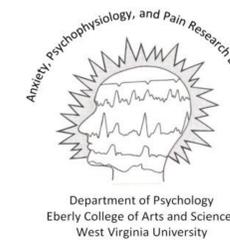




# The Relation Between Gagging and Beliefs about Dentists and Dental Treatment

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## Introduction

- 20–38.2% of the population have moderate to high dental care-related anxiety/fear, with 15.5% avoiding the dentist because of fear (Gatchel et al., 1983; Milgrom, Fiset, Melnick, & Weinstein, 1988)
  - Prevalence of dental care-related anxiety/fear has remained relatively stable since the 1950s (Smith & Heaton, 2003)
- Dental care-related anxiety/fear may be associated with the gagging reflex by way of avoidance learning
  - Gagging is a reflexive response that interferes with oral health care and may make for a particularly uncomfortable dental treatment experience
  - If so, gagging may promote negative beliefs about dentists and dental treatment, beliefs which are associated with dental care-related fear (Doerr et al., 1998; Milgrom et al., 2009)
- Little research exists on the prevalence of gagging and its relation to (a) the occurrence of gagging outside of the dental clinic setting; (b) negative beliefs about the dentist and/or dental treatment; and (c) dental care-related fear/anxiety
- Understanding the prevalence and epidemiology of chronic gagging may allow for more comfortable dental treatment

## Hypotheses

- Hypothesis 1: Gagging in the dental clinic is positively associated with gagging in contexts other than the dental clinic
- Hypothesis 2: Those who report that gagging causes problems during dental treatment are more likely than those for whom gagging does not cause problems to have more negative views about the dentist and/or dental treatment
- Hypothesis 3: People who have problems with gagging during dental treatment are more likely to have higher levels of dental care-related fear than their non-gagging counterparts.

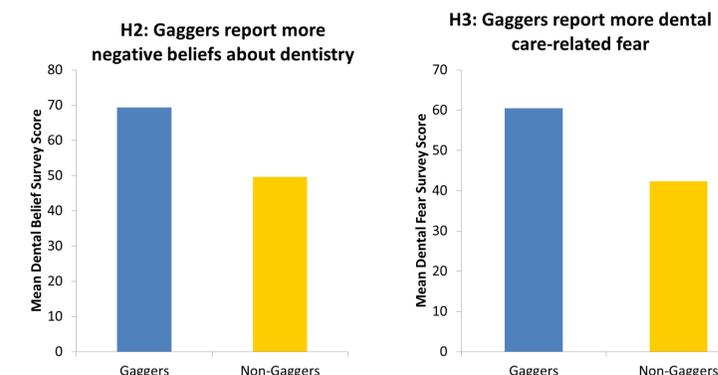
## Method

- Participants
  - 458 (54.1% female) participants
  - Mostly Caucasian (91.0%), consistent with demographics of WV
  - Average age of 36.3 years (SD = 14.5)
- Measures
  - Battery of Self-report measures: Dental Fear Survey, Revised Getz Dental Beliefs Survey, and Demographics questionnaire (which included items about gagging and current dental pain)
- Procedure
  - Data collected prior to dental appointments, in the waiting room of the Oral Diagnosis Clinic at the School of Dentistry, West Virginia University

## Results

- Descriptives:
  - 59.0% reported gagging during at least one previous dental visit, with no age or gender differences in gagging prevalence
  - 42.1% reported that gagging interrupted dental treatment in the past
  - 33.4% indicated that gagging had been a problem at times other than a dental visit
- Hypothesis 1:
  - Gagging in a dental setting was positively associated with gagging in other contexts ( $r = .38, p < .001$ )
- Hypothesis 2:
  - Those who reported problems with gagging during dental visits had more a more negative view of dentists and dental treatment ( $M = 69.4, SD = 28.5$ ) than did non-gaggers ( $M = 49.6, SD = 20.8, t(456) = 5.32, p < .001$ )
  - There was no difference in view of dentists and dental treatment between those who reported problems with gagging outside of the dental clinic and those who did not
- Hypothesis 3:
  - Those reporting problems with gagging had higher dental fear ( $M = 60.5, SD = 22.7$ ) than non-gaggers ( $M = 42.3, SD = 18.1; t(456) = 6.12, p < .001$ )

## Figures



## Discussion

- Gagging is associated with more negative views of the dentist and dental treatments as well as with dental care-related fear/anxiety
- Gagging patients may need increased attention from oral health care professionals to ensure proper care
- This sample is comprised of emergency dental patients from Appalachia, and so may represent a unique group, albeit one affected by oral and general health disparities
- The self-report nature of the study and social desirability bias may affect results
- Data collected at a dental clinic may not fully represent those with fears about dental care
- Research needs to address direction(s) of causation for gagging and dental beliefs and should examine the mechanisms that develop gagging problems



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