

# Dental Anxiety

## Prevalence, measurements and consequences

Akademisk avhandling

som för avläggande av odontologie doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i hörsal Arvid Carlsson, Academicum, Sahlgrenska Akademien, Medicinaregatan 3, Göteborg,

fredagen den 27 november, klockan 13.00  
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### Avhandlingen baseras på följande delarbeten

- I. Svensson, L, Hakeberg M and Wide Boman U. *Dental anxiety, concomitant factors and change in prevalence over 50 years*. Community Dental Health 2016; 33:121–126.
- II. Svensson, L, Hakeberg M and Wide U. *Dental pain and oral health-related quality of life in individuals with severe dental anxiety*. Acta Odontologica Scandinavica 2018; 76: 401-406.
- III. Svensson, L, Hakeberg M and Wide U. *Evaluating the Validity of the Index of Dental Anxiety and Fear (IDAF4C<sup>+</sup>) in Adults with Severe Dental Anxiety*. European Journal of Oral Sciences 2020; 128:423-428.

**SAHLGRENKA AKADEMIN  
INSTITUTIONEN FÖR ODONTOLOGI**



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### Abstract

The overall aim of this thesis was to gain knowledge about adults suffering from dental anxiety by studying the current prevalence of dental anxiety and concomitant factors, the impact of dental pain on everyday life among individuals suffering from severe dental anxiety, and to evaluate the validity of a psychometric measurement, the IDAF-4C<sup>+</sup>, used to measure the level of dental anxiety and to screen for a diagnosis of specific phobia for dentistry. The included studies have a cross-sectional design. Study I includes a Swedish national sample of 3500 individuals, randomly selected and interviewed by a telemarketing company. Data from this study were compared with data from a study performed in 1962, to be able to analyze a possible change in the prevalence of dental anxiety over time. Study II and III include clinical samples of highly dentally anxious individuals examined both clinically and with validated and reliable psychometric measurements. Severe dental anxiety was reported by 4.7%, moderate anxiety by 4.5%, low anxiety by 9.8%, and no dental anxiety by 80.9% of the subjects. The most important factors predicting dental anxiety were gender (women) and irregular dental attendance. A decrease in dental anxiety was seen over time. Dental pain was reported by 77.6% in a sample with severe dental anxiety and the pain intensity was reported to be high. The majority of individuals with dental pain reported a greater impact on their oral health-related quality of life than individuals without dental pain. The agreement between the phobia diagnosis according to the Phobia module of the IDAF-4C<sup>+</sup> and the clinical diagnosis of dental phobia according to the ICD-10 was very low, but the validity of the Anxiety and Fear module in relation to other psychometric measures of dental anxiety was good. In conclusion, the prevalence of dental anxiety has decreased over the last 50 years in Sweden, but a significant proportion of the population still reports severe dental anxiety. Individuals with severe dental anxiety are often affected in their everyday life, and individuals with dental pain seem to suffer a greater impact than individuals without dental pain. The IDAF-4C<sup>+</sup> is a reliable and valid measure with regard to the Anxiety and Fear module and the Stimulus module offers additive important information, however the Phobia module needs further tests and evaluations.

**Keywords:** dental anxiety, adults, prevalence, oral health, oral health-related quality of life, dental pain, measurements, validity, dental phobia