How Do Implicit and Explicit Spider Fear Co-Vary? An Exploratory Cluster Analysis.  
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Abstract
Although direct and indirect measures of spider fear have been shown to relate to each other, they have also differentially predicted fear-related outcomes and attention bias. It may therefore be theoretically and clinically important to understand how ‘implicit’ and ‘explicit’ fear co-vary, and how they predict key constructs. For an exploratory analysis, 128 undergraduate students completed self-report questionnaires to measure explicit spider fear and disgust, the Go/No-Go Association Task (GNAT) to measure implicit spider fear, and a spatial cueing task to measure threat-relevant attentional bias. Finally, participants completed a proxy Behavioural Approach Task (BAT). A Two-step cluster analysis using GNAT and spider fear scores as criterion variables resulted in three clusters: (1) low explicit/low implicit (41.4%); (2) average explicit/high implicit (28.3%); and (3) high explicit/low implicit (10.5%). A series of ANOVAs demonstrated that clusters differed on disgust propensity, F(2, 105) = .39, p = .005, and willingness to approach the spider, F(2, 105) = 3.64, p = .039, where Cluster 3 (high explicit fear) demonstrated the highest levels of disgust, and lowest ratings of willingness to approach the spider. No differences emerged between clusters on anticipatory approach anxiety, or attentional engagement/disengagement biases. Results are discussed in terms of dual-systems and cognitive-behavioural models of anxiety.

Method (Continued)

Results (Continued)

Discussion
- Different patterns of co-variation of explicit and implicit fear  
- Explicit fear related to more “controlled” processes such as disgust and behavioural approach; not to more “automatic” processes such as attention  
- Support for differential predictive validity of explicit and implicit measures  
- When explicit fear is high, may be more important than implicit fear in dictating behaviour. More important to target during Cognitive Therapy?  
- In non-clinical sample, explicit fear may be less prevalent, less ingrained → contribute less to symptoms, behaviour, etc.  
- Anxiety ratings for proxy BAT were high (mean = 66.52), suggesting that even non-clinical individuals evidence spider fear.

This study was exploratory. Will be important to replicate in a clinical sample.

Method
Participants:
- 128 undergraduate students (80% female, mean age = 22.5, SD = 4.67)

Measures:
- Disgust Propensity and Sensitivity Scale-Revised (DPSS; Olatunji et al., 1995)  
- Fear of Spiders Questionnaire (FSQ; Szymanski & O’Donohue, 1995)  
- Spider Phobia Questionnaire (SPQ; Körnman et al., 1994)

Cognitive Tasks:
- Go/No-go Association Task (GNAT, Teachman, 2007)  
- Central Cue Task (Mogg, Holmes, Garner, & Bradley, 2008)  
- Spatial Cue Task (Posner, 1980)

Results: Two-Step Cluster Analysis

- Cluster 3 (Greatest explicit fear):
  - Greatest disgust  
  - Least willingness to approach a spider  
  - No differences between clusters on:
    - Attentional biases  
    - Proxy BAT anxiety

References