Explores 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:
  1. Reward Responsiveness BAS Scale (RBAS)
  2. Personal Beliefs about Science (PBAS)
  3. Satisfaction with Orthodox Medicine (SOM)
  4. Susceptibility to Persuasion Scale (SPS)
  5. 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)

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Number of dimensions</th>
<th>CFI &gt;0.95</th>
<th>TLI &gt;0.95</th>
<th>SRMR &lt;0.05</th>
<th>Cronbach’s alpha &gt;0.80</th>
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</table>

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.