#2-16

A Preliminary Investigation of Acceptance and Commitment Therapy as A Treatment for Binge Eating Disorder in Japanese Female Adults.

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PURPOSE

Acceptance and Commitment Therapy (ACT) may be an effective intervention for individuals diagnosed with binge eating disorder (BED), because it reduces experiential avoidance and promotes other valued behaviors. However, no studies have examined ACT as a treatment for BED in a Japanese population. The present study provides preliminary data on the effectiveness of an ACT intervention for 4 Japanese females with BED using a multiple probe across participants design.

METHOD

Participants

Four Japanese female adults who met DSM-5 criteria for BED (moderate severity level) with no comorbid conditions.

Table 1. Participants Characteristics

	P1	P2	P3	P4
Age	55	33	38	43
Marital status	Single	Married	Married	Married
Children	0	0	2	3
Years of education	14	16	12	16
Years of binge-eating episode	30	11	8	9
Previous diagnoses	none	none	none	none

Note. Years of education begin with first grade (e.g., 12 = high school education, 16 = 4 years of college).

Measures

1) Number of days with bing-eating episodes per week
2) Number of days with committed-actions per week
3) Scores on several psychological questionnaires: Binge Eating Subscale in Eating Disorder Inventory (BES), General Health Questionnaire (GHQ), Acceptance and Action Questionnaire II (AAQ), and Self Compassion Scales (SCS)
4) Body mass index (BMI).

Procedure

1) The structure of each session: Events and homework since the last session were reviewed, a new topic was presented, and a new homework and exercises were assigned and agreed upon.

2) Baseline (BL): All participants monitored their binge-eating behavior patterns during BL phase.

3) Treatment: 10 weekly and 6 biweekly booster 90-min sessions of ACT were conducted during the treatment phase. The specific protocol was tailored for BED and Japanese culture.

Table 2. Topics and exercises/metaphors used in 10 weekly treatment sessions.

	Topics	Exercises and Metaphors
# 1	Creative Hopelessness	"Suppressing your thoughts" Ex. (Hayes & Smith, 2005)
# 2	Informed Consent for ACT	"Clipboard" Met. (Harris, 2009)
# 3	Value Clarification	"Journey of life" Met. (Hayes et al., 1999) "Values card sort" Ex. (Ciarrochi & Bailey, 2008)
# 4	Acceptnace & Defusion	"Holding an ice cube" Ex. (Flaxman et al., 2011) "Labeling your negative events" Ex. (Hayes & Smith, 2005)
# 5	Defusion	"Floating leaves on a moving stream" Ex. (Hayes & Smith, 2005)
# 6	Present Momenet	"Drinking tea mindfully" Ex. (Hayes & Smith, 2005)
# 7	Review #3-6	
# 8	Self as Context	"Chessboard"Met. (Hayes et al., 1999)
# 9-10	Committed Action	"Making goals happen through action" Ex. (Hayse et al., 2005)

4) Follow-up (FU): Follow-up sessions occurred at 1-, 2-, 3-, 6-, 12-, 18- and 24-months following the treatment phase.

Design

A non-concurrent multiple baseline design across participants.
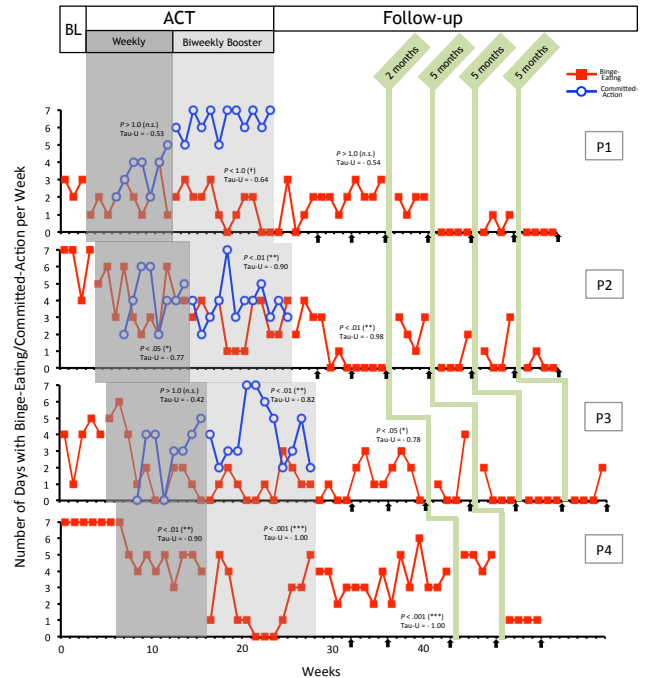
RESULTS

Figure 1. Weekly frequency of self-reported binge-eating and committed-action for the 4 participants at baseline, treatment, and follow-up phases. Black arrows indicate the implementation of a follow-up session. The *p*-values and effect sizes (Tau-U) between baseline and treatments/follow-up phases were analyzed by Tau-U Calculator (http://www.singlecaseresearch.org/calculators/tau-u).

Table 3. Scores of 4 psychological questionnaires and Body Mass Index (BMI) for the 4 participants.

		Pre	Mid	Post	FU 3	FU 6	FU 12	FU 18	FU 24
P1	BES	10	1	1	1	2	1	1	0
	GHQ	4	1	5	0	0	0	1	1
	AAQ	27	26	28	21	17	25	13	18
	SCS	15.3	16.7	17.7	17.7	17.8	17.8	22.0	18.0
	BMI	24.5	22.0	20.7	21.4	21.6	21.9	23.6	22.4
P2	BES	18	0	0	0	0	0	0	1
	GHQ	20	14	4	7	7	9	5	11
	AAQ	33	29	31	29	29	27	28	26
	SCS	15.4	18.1	18.0	19.9	21.6	21.6	20.6	22.0
	BMI	19.3	19.9	19.1	19.3	20.2	18.2	17.8	18.3
P3	BES	24	0	0	0	0	0	3	3
	GHQ	14	7	5	1	10	6	6	11
	AAQ	15	7	7	7	7	7	7	7
	SCS	15.0	30.0	27.1	30.0	27.8	29.0	29.0	29.4
	BMI	24.8	24.3	23.2	23.3	23.8	24.8	24.5	24.1
P4	BES	14	10	6	0	4	1	-	-
	GHQ	1	0	6	0	0	0	-	-
	AAQ	27	27	29	26	26	23	-	-
	SCS	16.9	17.3	17.5	17.8	18.2	17.8	-	-
	BMI	25.7	27.8	26.6	27.6	27.5	26.0	-	-

Note. Pre = first scoring at baseline, Mid = last scoring at weekly ACT treatment, and Post = last scoring at biweekly ACT booster treatment. The orange-colored numbers indicate the statistically reliable change between Pre and other time point (i. e., RCI values are more than 1.96) .

CONCLUSION

These findings suggest that ACT may be an effective treatment for Japanese female adults with BED. However, further investigations are needed to assess the how the effectiveness of ACT might vary for different individuals.