

Psychometric Properties of the Acceptance and Action Questionnaire II among an Ethnically Diverse Sample

J.R. Sandoval, M.Ed.; V. Correa-Fernandez, Ph.D.; N. Tavakoli, M.Ed.; M. McNeel, B.A.; A. Broyles, M.Ed.; H. Kim, Ph.D.

Introduction

- **Psychological flexibility** refers to one's ability to focus on the present moment and change or persist with one's behavior in the pursuit of goals and values. It has been found to help reduce symptoms of distress.
- The opposite, **psychological inflexibility (PI)**, refers to one's rigid attempts to control and avoid unwanted experiences.
- The Acceptance and Action Questionnaire (AAQ-II) is a measure of PI.
- There is scarce evidence for measurement invariance of AAQ-II in ethnically diverse samples.

1

Present Study

- Examined measurement invariance of the AAQ-II across gender and race/ethnic groups, as well as construct validity with distress tolerance.

2

Methods

Participants:

- 538 UH students
- 21.19% White, 13.20% African American, 29.93% Asian American, 31.04% Hispanic, and 4.28% Other
- 21.38% Male and 78.25% Female

Measures:

- Demographics (age, gender, race/ethnicity)
- Acceptance and Action Questionnaire-II (AAQ-II; Bond et al., 2011)
- Distress Tolerance Scale (DTS; Simons & Gaher, 2005; e.g., "When I feel distressed or upset, I must do something about it immediately")

Statistical Procedures:

- Measurement invariance
- Correlations between AAQ-II and DTS scores to assess criterion-related validity

3

Analysis

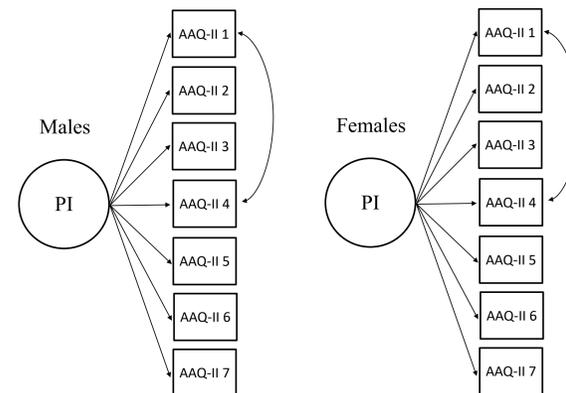
A series of factorial invariance tests accumulatively restricted model configuration and relevant parameters at each stage to be equal across groups:

- **Configural invariance:** the same model configuration
- **Weak invariance:** equivalent factor loadings
- **Strong invariance:** equivalent intercepts
- **Strict invariance:** equivalent residual variance/covariance

List of AAQ-II Items

AAQ-II 1	My painful experiences and memories make it difficult for me to live a life that I would value.
AAQ-II 2	I'm afraid of my feelings.
AAQ-II 3	I worry about not being able to control my worries and feelings.
AAQ-II 4	My painful memories prevent a fulfilling life.
AAQ-II 5	Emotions cause problems in my life.
AAQ-II 6	It seems like most people are handling their lives better than I am.
AAQ-II 7	Worries get in the way of my success.

Psychological Inflexibility Factor Structure



Fit Information Table for Factorial Invariance

	Sex (Gender) Group					
	RMSEA	CFI	SRMR	χ^2	df	p
Configural	.12	.947	.033	124.905	26	
Weak	.113	.943	.035	139.013	32	.934
Strong	.107	.938	.039	153.646	38	.100
Strict	.102	.932	.044	173.279	46	.008

	Race/Ethnic Group					
	RMSEA	CFI	SRMR	χ^2	df	p
Configural	.122	.947	.039	150.258	52	
Weak	.109	.943	.051	175.961	70	.805
Strong	.101	.938	.053	201.965	88	.31
Strict	.095	.931	.067	239.355	112	.016

Note. Calculated with uniqueness of items AAQII 1 and AAQII 4 correlated. RMSEA = root mean square error of approximation. CFI = comparative fit index. SRMR = standardized root mean square residual.

4

Results

- The unidimensional factor structure of the AAQ-II best fit the data when the uniqueness of AAQ-II 1 and AAQII 4 were correlated.
- Adequate fit for the initial configural invariance models were demonstrated across gender and across race/ethnicity.
- Strong factorial invariance was established between gender and between race/ethnicity groups.
- Strong negative correlations between the psychological inflexibility factor and the mean DTS, as well as between the factor and DTS subscales were indicated.

5

Discussion

- The AAQ-II demonstrated measurement invariance across gender and race/ethnicity.
- The AAQ-II displayed good criterion validity with emotional distress tolerance.
- The AAQ-II is a valid measure of PI and can be used across different ethnic groups.
- The instrument is suited for use in observation and intervention studies and to measure treatment effects.
- Future research can further expand on the psychometric properties of the instrument.

6

References

- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., . . . Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire-II: a revised measure of psychological inflexibility and experiential avoidance. *Behavioral Therapy, 42*(4), 676-688. doi:10.1016/j.beth.2011.03.007
- Simons, J. S., & Gaher, R. M. (2005). The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and Emotion, 29*(2), 83-102.

7