

Argentinean Adaptation of the AAQ II. First Psychometric Studies

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Abstract

In this poster we present the Argentinean adaptation of the AAQ II. We carried out different studies in order of reaching this goal. First, we revised the items of the Spanish version developed in México and rewrite some of them. Then, we carried out psychometric analysis to assess the validity and reliability of the instrument. We collected evidence based on test content through expert judges who evaluated the quality and the relevance of the items. In a following study, we provided validity evidence based on the internal structure of the instrument using exploratory and confirmatory factor analysis. Finally, we calculated composite reliability coefficients and also studied the sensitivity of the scales for detecting changes after an intervention. Results are discussed

Introduction

In this poster we present the preliminary results of the Argentinean Adaptation of the AAQ II, an instrument developed to assess experiential avoidance. While it is an instrument that have already been adapted to other Spanish speakers countries (Barraca Mairal, 2004, Patrón Espinosa, 2010), we don't have a local version of it. Besides, one of these adaptations was carried out with the first version of the instrument (Barraca Mairal, 2004) and in both adaptations authors did not carry out the psychometric studies suggested by the specialized literature in order to adapt psychometric instruments, especially to validate the original internal structure of the questionnaire. Taking that into account the purpose of this study was to carry out some preliminary studies in order to provide validity evidence and to investigate reliability of the AAQ II in Argentinean population following the guidelines of the specialized literature (APA, AERA, NCME, 1999).

Method

First Study: Evidence based on test content

Participants: Five experts in psychometrics and ACT

Procedure: The items were revised by the expert using a structured form of assessment of the quality of the items. In this form, experts assessed each item in terms of quality of drafting and adequacy for evaluating the concept in the target population. They also had the possibility of including some suggestions to improve the quality of the items. Once we received the returned forms we performed an analysis of the observations and suggestions about the items and calculated the Aiken's V coefficient of inter-rater agreement.

Second Study: Evidence based on response process

Participants: Ten participants aged between 20 and 50 years old. Six of the participants were female and 4 male

Procedure: We carried out a Cognitive Debriefing Interview with each participant. In the interview participants were asked about the ease of understanding of them

Third study: Evidence based on internal structure. and reliability .

Participants: We selected a sample of 918 participants with age between 14 and 78 years old (M= 30 S= 12, 35 % Males and 65% Females). We randomly split the sample in two sub samples one to carry out EFA (sample 1) and the other for CFA (sample 2). After cleaning the data base the sample 1 was composed for N = 450 and the sample 2 for N = 446

Procedure: We analyzed the 10 items of the AAQ-YUC (Patrón Espinosa, 2010) using Exploratory Factor Analysis (EFA), with Principal Components Analysis (PCA) as extraction method in a first stage to identify the number of factors (as suggested by Tabachnick & Fidell, 2007), and then we used Maximum Likelihood as the extraction method. Finally, we estimated the internal consistence of each factor using the Cronbach α coefficient. For this procedure, we used the SPSS 20 software.

For the CFA covariance matrices were used to analyze the measurement models, and maximum likelihood estimation was used to assess their fit. These analyses were conducted with the structural equation modeling software program AMOS 18 (Arbuckle, 2003). As Brown (2003) notes, it is frequently necessary to specify correlated measurement errors among items that have similar content and, in particular, use the same key terms. As well than the original study of Bond et al (2011), we specified correlated measurement errors between Items 2 and 5. As the chi-square (χ^2) statistic is very sensitive to sample size and may overestimate the lack of model fit, we considered multiple statistic indicators to evaluate the goodness of fit of the model: the normed chi square (NC), the comparative fit index (CFI), the goodness of fit index (GFI), and the root mean square error of approximation (RMSEA). To evaluate the obtained index values we followed the recommendations of Hu and Bentler (1995), and Hair, Anderson, Tatham and Black (1999). Finally, we estimated the composite reliability for each of the factors, using the criteria proposed by Hair et al. (1999) for interpretation.

Fourth study : Evidence based on the experimental sensibility of the instrument to an intervention.

Participants: 14 psychotherapists aged between 29 and 43 years old (M= 34 S= 5, just one male) We carried out two Mindfulness based programs aimed to train Psychotherapist skills. Each program was administrated in 12 session of two hours, two times a week. The first program included Mindfulness exercises based on a MBSR program. The second one also included training modules of Validation, Emotional regulation and Interpersonal Skills based on a DBT Skills training program. Only ten participants finished the program and the pre-post test assessment. We calculated t test of means and Cohen d as effect size measure.

Results

1. We carried out some modification in the wording of the items according to the suggestions of the experts . We observed that all items obtained a V value higher than the minimum of 0.50, whit a confidence interval of 90 % indicating that all the judges agree about the good quality of the reworded items.
2. All the participants in the Cognitive Debriefing Interview reported agreement with the items and a good comprehension of the sense of them.

3. In the EFA we observed tree items with low negative loadings (I1, I6 & I10) and that increase the α coefficient when deleted. We excluded these items due to we considered it could be a statistical artifact due to their negative redaction. The tree item were the same that were excluded in the study of Bond et al (2011). We obtained a 7 items simple structure with an α value of .83 that explained 43 % of the variance

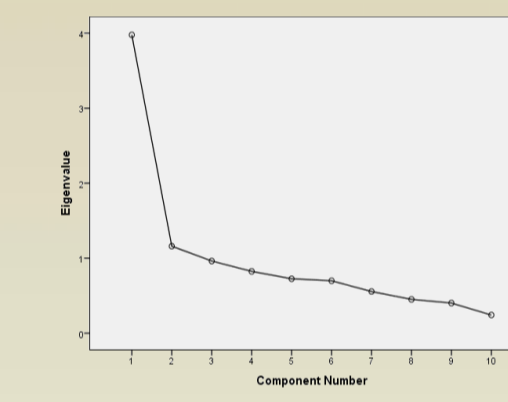


Figure 1: Scree Plot of the AAQ II-AR

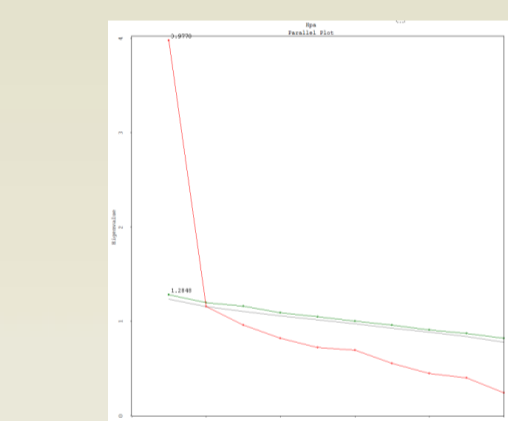


Figure 2: HPA Plot of the AAQ II-AR

ITEM	Factor 1
5. Mis recuerdos dolorosos me impiden tener una vida plena	.801
2. Mis recuerdos y experiencias dolorosas me dificultan poder vivir una vida valiosa	.771
7. Mis emociones me causan problemas en la vida	.666
4. Me preocupa no ser capaz de controlar mis sentimientos o temores	.636
9. Mis preocupaciones obstaculizan mi desarrollo personal	.632
8. Me parece que la mayoría de la gente maneja su vida mejor que yo	.616
3. Evito o escapo de mis sentimientos	.414

Note: Extracción método: Maximum Likelihood. 1 factor extraído. 4 iteraciones requeridas.

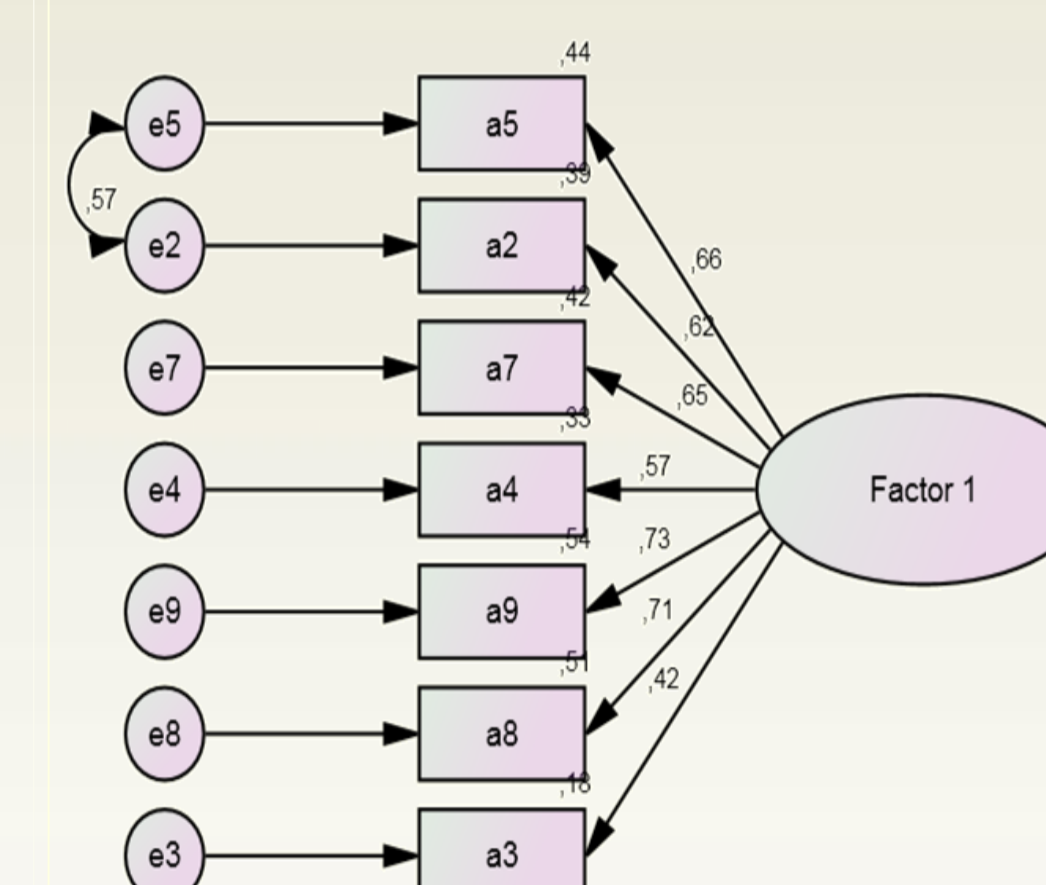


Figure 3: CFA Diagram of the AAQ II-AR

In CFA all the indices indicated good model fit for the unifactorial structure of seven items (NC= 2.42, CFI= .98, GFI= .98 and RMSEA= .056). All unstandardized factor loadings were significant at p.000 and ranged from .73 to 1.35. The unstandardized covariance between the item pair with similar content was significant at p.000. We also obtained a high composite reliability coefficient (.87)

4. We did not observe significant differences between pre and posttest measures in any group. However, in the DBT based program we observed a high effect size ($d = .1.58$).

Discussion

Based on the observed results we can conclude that the AAQ II-AR is a reliable and valid measure of experiential avoidance and that it can be used to evaluate the process in clinical settings. However we need another evidence that include studies of differences between clinical and non clinical samples, and evidence about the relations of the scores of the AAQ II- AR with other clinical instruments. We also need to carry out studies of structural invariance in different states of Argentina.