scale, HADS-A: The hospital anxiety and depression scale-Anxiety, HADS-D: The hospital anxiety and depression scale-Depression, PSWQ: Penn State Worry Questionnaire, DERS: Difficulties in Emotion Regulation Scale, TIME 2: immediately after treatment , TIME 3: End of 3-month follow up, , TAU: Treatment as Usual, UP: Unified Protocol, $p<.001$: ***

Adverse events

There were no adverse effect or risk associated with this trial.