Classifying a Stereotype of Social Anxiety

Jaclyn M. Fox[1], Katya C. Fernandez[1], Thomas L. Rodebaugh[1], Andrew R. Menatti[2], & Justin W. Weeks[2]
Washington University in St. Louis[1], Ohio University[2]

Abstract

We created the Social Anxiety Stereotype Measure to assess the existence of a social anxiety stereotype. This measure supports two factors: social inhibition and oddity. To test the validity of the oddity factor, we designed an Implicit Association Test (IAT). Participants responded faster to pairings of socially anxious and odd words than to socially confident and odd words, supporting the existence of an oddity factor as a part of the social anxiety stereotype.

Introduction

- Social anxiety is a collection of symptoms that convey submissive signals to others
  - Such signals often have a stereotype associated with them (Gilbert, 2001).
- Classifying existing stereotypes about individuals higher in social anxiety may provide information about how the disorder is perceived and predict how people behave towards individuals higher in social anxiety
- To date, no studies have empirically defined a stereotype about individuals with social anxiety
- Purpose of current study: create a measure that captures the social anxiety stereotype and validate the content of the stereotype of social anxiety using a task that does not rely on self-report
  - In the current study, we utilized the Implicit Association Test (IAT)

Measures

Social Anxiety Stereotype Measure

(SASM; Fox et al., in preparation)

- Participants read the following instructions: *You are about to meet someone. Before meeting them, you are told that this person is **extremely socially anxious**. Based on your own experience, how likely is it that this person is…*
  - 21 traits on a 1 (*Not at all likely*) to 7 (*Extremely likely*) Likert-type scale

Straightforward Social Interaction Anxiety Scale

(S-SIAS; Mattick & Clarke, 1998; Rodebaugh et al., 2007)

- A 20-item measure assessing anxiety in a variety of social interaction situations
- Internal consistency for straightforward items was excellent in the Sample 1 (α = .93)

Straightforward Brief Fear of Negative Evaluation Scale

(S-BFNE; Leary, 1983; Rodebaugh et al., 2004)

- A 12-item measure assessing anxiety and fear of being evaluated negatively
- Internal consistency for straightforward items was excellent in Sample 1 (α = .93)

Sample 1

635 undergraduate participants
- **Age:** *M* = 19 years
- **Gender:** 65% women
- **Ethnicity:** White (*n*=567; 89%)

Sample 2

87 undergraduate participants
- **Age:** *M* = 20 years
- **Gender:** 61% women
- **Ethnicity:** White (*n*=50; 58%)

Implicit Association Test

(Greenwald et al., 2002; Greenwald et al., 1998)

- Participants were presented with four categories of words at the beginning of the computer task: *Socially Anxious* (SA), *Socially Confident*, *Odd* words, and *Normal* words
  - Words for *Odd* factor were derived in part from the SASM
- Throughout the task, participants saw a computer screen with variations of pairings in the upper corners of the screen.
- Participants were asked to sort the word in the middle into one of the top corners, and reaction times were recorded.

Block	Number of Trials	Function	Items Left-Key Response	Items Right-Key Response
1	20	Practice	Socially Anxious	Socially Confident
2	20	Practice	Normal	Odd
3	20	Practice	Socially Anxious + Normal	Socially Confident + Odd
4	40	Test	Socially Anxious + Normal	Socially Confident + Odd
5	20	Practice	Socially Confident	Socially Anxious
6	20	Practice	Socially Confident + Normal	Socially Anxious + Odd
7	40	Test	Socially Confident + Normal	Socially Anxious + Odd

Note. For half of the participants, the positions of blocks 1, 3, and 4 are switched with those of Blocks 5, 6, and 7, respectively. The procedure in Blocks 3, 4, 6, and 7 is to alternate trials that present either a "normal" or an "odd" word with trials that presented either a "socially anxious" word or a "socially confident" word.

Methods

- SASM was administered to Sample 1
  - Exploratory Factor Analysis (EFA) was conducted on first half of sample
  - Confirmatory Factor Analysis (CFA) was conducted on second half to confirm factor structure
- Sample 2 completed an IAT designed to confirm (part of) the social anxiety stereotype

Results: Sample 1

- EFA suggested two-factor fit→ CFA showed very good fit of two-factor solution (CFI = .97, TLI=.95, RMSEA=.08, SRMR=.05)
- Factor 1: Social Inhibition (SI; *shy, soft-spoken, quiet, reserved, timid*)
- Factor 2: Oddity (ODD; *unusual, strange, peculiar, weird*)
- Self-reported social anxiety, as measured by the S-SIAS and S-BFNE, was significantly correlated with SI and ODD

Results: Zero-Order Correlations

	SI	ODD	S-SIAS	S-BFNE
SI	(.90)	.25**	.15**	.14**
ODD		(.84)	.14**	.12*
S-SIAS			(.93)	.60**
S-BFNE				(.93)

Note. Due to sporadic missing data, *n* varies from 622 to 632 across correlations.
Values on the diagonal indicate internal consistency coefficients. **$p < 0.01$ level *$p < 0.05$

Results: Sample 2

- For each participant, an IAT score was computed
  - IAT score used = *D* (Greenwald, Nosek, & Banaji, 2003)
- Performance was faster for the SA/odd and Socially Confident/normal pairing than the SA/normal and Socially Confident/odd pairing (*D*=-.91, SD=.55), *t*(86) = -15.374, p <.001.

Discussion

- By utilizing a new self-report measure (SASM) and an IAT, we were able to define a stereotype of social anxiety, which consists of both social inhibition and oddity
- We utilized the IAT in particular to confirm the oddity factor
  - SA/odd and Socially Confident/normal as pairings showed faster reaction times than SA/normal and Socially Confident/odd pairings, which serves as evidence for the oddity factor in the social anxiety stereotype
- Individuals higher in social anxiety are even more likely to associate social anxiety with these two factors
- Future research should focus on the implications of this stereotype
  - Whether an individual higher in SA ascribing to this stereotype makes the individual more vulnerable to depression
  - How the SA stereotype influences behavior towards individuals higher in SA, etc.