

PSYCHOMETRIC PROPERTIES of the ACCEPTANCE and ACTION QUESTIONNAIRE

FRENCH VERSION (AAQ-II, 7 items)

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Introduction

- **Experiential avoidance (EA)** is a central process in **Acceptance and Commitment Therapy (ACT)**.
- EA is defined as the **tendency to rigidly escape or avoid private psychological experiences** (thoughts, emotions, sensations, memories, urges), even when doing so is **futile or interferes with valued actions** (Hayes et al., 2012).
- High EA contributes to the **development and maintenance of various forms of psychopathology**, through the narrowing of one's behavioral repertoire, such as substance abuse, post-traumatic stress disorder, borderline personality disorder, phobias, eating disorders, depression, stress, anxiety and general psychological distress (Boulanger et al., 2010; Hayes et al., 2004; Ruiz, 2010).
- EA is measured by the **Acceptance and Action Questionnaire (AAQ-II)**, Bond et al., 2011), a 7 item self-administered questionnaire answered on a 7 point Likert-type scale (from 1="never true" to 7="always true").
- The properties of the **7 items version have not yet been studied in French**.
- The goal of the present study was to **evaluate the psychometric properties of the AAQ-II (7 items)**.

Method

- The first group consisted of **282 participants from a non-clinical population** with a mean age of 22.40 ($SD=4.03$), 72% were female and 28% were male.
- The second group were **130 participants from a clinical population (France)**, with a mean age of 43.88 ($SD=13.86$), 75.4% were female and 24.6% were male.

Table 1: Alphas and raw scores for each questionnaire. Comparison between clinical and non-clinical samples and the independent samples *t*-test result for the AAQ-II.

		Alphas		Means (SD) Raw scores	
		Clinical (N=130)	Non-clinical (N=282)	Clinical	Non-clinical
Acceptance and Action Questionnaire (AAQ-II) , Bond et al., 2011; Monestès et al., 2009)	7 items 1 (always true) to 7 (never true)	.73	.91	34.78 (9.24)	20.10 (9.10)
Mindful Attention Awareness Scale (Brown & Ryan, 2003; Jermann et al., 2009)	15 items 1 (almost always) to 6 (almost never)	.89	.86	58.44 (15.99)	59.17 (10.77)
Cognitive Fusion Questionnaire (CFQ) , Gillanders et al., 2013)	7 items 1 (always true) to 7 (never true)	.85	.93	33.27 (7.81)	22.54 (9.66)
Academic Procrastination State Inventory (APSI) , Schouwenberg, 1992; Gagnon et al., 2013)	14 items 1 (not at all) to 5 (always)		.87		36.05 (9.22)

An independent-samples *t*-test was conducted to compare the clinical ($M=4.99$, $SD=1.26$) and the non-clinical samples ($M=2.87$, $SD=1.30$). There was a significant difference in the scores of Experiential Avoidance; $t(410)=-15.59$, $p=.000$. These results suggest that the **clinical sample was associated with a higher mean score of Experiential Avoidance than the non-clinical sample**.

Results

Concurrent Validity

- Results of correlational analyses showed that **EA is significantly related to two dimensions of psychological flexibility**, namely mindfulness and cognitive fusion (Table 2).

Table 2: Correlations between Experiential Avoidance (AAQ-II), Mindfulness (MAAS) and Cognitive Fusion (CFQ) and Academic Procrastination (APSI) in a clinical ($N=130$) and a non-clinical ($N=282$) population.

	Acceptance and Action Questionnaire (AAQ-II)	
	Clinical	Non-clinical
MAAS	-.41**	-.41**
CFQ	.56**	.81**
APSI		.35**

** $p < .01$

Exploratory Factor Analysis

- The results of the initial Exploratory Factor Analysis (EFA) with **Principal Components Analysis** confirmed the **unidimensional factor structure explaining 65% of the total variance**.
- The second EFA was conducted with the **Unweighted Least Squares method** (Table 3).

Table 3: Factor Structure of the AAQ-II ($N=282$).

	Factor loadings	Means (SD)
1. Mes expériences et mes souvenirs douloureux me gênent pour conduire ma vie comme il me tiendrait à cœur de le faire (My painful experiences and memories make it difficult for me to live a life that I would value)	.75	2.91 (1.62)
2. J'ai peur de mes émotions (I'm afraid of my feelings)	.72	2.93 (1.64)
3. J'ai peur de ne pas être capable de contrôler mes inquiétudes et mes émotions (I worry about not being able to control my worries and feelings)	.79	3.26 (1.69)
4. Mes souvenirs douloureux m'empêchent de m'épanouir dans la vie (My painful memories prevent me from having a fulfilling life)	.81	2.64 (1.60)
5. Les émotions sont une source de problèmes dans ma vie (Emotions cause problems in my life)	.78	2.70 (1.60)
6. J'ai l'impression que la plupart des gens gèrent leur vie mieux que moi (It seems like most people are handling their lives better than I am)	.77	3.21 (1.72)
7. Mes soucis m'empêchent de réussir (Worries get in the way of my success)	.76	2.44 (1.42)

Confirmatory Factor Analysis

- A Confirmatory Factor Analysis (CFA) was conducted using AMOS 22 with the **Maximum Likelihood Estimation** and the unidimensional structure of the AAQ-II was confirmed (Table 4).

Table 4: Main results of the Confirmatory Factor Analysis for the AAQ-II.

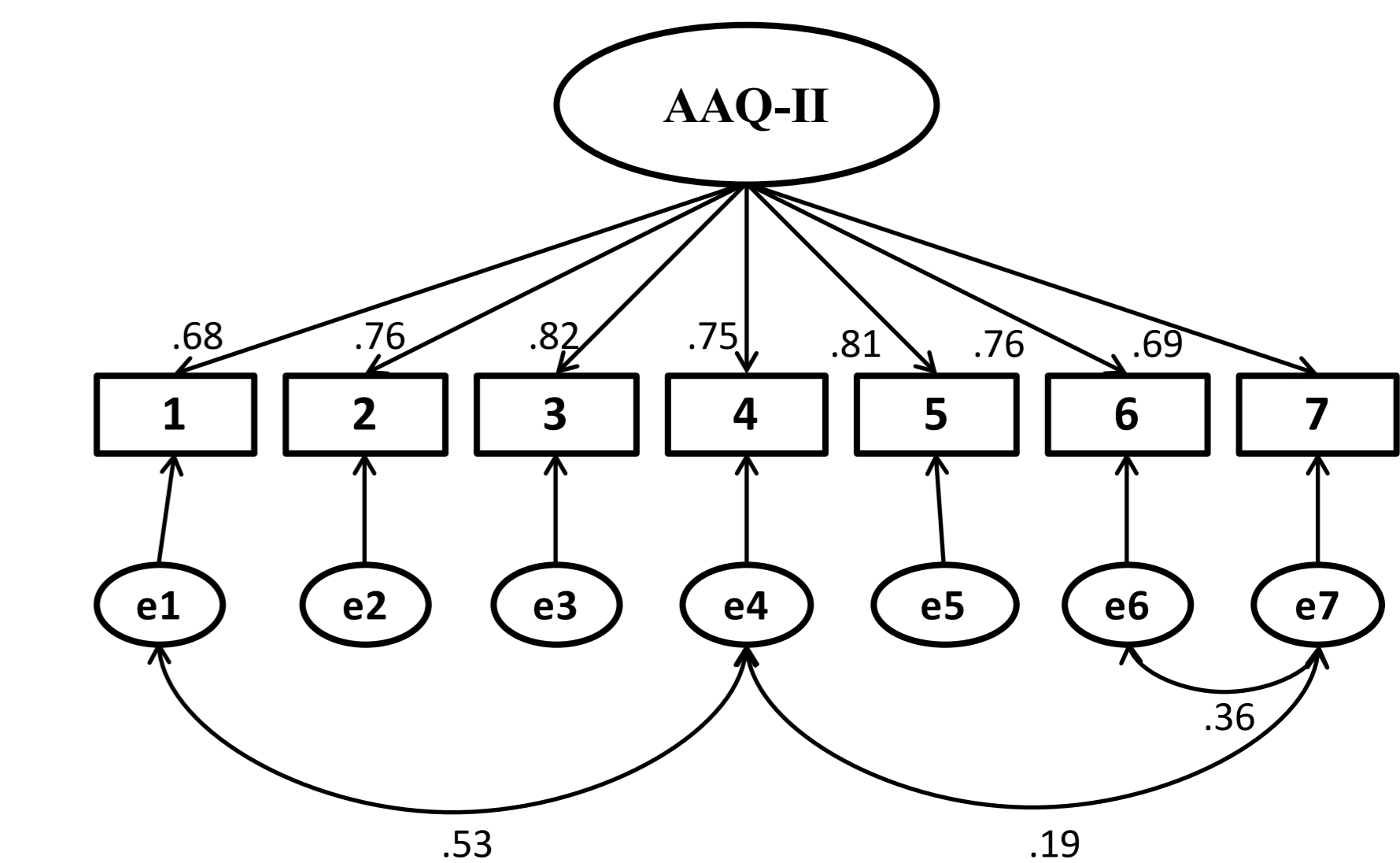
Model Fits	<i>p</i>	CMIN /DF	GFI	CFI	SRMR	RMSEA
AAQ-II	$p < .01$	12.78	.85	.87	.06	.21

- To improve the fits of the model, we **allowed some measurement errors to covary** (Table 5; Figure 1).

Table 5: Main results of the Confirmatory Factor Analysis for the AAQ-II with the covariation of three measurement errors.

Model Fits	<i>p</i>	CMIN /DF	GFI	CFI	SRMR	RMSEA
AAQ-II	$p < .01$	5.07	.95	.96	.03	.12

Figure 1: A confirmatory factor analysis measurement model of Experiential Avoidance.



Conclusion

- The 7 items AAQ-II is a **valid and reliable questionnaire** in French language.
- The CFA revealed overall **acceptable fits of the structure model**.
- The psychometric properties of the **AAQ-II french version ensure its use in clinical settings and research**.

Limitations

- Test-retest reliability has to be established.
- Establish further validity with other ACT processes such as values-based actions.