Evidence for a memory bias for external cues of social threat in social anxiety has not been consistently found (e.g., Hirschy & Clark, 2004). Social anxiety is associated with self-focused attention (Bögels & Mansell, 2004). Individuals with social anxiety disorder may preferentially attend to internal cues of anxiety rather than to external cues of social threat (Mansell, Clark, & Ehlers, 2003).

This study examined whether instructions to interpret changes in physiology during a speech as reflective of poor performance would be associated with a memory bias for stimuli associated with changing physiology. Evidence of such a memory bias would support the hypothesis that social anxiety disorder is associated with a memory bias for internal cues of anxiety rather than external cues of social threat.

Participants:
45 Undergraduate students:
20 in Threat Condition and 22 in Non-threat Condition
Stimuli:
- Images of animals, fruits/vegetables, and man-made objects (30 photographic images: 10 for each category) seen during speech; one image every 5 seconds
- Additional 30 photographic images used for recognition test (10 for each category)

Memory Tests:
- Memory test 5 minutes (T1) and 1 week (T2) following speech
- Measures of memory used:
  - Free Recall
  - Cued Recall
  - Recognition Memory test for 15 target images each at T1 and T2

Results:
- Participants in the Threat Group did remember more stimuli overall than participants in the Non-threat group.
- However, the threat manipulation appeared to lead individuals to remember more stimuli associated with stable physiology rather than changing (particularly increasing) physiology.
- Participation in the Threat Group did remember more stimuli associated with stable physiology rather than changing (particularly increasing) physiology.
- Perhaps individuals diagnosed with social anxiety disorder may have remembered more stimuli associated with changing physiology.
- Future research should examine if these findings extend to individuals diagnosed with social anxiety disorder.
- This study offers partial support for the hypothesis that social anxiety may be associated with a memory bias for internal physiological cues of anxiety.

Recall:
- Dependent variable: Number correctly recalled
- Analysis: 2 (Time: T1 vs. T2) x 2 (Condition: Threat vs. Non-threat Group) x 3 (Stimuli: Increasing, Decreasing, Stable) ANOVA
- Significant main effect for condition, F (1, 60) = 5.13, p < .05
- Threat Group recalled significantly more stimuli than the Non-threat Group
- Condition x Stimulus interaction; F (2, 120) = 2.40, p = .10
- Threat Group recalled more stable stimuli than non-threat group
- No differences between groups on recall of increasing or decreasing stimuli

Discussion:
- Instructions to interpret changes in physiology during a speech as threatening did have an impact on memory for internal cues of changing physiology.
- Participants in the Threat Group did remember more stimuli overall than participants in the Non-threat group.
- However, the threat manipulation appeared to lead individuals to remember more stimuli associated with stable physiology rather than changing (particularly increasing) physiology.
- Perhaps individuals diagnosed with social anxiety disorder may have remembered more stimuli associated with changing physiology.
- Future research should examine if these findings extend to individuals diagnosed with social anxiety disorder.
- This study offers partial support for the hypothesis that social anxiety may be associated with a memory bias for internal physiological cues of anxiety.

References: