

Japanese Version of Child and Adolescent Mindfulness Measure: Development and Examination of its Reliability and Validity

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1. Introduction

- Research on cognitive behavioral therapy for children is gaining popularity in Japan.
- However, the measurement criterion of the ACT test for children in Japan is only Avoidance and Fusion Questionnaire for Youth (AFQ-Y).

Purpose

- Development of the Japanese version of CAMM
- Consideration of validity and reliability

What is the “Child and Adolescent Mindfulness Measure”?

- The Child and Adolescent Mindfulness Measure (CAMM) was developed by Greco, Baer, & Smith (2011).
- CAMM has a one-factor structure with a total of 10 items.
- CAMM comprises reverse-scored items.

2. Method

Participants

500 junior high school and high school students registered with the online research company (189 boys, 311 girls).

Procedures

The survey was conducted from mid-September 2016 to mid-October 2016. After one month, a retest was conducted.

Translation

We were permitted by the original author to go ahead with the translation. One college student and one expert from ACT translated the items and validated the back translation. We examined the latter with the corrected items.

Measures

- Japanese Version of Avoidance and Fusion Questionnaire for Youth (AFQ-Y: Ishizu, Shimoda, & Ohtsuki, 2014)
- Thought Suppression Measure (Matsumoto, 2008)
- Subjective adjustment scale for adolescents (Okubo, 2005)
- Mood Inventory (Sakano, Fukui, Kumano, Horie, Kawahara, Yamamoto, Nomura, & Suematsu, 1994)
- Hostile Aggression Inventory (HAI:Hata, 1990)

3. Results

The data regarding high school students was reported at the ACT in Japan, which was held in March 2017. In this presentation, we analyze the data of junior high school students and high school students as a whole.

Table 1 Factor Loadings, Mean, and Standard Deviation of Japanese CAMM

Item	Loading	Mean	SD
1 I get angry at myself when meaningless thoughts arise.	.69	2.57	1.04
2 At school, I move through classrooms without being aware of my own actions.	.51	2.94	1.06
3 I keep myself busy so that I do not notice my thoughts or emotions.	.65	2.98	0.97
4 I try to only think of fun things.	.78	2.54	1.11
5 When unpleasant thoughts arise, I try to get rid of those thoughts.	.74	2.28	1.12
6 It is difficult to focus only on one thing.	.50	2.36	1.10
7 I think about things that happened in the past more than things that are happening now.	.68	2.35	1.07
8 I get angry at myself when certain thoughts arise.	.80	2.65	1.11
9 I work hard to not feel any emotions that are considered bad.	.75	2.44	1.19
10 When I feel unpleasant emotions, I stop thinking about them.	.60	2.41	1.05
	$\alpha = .89$		

Exploratory Factor Analysis (Table 1)

The item showed a one-factor structure. Internal consistency (coefficient alpha) of this measure was .89.

Convergent Validity (Table 2)

A correlation of the same extent as the original scale was observed between AFQ-Y and Thought Suppression.

Test-retest reliability

ICC (2,1), (2,k) = .637

The measure showed moderate reliability.

Table 2 Zero-Order Correlations Between Japanese CAMM and Other Variables

Psychological inflexibility (AFQ-Y)	-.620 **
Thought suppression (Thought Suppression Measure)	-.604 **
Quality of life (Subjective adjustment scale for adolescent)	.207 **
Somatization (Mood Inventory)	-.076
Externalizing symptoms (HAI)	-.357 **
Internalizing symptoms (Mood Inventory)	-.575 **

4. Discussion

The Japanese version of CAMM showed the same results as the original measure for factor structure, reliability, and validity.

However, when analyzing the data separately for junior high school students and high school students, the factor structure changed. Future studies need to examine the factor structure.

It is necessary to consider the validity of this measure in a clinical setting.

Reference

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