

Babel's AAQ-II do different languages result in different outcomes in Europe?



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INTRODUCTION

- RESEARCH USING PROCESS MEASURES
 - ADVISED¹
 - CONDUCTED²
- POTENTIAL PITFALLS OF TRANSLATION³
 - CULTURAL NUANCES
 - FROM ENGLISH
 - NO REFLECTION OF REALITY

1. Ost LG (2008) Efficacy of the third wave of behavioral therapies: a systematic review and meta-analysis. *Behaviour research and therapy* 46: 296-321

2. Forman EM et al (2007) A randomized controlled effectiveness trial of acceptance and commitment therapy and cognitive therapy for anxiety and depression. *Behavior modification* 33: 772-99

3. Spitzer AD (2004) Translation and Validation of Study Instruments for Cross-Cultural Research. *Gastroenterology* 126: S124-S128

ACCEPTANCE AND ACTION QUESTIONNAIRE – AAQ-II

- Psychological Flexibility (PF):
« (...) the ability to fully contact the present moment and the thoughts and feelings it contains without needless defense, and, depending upon what the situation affords, persisting or changing in behavior in the pursuit of goals and values »⁴
- Original version (AAQ-I)⁵
- Multiple versions (9, 16, 49 items) for different target groups/problems (e.g. pain – CPAQ)

4. Hayes SC et al (2008) Acceptance and commitment therapy model, processes and outcomes. *Behaviour research and therapy* 44: 1-25

5. Hayes SC et al (2004) Measuring experiential avoidance: A preliminary test of a working model. *The psychological record* 54: 563-78

ACCEPTANCE AND ACTION QUESTIONNAIRE – AAQ-II

- AAQ-II⁶
- 10 items – 7 point Likert scale (total range: 10-70)
- Higher score = higher flexibility
- PF = dependent variable, instead of symptoms decrease

6. Bond FW et al (submitted for publication) Preliminary psychometric properties of the Acceptance Action Questionnaire-II: a revised measure of psychological flexibility and acceptance.

ACCEPTANCE AND ACTION QUESTIONNAIRE – AAQ-II

1. Its OK if I remember something unpleasant.
2. My painful experiences and memories make it difficult for me to live a life that I would value.
3. I'm afraid of my feelings.
4. I worry about not being able to control my worries and feelings.
5. My painful memories prevent me from having a fulfilling life.
6. I am in control of my life.
7. Emotions cause problems in my life.
8. It seems like most people are handling their lives better than I am.
9. Worries get in the way of my success.
10. My thoughts and feelings do not get in the way of how I want to live my life.

RESEARCH QUESTION

DO THE TRANSLATIONS OF THE ACCEPTANCE AND ACTION QUESTIONNAIRE II (AAQ-II)⁶ LEAD TO DIFFERENT OUTCOMES IN EUROPE?

6. Bond FW et al (submitted for publication) Preliminary psychometric properties of the Acceptance Action Questionnaire II: a revised measure of psychological flexibility and acceptance.

METHODS

COMBINATION OF SAMPLES

Normal: N= 1,186
♀ : 78%
♂ : 22%

Dutch: N= 370
English: N= 67
French: N= 207
Greek: N= 177
Italian: N= 365

Clinical: N= 303
♀ : 62%
♂ : 38%

Dutch: N= 124
French: N= 76
Greek: N= 75
Italian: N= 28

- DESCR STAT + ONE-WAY ANOVAS
- IC + FACTOR ANALYSES

RESULTS

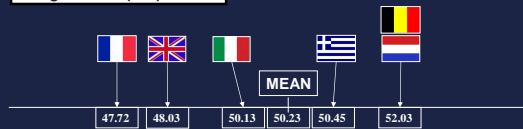
AAQ-II SCORES NORMAL SAMPLES

MEAN (±SD)

Dutch 52.03 (±9)
English 48.04 (±8)
French 47.72 (±10)
Greek 50.45 (±10)
Italian 50.13 (±9)
Merged 50.23 (±10)

REMARKS

Dutch scores higher than English ($P<0.05$) & French ($P<0.001$)
Italian & Greek scores higher than French ($P<0.05$; $P<0.05$)
 $F(4;1,181)=7.858, P<0.001$



RESULTS

AAQ-II SCORES NORMAL VS CLINICAL SAMPLE

NORMAL SAMPLE

Dutch 52.03 (±9)
English 48.04 (±8)
French 47.72 (±10)
Greek 50.45 (±10)
Italian 50.13 (±9)
Merged 50.23 (±10)

CLINICAL SAMPLE

Dutch 39.69 (±12)
French 41.21 (±11)
Greek 37.83 (±13)
Italian 38.68 (±11)
Merged 39.52 (±12)

REMARKS

Normal sample scores > clinical sample scores ($P<0.001$)

RESULTS

INTERNAL CONSISTENCY

NORMAL SAMPLE CRONBACH'S ALPHA

Dutch 0.89
English 0.82
French 0.82
Greek 0.84
Italian 0.83
Merged 0.84

REMARKS

Good internal consistency reliability for every sample (>0.80)

RESULTS

TEST-RETEST

NORMAL SAMPLE PEARSON CORRELATION N= 336

$r=0.837$
($P<0.01$)

REMARKS

Good test-retest reliability

CORRELATIONS WITH OTHER MEASURES (total sample)

Language	AAQII-BDI-II	AAQII-WBSI	AAQII-MAAS
Merged	-0.705**	-0.630**	0.432**
Dutch	-0.689**	-0.734**	0.456**
French	-0.703**	-0.710**	0.425**
Greek	-0.748**	-0.538**	0.425**
Italian	-0.585**		

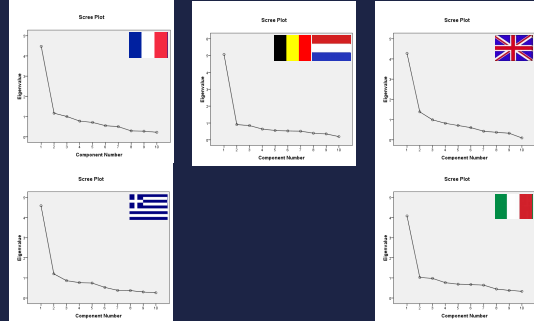
** $P < 0.01$

REMARKS

AAQ-II correlates negatively with depression, thought suppression and positively with mindfulness

RESULTS

FACTOR ANALYSIS



RESULTS

FACTOR ANALYSIS

	DUTCH	ENGLISH	FRENCH	GREEK	ITALIAN
ITEM 1	0.422	0.365	-0.278	0.083	0.200
ITEM 2	0.791	0.775	0.700	0.750	0.669
ITEM 3	0.708	0.732	0.732	0.760	0.706
ITEM 4	0.754	0.765	0.749	0.768	0.780
ITEM 5	0.810	0.808	0.801	0.801	0.738
ITEM 6	0.597	0.447	0.572	0.595	0.541
ITEM 7	0.726	0.748	0.825	0.825	0.606
ITEM 8	0.739	0.729	0.709	0.710	0.668
ITEM 9	0.784	0.590	0.728	0.715	0.728
ITEM 10	0.701	0.356	0.356	0.399	0.553

REMARKS

Weaker loadings ($< .40$) for items 1 and 10
Positively worded

RESULTS

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REMARKS

Big differences only explained by cultural discrepancies?

DIFFERENCES EXPLAINED BY TRANSLATIONS?

- Skewness and kurtosis are in the acceptable range, hence, a slight translation difference might be responsible:

– Original item 1:

Its OK if I remember something unpleasant

– French back-translation:

If a bad memory crops up, I don't shut the door on it

– Greek back-translation:

I feel fine if I recall something unpleasant

RESULTS

DIFFERENTIAL ITEM FUNCTIONING – COMPARING ITEMS

	Dutch/ English	Dutch/ French	Dutch/ Greek	Dutch/ Italian	English/ French	English/ Greek	English/ Italian	French/ Greek	French/ Italian	Greek/ Italian
ITEM 1	14.59	6.71	13.97	28.94	10.34	13.61	0.06	1.30	30.64	41.57
ITEM 2	18.03	5.52	17.66	7.11	10.86	0.15	1.35	23.74	18.17	2.53
ITEM 3	3.85	0.14	0.18	0.39	3.18	3.52	1.40	0.21	1.18	0.26
ITEM 4	5.24	21.44	1.83	23.66	1.34	0.28	1.49	4.68	0.83	8.23
ITEM 5	8.82	0.18	0.49	0.18	7.15	2.52	4.37	2.10	1.62	0.06
ITEM 6	12.79	6.35	2.12	20.00	1.05	11.41	1.05	4.74	1.92	22.38
ITEM 7	2.30	68.32	15.57	16.77	35.94	8.28	10.05	15.99	16.89	0.00
ITEM 8	0.84	1.52	16.31	0.05	0.37	1.06	0.41	6.70	0.76	16.04
ITEM 9	1.02	30.00	0.06	4.56	13.45	0.17	0.44	13.00	42.14	2.79
ITEM 10	28.55	0.18	39.75	8.62	8.30	0.16	4.75	15.42	3.96	13.08

Mantel Chi-Square – $p < .01$ (With DIFAS 4.0 – Thanks to Randall Penfield, Univ. Of Miami)



Enough is enough gang!!



Breeeeaaaaattttthhhh!!

RESULTS

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REMARKS

A lot of differences among each item, due to language
Items can be slightly differently understood across languages

CONCLUSION

DO THE TRANSLATIONS OF THE ACCEPTANCE AND ACTION
QUESTIONNAIRE II (AAQ-II) LEAD TO DIFFERENT OUTCOMES
IN EUROPE? **GLOBALLY NOT**

- The AAQ-II can be used in all the languages studied
- Other translations to be validated: Japanese, Norwegian, Portuguese, Swedish...
- Flexibility discriminates normal from clinical samples in all cultures
- Psychological flexibility is a cross-cultural construct

Conclusion

Psychological flexibility is a transcultural psychological variable

We're all the same!

