Social Anxiety and Romantic Narratives: A Linguistic Analysis of Emotion and Sex

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Abstract
After being asked to write a fictional romantic story, individuals higher in social anxiety use more “sad” words and fewer “sexual” words than their less anxious counterparts.

Introduction
• Previous research has utilized linguistic analysis of autobiographical narratives to identify increased self-focused attention in individuals with social anxiety disorder
  • Anxious individuals used more self-referential, anxiety-related, and sensory words related to healthy controls when writing a narrative about a social situation
  • Because individuals higher in social anxiety experience romantic relationship dysfunction (including sexual; Bodenheimer et al., 2002), it is possible that narrative writing can expose cognitive biases associated with this dysfunction
    • Socially anxious individuals are more likely to take a self-protective communication strategy with their partners (Sparrevohn & Rapee, 2009), and to engage in less frequent and less intimate sexual behaviors with their partner.
    • Due to the high co-morbidity between social anxiety and depression, as well as overlapping affective and interpersonal characteristics, the potential impact of depression should be considered

Current Study
The current study used linguistic analysis of a fictional story about going on a date to examine evidence of a cognitive bias associated with thinking about romantic and sexual behavior.

Hypotheses
Individuals higher in social anxiety would use more words associated with negative emotion (sadness, anger, negative emotion), and fewer words associated with sex, positive emotion, and expression of affect when writing short narratives about going on a date. This will be true even after accounting for variance due to depressive symptoms.

Sample
81 undergraduate participants
  • Age: M = 19.91 years
  • Gender: 68% female
  • Ethnicity: White (n=77; 84%); Black (n=4; 5%); Hispanic (n=5; 6%); Asian (n=2; 2%)

Measures
Social Phobia Scale (Maccabe & Clarke, 1998)
  • A 20-item measure assessing fear of scrutiny
  • Chosen for its particular relevance in first-time interactions (e.g., first date) with potential romantic partners
  • Internal consistency was excellent (α = .88)

Beck Depression Inventory—II (BDI; Beck, Steer, & Brown, 1996)
  • A 21-item measure assessing depressive symptoms (suicidality question omitted)
  • Internal consistency for items was very good (α = .89)

POSEMO—Categories
  • POSEMO = positive emotion words
  • NEGEMO = negative emotion words
  • SAD = sad words
  • ANX = anxiety words
  • AFFECT = affect words
  • ANGER = anger words

Participants were shown pictures of three attractive individuals of the opposite sex on a computer screen and were asked to select one, and then to write a story about going on a date with that individual.

Participants wrote a total of 20 sentences

LIWC categories included:
  • LIWC (words, affect words), ANGER = anger words; SEX (sexual words)

Results
• Fear of scrutiny was positively associated with the use of sad words and negatively associated with the use of sexual words
  • No significant association between fear of scrutiny and positive emotion related words, negative emotion words, anxiety-related words, and anger-related words

• In multiple regression, both the use of sad words (part r = .20, p = .05) and sexual words (part r = -.32, p = .002) continued to predict fear of scrutiny above and beyond depression.

Discussion
• Our results are partially consistent with our hypotheses
  • The use of (more) sad and (fewer) sexual words was significantly associated with (higher) fear of scrutiny, but all other affect/emotion words were not.
  • These results suggest that capturing cognitive biases related to romantic relationships may be possible via linguistic analysis of a fictional romantic story, particularly when focusing on words related to sadness and sex.
  • These results are consistent with previous research suggesting that individuals with social anxiety disorder experience difficulties with emotion expression and sexual functioning in romantic relationships.

Implications & Future Research
• Linguistic analysis may provide valuable insight into social anxiety and romantic relationship functioning
  • Does not rely on self-report
  • Future research should focus on how these biases relate to romantic relationship functioning
  • Does the tendency to use more sad and less sexual words in these narratives mediate the relationship between social anxiety and romantic relationship functioning?

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