

Four-session program of Mindfulness and Cognitive Behavioral Therapy for Social Anxiety Disorder: Pilot study

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Introduction: Social anxiety disorder (SAD) is a marked and intense fear of social situations in which one may be scrutinized by others (American Psychiatric Association, 2013). Noda, Shirotaki, & Nakao (2021) developed a four-session program of mindfulness and cognitive behavioral therapy (M-CBT) as a low-intensity treatment module for individuals with social anxiety. Furthermore, Noda (2020) tested its effectiveness on cost bias and social anxiety with individuals who have high social anxiety in a randomized controlled trial. The results showed that the group receiving M-CBT, compared to the control group, improved significantly in cost/probability bias in the negative cognition generated when paying attention to others; fear of negative evaluation from others; depressive symptoms; trait mindfulness; and happiness. The purpose of this study was to assess the feasibility and initial effectiveness of the four-session program in M-CBT for SAD in a single-arm trial.

Methods: The participants were outpatients who suffered mainly from social anxiety attending an outpatient clinic in Tokyo, specializing in treating depression and anxiety. The inclusion criteria was: having SAD (based on the criteria from the Diagnostic and Statistical Manual of Mental Disorders, 5th ed, DSM-5; American Psychiatric Association, 2013 assessed by the Mini-International Neuropsychiatric Interview for DSM-5 (MINI; Sheehan et al., 1998) and being 18 years and older. The exclusion criteria was: having a current psychotic disorder, current manic episode, high suicide risk, severe physical illness, or significant cognitive impairment. The patients (N=24) completed a set of questionnaires that evaluated social anxiety symptoms, cost/probability bias, fear of negative evaluation from others, self-focused attention, trait mindfulness, depressive symptoms, cognitive reappraisal, and suppression at pretreatment, the time before each session of treatment, posttreatment, and follow-up. This study was registered in the UMIN Clinical Trial Registration System (UMIN: 000043720) and conducted with the approval of the Research Ethics Committee of the Faculty of

Human Sciences, Musashino University (Approval Number: 202013).

Results: Linear mixed-effects models showed that the M-CBT was effective for social anxiety symptoms, cost/probability bias, fear of negative evaluation from others, trait mindfulness, depressive symptoms, and cognitive reappraisal. The M-CBT also produced significant pre-post improvements in these outcomes with moderate to high effect sizes (social anxiety symptoms: $d = 1.04$, cost bias: $d = 0.88-1.02$, probability bias: $d = 1.14-1.32$, fear of negative evaluation from others: $d = 0.94$, trait mindfulness: $d = -0.82$, depressive symptoms: $d = 0.75$, and cognitive reappraisal: $d = -0.62$).

Discussion: These results suggest that M-CBT is effective for treating social anxiety symptoms and cost bias. This study demonstrates that M-CBT is feasible and acceptable for social anxiety disorder. It may comprise a treatment module for those who do not respond to traditional cognitive behavioral therapy.

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Objective

This study aimed to assess the feasibility and initial effectiveness of the four-session program of mindfulness and cognitive behavioral therapy (M-CBT) for Social anxiety disorder (SAD) in a single-arm trial.

Method

1. Participants

The participants were 23 patients who suffered mainly from social anxiety attending an outpatient clinic in Tokyo, specializing in treating depression and anxiety (four males and 18 females).

2. Measures

(1) Liebowitz Social Anxiety Scale (LSAS; Asakura et al., 2002), (2) Speech Cost/Probability bias Scale (SCPS; Noda et al., 2017), (3) Short Fear of Negative Evaluation Scale (SFNE; Sasagawa et al., 2004), (4) Self-Focused Attention Scale (SFA; Noda et al., 2018), (5) Subjective Happiness Scale (SHS; Shimai et al., 2012), (6) Five Facet Mindfulness Questionnaire (FFMQ; Sugiura et al., 2012), (7) Japanese Version of Self-rating Depression Scale (SDS; Hukuda et al., 1973), (8) Emotion Regulation Questionnaire (ERQ; Yoshizu et al., 2013)

3. Statistical approach

Efficacy was analyzed with linear mixed-effects models. Cohen's *d* was calculated to assess effect sizes between pre- and post-tests.

4. Institutional review board and informed consent

This study was approved by the ethics committee of the first author's affiliated university, and the written informed consent of all patients was obtained before participation.

5. Intervention program and procedure

The intervention group participated in the M-CBT program and half-day retreat, which involved group therapy (three to five people). This M-CBT program consisted of four sessions, and its main components were psychoeducation, MT, cognitive restructuring, and experience sharing.

Results

Significant reductions were in all outcomes except for ERQ-suppression (Table 1). Significant effect sizes between the pre- and post-test were shown for LSAS, SCPS-Cost bias, SCPS-Probability bias, SFNE, FFMQ, SDS, and ERQ-cognitive reappraisal ($p < .05$).

Discussion

This study demonstrated that the four-session program of M-CBT is feasible and acceptable for patients with SAD. Rigorous randomized controlled trials that address the limitations of this study should be conducted to accumulate evidence of this possibility.

These findings provide a rationale for therapists to combine CBT techniques and MBIs in clinical settings. If the effectiveness of M-CBT is validated, it may provide new treatment options for patients with SAD and lead to more tailored therapies for their conditions.

As M-CBT is positioned as a low-intensity treatment module, it may be expected as a viable treatment option for patients with mild SAD, those with SAD who require additional intervention for cost bias, or those with other mental illnesses who need intervention for social anxiety symptoms.



Table 1 Means and Standard Deviations of Outcomes and Results of linear mixed effects models

		Pre-test		Post-test		Follow up	F-values	Multiple comparisons	Pre-Post effect sizes (Cohen's <i>d</i>)	Pre-Follow up effect sizes (Cohen's <i>d</i>)
		N=23	N=23	N=23	N=23					
LSAS total score	Mean (SD)	81.04 (26.72)	61.91 (26.69)	57.65 (29.65)		11.40**	8<1, 2, 3, 4, 5* 7<1, 2, 3* 6<1, 2* 5<1*	1.04*	1.08*	
Anxiety	Mean (SD)	44.91 (14.67)	35.74 (13.86)	34.09 (15.59)		9.59**	8<1, 2, 3, 4, 5* 7<1, 2, 3, 4* 6<1*	.83*	.92*	
Avoidance behavior	Mean (SD)	36.13 (13.33)	26.17 (14.28)	23.57 (15.38)		9.10**	8<1, 2, 3, 4* 7<1, 2* 6<1* 5<1*	.94*	1.04*	
SCPS cost bias total score	Mean (SD)	41.22 (8.49)	33.30 (10.61)	31.78 (10.43)		14.84**	8<1, 2, 3, 4, 5, 6* 7<1, 2, 3, 4, 5* 6<1, 2*	1.02*	1.13*	
Negative cognition from one's own performance	Mean (SD)	28.78 (7.15)	23.26 (7.76)	22.22 (7.58)		12.35**	8<1, 2, 3, 4, 5, 6* 7<1, 2, 3, 4, 5*	.92*	1.04*	
Negative cognition generated when paying attention to others	Mean (SD)	12.43 (2.04)	10.04 (3.21)	9.57 (3.34)		11.13**	8<1, 2, 3, 4, 5* 7<1, 2, 3* 6<1, 2*	.88*	.97*	
SCPS probability bias total score	Mean (SD)	37.96 (7.02)	27.13 (9.32)	28.43 (9.09)		20.11**	8<1, 2, 3, 4, 5* 7<1, 2, 3, 4, 5* 6<1, 2* 5<1, 2* 4<2*	1.27*	1.18*	
Negative cognition from one's performance	Mean (SD)	26.70 (5.85)	18.96 (7.09)	20.09 (7.04)		16.39**	8<1, 2, 3, 4, 5* 7<1, 2, 3, 4, 5* 6<1, 2* 5<2* 4<2*	1.14*	1.00*	
Negative cognition generated when paying attention to others	Mean (SD)	11.26 (1.74)	8.17 (2.69)	8.35 (2.76)		14.47**	8<1, 2, 3* 7<1, 2, 3, 4* 6<1, 2* 5<1, 2* 4<2*	1.32*	1.13*	
SFNE	Mean (SD)	52.30 (6.83)	43.70 (10.37)	43.04 (10.97)		11.99**	8<1, 2, 3, 4, 5, 6* 7<1, 2, 3, 4, 5* 6<1*	.94*	.95*	
SFA total score	Mean (SD)	29.61 (7.87)	24.87 (10.11)	22.96 (9.05)		5.01**	8<1, 2, 3* 7<2*	.40	.54*	
Arousal	Mean (SD)	14.39 (5.19)	11.30 (6.20)	10.17 (5.51)		4.11**	8<1, 2, 3*	.41	.57*	
Behavior	Mean (SD)	15.22 (3.75)	13.57 (4.72)	12.78 (4.72)		4.70**	8<1, 2, 3, 4* 7<2*	.34	.44*	
FFMQ	Mean (SD)	100.35 (19.09)	118.17 (24.57)	121.35 (25.02)		13.57**	8<1, 2, 3, 4, 5* 7<1, 2, 3, 4* 6<1, 2, 3* 5<2*	-.82*	-.91*	
SDS	Mean (SD)	51.91 (9.91)	46.09 (11.58)	45.52 (11.09)		10.36**	8<1, 2, 3, 4* 7<1, 2, 3, 4* 6<2*	.75*	.82*	
ERQ cognitive reappraisal	Mean (SD)	21.30 (6.71)	25.57 (7.50)	26.30 (6.88)		6.03**	8<1, 2, 3* 7<1, 2* 6<1, 2*	-.62*	-.81*	
ERQ suppression	Mean (SD)	15.17 (4.71)	14.45 (4.41)	14.39 (4.49)		.56		.29	.17	

** $p < .01$, * $p < .05$

Note) 1=Pre-test, 2=Test before the first session, 3=Test before the second session; 4=Test before the third session; 5=Test before the fourth session; 6=Test before the fifth session; 7=Post-test; 8=Follow up-test; LSAS=Liebowitz Social Anxiety Scale; SCPS=Speech Cost/Probability bias Scale; SFNE=Short Fear of Negative Evaluation Scale; SFA=Self-Focused Attention scale; FFMQ=Five Facet Mindfulness Questionnaire; SDS=Self-rating Depression Scale; ERQ= Emotion Regulation Questionnaire

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発表概要報告書

【大会概要】

2023年6月1日から2023年6月4日に韓国のソウルで開催された、10th World Congress of Cognitive and Behavioral Therapies (WCCBT)に参加した。この学会では、世界各国から多くの先生方が、様々な分野で数多くの研究成果を発表した。Process-based Therapyや診断横断的認知行動療法など、大変興味深い発表を聞くことができた。本学会は、対面での実施であったため、先生方に直接質問することができた。

【発表内容の概要】

"Four-session program of Mindfulness and Cognitive Behavioral Therapy for Social Anxiety Disorder: Pilot study"という演題で、ポスター発表を行った。本研究は、マインドフルネスと認知行動療法を併用したMindfulness and Cognitive Behavioral Therapy (M-CBT)を開発し、社交不安症患者を対象にそのM-CBTショートプログラムの有効性を検討した。このプログラムは、全4回のセッションと1回の半日リトリートで構成された集団形式のプログラムである。社交不安症特有の認知バイアス (cost bias) が介入対象である。介入後、その認知バイアスと社交不安症状が有意に改善した。社交不安症状に対して1.00を超える効果量、認知バイアスについては、0.80を超える効果量が得られ、M-CBTショートプログラムの有効性が確認された。

この研究は、International Journal of Cognitive Therapyに採択され、URL (<https://doi.org/10.1007/s41811-023-00173-1>) から見ることが可能である。

【体験記】

本学会では、多くの著名な先生とお会いしてお話しをすることができた。アムステルダム大学のSusan Bögels先生と上記のポスター発表の内容を共有することができた。Bögels先生は、私の研究にとっても興味を持ってくださり、たくさんのフィードバックをくださった。また、Metta Institute of Cognitive Behavior TherapyのYounghee Choi先生と不安とうつの病理学に関してお話しすることもできた。その他、多くの方と研究に関して情報を交換することができた。本学会は、朝8時30から始まり、夕方18時まで、多くの発表が行われていた。たくさんの刺激をいただいた学会だった。将来的には、このような国際学会のシンポジウム等で、自分の研究を発表したいと考えた。

(日本語 1200 字以内)

採用された方についてはウェブページ等で内容が公開される場合があります。