

# The Portuguese version of the Acceptance and Action Questionnaire for Substance Abuse: Psychometric characteristics

Ana Galhardo<sup>1, 2</sup>

Frederico Sequeira<sup>1</sup>

Marina Cunha<sup>1, 2</sup>

Margarida Couto<sup>1</sup>

<sup>1</sup>Instituto Superior Miguel Torga, Coimbra, Portugal; <sup>2</sup>Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC) – Faculty of Psychology and Educational Sciences of the University of Coimbra

## INTRODUCTION

Psychological inflexibility (PI) is a relevant mechanism for the onset and maintenance of psychopathology. The Acceptance and Action Questionnaire for Substance Abuse (AAQ-SA) was developed and proved to be a valid and reliable measure for the assessment of PI specifically in substance abuse problems (Luoma, Drake, Kohlenberg, Hayes, 2011). The current study aimed to translate/adapt to Portuguese the AAQ-SA (AAQ-SA-PT) and explore its psychometric characteristics.

## MATERIALS AND METHODS

**Participants:** The sample included 90 participants, 71 men (79%) and 19 women (21%) presenting a substance abuse diagnosis. Participants age ranged from 22 to 67 years old  $M = 37.08$ ;  $SD = 9.91$ ). Concerning years of education a mean of 9.43 years was found ( $SD = 2.07$ ).

**Instruments:** Sociodemographic and clinical questionnaire; Acceptance and Action Questionnaire – Substance Abuse (AAQ-SA; Luoma, Drake, Kohlenberg, Hayes, 2011), Depression, Anxiety and Stress Scales (DASS 21; Lovibond & Lovibond, 1995; Pais-Ribeiro, J. L., Honrado, A. & Leal, I., 2004); Acceptance and Action Questionnaire II (AAQ-II; Bond et al., 2011; Pinto-Gouveia, Gregório, Dinis, & Xavier, 2012).

**Procedures:** The AAQ-SA was translated from English to Portuguese language following the International Test Commission (2010) recommendations. The Division of Intervention on Addictive Behaviors and Dependencies (DICAD) approved the study. Participants gave their written informed consent.

## RESULTS

AAQ-SA-PT items analyses indicated that items 3, 13, and 15 showed item-total correlations  $< .40$  and their removal would also improve reliability. These items were removed and a principal component analysis (PCA) was conducted. PCA results showed a one-factor structure accounting for 59.20% of the explained variance. Factor loadings ranged from .44 to .90. A Cronbach's Alpha's of .93 was found. Concerning the AAQ-SA-PT association with other measures, positive correlations with the AAQ-II ( $r = .91$ ;  $p < .001$ ), depressive symptoms ( $r = .64$ ;  $p < .001$ ), anxiety symptoms ( $r = .29$ ;  $p < .001$ ) and stress symptoms ( $r = .43$ ;  $p < .001$ ) were found.

Table 1. Mean, Standard deviation, Item-total correlations and Cronbach  $\alpha$  if item deleted of the AAQ-SA-PT items

Item	<i>M</i>	<i>SD</i>	Item-total <i>r</i>	Cronbach $\alpha$ if item deleted
1. I can do things that are important to me even when I'm feeling urges to use substances	4.31	1.3	.82	.91
2. My urges and cravings to use get in the way of my success	4.83	1.11	.84	.91
3. If I have urges to use substances, then I am a substance abuser	5.61	1.42	.45	.92
4. I try to achieve my sobriety goals, even if I am uncertain that I can	3.98	0.99	.21	.92
5. I work toward things I value, even though at times I feel cravings to use substances	3.53	1.27	.69	.91
6. I am not very aware of what occurs around me when I am thinking of using substances	4.93	0.98	.70	.91
7. I can set a course in my life and stick to it, even if I have doubts about my sobriety	3.72	1.11	.82	.91
8. Memories of my substance abuse history make it difficult for me to live a life that I would value	4.71	1.01	.82	.91
9. If I get bored working toward my recovery, I can still take the steps necessary to succeed	3.67	1.07	.86	.91
10. If I feel uncertain about my recovery, I can still make a choice and take action	3.62	1.09	.88	.91
11. If I promised to do something, I'll do it, even if I later don't feel like it	3.39	0.80	.72	.91
12. Having some worries about substance use will not prevent me from living a fulfilling life	3.18	1.02	.61	.91
13. I would rather achieve my goals than avoid thoughts and feelings about substances	1.72	0.99	-.14	.93
14. Urges and cravings cause problems in my life	4.89	1.11	.80	.91
15. I'm afraid of my positive feelings about a substance I've abused	4.50	1.16	.08	.93
16. When I think of substance use my mind is often on "automatic pilot," not fully involved in what I am doing in the moment	4.86	0.97	.70	.91
17. I worry about not being able to control my urges and cravings	4.27	0.87	.43	.92
18. Feeling sad or anxious makes me want to use substances	5.78	0.99	.59	.92

## DISCUSSION

The AAQ-SA-PT revealed differences in factor structure when compared to the original version (Luoma, Drake, Kohlenberg, Hayes, 2011). The Portuguese version showed a single component structure, high internal consistency, and adequate convergent and discriminant validity. Although the AAQ-SA-PT seems to be a reliable and valid measure of psychological inflexibility in people facing substance abuse problems, future research should confirm these results in a larger sample.

## References

- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. C., Guenole, N., Orcutt, H. K., . . . Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire – II: A revised measure of psychological flexibility and acceptance. *Behavior Therapy*, 42, 676-688.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behavior Research and Therapy*, 33(3), 335-343.
- Luoma, J. B., Drake, C., Hayes, S. C., Kohlenberg, B. (2011). Substance Abuse and Psychological Flexibility: The Development of a New Measure. *Addiction Research and Theory*, 19(1), 3-13.
- Pais-Ribeiro, J. L., Honrado, A., & Leal, I. (2004). Contribuição para o estudo da adaptação portuguesa das escalas de ansiedade, depressão e stress (EADS) de 21 itens de Lovibond e Lovibond. *Psicologia, Saúde & Doenças*, 5(2), 229-239.
- Pinto-Gouveia, J., Gregório, S., Dinis, A., & Xavier, A. (2012). Validation of the Portuguese version of the Acceptance and Action Questionnaire (AAQ-II). *International Journal of Psychology & Psychological Therapy*, 12(2), 139-156.