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Interpretation of Ambiguous Dental Scenarios by Severity of Dental Anxiety



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Introduction

Interpretational bias is the tendency for individuals with anxiety to interpret anxiety-relevant ambiguous situations in a negative way.¹⁻³ Dental anxiety poses a significant barrier to adequate oral health care for 5-15% of adults and may be maintained through negative interpretations of dental situations.⁴⁻⁷ The goal of this study was to examine how dentally anxious individuals interpret ambiguous dental scenarios compared to those with lower dental anxiety.

Methods

- United States adults were recruited through national Craigslist advertisements.
- Participants provided qualitative explanations of ambiguous dental scenarios.
- Completed the Modified Dental Anxiety Scale (MDAS).
- We compared descriptions of five interpersonal scenarios between those high in dental anxiety (MDAS>19) compared to the rest of the sample.
- Calculated the number of various emotionally valanced terms as a ratio of each group's total number of words.

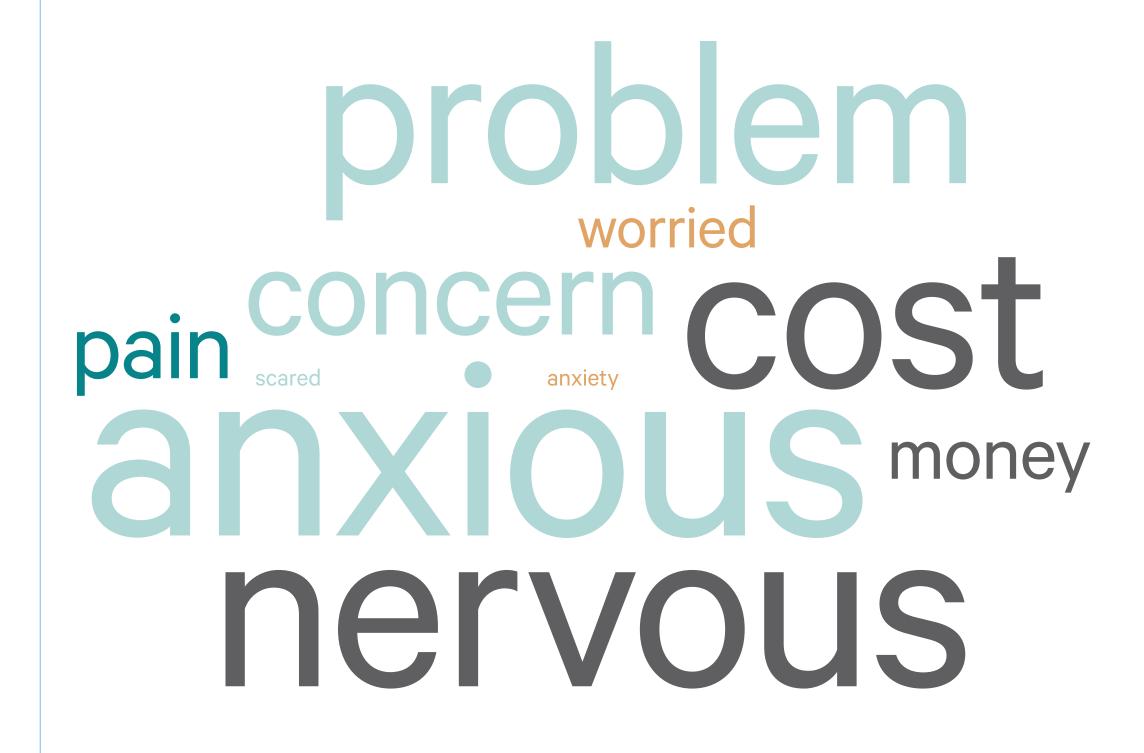
Results

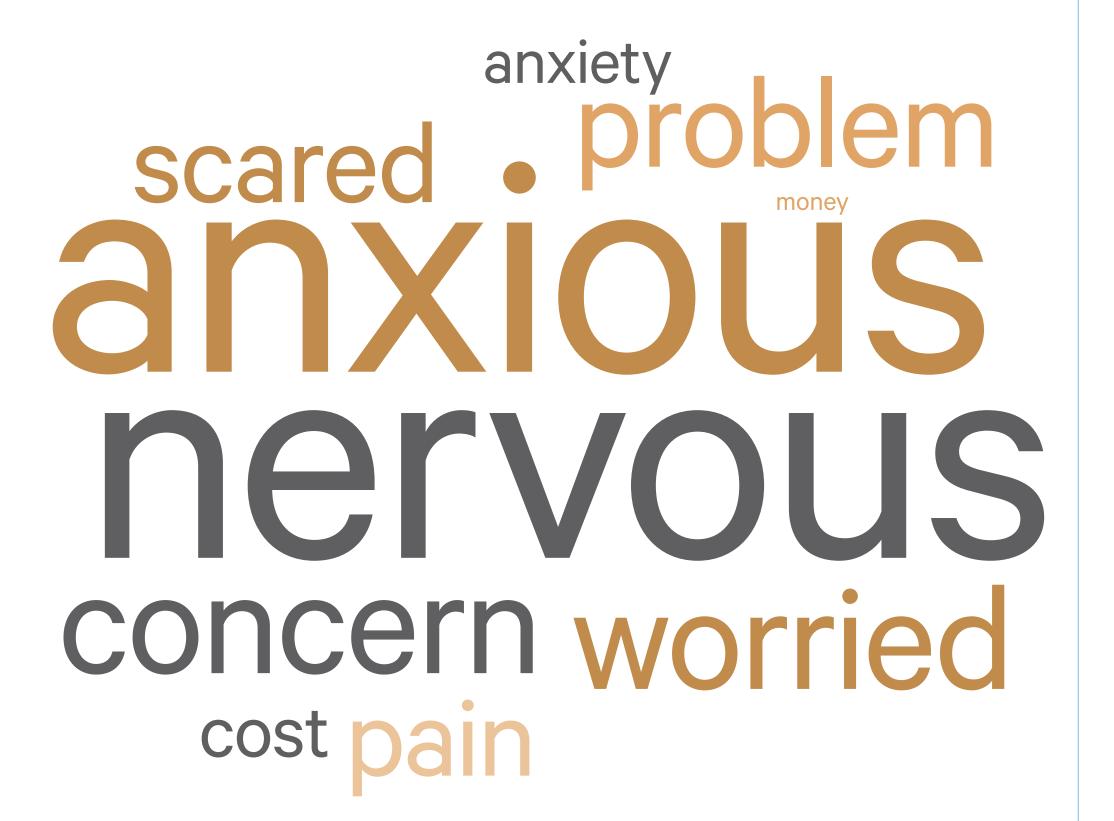
- Participants (**N=402**; mean age=40.0 (sd=14.4), range 18-85; 65.2% female) completed the survey
- Mean MDAS score was 16.6 (sd=5.6, range=5-25); **42.5%** reported high dental anxiety
- Dentally anxious respondents used **fewer words** (2711) across fewer interpretative statements (148) compared to the rest of the sample (3693 words / 170 interpretations)
- As a proportion of the total number of words, dentally anxious participants used terms like "nervous", "anxious", "worried", and "scared" more often (range=0.26-0.66%) than other respondents (range=0.05-0.38%)
- Less anxious respondents used the terms "money" (0.14%) and "cost" (0.35%) more often than dentally anxious individuals (0.07% and 0.18%, respectively)

Words used by Dental Anxiety Levels

Low Dental Anxiety (n=231)

High Dental Anxiety (n=171)





While dentally-anxious individuals were more likely to use terms like "worried" and "scared," less anxious individuals were more likely to use words like "cost" and "money".

Conclusions

- Dentally-anxious respondents used words related to anxiety as a greater proportion of their overall words.
- Less anxious individuals more often described concerns about the cost of treatment.
- Related work in dental-related interpretational bias found that dentally anxious individuals interpret ambiguous dental situations as significantly more negative than less anxious individuals.⁸
- Dentists should be aware of this interpretational bias and tailor their communication to each patient's specific sources of concern.

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