# Oral health behaviour and self-esteem in Swedish children

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## Abstract

This study focus on the socio-psychological concept of self-esteem and examines its association with oral health behaviour and with some background variables that have been shown to be of importance in previous studies. In 1995, 3370 12-year-olds answered a questionnaire on social and demographic factors. Questions on attitudes and behaviour were also included. After reducing the number of variables and constructing new variables, multivariate analyses were performed. A polytomous regression on self-esteem showed that having very poor self-esteem as opposed to poor, good and very good self-esteem was associated with being a girl, not living with one's biological parents, poor social support, having less interest in politics, poor adaptation in school and poor oral health behaviour. The results also showed that being a boy, choosing statements reflecting less exemplary behaviour, and being less well adapted in school increased the risk of having poor oral health behaviour, as did ethnic group affiliation and having poor self-esteem. Our results showed that self-esteem is a crucial intervening variable between variables measuring social background and outcome variables, especially oral health behaviour. © 2000 Elsevier Science Ltd. All rights reserved.

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## Introduction

During recent decades, research on caries prediction and protection has shown a high degree of consensus regarding ecological as well as social group determinants of the prevalence of caries among young people. Who one's parents are, their lifestyle, where they live, poverty, oral hygiene, dietary habits and a few other factors provide a fairly good picture of the aetiology of the disease (Schou, 1991). Different types of beha-

viour that are associated with caries early in life have also been identified. In addition, a number of lifestyle variables, such as smoking, bedtime and video watching, are also associated with these problems. Nevertheless, it has been found difficult to predict dental caries. The most promising research attempts have applied longitudinal designs using multivariable models including dental, behavioural and social data, which is what we have done in this project (Kolehmainen, Heinonen & Haapakoski, 1985, Grytten, Rossow, Holst & Steele, 1988). However, confusion still exists concerning which intervention strategies to put into practice. It has been difficult to transform epidemiological findings into functioning programmes. Knowledge is still lacking with regard to the social mechanisms that mediate

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between structural circumstances and dental health behaviour.

In an influential article from 1997, Macgregor and Balding pointed out the relevance of focusing on what they label the significant role of self-concept in this mediating process. Using two indicators of self-concept, self-esteem and health locus of control, they succeeded in showing significant associations between several dental health behaviours such as tooth brushing frequency and recalled advice on tooth brushing. Macgregor and Balding pointed out the importance of taking social cognitions into account, i.e. the inner but externally influenced properties by which individuals define relevant phenomena in their social environment. Attitudes fulfil this function.

As early as the 1920s, the American interactionists Thomas and Znaniecki argued that attitudes provide a link between individuals and their social groups. This perspective has been preserved and ennobled within the Chicago school of symbolic interactionism, where it is asserted that attitudes, and especially cognitions, arise in social interaction and communication processes (Denzin, 1992). An individual's social schemes, which he/she can use to orient himself/herself in different social situations, are built up within the socialisation process. Initially, the most important actors involved in this process are the mother and then the father, but more distant groups such as relatives, friends, those one works with, etc., will successively influence the process. There are also professional actors such as health promoters who want to intervene, as well as normative, impersonal rules on how to behave. All these senders of rules and regulations are, to varying extents, significant to the individual, but their importance will change over time.

When these influences are being integrated in a person's personality, that person learns not only about social life but also about himself/herself. The person reflects, becomes able to assume increasingly complex roles, and will develop what George Herbert Mead (1934) labels a generalised other. The person will also develop cognitive maps, or what researchers within the field of social cognition designate as social schemes, and this is what we are investigating here.

Attitudes are an important part of social schemes. These are defined as "responses that locate 'objects of thought' on 'dimensions of judgement'" (McGuire, 1985). They concern evaluations and orientations to objects such as, for example, caries and tooth brushing. Augostinos and Walker (1995) also focused attention on two other features of an attitude, namely categorisations and sociability. Categorisation implies that objects are classified with the help of schemes that are already functioning or that new experiences are added to the schemes. These objects include self-concepts like self-esteem and self-image.

On the sociological macro-level there has also been an increased focus on identity and self, and several identity projects are currently ongoing in leading sociology quarters. Anthony Giddens, for instance, defines the society of today as late modern, and as characterised by the paradoxical trends toward a simultaneously increased need for experts and responsibility for the self (Giddens, 1991). The self Giddens describes is a reflexive, and in a world saturated with stimuli and lifestyles, the choices individuals make tend to be more numerous and also less foreseeable. What Giddens labels reflexive organised selves make increasingly more complex plans for their lives, and what is most important for them to construct is their own self-identities.

The picture of late modern society also describes a development in which structural conditions in the social environment decrease in importance as determinants of both subjective norms and social patterns of behaviour. In place of that, the free actor has taken the stage, which entails both increased risks and increased possibilities for the individual.

Based on Giddens, two sets of factors appear to be crucial in the dental health life-plans of our target group of young people. These are:

- Having good teeth tends to be more and more important to young people, and good in this context can mean two things: (a) having nice-looking teeth, or (b) having sound teeth. In the first case aesthetic motives dominate the life-plans of these youths, while in the second case rational motives are dominant. The norm distribution also differs greatly in the two cases. In the first case the media formulates a discourse in which nice-looking teeth are important to the image of young people and, consequently for their self-esteem. In the second case experts such as dentists formulate a discourse in which good dental health is prescribed for rational reasons. Certain lifestyles are identified as risky in the context of poor dental health.
- Structural properties in the social environment such as social class and ethnic group affiliation are thought to have diminished in strength as causes of dental diseases. Instead, lifestyle factors seem to have increased in importance, as have choices on the personal level. This means that dental health behaviour is experienced as a personal choice, but that at the same time it is part of a broader pattern of lifestyle.

This study focuses on the socio-psychological concept of self-esteem that has been constructed in order to illuminate these factors. We will examine how this concept is associated with oral health behaviour as the outcome variable on the one hand, and with some background variables that have been shown to be of