

# Exploring the engagement with risk-associated alternative healthcare: Results from a pilot web survey validating selected psychometric tools



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## Background & Objectives

- Rapid increase in the use of **alternative healthcare (AH)** has prompted research exploring its uptake and the potential risks associated with its use.
- Currently, there has been **limited research exploring the nature of risk-associated AH behaviours**, and the **demographic and psychosocial factors** that may help explain why people engage in them
- Therefore, we have developed, and are validating a **survey instrument** to explore and **predict engagement with higher-risk AH practices** in people who use AH, using psychological factors previously identified with the uptake of AH.

## Methods

- After identifying the most significant AH risk associated practices in an interprofessional Delphi study we developed/tested a pilot survey with **109 university students** who self-reported their use of AH and the types of risk-associated AH behaviours they engaged in.
- Five psychometric instruments** used:
  - Reward Responsiveness BAS Scale (RBAS)
  - Personal Beliefs about Science (PBAS)
  - Satisfaction with Orthodox Medicine (SOM)
  - Susceptibility to Persuasion Scale (SPS)
  - Control Beliefs Inventory (CBI)

## Results

1) **Confirmatory factor analysis (CFA)** of the five psychometric instruments indicated that the models of **all instruments, except the CBI**, provide an adequate fit to the data ( $n=82$ )

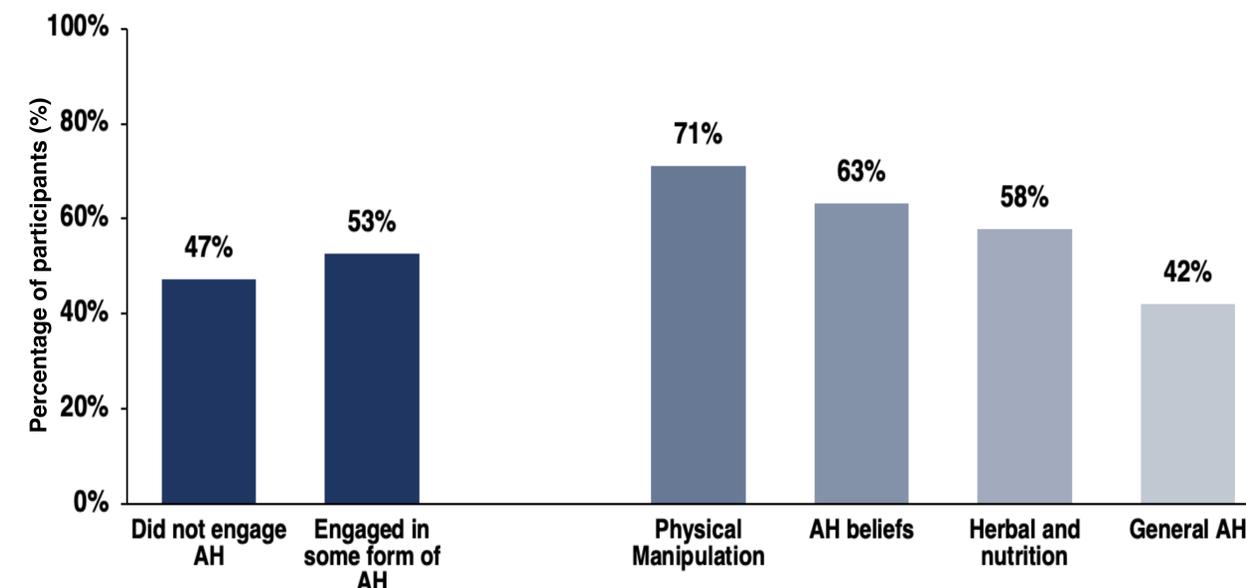
Instrument	Number of dimensions	CFI >0.95	TLI >0.95	SRMR <0.05	Cronbach's alpha >0.80
RBAS	1	✓	✓	✓	✓
PBAS	1	✓	✓	✓	✗
SOM	1	✓	✓	✓	✓
SPS	10	✓	✓	✓	✓*
CBI	4	✗	✗	✗	✓

CFI - comparative fit index; TLI - Tucker-Lewis index; SRMR - standardized root mean squared residual

\* Two subscales had Cronbach's alpha <0.8

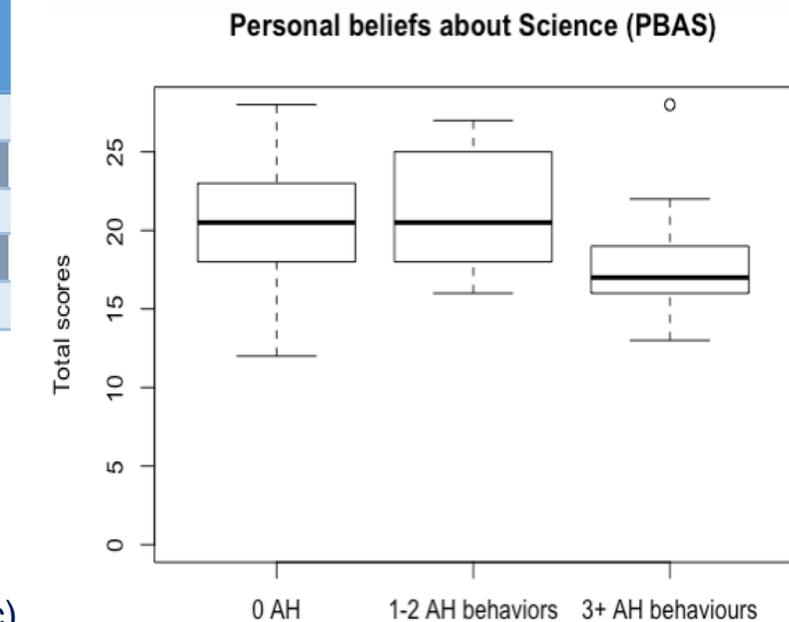
2) Use of AH:

- 38** out of 72 participants (53%) reported engaging in some form of AH
- The majority engaged in **physical manipulation** forms (e.g. chiropractic)



3) Differences in psychometric scores:

- 27% participants** reported engaging in **3 or more** risk-associated AH behaviours
- They had **lower** scores on the **PBAS and SOM** scales compared to those who reported no AH use



## Conclusion

**4 out of the 5 selected** psychometric instruments demonstrated acceptable levels of validity & reliability.

**CBI**: provided differing results, may be due to being tested in a wider population originally - tool developer contacted for investigation.

There may be specific **psychosocial factors** related to engagement in risk-associated AH behaviours.