Outcomes

Primary Outcome

Nightmare Distress Questionnaire (NDQ [5]). The NDQ consists of 13 items rated on 5-point Likert scales. The score ranges from 13 to 65, and higher values indicate more distress. The NDQ has shown good internal consistency (Cronbach's $\alpha = .83$ to $\alpha = .88$) and medium correlations with nightmare frequency (r = .29 to r = .45 [5]). The questionnaire was translated into German by our workgroup; the translation was not published. Psychometric data are available for a different German version of the NDQ [33].

Secondary Outcomes

Nightmare Frequency Questionnaire (NFQ [34]). For this questionnaire, the participant is asked to state the number of nights with nightmares and the number of nightmares in the last three months, given as zero or a number per year, month, or week. The NFQ has shown good psychometric values; the retest reliability was r = .9 for nights with nightmares and r = .86 for number of nightmares, and the two measures were highly correlated (r = .80). Correlations with a prospective diary were r = .6 for nights with nightmares and r = .63 for number of nightmares [35]. We analyzed the number of nightmares.

Nightmare Effects Survey (NES [34]). The first item asks whether the person's life is generally affected by nightmares. The remaining eleven items ask the patient to rate areas in daily life on 5-point Likert scales regarding how much these areas are "adversely or negatively affected by nightmares". The score ranges from 0 to 44, and higher values indicate more effects. The NES has shown good internal consistency (Cronbach's $\alpha = .9$ [34]) and a correlation of r = .7 with the NDQ [36].

Self-Efficacy Questionnaire (SWE [37]). This 10-item measure operationalizes the patient's sense of mastery with statements, such as "I am confident that I could deal efficiently with unexpected events", rated on 4-point Likert scales. The score ranges from 10 to 40, with higher values indicating higher self-efficacy. Its internal consistency is high (Cronbach's α = .8 to .9), it is unidimensional, and has shown positive relationships with optimism and job satisfaction and negative relationships with anxiety, depression, and stress [38].

Symptom Checklist 90-Revised (SCL-90-R, German version [39]). The SCL measures a wide variety of psychopathological symptoms. The Global Severity Index (GSI) was used, which ranges from 0 to 4, with higher values indicating more and/or more intense symptoms.

Additional Measures

Treatment Credibility and Expectancy. We used six items from the reaction to treatment questionnaire [40] with 10-point Likert scales. Four items relate to credibility (logical treatment, confidence, recommendation to a friend, and successful treatment); the score ranges from 4 to 40, with higher values indicating higher credibility. Two items relate to the expected intensity of symptoms directly after the treatment and in one year's time. Expectancy ratings were reverse coded, which resulted in a score ranging from 2 to 20, with higher values indicating higher expected effects/lower symptom levels).

Landeck Inventory for the Assessment of Sleep Disorders (LISST [41]). This is a screening instrument for sleep disorders. We used one item that measures general dream recall with verbal categories that range from "never" to "nearly every morning".

Several other measures were obtained from the participants: therapist and patient ratings of depression and anxiety (used in the validation of the NFQ and NES [42]) and a single item that measured nightmare intensity (excluded in favor of the validated NDQ and NES).

Observed Data in the ITT Sample

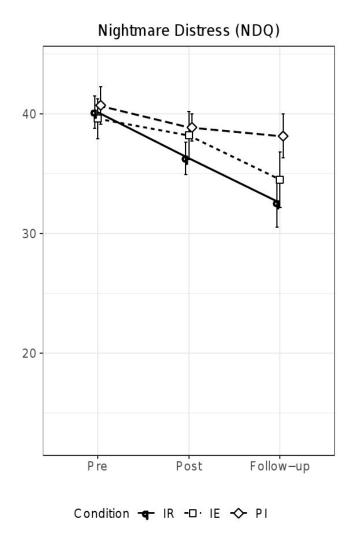


Fig. 2. Means for the main outcome with 95%-CIs. Intention-to-treat sample, N = 96.

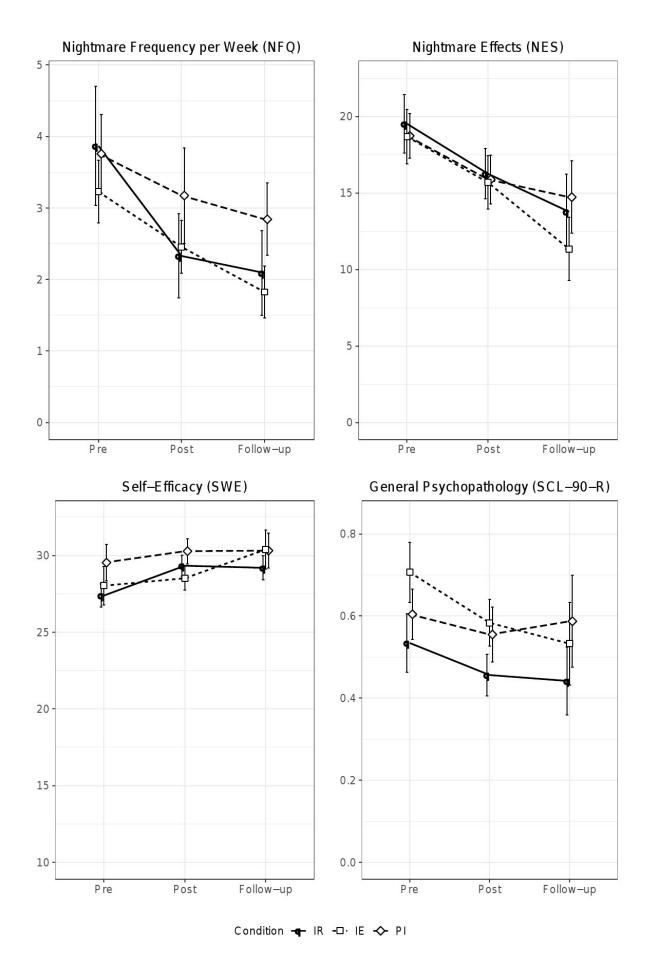


Fig. 3. Means for the secondary outcomes with 95%-Cls. Intention-to-treat sample, N = 96.

Table A: Time intervals between sessions and treatment duration

Time internal		Condition		Total
Time interval	IR	IE	PI	Total
Screening to session 1, M (SD, range, n)	56.28 (51.08, 0–239, 32)	66.41 (63.52, 0–249, 34)	60.90 (50.70, 0–152, 30)	61.31 (55.28, 0–249, 96)
Session 1 to 2, M (SD, range, n)	37.14 (30.48, 21–147, 29)	25.71 (8.73, 18–51, 31)	26.64 (8.15, 20–56, 28)	29.77 (19.32, 18–147, 88)
Session 2 to 3, M (SD, range, n)	30.07 (4.81, 21–44, 28)	33.07 (9.41, 27–77, 28)	33.15 (14.07, 23–81, 26)	32.07 (10.02, 21–81, 82)
Session 3 to 4, M (SD, range, n)	50.84 (13.30, 21–97, 25)	53.11 (13.82, 35–98, 28)	56.46 (12.87, 35–93, 24)	53.42 (13.38, 21–98, 77)
Treatment duration, M (SD, range, n)	115.60 (26.76, 91–196, 25)	111.93 (19.15, 93–176, 28)	114.08 (18.09, 90–168, 24)	113.79 (21.40, 90–196, 77)

Note: Durations measured in days, treatment duration = interval from session 1 to session 4. IE = Imaginal Exposure, IR = Imagery Rescripting, M = mean, PI = Positive Imagery, SD = standard deviation. Intention-to-treat sample, N = 96.

Table B: Types of comorbid and lifetime diagnoses

Diagnoses	No. of persons with comorbid diagnosis	%	No. of persons with lifetime diagnosis	%
Substance-related disorders			3	3%
Affective disorders	41	43%	14	15%
Anxiety disorders	34	35%	5	5%
Obsessive-compulsive disorders	4	4%		
Adjustment disorders	3	3%	5	5%
Somatoform disorders	4	4%		
Eating disorders	5	5%	5	5%
Sleeping disorders (other than nightmares)	1	1%	1	1%
Personality disorders	9	9%		
Any disorder	59	61%	28	29%

Note: Multiple diagnoses within one category and across categories were possible. Intention-to-treat sample, N = 96.

Table C: Comparison of the demographic and baseline data in treatment completers and non-completers

Characteristic	Non-completers	Completers	Total	F	р
Age in years, M (SD, n)	46.5 (11.92, 22)	40.04 (14.38, 74)	41.52 (14.07, 96)	3.677	.058
Duration of nm disorder in years, M (SD, n)	14.29 (13.49, 21)	15.81 (14.37, 73)	15.47 (14.12, 94)	0.188	.666
No. of comorbid diagnoses, M (SD, n)	1.23 (1.15, 22)	1.19 (1.36, 74)	1.20 (1.31, 96)	0.014	.906
No. of lifetime diagnoses, M (SD, n)	0.36 (0.66, 22)	0.39 (0.74, 74)	0.39 (0.72, 96)	0.026	.872
NDQ pre, M (SD, n)	38.05 (6.47, 21)	40.71 (6.37, 74)	40.12 (6.45, 95)	2.820	.096
NFQ pre, <i>M</i> (<i>SD</i> , <i>n</i>)	3.36 (3.18, 20)	3.68 (2.98, 73)	3.61 (3.01, 93)	0.174	.677
NES pre, M (SD, n)	19.71 (8.29, 21)	18.76 (8.58, 74)	18.97 (8.48, 95)	0.207	.650
SWE pre, <i>M</i> (<i>SD</i> , <i>n</i>)	28.24 (4.84, 21)	28.31 (5.38, 74)	28.29 (5.24, 95)	0.003	.956
SCL pre, M (SD, n)	0.64 (0.34, 20)	0.61 (0.63, 73)	0.62 (0.58, 93)	0.028	.868
Gender, count (exp. count, std. residual)					.020
female	13 (17.2, -1)	62 (57.8, 0.6)	75		
male			21		
amily status, count (exp. count, std. residual)					.619
single	5 (6.0, -0.4)	21 (20.0, 0.2)	26		
partnership	4 (5.3, -0.6)	19 (17.7, 0.3)	23		
married	7 (6.6, 0.1)	22 (22.4, -0.1)	29		
divorced	3 (1.4, 1.4)	3 (4.6, -0.8)	6		
widowed	0 (0.2, -0.5)	1 (0.8, 0.3)	1		

Characteristic	Non-completers	Completers	Total	F	р
Education, count (exp. count, std. residual)					.065
5 years secondary education	3 (1.6, 1.1)	4 (5.4, -0.6)	7		
6 years secondary education	6 (5.3, 0.3)	17 (17.7, -0.2)	23		
certificate for university entrance	1 (5.5, -1.9)	23 (18.5, 1.0)	24		
university of applied science	3 (1.6, 1.1)	4 (5.4, -0.6)	7		
university	6 (6.0, 0)	20 (20.0, 0)	26		
other	0 (0.2, -0.5)	1 (0.8, 0.3)	1		
Psychotropic medication, count (exp. count, std. residual)	6 (6.6, -0.3)	23 (22.4, 0.1)	29		.798
Medication suspected to induce nm, count (exp. count, std. residual)	6 (4.2, 0.9)	12 (13.8, -0.5)	18		.352

Note: exp. = expected, *M* = mean, nm = nightmare, NDQ = Nightmare Distress Questionnaire, NES = Nightmare Effects Survey, NFQ = Nightmare Frequency Questionnaire, SCL = Symptom Checklist 90, *SD* = standard deviation, std. = standardized, SWE = Self-Efficacy Questionnaire. Intention-to-treat sample, *N* = 96.

Table D: Descriptive data of the outcomes in the ITT sample (imputed data)

		Condition		
Measure -	IR	IE	PI	· Total
NDQ pre, M (SD, range)	40.13 (6.92, 26–52)	39.56 (6.05, 29–55)	40.70 (6.44, 29–50)	40.11 (6.42, 26–55)
NDQ post, M (SD, range)	36.53 (7.38, 21–53)	38.07 (5.96, 16–49)	38.86 (6.15, 27–55)	37.80 (6.52, 16–55)
NDQ follow-up, M (SD, range)	33.65 (7.50, 18–47)	34.86 (7.54, 16–48)	37.85 (7.14, 20–53)	35.39 (7.53, 16–53)
NFQ pre, M (SD, range)	3.87 (3.41, 0.25–17)	3.19 (2.35, 0.75–10)	3.83 (3.15, 0.21–14)	3.62 (2.98, 0.21–17)
NFQ post, M (SD, range)	2.27 (1.92, 0.21–7)	2.43 (1.89, 0-7)	3.24 (2.78, 0.50–14)	2.63 (2.23, 0–14)
NFQ follow-up, M (SD, range)	2.02 (1.76, 0.02–7)	1.88 (1.82, 0-7)	3.01 (2.62, 0.50–12)	2.28 (2.12, 0–12)
NES pre, M (SD, range)	19.63 (8.65, 4–35)	18.68 (7.88, 5–34)	18.73 (9.07, 4–36)	19.01 (8.45, 4–36)
NES post, M (SD, range)	16.54 (9.12, 2–32)	16.22 (7.78, 0–39)	16.40 (7.93, 1–33)	16.38 (8.21, 0–39)
NES follow-up, M (SD, range)	14.63 (8.34, 2–33)	12.41 (8.86, 0–34)	15.10 (9.50, 1–42)	13.99 (8.88, 0–42)
SWE pre, M (SD, range)	27.44 (5.07, 17–38)	28.03 (5.62, 10–37)	29.53 (4.80, 14–37)	28.30 (5.21, 10–38)
SWE post, M (SD, range)	29.15 (4.01, 18–36)	28.46 (4.70, 19–39)	30.02 (3.90, 22–38)	29.18 (4.24, 18–39)
SWE follow-up, M (SD, range)	29.27 (4.74, 17–40)	29.97 (5.68, 15–40)	30.11 (3.81, 20–40)	29.78 (4.80, 15–40)
SCL pre, M (SD, range)	0.53 (0.47, 0.01–2.19)	0.71 (0.67, 0.04–2.69)	0.60 (0.54, 0.01–2.13)	0.61 (0.57, 0.01–2.69)
SCL post, M (SD, range)	0.46 (0.48, 0.01–1.64)	0.58 (0.59, 0.01–2.31)	0.54 (0.53, 0.01–1.96)	0.53 (0.53, 0.01–2.31)
SCL follow-up, M (SD, range)	0.44 (0.48, 0.02–1.69)	0.53 (0.57, 0.01–2.11)	0.54 (0.64, 0.06–2.75)	0.50 (0.56, 0.01–2.75)

Note: IE = Imaginal Exposure, IR = Imagery Rescripting, M = mean, NDQ = Nightmare Distress Questionnaire, NES = Nightmare Effects Survey, NFQ = Nightmare Frequency Questionnaire, nm = nightmare, PI = Positive Imagery, SCL = Symptom Checklist 90, SD = standard deviation, SWE = Self-Efficacy Questionnaire. Imputed data in the Intention-to-treat sample, n_{IR} = 32, n_{IE} = 34, n_{PI} = 30, N_{Total} = 96.

Table E: Features and comparison of multilevel models for the imputed ITT data

Model	AIC	BIC	χ²	df	р
NDQ					
unconditional	1884.76	1895.75			
Model 1	1840.96	1859.27	47.81	2	< .001
Model 2	1837.08	1873.71	13.87	5	.016
Model 3	1839.13	1883.09	1.95	2	.377
Model 4	1841.37	1899.98	5.76	4	.218
Model 5	1827.74	1915.65	29.63	8	< .001
Model 6	1842.26	2021.75	35.48	25	.08
FQ					
unconditional	1258.17	1269.16			
Model 1	1222.58	1240.89	39.59	2	< .001
Model 2	1158.59	1195.22	73.99	5	< .001
Model 3	1158.07	1202.03	4.52	2	.104
Model 4	1161.21	1219.82	4.86	4	.302
Model 5	1163.06	1250.97	14.15	8	.078
Model 6	1188.06	1367.55	25	25	.462
ES					
unconditional	1960.38	1971.37			
Model 1	1916.48	1934.79	47.9	2	< .001
Model 2	1916.52	1953.15	9.96	5	.077
Model 3	1920.14	1964.1	0.38	2	.826

Model	AIC	віс	χ²	df	р
Model 4	1924.92	1983.53	3.23	4	.521
Model 5	1891.49	1979.41	49.42	8	< .001
Model 6	1913.46	2092.95	28.03	25	.306
SWE					
unconditional	1598.77	1609.76			
Model 1	1588.6	1606.92	14.17	2	.001
Model 2	1548.51	1585.14	50.09	5	< .001
Model 3	1550.34	1594.3	2.17	2	.338
Model 4	1548.89	1607.5	9.45	4	.051
SCL					
unconditional	206.63	217.62			
Model 1	195.18	213.5	15.45	2	<.001
Model 2	182.81	219.44	22.37	5	< .001
Model 3	185.88	229.84	0.93	2	.629
Model 4	191.69	250.3	2.19	4	.701

Note: Effects were added in the following order: Model 0 unconditional, fixed time effects in Model 1, random time effects in Model 2, fixed condition effects in Model 3, time*condition interaction in Model 4, additive covariates in Model 5, time*covariates interaction in Model 6. χ^2 -tests compare each model with the immediately preceding one. AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion, NDQ = Nightmare Distress Questionnaire, NES = Nightmare Effects Survey, NFQ = Nightmare Frequency Questionnaire, SCL = Symptom Checklist 90, SWE = Self-Efficacy Questionnaire. Imputed data of the ITT sample, 288 observations (3 time levels nested in 96 participants).

Table F: Fixed and random effects in the multilevel models for the imputed ITT data

Madal and an Batan					Fixed effect					Random
Model and predictor	Beta	Beta SE	Std. Beta	Std. Beta SE	CI low	CI high	t	df	р	effect
NDQ Model 2										
Intercept	40.11	0.66	0	0	38.84	41.4	61.19	95	< .001	28.55
Time (post)	-2.3	0.56	-0.15	0.04	-3.42	-1.24	-4.09	95	< .001	5.10
Time (follow-up)	-4.71	0.74	-0.31	0.05	-6.14	-3.29	-6.37	95	< .001	27.18
Residual										12.68
NDQ Model 5										
Intercept	40.2	0.79	0	0	38.64	41.76	50.86	98.61	< .001	24.05
Time (post)	-2.31	0.56	-0.15	0.04	-3.42	-1.2	-4.11	93	< .001	4.67
Time (follow-up)	-4.68	0.73	-0.31	0.05	-6.11	-3.27	-6.38	93	< .001	25.91
Residual										12.78
Condition (IR+IE vs PI)	-1.05	1.36	-0.07	0.09	-3.77	1.56	-0.77	87.49	.443	
Condition (IR vs IE)	-0.89	1.52	-0.05	0.09	-3.88	2.08	-0.58	87.21	.56	
Gender (male)	-1.87	1.43	-0.11	0.08	-4.76	1.06	-1.31	85	.195	
Age	-1.02	0.65	-0.14	0.09	-2.33	0.32	-1.55	85	.124	
Duration of nm disorder	0.71	0.58	0.1	0.08	-0.46	1.88	1.23	85	.221	
Psychotropic medication	1.82	1.65	0.12	0.11	-1.52	5.12	1.1	85	.275	
Medication suspected to induce nm	-1.04	1.91	-0.06	0.11	-4.87	2.9	-0.55	85	.587	
SWE baseline	-0.79	0.61	-0.11	0.09	-2.01	0.47	-1.31	85	.194	
Dream recall baseline	1.09	0.54	0.15	0.08	-0.04	2.21	2.01	85	.047	
SCL baseline	2.05	0.64	0.29	0.09	0.76	3.36	3.19	85	.002	

					Fixed effect					Random
Model and predictor –	Beta	Beta SE	Std. Beta	Std. Beta SE	CI low	CI high	t	df	р	effect
Time (post)*Condition (IR+IE vs PI)	-0.7	1.21	-0.03	0.05	-3.1	1.71	-0.58	93	.567	
Time (follow-up)*Condition (IR+IE vs PI)	-2.74	1.58	-0.1	0.06	-5.8	0.4	-1.73	93	.086	
Time (post)*Condition (IR vs IE)	2.11	1.35	0.07	0.05	-0.54	4.76	1.56	93	.123	
Time (follow-up)*Condition (IR vs IE)	1.78	1.77	0.06	0.06	-1.62	5.27	1.01	93	.316	
NFQ Model 2										
Intercept	3.62	0.3	0	0	3.01	4.22	11.91	95	< .001	8.25
Time (post)	-0.99	0.24	-0.18	0.05	-1.45	-0.52	-4.08	95	< .001	4.37
Time (follow-up)	-1.34	0.25	-0.25	0.05	-1.81	-0.86	-5.41	95	< .001	4.63
Residual										0.62
NES Model 1										
Intercept	19.01	0.87	0	0	17.33	20.75	21.87	145.98	< .001	
Time (post)	-2.63	0.68	-0.14	0.04	-3.98	-1.28	-3.84	190	< .001	
Time (follow-up)	-5.02	0.68	-0.27	0.04	-6.37	-3.68	-7.34	190	< .001	
NES Model 5										
Intercept	17.41	0.91	0	0	15.54	19.31	19.14	92.16	< .001	30.9
Time (post)	-2.62	0.62	-0.14	0.03	-3.82	-1.45	-4.25	93	< .001	6.58
Time (follow-up)	-4.97	0.78	-0.27	0.04	-6.49	-3.44	-6.34	93	< .001	28.8
Residual										14.96
Condition (IR+IE vs PI)	0.43	1.53	0.02	0.08	-2.74	3.17	0.28	85.32	.781	
Condition (IR vs IE)	-1.93	1.7	-0.09	0.08	-5.31	1.47	-1.13	85.13	.26	
Gender (male)	1.98	1.73	0.09	0.08	-1.67	5.79	1.15	85	.254	

Mandal and another					Fixed effect					Random
Model and predictor -	Beta	Beta SE	Std. Beta	Std. Beta SE	CI low	CI high	t	df	р	effect
Age	-0.18	0.79	-0.02	0.09	-1.92	1.59	-0.23	85	.819	
Duration of nm disorder	-0.12	0.7	-0.01	0.08	-1.59	1.43	-0.17	85	.869	
Psychotropic medication	4.26	1.99	0.22	0.1	-0.13	8.65	2.14	85	.035	
Medication suspected to induce nm	-0.56	2.3	-0.03	0.1	-5.43	4.33	-0.24	85	.807	
SWE baseline	-1.11	0.73	-0.13	0.08	-2.65	0.4	-1.51	85	.134	
Dream recall baseline	1.49	0.66	0.17	0.08	0.07	2.93	2.27	85	.026	
SCL baseline	3.2	0.77	0.37	0.09	1.52	4.81	4.14	85	< .001	
Time (post)*Condition (IR+IE vs PI)	-0.43	1.33	-0.01	0.04	-3.04	2.26	-0.32	93	.747	
Time (follow-up)*Condition (IR+IE vs PI)	-2	1.69	-0.06	0.05	-5.25	1.43	-1.18	93	.24	
Time (post)*Condition (IR vs IE)	0.63	1.49	0.02	0.04	-2.34	3.57	0.42	93	.675	
Time (follow-up)*Condition (IR vs IE)	-1.27	1.89	-0.03	0.05	-5.06	2.42	-0.67	93	.502	
SWE Model 2										
Intercept	28.3	0.53	0	0	27.25	29.35	53.23	95	< .001	24.46
Time (post)	0.87	0.41	0.09	0.04	0.07	1.67	2.15	95	.034	10.46
Time (follow-up)	1.48	0.48	0.15	0.05	0.55	2.42	3.11	95	.002	16.48
Residual										2.68
SWE Model 4										
Intercept	28.33	0.53	0	0	27.28	29.38	53.41	93	< .001	24.46
Time (post)	0.88	0.41	0.09	0.04	0.07	1.66	2.16	93	.034	10.82
Time (follow-up)	1.45	0.48	0.14	0.05	0.52	2.38	3.04	93	.003	16.94
Residual										2.49

Model and modister					Fixed effect					Random effect
Model and predictor -	Beta	Beta SE	Std. Beta	Std. Beta SE	CI low	CI high	t	df	р	
Condition (IR+IE vs PI)	-1.8	1.14	-0.17	0.11	-4.09	0.44	-1.57	93	.119	
Condition (IR vs IE)	0.59	1.28	0.05	0.11	-1.88	3.12	0.46	93	.644	
Time (post)*Condition (IR+IE vs PI)	0.59	0.88	0.03	0.05	-1.09	2.3	0.67	93	.505	
Time (follow-up)*Condition (IR+IE vs PI)	1.31	1.03	0.07	0.06	-0.71	3.37	1.27	93	.208	
Time (post)*Condition (IR vs IE)	-1.28	0.98	-0.06	0.05	-3.24	0.6	-1.31	93	.193	
Time (follow-up)*Condition (IR vs IE)	0.11	1.15	0.01	0.06	-2.19	2.32	0.09	93	.927	
SCL Model 2										
Intercept	0.61	0.06	0	0	0.5	0.73	10.56	95	< .001	0.3
Time (post)	-0.09	0.03	-0.07	0.02	-0.14	-0.03	-3.25	95	.002	0.02
Time (follow-up)	-0.11	0.04	-0.09	0.03	-0.18	-0.04	-3.16	95	.002	0.08
Residual										0.02

Note: Effects are reported for the models that best fit the data. *CI* = Confidence Interval, IE = Imaginal Exposure, IR = Imagery Rescripting, NDQ = Nightmare Distress Questionnaire, NES = Nightmare Effects Survey, NFQ = Nightmare Frequency Questionnaire, PI = Positive Imagery, SCL = Symptom Checklist 90, *SE* = standard error, SWE = Self-Efficacy Questionnaire. Imputed data of the ITT sample, 288 observations (3 time levels nested in 96 participants).

Table G: Clinical significance, absolute scores

		Condition		
Criterion for clinical significance —	IR	IE	PI	- Total
Number of nightmares at post, n (%)				
None	0 (0.0%)	2 (7.1%)	0 (0.0%)	2 (2.5%)
< 1 / week	9 (32.1%)	9 (32.1%) 8 (28.6%) 3		20 (25.3%)
≥1/week	19 (67.9%)	19 (67.9%) 18 (64.3%)		57 (72.2%)
Number of nightmares at follow-up, n (%)				
None	0 (0.0%)	3 (11.1%)	0 (0.0%)	3 (4.2%)
< 1 / week	8 (32.0%)	11 (40.7%)	5 (26.3%)	24 (33.8%)
≥1/week	17 (68.0%)	13 (48.1%)	14 (73.7%)	44 (62.0%)
Psychopathology pre, n (%)				
Low	1 (3.2%)	1 (2.9%)	1 (3.6%)	3 (3.2%)
Medium	23 (74.2%)	25 (73.5%)	21 (75.0%)	69 (74.2%)
High	7 (22.6%)	8 (23.5%)	6 (21.4%)	21 (22.6%)
Psychopathology post, n (%)				
Low	3 (11.5%)	2 (7.1%)	1 (4.0%)	6 (7.6%)
Medium	17 (65.4%)	21 (75.0%)	19 (76.0%)	57 (72.2%)
High	6 (23.1%)	5 (17.9%)	5 (20.0%)	16 (20.3%)
Psychopathology follow-up, n (%)				
Low	4 (16.0%)	6 (21.4%)	0 (0.0%)	10 (13.3%)
Medium	16 (64.0%)	16 (57.1%)	17 (77.3%)	49 (65.3%)
High	5 (20.0%)	6 (21.4%)	5 (22.7%)	16 (21.3%)

Note: Psychopathology judged by T-norms of the SCL, low: $T \le 37$, medium: 37 < T < 63, high: $T \ge 63$. IE = Imaginal Exposure, IR = Imagery Rescripting, PI = Positive Imagery. Intention-to-treat sample, N = 96. Percentages refer to the number of observed values per condition and time.

Table H: Clinical significance, relative scores

Change Score	Condition			_
	IR	IE	PI	Total
NDQ pre to post				
M (SD, range, N)	-3.33 (4.24, -15–2, 28)	-2.46 (6.83, -24–8, 28)	-2.57 (5.13, -15–7, 25)	-2.80 (5.46, -24–8, 81)
Improved, n (%)	5 (17.9%)	7 (25.0%)	4 (16.0%)	16 (19.8%)
Unchanged, n (%)	23 (82.1%)	20 (71.4%)	20 (80.0%)	63 (77.8%)
Worsened, n (%)	0 (0.0%)	1 (3.6%)	1 (4.0%)	2 (2.5%)
NDQ pre to follow-up				
M (SD, range, N)	-7.15 (6.51, -25–2, 26)	-5.61 (7.85, -22–6, 27)	-4.18 (6.90, -18–8, 22)	-5.73 (7.14, -25–8, 75)
Improved, n (%)	13 (50.0%)	11 (40.7%)	8 (36.4%)	32 (42.7%)
Unchanged, n (%)	13 (50.0%)	16 (59.3%)	13 (59.1%)	42 (56.0%)
Worsened, n (%)	0 (0.0%)	0 (0.0%)	1 (4.5%)	1 (1.3%)
IFQ pre to post				
M (SD, range, N)	-1.61 (3.10, -13–2, 28)	-1.04 (1.65, -4–2, 28)	-0.79 (2.44, -9–3, 23)	-1.17 (2.46, -13–3, 79)
Improved, n (%)	4 (14.3%)	0 (0.0%)	1 (4.3%)	5 (6.3%)
Unchanged, n (%)	24 (85.7%)	28 (100.0%)	22 (95.7%)	74 (93.7%)
Worsened, n (%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
IFQ pre to follow-up				
M (SD, range, N)	-1.98 (3.12, -12–2, 25)	-1.65 (1.63, -6.25–1, 27)	-0.79 (1.60, -5–2, 19)	-1.53 (2.29, -12–2, 71)
Improved, n (%)	3 (12.0%)	1 (3.7%)	1 (5.3%)	5 (7.0%)
Unchanged, n (%)	22 (88.0%)	26 (96.3%)	18 (94.7%)	66 (93.0%)
Worsened, <i>n</i> (%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Change Score	Condition			
	IR	IE	PI	Total
NES pre to post				
M (SD, range, N)	-3.11 (6.34, -16–6, 28)	-2.50 (6.88, -18–8, 28)	-1.88 (5.10, -10–13, 25)	-2.52 (6.13, -18–13, 81)
Improved, n (%)	7 (25.0%)	5 (17.9%)	2 (8.0%)	14 (17.3%)
Unchanged, n (%)	21 (75.0%)	23 (82.1%)	22 (88.0%)	66 (81.5%)
Worsened, n (%)	0 (0.0%)	0 (0.0%)	1 (4.0%)	1 (1.2%)
NES pre to follow-up				
M (SD, range, N)	-5.65 (8.71, -24–11, 26)	-6.78 (7.94, -26–2, 27)	-4.55 (7.08, -21–6, 22)	-5.73 (7.93, -26–11, 75)
Improved, n (%)	11 (42.3%)	8 (29.6%)	6 (27.3%)	25 (33.3%)
Unchanged, n (%)	13 (50.0%)	19 (70.4%)	16 (72.7%)	48 (64.0%)
Worsened, n (%)	2 (7.7%)	0 (0.0%)	0 (0.0%)	2 (2.7%)
WE pre to post				
M (SD, range, N)	1.33 (2.76, -4–9, 27)	.78 (4.35, -9–15, 27)	0.48 (4.22, -9–15, 25)	0.87 (3.80, -9–15, 79)
Improved, n (%)	2 (7.4%)	2 (7.4%)	3 (12.0%)	7 (8.9%)
Unchanged, n (%)	25 (92.6%)	23 (85.2%)	21 (84.0%)	69 (87.3%)
Worsened, n (%)	0 (0.0%)	2 (7.4%)	1 (4.0%)	3 (3.8%)
SWE pre to follow-up				
M (SD, range, N)	1.62 (3.03, -3–11, 26)	2.50 (5.67, -14–17, 28)	0.82 (4.97, -8–17, 22)	1.71 (4.70, -14–17, 76)
Improved, n (%)	4 (15.4%)	10 (35.7%)	3 (13.6%)	17 (22.4%)
Unchanged, n (%)	22 (84.6%)	16 (57.1%)	17 (77.3%)	55 (72.4%)
Worsened, n (%)	0 (0.0%)	2 (7.1%)	2 (9.1%)	4 (5.3%)

Change Score		Condition		
	IR	IE	PI	Total
SCL pre to post				
M (SD, range, N)	08 (0.23, -0.54–0.69, 26)	11 (0.23, -0.60–0.56, 28)	-0.05 (0.17, -0.47–0.27, 24)	-0.08 (0.21, -0.60–0.69, 78)
Improved, n (%)	6 (23.1%)	9 (32.1%)	4 (16.7%)	19 (24.4%)
Unchanged, n (%)	19 (73.1%)	18 (64.3%)	19 (79.2%)	56 (71.8%)
Worsened, n (%)	1 (3.8%)	1 (3.6%)	1 (4.2%)	3 (3.8%)
SCL pre to follow-up				
M (SD, range, N)	09 (0.32, -0.83–0.94, 25)	16 (0.38, -1.27–0.98, 28)	-0.04 (0.33, -0.46–1.06, 21)	-0.10 (0.35, -1.27–1.06, 74)
Improved, n (%)	6 (24.0%)	13 (46.4%)	5 (23.8%)	24 (32.4%)
Unchanged, n (%)	17 (68.0%)	13 (46.4%)	14 (66.7%)	44 (59.5%)
Worsened, n (%)	2 (8.0%)	2 (7.1%)	2 (9.5%)	6 (8.1%)

Note: IE = Imaginal Exposure, IR = Imagery Rescripting, M = mean, NDQ = Nightmare Distress Questionnaire, NES = Nightmare Effects Survey, NFQ = Nightmare Frequency Questionnaire, PI = Positive Imagery, SCL = Symptom Checklist 90, SD = standard deviation, SWE = Self-Efficacy Questionnaire. Intention-to-treat sample, N = 96. Percentages refer to the number of observed values per measure, condition, and time.

Table I: Credibility, expectancy, and practice

Managemen	Condition			Total
Measure	IR	IE	PI	- Total
Treatment credibility, M (SD, n)	30.26 (4.82, 27)	29.00 (5.99, 30)	28.11 (6.67, 27)	29.12 (5.88, 84)
Treatment expectancy, M (SD , n)	14.30 (2.74, 27)	14.93 (4.00, 30)	14.26 (2.81, 27)	14.51 (3.24, 84)
No. of practice sessions, M (SD, range, n)	16.76 (6.42, 1–28, 25)	13.54 (9.48, 0–28, 26)	21.23 (6.61, 1–28, 22)	16.96 (8.22, 0–28, 73)

Note: IE = Imaginal Exposure, IR = Imagery Rescripting, M = mean, nm = nightmare, PI = Positive Imagery, SD = standard deviation. Intention-to-treat sample, N = 96.