

HANNE BERTHELSEN

WORK-RELATED SUPPORT, COMMUNITY AND TRUST

Dentistry in Sweden and Denmark



MALMÖ UNIVERSITY

**WORK-RELATED SUPPORT, COMMUNITY AND TRUST
- DENTISTRY IN SWEDEN AND DENMARK**

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PREFACE

This thesis is based on the following papers:

- I. Berthelsen H, Hjalpers K, Pejtersen JH, Söderfeldt B. Good Work for dentists – a qualitative analysis. *Community Dent Oral Epidemiol* 2010; 38:159–170.
- II. Berthelsen H, Hjalpers K, Söderfeldt B. Perceived social support in relation to work among Danish general dental practitioners in private practices. *Eur J Oral Sci* 2008; 116:157–163.
- III. Berthelsen H, Pejtersen JH, Söderfeldt B. Measurement of social support, community and trust in dentistry. In press.
- IV. Berthelsen H, Söderfeldt B, Harris RV, Pejtersen JH, Bergström K, Hjalpers K, Ordell S. Collegial Support and Community with Trust in Swedish and Danish Dentistry. Submitted for publication.

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ABSTRACT

Work as a dentist provides great opportunities for human contacts with patients as well as with co-workers. The context for provision of health care is changing, implicating that the roles of health professionals - including dentists - are challenged. This thesis deals with positive work relations among dentists. The overall aims were: 1) to improve understanding of what characterizes Good Work for general dental practitioners and 2) to analyse associations between factors in the work environment and social support, community, and trust among dentists in Sweden and Denmark.

The thesis is based on both qualitative and quantitative methods, comprising results from three studies, presented in four papers. The study populations include general dental practitioners from Sweden and Denmark working in the private and in the public sector.

In Paper I, dentists' perceptions of Good Work regarding positive and rewarding aspects were explored through phenomenological analysis of interviews with Danish and Swedish general dental practitioners. The main result was that the core of Good Work emanates from the clinical encounter; from the relation with the patient and from the opportunity to carry out high quality odontological handicraft. Social relations at the workplace, as well as organizational values and conditions, were perceived as influencing the opportunities to achieve rewarding aspects from the clinical encounter.

The aim of Paper II was to study to what extent Danish general dental practitioners perceived support from colleagues and to relate this support to demographic and work-related background factors. The analysis was based on answers from 222 dentists included

in a cross-sectional survey of randomly selected general dental practitioners from Denmark. Most respondents perceived that they had a colleague with whom they would choose to discuss a potential complaint proceeding, even though it was more common to discuss difficult treatments than problems concerning dissatisfied patients with colleagues. Dentists who were female, young, from group practices, often in contact with colleagues outside the practice, and who reported that they were supported in practical matters, perceived on average a higher degree of *Emotional Support*. Dentists who were married/cohabitant, coming from a group practice, often in contact with colleagues outside the practice and who were emotionally supported perceived a higher degree of *Practical Support*. The study emphasized the importance of the organizational setting for a professional and personal supportive psychosocial working environment in dentistry.

Data from a cross-sectional comparative survey were used in papers III and IV. A questionnaire was sent to randomly selected general dental practitioners working in Sweden or Denmark in the private or the public sectors. The net response was 68%. In paper III, two scales were developed; the one measuring *Community with Trust* (the sense of being part of a community characterized by trust and humour at work) and the other *Collegial Support* (perceived social support from colleagues in relation to the work with patients) were developed. The psychometric properties of the scales were evaluated. Explorative factor analysis was used to investigate dimensionality; internal consistency was assessed by Cronbach's coefficient alpha. Differential item functioning and convergent validity were assessed. The reliability and validity of the two new scales were satisfactory.

The aim of paper IV was to analyse variables associated with the scales for *Collegial Support* and *Community with Trust*. Two models were built using multiple hierarchical linear regression analysis. Demographic background factors, work factors, managerial factors and factors relating to objectives and values characterizing the climate of the practice were introduced as blocks in the models. The main results were that having common breaks and decision authority, as well as working in a practice climate characterized by professional values were positively associated with the scale for *Community with Trust*. Dentists who were female, married/cohabitant, who had frequent contacts with colleagues outside the practice, and worked

at a practice with frequent common breaks, where the leader had formalized managerial education, and the climate was characterized by professional values, were positively associated with the scale for *Collegial Support*. In contrast, being managerially responsible and having worked many years as a dentist were negatively associated with *Collegial Support*. Thus, a different pattern was documented for *Collegial Support* than for *Community with Trust*, indicating different underlying mechanisms. A professionally oriented practice climate and common breaks at work were strongly associated with both outcome variables.

Differences in average for dentists' *Collegial Support* and *Community with Trust* were found among different organizational settings. The final regression analyses pointed to organizational differences such as size of practices, influence on work, frequency of common breaks, managerial education and practice climate as well as, for example, gender distributions, contributed to possible explanations. Thereby, new knowledge has been achieved about a number of work environment factors which are of relevance for positive social relations in dentistry.

In conclusion, the work with patients constitutes the core of work in dentistry, while relations among peers, staff, and management are important frameworks. This thesis points to the importance of collegiality and work-related community with freedom in work with patients. Therefore, it is relevant to address the professional and relational character of the work when organizing and managing dentistry.

SAMMENFATNING

Tandlæger omgås mange mennesker i løbet af deres arbejdsdag, såvel patienter, pårørende som arbejdskammerater. Denne afhandling har fokus på de dele af arbejdet, som har med de med-menneskelige kontakter at gøre.

Der sker store forandringer i vilkårene for sundhedssektoren i disse år, med særlig bevågenhed i forhold til økonomisk effektivitet og styrkelse af borgernes rettigheder. En række tiltag bidrager til at understøtte en udvikling i retning af mere markedslignende forhold. Indenfor tandplejen i Sverige og Danmark ses øgede krav om gennemsigtighed f.eks. i form af prislister, service deklARATIONER og kvalitetssikring. Desuden oprettes fritvalgsordninger på et stigende antal områder i sundhedssektoren. I en tid med gennemgribende forandringer i vilkårene for tandplejen er det særligt vigtigt at samle viden om, hvad tandlægerne opfatter som centralt for deres arbejde og om forhold, der bidrager til arbejdsglæde. Sådanne idealer kan have betydning for at sikre og fremme et positivt arbejdsmiljø som en del af fremtidig planlægning af tandplejen.

Formålet med afhandlingen har dels været at opnå dybere kundskab om, hvad tandlæger oplever som Det Gode Arbejde og dels at analysere sammenhænge mellem faktorer i arbejdet og sociale relationer tandlæger imellem.

I afhandlingen indgår fire artikler, som baseres på data fra tre delstudier. I materialet indgår forskellige grupper af danske og svenske alment praktiserende tandlæger fra privat såvel som offentlig tandpleje.

Ni tandlæger blev interviewet om deres arbejdsliv med særlig fokus på det, der giver arbejdsglæde samt positive og berigende oplevelser

i arbejdet (artikel 1). På tværs af de interviewede tandlæger kunne der udledes en fælles kerne i Det Gode Arbejde, nemlig relationen med patienterne og mulighederne for at udføre håndværk af god kvalitet. Oplevelsen af at gøre en forskel ved at gøre noget godt for andre mennesker viste sig at være en vigtig del af Det Gode Arbejde. Længerevarende relationer med patienterne fremhævedes at bidrage til mulighederne for at opnå tillidsfulde relationer, følge patienternes fremskridt og se de mere langsigtede resultater af ens eget arbejde. Det var ikke bare tilfredsstillelsen her og nu ved at udføre god kvalitet, der blev opfattet som vigtig, men også at patienterne tager hånd om og vedligeholder resultatet. Det oplevedes som en anerkendelse, der sammen med en tillidsbaseret relation, giver tandlægen en indre tilfredshed.

Samarbejdsrelationerne på arbejdspladsen, samt de værdier og forhold, der karakteriserede klinikken, blev opfattet som en ramme om arbejdet. Tandlægerne forklarede, at rammerne påvirker mulighederne for at opnå de berigende aspekter fra patientarbejdet og der igennem påvirkes deres arbejdsglæde også. Det er derfor naturligt, at professionel frihed i form af indflydelse på rammerne blev fremhævet som særlig vigtig. En atmosfære på klinikken, der er præget af fællesskab, tillid til hinanden og støtte i arbejdet, oplevedes også at bidrage direkte samt indirekte til arbejdsglæden.

Fællesskab, tillid og social støtte i arbejdet blev studeret nærmere i de efterfølgende tre delstudier. Artikel II bygger på en spørgeskemaundersøgelse, hvor 222 privat praktiserende danske tandlæger deltog. I artikel III og IV indgår materiale fra en spørgeskemaundersøgelse med deltagelse af 1835 alment praktiserende tandlæger fra den offentlige og private sektor i Sverige og Danmark.

Resultaterne i artikel II og IV viste, at de fleste af tandlægerne havde en kollega, som de ville kunne diskutere en eventuel klagesag med. Generelt oplevede tandlægerne dog højere grad af støtte i forbindelse med håndværksmæssige udfordringer end omkring emner som personlig trivsel og problematiske patientrelationer. Analyser i artikel II godtgjorde, at personlige faktorer såvel som arbejdsrelaterede forhold var relateret til graden af social støtte i arbejdet.

I artikel III blev en ny skala udviklet og benævnt *Tillidsfuldt Fællesskab*. Desuden blev praktiske og emotionelle aspekter samlet i en skala for oplevet *Kollegial Støtte* i arbejdet. Begge skalaer blev vurderet og viste sig at fungere godt, samt at være pålidelige på tværs af nationalitet, sektor og køn blandt tandlægerne.

Ud fra fundene i de første tre studier og de forandringer, som præger udviklingen i sundhedssektoren, kunne der opstilles en række hypoteser for forhold, der kunne formodes at have betydning for *Tillidsfuldt Fællesskab* og *Kollegial Støtte* i arbejdet som tandlæge. Relationer mellem henholdsvis faktorer, som beskriver personlige karakteristika, arbejdsforhold, ledelses forhold samt værdier på klinikken og de to nye skalaer blev analyseret nærmere i artikel IV.

For *Kollegial Støtte* viste det sig i regressionsmodeller (artikel IV), at kvindelige tandlæger og gifte/samlevende oplevede højere grad af støtte end mænd og enlige. Det samme var tilfældet for tandlæger med hyppig netværkskontakt udenfor klinikken og tilknyttet en klinik med flere tandlæger, og hvor den daglige leder har en formel lederuddannelse samt, hvor klinikens værdier er i god overensstemmelse med professionens. Derimod viste det sig, at lederne selv og tandlæger med længere tid i faget rapporterede mindre *Kollegial Støtte*.

For *Tillidsfuldt Fællesskab* var mønstret noget enklere (artikel IV). Tandlæger, som havde indflydelse i arbejdet, hyppige fælles pauser på klinikken og arbejdede på en klinik, hvor værdierne i høj grad stemte overens med professionens værdier, anførte også i højere grad at opleve sig som del i et *Tillidsfuldt Fællesskab*.

Jo mere *Kollegial Støtte* og især jo mere *Tillidsfuldt Fællesskab* tandlægerne oplevede, desto bedre selv vurderet helbred samt desto større arbejdsglæde og jobtilfredshed havde de også.

Det var muligt at udlede en fælles kerne i arbejdet som tandlæge på tværs af nationalitet og sektor og et fælles ideal i betydningen af rammer som atmosfæren på klinikken og kollegiale relationer (artikel I). Imidlertid viste det sig, at der var store forskelle i gennemsnittet af *Kollegial Støtte* og *Tillidsfuldt Fællesskab* afhængigt af sektor og om arbejdsstedet lå i Danmark eller Sverige. F.eks. oplevede tandlæger fra offentlig tandpleje mere *Kollegial Støtte* end tandlæger fra den private sektor. I Sverige rapporterede privatpraktiserende signifikant højere gennemsnit for *Tillidsfuldt*

Fællesskab end deres kolleger fra offentlige klinikker, mens en tilsvarende forskel ikke var tilfældet i Danmark.

Analyserne viste, at sådanne forskelle bl.a. kan forklares ud fra organisatoriske forskelle som klinikstørrelse, mulighed for indflydelse i jobbet og værdigrundlag på klinikken. Desuden bidrog også forhold som lederuddannelse og kønssammensætning til at forklare forskelle i gennemsnittet for *Kollegial Støtte* mellem de forskellige organisationsformer. Dermed er der skabt en viden om en række forhold i arbejdsmiljøet, som kan have betydning for relationerne og dermed også relaterer sig direkte til arbejdsglæden blandt tandlæger.

Sammenfattende peger afhandlingens resultater på vigtigheden af at inddrage den professionelle og relationelle karakter af arbejdet i organisering og ledelse af fremtidens tandpleje.

ABBREVIATIONS

COPSOQ	Copenhagen Psychosocial Questionnaire
DC Model	Demand Control Model
DCS Model	Demand Control Support Model
DEWSS	Dentists' Experienced Work Stress Scale
DIF	Differential Item Functioning
ERI Model	Effort Reward Imbalance Model
JR Model	Job Resource Model
HSO	Human Service Organization
NOVO Network	Nordic Research and Development Network within Healthcare Organizations
NPM	New Public Management
NRCWE	National Research Centre for the Working Environment
PCA	Principal Component Analysis
PDS	Public Dental Service
VIF	Variance Inflation Factor
WHO	World Health Organization

INTRODUCTION

A relational perspective on work environment

Work life is an important part of our lives as it provides us with opportunities for an income, personal growth, and for taking part in social relations. Recently Søndergård Kristensen has pointed at a shift in focus of work environment research. His point is that today we say: “*we are each other’s work environment*” rather than placing emphasis on job characteristics (1). The present work is in line with this perspective as the subject is a positive relational work environment among dentists.

Social relations are known to influence health and well-being of the individual (2). Individuals are embedded in social structures and relations. Thereby, well-being is not merely an individual issue, but has also a social dimension (3). Social well-being is included in the definition of health by The World Health Organization (4):

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”

The workplace has considerable potential to provide adults with a sense of community (5). Sense of community includes the feeling of belonging to a group and being of importance for each other (6,7). Absence of latent social conflicts and the presence of strong social bonds in a society measured by trust and norms of reciprocity can be understood as social cohesion, which constitutes the foundation for social capital (8,9). Durkheim’s emphasis on groups and on the importance of social cohesion for well-being is considered to be the roots of social capital (10-12). In relation to workplaces,

social capital has been the subject of increased interest in work environment research during the last two decades (1,12). Social capital is not a fixed concept. Many different attempts to define it have been made over the years, as for example by Bourdieu, Coleman, Portes, Putnam, and Lin. An example of a definition is the one by Putnam from his book *Making Democracy Work* (p. 167 in (9)):

“Social capital refers to features of social organization such as networks, norms, and social trust that can facilitate coordinated actions [...] as well as spontaneous cooperation “

Social capital in its different forms is well documented as having an impact on health and well-being (10,12). Eriksson states the importance of achieving knowledge about which forms of social capital that are health-enhancing, for whom and in what context (p. 11 in (12)). The present thesis provides a deeper insight into central concepts such as trust, community, and social support in the context of work environment in dentistry.

Dentistry as a Human Service Organization

Working with patients - human service work - differs from other kinds of work (13). Patients have an active role, through which they contribute to success or failure of the treatment. The patients constitute the raw material of the organization, and they go through a transformation process (13). Dentistry is a core example of such a Human Service Organization (HSO)(14) as defined by Hasenfeld (13). Where industrial production is based on immaterial objects, patients are human beings with their own will. The patients as well as the dentists express their emotions in a professional relation, which is built on trust (13,15,16). Thereby, the work in organizations such as dentistry is based on a moral foundation (13,17), and moral factors such as trust are important.

Trust

Trust can be regarded as a fundamental quality in all kinds of human relationships; however, it is not easy to define trust. Baier views trust as being in a (vulnerable) situation, being dependent on the goodwill

of others with the risk of being harmed, but having confidence that this will not happen (18).

Trust is essential in professional relationships in health care, not only between the patient and the health care professional, but also among people at the workplace (19,20). The National Research Centre for the Working Environment in Denmark (NRCWE) has developed questions to measure trust at workplace level (21). Their starting point was a definition of trust as expressed by Mayer et al. (21,22):

“...the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other part”.

In the context of work, NRCWE considers it relevant to study trust among colleagues (horizontal trust) and between management and employees (vertical trust) (23) corresponding to the distinction suggested by Coleman (24). Luhmann argues that mistrust is the opposite of trust, different from simply lack of trust. He concludes, that it is necessary to choose whether you talk about trust or mistrust (25).

Social contexts characterized by continued relationships, changing dependencies, and an element of unpredictability are believed to form a nourishing basis for development of trust (p 77 in (25)). Relations characterized by trust have a built-in feature of social control, since it can be regarded as a way to reduce social complexity (e.g. p 115 in (25)). Dentists are core examples of an occupational profession (26-31). In theories concerning such occupational professions, it has been argued that a way to organize and manage work can be through trust and collegiality (32-34).

Social support

Social support is a complex concept, which is reflected in the many varying approaches to define and measure it. House & Kahn divided social relationships into structural and functional aspects. Social network is the structural aspect, and the functional aspect concerns how such networks are utilized to e.g. support each other

socially in different ways (35). Social support must be conceived in a reciprocal way (36), as it is not only a matter of receiving support but also concerns the promotion of a feeling of belonging, to be esteemed, and to be of importance to others (2,37). While received support concerns information about actual support provided recently, perceived support is the respondents' assessment of whether support is available if needed (38). Perceived support from an individual can often be the catalyst that prevents the development of unhealthy stress (38).

In the context of work, support can be provided by different sources, such as from the organization, the leader, colleagues, or others. However, no agreement exists upon which source is more important in relation to social support at work (39). When measuring social support, it can be done in a general way or focused towards problems (35).

Different kinds of social support exist. An example of a classical division is into emotional, instrumental, appraisal, and informational support (35). Emotional support concerns topics such as esteem, affect, concern; appraisal support is about affirmation and social comparison; informational support deals with directions, advice and information; and examples of instrumental support are money, labour, and time (35).

The present thesis settled for a measure of perceived support, grounded in the specific character of the work and covering different aspects of relevant everyday challenges. However, it was not possible to identify a relevant questionnaire. Among several questionnaires, two were taken into special consideration but considered unsuitable in the present context. They will be presented shortly in the following sections.

The classical measure in a work context was developed by Johnson and Hall in 1988 and applied to a Swedish population (40). It includes questions such as whether it is possible to talk to co-workers during breaks, to leave their job to talk with co-workers, to interact with co-workers, and whether the respondent meets co-workers outside the work place (40). Evidently, this measure does not fulfil the approach settled for in the present work as it includes network, and aspects of control over the job situation rather than concrete social support issues.

Another measure of social support in relation to work is found in the Copenhagen Psychosocial Questionnaire (COPSOQ) (41), and has previously been applied to dentistry in Denmark (42). The items included in COPSOQ are more relevant, but have three major disadvantages in relation to the field of dentistry studied here. It relies on frequency of support received instead of perceived support; it is directed toward a classical hierarchical organization; and it does not address the specific challenges of patient work.

House and Kahn conclude about the complex field of measurement of social support (p. 103 in (35)):

“As we have indicated, the measures used in a given study should be tailored to the needs of the study. This is not to say, however, that investigators should all construct their own measures from scratch.”

Van Vegchel and Söderfeldt have concluded a need for specification of the concepts in work environment models in correspondence with the nature of the special kind of work in HSO (43,44). The lack of a relevant measure for social support, taking into account the special nature of work with people corroborates this. It points to a need for development of relevant questions from inside knowledge of ways of supporting each other as dentists.

Social relations and work environment models in dentistry

Several work environment models have been developed to predict health-related outcomes. Different aspects of social relations at work are included - directly or indirectly – in such models.

One of the most well-known models is Karasek’s Demand-Control Model (DC Model) from 1979 (45,46). The model categorizes work in four groups depending on the extent of demands as e.g. work load and work pace, and on the opportunities for control over the work situation in the form of authority to make decisions, and intellectual discretion. The model contains a strain diagonal, where the combination of high demands and low control may lead to adverse health effects. It also contains a positive aspect, an activity or learning diagonal, where high control and high demands may lead to a challenging and stimulating work situation. In 1988, Johnson and

Hall extended the model with a workplace social support dimension to the Demand-Control-Support Model (DCS Model) (40).

In the context of dentistry the DCS Model has been applied to a sample of Swedish dental practitioners by Rolander et al (47). However, the results did not support the model, which the authors found may be partly due to the instruments used (47). In a previous study by the present author results from an adaptation of the DCS Model to the context of dentistry supported the fundamental logic of the model (48). The conceptualization of social support items from this study is covered in Paper II of this thesis. These studies on dentists (47,48) suggest that an alternative work environment model, the Effort-Reward Imbalance Model (ERI Model), may have elements making it more suitable for application to dentistry.

The ERI Model is theorized by Siegrist and is based on the idea of a balance between efforts (related to the job situation and to personality traits such as over-commitment) and rewards, specified as money, esteem, and career opportunities/job security (43,49). The role of colleagues is only indirectly included through the importance of esteem in work life. For dentists, different sources of esteem are of importance, such as the general esteem of the profession in society (50), from the patients, and from professional relations connected with work (31,51-53).

It may be difficult for outsiders to understand the specific challenges that are part of work as a dentist. Dentists experience being evaluated by their patients on personal behaviour and style, rather than on their technical qualifications (50). Even though patients to some extent are able to evaluate function and aesthetics, the technical part of the work can only fully be assessed or appreciated by colleagues, in this context understood as other dentists. Further, many issues are confidential and cannot be shared with people outside the workplace. Therefore, it is not surprising that dentists prefer to share professional issues with colleagues (54,55).

In the context of dentistry, the Job Resource Model (J-R Model) has been adapted to dentistry and used in a number of studies (56-58). This model also is based on the idea of balance in work life. Resources, such as professional contacts, are seen as needed to avoid the negative impacts of a demanding work environment. Professional contacts are defined as keeping company with

colleagues, participation in network groups, keeping company with staff, conveniences of the practice, and possibilities for professional development as well as for postgraduate education (59). The model has proven to predict ill health as well as positive outcomes such as engagement (56-58,60,61). However, the conceptualization of professional contacts is rather broad, comprising also aspects of the organization and management of dentists' work.

Social relations in dentistry

In research on dentistry work relations have traditionally been dealt with in two different ways, as stressors or as sources for job satisfaction. In the stress tradition Cooper et al. in 1978 were among the first stating staff-related aspects of the work as a source of occupational stress among dentists (62). In a literature review twenty years later, Gorter et al. concluded that team aspects still constitute an important group of stressors for dentists (63). They developed the instrument, DEWSS (Dentists' Experienced Work Stress Scale), including a subscale based on stressing aspects of team work (63). The included aspects dealing with team work were staff turnover and absence, but also communication and relation with staff, limited opportunities of contact with colleagues, as well as conflicting demands of being employer and co-worker at the same time. During the same period other researchers also stated related aspects of work as stressing. For example, Wilson concluded interpersonal problems with colleagues, staff-related problems due to absenteeism, and personal friction as well as unsatisfactory help from auxiliaries could be stressors in work life (64). Even bullying has been reported as a problem in dental practices (65). The perspective of social relations as a stressor has been consistent during the years. Recently, Ayers and colleagues reported staff-related problems, unsatisfactory help from auxiliaries, and feeling isolated as stressors in the work life of dentists (66).

Efforts have been directed towards identifying stressors and their negative impact on health and well-being, while less has been reported about the relation to background factors. In a survey of a representative sample of dentists working in Danish private practices, a gender difference was seen for perceived stress in relation to collaboration at practice (51). While 19 percent of the male dentists

reported their collaboration with co-workers as stressing to a high or very high degree, the same was the case for only 4 percent of the female dentists (51). Moreover, female dentists in particular appear to feel isolated in their work (54,67). However, social relations at work do not rank high compared to other major stressors such as time pressure and patient relations (51,63,64).

In 1995, Freeman et al. suggested different strategies for avoiding stress in dentistry (68). They advocated person-centred and situation-centred strategies against stressful dentist-staff relationships. The perspective was primarily preventive, understanding social relations as a personal risk factor for stress. However, further perspectives have emerged; a) positive social relations at work as an advantage in itself, and b) organizational conditions nurturing the establishment of positive relations.

Professional contacts in work as a dentist constitute a job resource (56,58-60,69,70). Gaining respect from society, staff and colleagues is perceived as motivating and contributes to job satisfaction for dentists (50,52,53,71,72). Among a group of female dentists from public practices in Sweden Hjalms found that 81 percent of the respondents perceived a stimulating fellowship as very important for their work (67). This finding corresponds well with the fact that dentists working in group practices are more satisfied with their jobs (73,74). Dentists from larger practices are also less likely to report stress and burnout (51,75,76), factors well known to be of importance for overall job satisfaction (73,77). Job resources are useful as they may mitigate the negative impacts of demands and help dentists to stay engaged in their work, especially in situations with high demands (56,58,60).

Research on dentistry has pointed to the importance of considering the object of work and of including management issues in addition to job and individual attributes (78). Søndergård Kristensen has emphasized the importance of also including contextual factors as for example culture and labour market in work environment research (1). To study the effects of organizational and cultural matters it is relevant to make international comparisons. This thesis relies therefore partly on a joint comparative study of dentistry in Sweden and Denmark, giving opportunities to contribute knowledge of contextual effects on job satisfaction and social relations at work.

Therefore, a brief overview of the organization of dentistry in the two countries follows.

The organization of dentistry in Sweden and Denmark - a short overview

The overall organization of dentistry in Sweden and Denmark has some similarities but also distinct differences. In both countries, dental health care is provided by public and private practices. Children and adolescents have opportunities for free dental care, adults have co-payment and partly public insurance, and special subsidies are given to especially vulnerable groups such as e.g. mentally disabled patients.

In Denmark councils of the 5 regions have the responsibility for private dental services to be provided and subsidies given (chapter 13 in (79)). In addition, the regional councils are responsible for provision of highly specialized counselling and treatments for children up to the age of 18, coordination of dental services across sectors, and provision of dental services at hospitals (chapter 47,48 in (79)). The authorities of 98 local municipalities are responsible for provision of dental care for citizens up to the age of 18, at public or private practices (chapter 37 in (79)). Moreover, they are responsible for provision of dental care for citizens with extensive handicaps (chapter 37 in (79)). While children have the choice of private or public providers, there is no competition between sectors for adults in general. The general dental practitioner in Denmark has a broad field of activity as only 2 recognized specialities exist (surgery and orthodontics).

In Sweden the 21 county councils are responsible for the provision of dental care to its citizens (§5 in (80)). The Public Dental Service is responsible for provision of dental care including the year the citizens turn 19, specialized dental care for adults, and also other dental care for adults to the extent decided by the county council (§7 in (80)). The county council is responsible for provision of dental care to specially vulnerable groups, and for planning of dental care in accordance with the needs of the population, also in relation to providers other than the Public Dental Service (§8 in (80)). Children and adults have free choice of public or private providers. Dentistry in Sweden has 8 recognized specialities.

Thereby, two main differences between the two countries are a) a more centralized responsibility for planning and delivery of dental health care in Sweden compared to Denmark, and b) competition between sectors is more pronounced in Sweden than in Denmark.

A changing context for provision of dental care

Legislation and regulation in Sweden and Denmark have supported a shift, where the patients have been empowered through more rights. Demands for service declarations, for evidence-based care, and for quality assurance are examples of a desire from society for more transparency in a field traditionally run by health professionals themselves.

Health care providers face increased competition. Legislation opens up for free movement of workforce, services, and patients in Europe. Patients can choose to have dental care outside their country of residence, keeping public subsidies from their home country. Nowadays, it is not unusual to see patients going for dental care from Denmark to Sweden - or from Sweden to Poland. Patients of today know about different possibilities for treatments in their home country and abroad, and they make demands for service, information and treatment (81,82).

During recent years the conditions for providing dental health care have undergone substantial changes. Increasing as well as changing needs, due to a demographic transition of the populations resulting in a higher proportion of elderly people, have been reported (83). Technological improvements in treatment possibilities and in public access to information also imply changing demands for care (84). WHO has argued for a need to reorient health services to comply with the changing situation (85). Also, at policy level in Denmark and Sweden, there has been an awareness of the need for restructuring dental health care (86-89). Increased delegation of work to dental hygienists and nurses, larger organizational units, and more competition have been among the central responses to the challenge.

These changes correspond well with the New Public Management (NPM) ideology, characterized by its emphasis on value for money, efficiency, performance management, transparency, and contestability (31,90,91). NPM doctrines have been implemented as

part of a modernization process of the public sector in the western part of the world (92). NPM includes managerially as well as more economically oriented elements. As examples of managerial elements, management by objectives, decentralization of management, lean production, balanced score cards, and benchmarking can be mentioned. Wages based on performance measures, and internal as well as external contracting are part of the economical elements (93). The thought behind NPM is that the public sector is too large, too expensive and too bureaucratic, but it can be transformed by implementing managerial models from the private sector and by aiming to establish quasi-market conditions. Such changes have an impact on the health care sector as a whole and not merely on the conditions for public providers.

The demands on dentists are becoming more complex. As an example, conflicts between professional ethics, practice management and evidence-based decision-making are outlined in relation to selling orthodontic services in a newly published American study (94). Aspects of the changing context, such as market orientation, changes in the role of patients, and more demands on administrative tasks are to a great extent found as a reason for stress among Danish private practitioners (95). Larger practice units and new ways of division of labour will undoubtedly increase team work in the future.

In a time with fundamental changes in the context of health care, it becomes necessary to identify the core of the dentists' work and their beliefs about what constitutes a Good Work. Such ideals can be included in future planning of the sector, taking into account circumstances to be preserved and potentials for improvements to facilitate a positive work environment and maintenance of a healthy workforce in service professions such as dentistry.

Good Work

Much attention in research has been paid to sources of dissatisfaction and consequences of this, which of course is of great importance. A study on private dental practitioners from a large city in Denmark concluded that 19 percent were dissatisfied with their choice of career, as they probably would not recommend dentistry as a career to young aspirants (50). A similar question was posed to a sample of publicly employed, unpromoted female dentists from

Sweden. Around 60 percent of this group stated that they would not choose the same job again if they were to choose today (67). This dissatisfied majority of dentists found large discrepancies between their ideal and their actual work situation (14). The reported differences in these two studies corroborate the findings of a Swedish comparative study some years previously. Bejerot concluded that dentists in the private sector in Sweden reported a much higher degree of correspondence between ideal and reality compared with publicly employed dentists (78).

On the other hand, between 40-80 percent of the dentists are satisfied with their work life (50,67). Scientific literature has dealt with the influence of personality as well as demographic characteristics (74,96-98), and quality of non-work life (72) for dentists' job satisfaction. In relation to the work situation, income level (52,53,72,99,100), opportunities for continued professional development (71-73,100,101), perceived control (71,77,97,98,101, 102), work pressure (71,77,97,98,101,102), and facilities and materials available (97,101) have proven to be of importance for job satisfaction. Factors concerning relationships with patients (53,72,98,100) and the actual process of delivering care (52,71,72,98), as well as a relationship with colleagues (67,97) and respect received from being a dentist (52,53,72,98) have been shown also to have an impact. Not much attention has been paid to contextual conditions, even though size of practice (73,74) and remuneration systems as well as work sector (71,73,74,97-99,102) are related to job satisfaction among dentists.

The research presented above is primarily based on quantitative methods and yields a broad picture of the complex associations between different factors and satisfaction with work as a dentist. A changing context for dentistry, with increased use of team work, new roles for the dentist and new organizational rationales place the relations at work at the centre. Hakanen and colleagues have concluded that a way forward is to facilitate job resources such as positive relations (60), but we do not have much insight into this field. Moreover, we have a limited understanding of what constitutes the ideal of a Good Work from the perspective of the dentist and the function of social relations.

A qualitative approach enables a deeper understanding of complex issues such as contextual and personal relations with satisfaction and motivation. In addition, there is a lack of relevant instruments for measurement of core concepts of positive aspects of social relations taking the specific nature of HSO work into consideration. In a time with many changes in the way of organizing dental health care it is of special relevance to know which aspects enhance a good and sustainable work life for dentists as they define it themselves.

AIMS

Overarching Aim

The overall aim of this thesis was twofold: to study general dental practitioners' perception of what constitutes a Good Work and to achieve more knowledge about relations between the work environment and social support, community and trust among dentists in Sweden and Denmark.

Specific Aims

- To achieve a deeper understanding of what constitutes and characterizes the concept of Good Work for dentists. (Paper I)
- To assess the extent to which Danish general dental practitioners perceive support from colleagues, and to relate perceived support to demographic and work-related background factors. (Paper II)
- To develop scales measuring aspects of social support, trust and community in relation to work and to evaluate their psychometric properties. (Paper III)
- To analyse relationships between work-related, managerial and practice climate factors and positive outcomes such as support, trust and community in the work situation. (Paper IV)

MATERIAL AND METHODS

Ethical Approvals

The study for Paper I was approved by The Regional Ethical Review Board in Lund, Sweden (DNR 20/2008). The Study for Papers III and IV were also approved by this Board (H15 501/2008). In Denmark, no particular permissions for these studies were required. The study for Paper II was conducted in accordance with the rules of The Danish Data Protection Agency.

Paper I

Participants

Based on a purposive sampling strategy, nine general dental practitioners were included in the study. The informants had different backgrounds as to gender, age, family situation, work country (Denmark/Sweden), work sector, and work experience (size of practice, position, patient group). The stepwise selection process went on until analyses showed that saturation was obtained in the resulting dimensions.

Data Collection

In 2007-2008 semi-structured, in-depth interviews were performed in the mother tongue of the informants as well as the interviewer. Both interviewers had a background in dentistry themselves and aimed to obtain open-minded, relaxed interview situations. The interviews were conducted as a conversation with open questions, following the track of the informant. An interview guide was used to ensure coverage of key areas and included open questions that could be used as openers, when the informant did not go into an overall

area. The interviews were audio-recorded and transcribed verbatim by the interviewers.

Data Analysis

The material identified as pertaining to aspects of Good Work was used for systematic text condensation according to the principles of Giorgi's phenomenological analysis (103), as modified by Malterud (104). All authors contributed to the analysis. The analysis followed Malterud's four steps (104): (A) reading the material to obtain an overall impression, and bracketing preconceptions; (B) identifying units of meaning representing different aspects of Good Work, and coding for these aspects; (C) condensing and abstracting the meaning within each of the coded groups; and (D) summarizing the contents of each code group to generalize descriptions and concepts reflecting perceived, important aspects of Good Work.

Paper II

Participants

A random sample of dentists with a minimum work experience of 6 years and a minimum of 15 work hours per week in a private general practice was drawn from the register of the Danish Dental Association. In 2002, a questionnaire was mailed to 300 dentists, and a net response rate of 74% was obtained after one reminder. The study population was considered representative for those Danish dental practitioners who fulfilled the inclusion criteria.

Instruments

A questionnaire was developed and tested to check face validity, relevance, and reliability in a pilot survey prior to the start of the study. It was revised according to results gained from the pilot testing. The questionnaire in its full length has previously been published as an appendix (51).

The questionnaire comprised 21 questions or statements with corollary questions to cover demographic and work-related factors, perceived stress, self-reported health, health-related behaviours, and perceived social support in relation to work. The demographic items covered respondents' gender, age, and marital status. To describe the work situation, questions were formulated regarding year of

graduation, employment status, size of practice, number of weekly work hours dedicated to different tasks, and number of patients seen during the last week. The section on social network consisted of questions covering different opportunities to meet colleagues outside the practice and the frequency of these meetings during the last year.

Perceived social support in relation to work was assessed by asking respondents to grade the extent to which they felt the following statements characterized them: exchange of experiences with colleagues, discussion of difficult treatments and displeased patients with colleagues, referral of special treatments (e.g. surgery) to colleagues, collaboration with a colleague about helping each other when falling far behind schedule, transference to colleagues of those patients one does not get along with, having a colleague with whom a potential complaint proceeding can be discussed, talks with colleagues about well-being. The response alternatives were: 'not at all', 'to a low degree', 'to a certain degree', 'to a high degree' or 'to a very high degree'.

Statistical methods

Based on theoretical considerations and results from Principal Component Analyses (PCA), three new variables were constructed as additive indexes. The indexes were named: *Emotional support*, *Practical support*, and *Opportunities to meet colleagues outside the clinic*. Internal consistency was assessed by Cronbach's coefficient alpha (105).

Multiple linear regression analyses were carried out using *Emotional support and Practical support* as dependent variables. An element of hierarchical block regression was used. Correlation between independent variables, variance inflation factors, and Cook's distances were calculated and residual plots were inspected (106).

Papers III and IV

Participants

Stratified randomly selected samples of general dental practitioners working in Denmark or Sweden were provided by the Danish and Swedish Dental association registers. 1835 dentists from private or public practices, corresponding to around 21 percent of the eligible

population in Denmark, and 12 percent in Sweden, were included in the sample. A net response of 68% was obtained after 2 reminders to non-respondents. Data analyses were performed on data from 1226 dentists: 627 from Sweden and 598 from Denmark. The net response rate was considerably lower for Danish private practitioners (60%) compared to the other groups (68%-81%). Therefore, a non-response study including 30 randomly selected non-respondents from Danish private practices was made (107). There was an over-representation among this group of non-respondents of males, dentists having a managerial responsibility, more working hours and better self-rated health, while they did not differ in job satisfaction compared to respondents from Danish private practices. In the Danish sample as a whole, an over-representation of female respondents was seen, while this was not the case for the Swedish sample (107).

Instruments

A questionnaire comprising 39 questions or statements with corollary questions was designed to assess the professional relational work environment in dentistry and its effect on work fulfilment and job satisfaction. It included newly formulated questions combined with questions from other questionnaires.

Development process

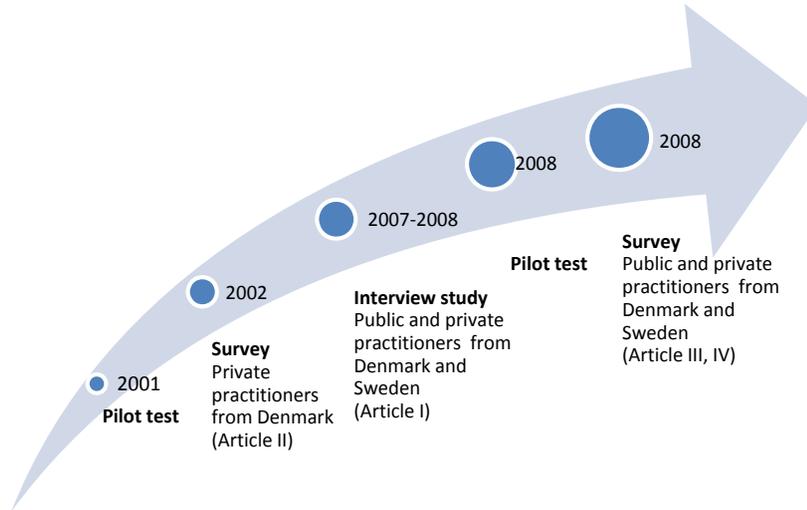
Questions were formulated in Swedish and Danish as a parallel process based on comprehensive discussions of cultural and conceptual understanding of the content. For the purpose of presentation of the project outside the Scandinavian context, the questionnaire was also translated into English. This translation of questions from respectively Danish and Swedish into English was done in cooperation between the research group and a native English-speaking colleague.

Newly developed questions were tested by an internet based pilot study on 140 dentists from public as well as private practices in Denmark and Sweden. The final selection of items was based on distributional analyses and factor analyses of the responses to the pilot study, amended with comments from respondents.

The resulting reformulated questionnaire was then presented for 10 dentists from each country and discussed as to understanding of

the content of items and the use of terms before the final adjustments. Professional help was used for design and for correction of linguistic structure and usage. The questions included in this thesis originate from existing questionnaires (Paper II and the Copenhagen Psychosocial Questionnaire version II (23)) mixed with new items. Figure 1 provides an overview of the development process.

Figure 1. Development process of questionnaires.



Items

Questions covering a) personal background factors, b) structural work factors, c) managerial factors, d) practice climate factors, e) work-related social support, and f) atmosphere at practice, were included.

a) Personal background factors were gender, number of years since graduation from dental school, and marital status.

b) Structural work factors were work country (Sweden or Denmark), work sector (public or private), collegial network outside the practice, number of weekly work hours with direct patient contact, size of practice, and frequency of having common breaks at work.

c) Managerial factors included whether the dentist had decision authority, managerial responsibility, and if the daily leader had

formalized leadership training. Decision authority was based on eight items about influence on the following circumstances: the brand of filling material used at the practice, choice of dental technician, the assistant nurse, employment of new personnel, scheduling appointments, scheduling acute patients, choice of own courses, and goal formulations of the practice. The variable was constructed as dichotomous based on having one or more circumstances with non-influence ('no') versus having some or full influence over all circumstances ('yes').

d) Practice climate was measured by asking respondents to grade on a five category scale how they thought the following factors characterized the goals and values of the practice: initiative, technical quality, productivity, efficiency, engagement, income-oriented, flexibility, service oriented, creativity, professional development. Based on theoretical considerations and supported by PCA, the variables were combined into two additive indexes: professional climate and productivity climate.

e) Social support in relation to the work with patients was assessed by asking respondents to grade statements on a 5-step scale. The statements covered discussion of difficult treatments and problems concerning dissatisfied patients with colleagues, talking about personal well-being with colleagues, having a colleague with whom a potential complaint proceeding could be discussed, and finally having the opportunity for practical assistance from a colleague if needed.

f) The atmosphere at the practice was assessed by asking the respondents to state on a five-category scale the frequency of: a good atmosphere in relation to colleagues, being part of a community at work, and having fun at the practice. On a five-category scale they responded with the extent to which: good collaborative ability characterizes the practice, the employees in general trust each other, the management trusts the employees to do their work well, the employees trust the information that comes from the management, the employees feel able to express their views and feelings, and the existence of trusted relations with the staff at the practice.

Statistical methods Paper III

Data quality of the items concerning social support and atmosphere at the practice was examined by looking at the percentage of

missing data and the distributions on item level. PCA was applied to the fourteen items. Scaling assumptions of the resulting factors were examined before scales were established as additive indexes measuring: *Collegial Support* and *Community with Trust*. Internal consistency of scales was evaluated by Cronbach's alpha (105). Differential Item Functioning (DIF) with respect to gender, nationality and employment sector was analysed using ordinal logistic regression methods (108). In accordance with other studies a sufficient magnitude for the association required that the background variable explained at least an additional 2 % of the item variance (using the difference in Nagelkerke's Pseudo R²) (109).

Convergent validity was assessed in relation to self-rated health and a range of work satisfaction outcomes using Kendall's Tau-b.

Statistical methods Paper IV

Differences in characteristics of the study population in relation to organizational affiliation were analysed using Pearson's Chi-Square test, 1-way ANOVA and Kruskal Wallis' test with a significance level at 0.05.

Multiple hierarchical linear regression analyses were performed. Two models were built with the scales of *Community with Trust* and of *Collegial Support* as dependent variables. The independent variables were included in four steps. In each step, a block of variables (personal background factors, work factors, managerial factors and practice climate factors) was included into the model.

Inter-correlations between independent variables and variance inflation factors (VIF) were checked, Durbin Watson statistics were calculated, and residual plots as well as Cook's distances were inspected (106). The models were initially run for the four subgroups of dentists based on organizational affiliation, but as the overall pattern was similar for the analyses, work sector and country were included as independent variables in the final models.

RESULTS

Paper I

The aim was to achieve a deeper understanding of what constitutes and characterizes Good Work for dentists.

The overall impression of data was that the perception of Good Work emerged directly from the clinical encounter: from the relation with the patient and from the opportunity to perform high quality odontological handicraft. Next, the dentists described some basic conditions such as their relations to workmates, peers and leaders, as well as how organizational values and conditions influenced the opportunities to achieve the perceived rewarding aspects from the clinical encounter.

Subsequently, data were coded for different aspects of two main categories: intrinsic and extrinsic dimensions of Good Work. Intrinsic dimensions resulted in descriptions of emotions and rationales, presenting the moral foundation of the clinical encounter (making a difference by doing good, a positive interaction over time, and the creative zest). Extrinsic dimensions included psychosocial work-environmental aspects (freedom to keep up odontological professionalism, and a positive work climate with trustful relationships). Good Work and private life were found to be linked through the moral foundation.

An overview of the results is presented in Figure 1 in Paper 1. The understanding of Good Work appeared essentially to be founded on human relations, emerging from work with the patients. In the clinical encounter the patient and the dentist meet each other in a professional transaction in which the dentist delivers a professional service and the patient contributes with appreciation, cooperation,

acknowledgement, and payment. When dentists refer to their personal experiences of Good Work, they speak about internal self-satisfaction as well as external rewarding aspects of the job.

Paper II

The aim of Paper II was to assess the extent to which Danish general dental practitioners perceive support from colleagues, and to relate perceived support to demographic and work-related background factors.

Most respondents (75%) reported to a high, or a very high degree having a colleague with whom they would choose to discuss a potential complaint proceeding. By contrast, more than half of the dentists (58%) stated that they did not at all or only to a very low degree, collaborate with colleagues when falling behind schedule. It was more common to discuss difficult treatments than problems concerning displeased patients with colleagues. No differences in mean for the index *Contact with colleagues outside the clinic* according to gender, employment status, marital status or size of clinic were found.

PCA of the support items resulted in a two-factor solution with communalities ranging 0.59-0.81 and major factor loadings ranging 0.70-0.90. The first factor was interpreted as *Emotional Support* and explained 51% of the variance, while the second factor *Practical Support* explained 16%. Additive indexes were established and utilized as dependent variables in four regression models. Multiple linear regression analyses were carried out using *Emotional Support* as the dependent variable in two models, using an element of hierarchical block regression by evaluating the effect of inclusion of *Practical Support*. In the following two hierarchical models, *Practical Support* was used as the dependent variable.

The main results of regression analyses revealed that dentists working in group practices perceived more *Emotional support* and *Practical support* than did dentists working in solo practices. Also *Contact with colleagues outside the clinic* was positively associated with both kinds of support. Associations with background factors such as gender and marital status differed between the models. When introducing *Practical support* to the model for *Emotional support* and vice versa, additional explanatory power was seen, and

the associations with size of practice and *Contact with colleagues outside the practice* became weaker.

Paper III

The aim was to develop scales measuring aspects of social support, trust and community in relation to work and to evaluate their psychometric properties.

PCA applied to all 14 items concerning support, community and trust resulted in two factors. The first factor explained 40% of the variance and was interpreted as *Community with Trust*. The second factor, explaining 17 percent of the variance, was interpreted as *Collegial Support*.

A scale for *Community with Trust* was established. Floor/ceiling effect was 0.0/5.1 percent. Cronbach's alpha of the scale (consisting of 9 items) was 0.89 and corrected item-total correlations ranged 0.57-0.69. No items showed DIF fulfilling our 2.0% criteria in relation to gender or nationality, while sector explained 2.2% additional item variance for one item.

A scale on *Collegial Support* was also created and had a floor/ceiling effect on 0.1/8.3 percent. Cronbach's alpha of the scale (consisting of 5 items) was 0.84, and corrected item-total correlations ranged 0.56-0.68. One item showed DIF with respect to nationality, which explained an additional 2.9% of the item variance. Another item showed DIF in relation to work sector, explaining an additional 2.6% of the item variance.

Convergent validity was assessed in relation to different outcomes concerning aspects of satisfaction with work. *Community with Trust* was in general more strongly correlated with the outcome variables than *Collegial Support* was. Most remarkable was the strong association between *Community with Trust* and the variable about perceiving to have a good work life. The scales for *Community with Trust* and *Collegial Support* were weakly positively correlated with each other.

Stability and internal consistency of the scales were considered as satisfactory. Content validity was considered as good, based on the development approach. All in all, the reliability and validity of the new scales may be considered as satisfactory.

Paper IV

The aim of Paper IV was to analyse relationships between work-related, managerial and practice climate factors and positive outcomes such as support, trust and community in the work situation.

In table 1 an overview of the results is presented in relation to the stated hypotheses.

Table 1. Overview of hypotheses and results presented in Paper IV.

Predictor	Hypotheses		Results	
	<i>Community with Trust</i>	<i>Collegial Support</i>	<i>Community with Trust</i>	<i>Collegial Support</i>
1. Number of dentists at practice	+	+	0	+
2. Frequency of common breaks	+	+	+	+
3. Formalized managerial education of leader	+	+	0	+
4. Decision authority (dentist)	+	+	+	0
5. Professional climate	+	+	+	+
6. Productivity climate	-	+	0	0

Community with Trust

The final model (Table 2) was highly significant and explained 49% of the variance. Decision authority and common breaks at work as well as a practice climate reflecting professional values were positively associated with the scale for *Community with Trust*.

Collegial Support

The final model (Table 2) for *Collegial Support* was highly significant and explained 24 percent of the total variance. Being female, married/cohabitant, reporting a large collegial network, having frequent common breaks, being more dentists at practice, formalized managerial education of the daily leader, and a professional practice climate were positively associated with higher levels of *Collegial Support*. The more years as a dentist and having managerial responsibility were negatively associated with *Collegial Support*.

Table 2. Final regression models with *Community with Trust* and with *Collegial Support* as dependent variables.

		<i>Community with Trust</i> (range 0-100)		<i>Collegial Support</i> (range 0-100)	
		b	p	b	p
Demographic background factors	Gender (female)	0.20	0.77	8.17	0.00
	Number of years as dentist	0.04	0.23	-0.22	0.00
	Marital status (married/cohabitant)	-0.24	0.79	3.77	0.03
Work factors	Work country (DK)	0.81	0.22	1.68	0.17
	Work sector (public)	-0.61	0.48	1.28	0.43
	Collegial network (scale 0-100)	0.02	0.14	0.27	0.00
	Number of work hours with patient contact	0.03	0.51	-0.03	0.66
	Number of dentists	-0.02	0.88	1.57	0.00
	Common breaks (range 1-5)	2.27	0.00	1.48	0.02
Managerial factors	Managerially responsible	-1.00	0.24	-4.74	0.00
	Formalized managerial education of leader	0.95	0.15	2.68	0.03
	Decision authority (dentist)	2.38	0.00	1.02	0.51
Practice climate factors	Professional (range 0-100)	0.55	0.00	0.30	0.00
	Productivity (range 0-100)	-0.04	0.06	-0.07	0.06
	P model		0.00		0.00
	Adj. R-square		0.49		0.24

DISCUSSION

There are two main topics in this thesis: characterization of Good Work and social work relations. The generalizability of the overall results will be discussed according to the aims of the thesis. The literature overview in the introduction has demonstrated scarce previous research in many of the variables under study here. Consequently, the main approach in this discussion is to look for consistency in the findings across the studies included in this thesis. The scales will be discussed under strengths and limitations of the materials and methods used. After a conclusion of the contributions of this thesis, some further perspectives will be presented.

Good Work

The core of Good Work

A main finding was that the core of Good Work emanates from the relation with the patient and from the opportunity to carry out high quality odontological handicraft. The finding of an intrinsic rewarding core in the work is in agreement with results from a Danish study dealing with reasons for choosing to study dentistry (110). Consistently over the years from 1972-1994, almost half of the students stated the dentist-patient relationship as a reason for choosing dentistry. Among the most readily listed motives were attitudes, such as doing something for and with people, and expectations of a profession providing a variety of challenges, being manual, and giving an opportunity for practicing theory (110). Also previous research on dentists' job satisfaction, from settings as different as Kentucky and The Netherlands, corroborate the intrinsically rewarding nature of dentistry (52,59). It underlines a

moral dimension of the work, in line with Hjalmer's research on dentistry in Sweden (14).

Contextual dimensions of Good Work

Social relations at the workplace, as well as organizational values and conditions, were perceived here as influencing the opportunities to achieve the rewarding aspects from the clinical encounter. Freedom to keep up odontological professionalism has also been addressed in literature concerning job satisfaction among dentists. This literature underlines the importance of control over the work situation (71,77,97,98,101,102), and opportunities for continued professional development (71-73,100,101).

The weight that informants placed on a positive working climate with mutual trust differs partly from other research on dentistry. As stated in the introduction, team aspects and staff have widely been viewed as contributors to stress, even though such relations can also be viewed as a job resource (59).

Across the intrinsic and extrinsic dimensions, a time dimension was found. Relations over time provide opportunities for getting to know each other, to build confidence and trust, and through this, to perform and to have a Good Work. Thereby, the time dimension underlines the importance of the relational character of work as a human service provider for overall work sustainability.

Dentists in the present study did not emphasize income as a central contributor to Good Work, although it previously has been shown to be important for job satisfaction, for job engagement, and for choosing dentistry as a career (52,53,56,72,111). This could partly be due to professional norms emphasizing altruistic motives. Besides, it could also point to a distinction between Good Work and job satisfaction. Good Work concerns work fulfilment, meaning and motivation, as well as a pleasure in the work *per se*, while income represents part of the work conditions framing the job. This interpretation is in line with the theoretical distinction between motivators and hygiene factors in the two-factor-model (112).

Social Support

The results showed that the respondents to a greater extent reported discussion of difficult treatments than problems concerning

displeased patients (Paper II). In relation to the core of the work as found in Paper 1, work related support was directed more towards the handicraft than towards the relation with patients (Paper II). The dentists usually thought that they had someone to support them in case of a complaint proceeding, even though it was not as customary to talk with colleagues about personal well-being. The overall pattern of findings in Paper II was found to be similar among the broader composed total sample of dentists in Paper III.

It is well known that working with patients implies high emotional demands resulting in an increased risk of burnout (113). Work-related social support is a way to cope with such demands. The tendency to perceive less support in relation to issues closer to personal feelings and pride than to more neutral issues such as handicraft may contribute to explaining previous findings of dentists feeling lonely in their job, even when surrounded by other people (114).

Potential antecedents for work-related social support

Factors such as gender, marital status and number of years since graduation were associated with social support (Papers II, IV). The results correspond with observations that women in general perceive more support at the workplace than their male colleagues (39,65). This may partly be due to a different need for support following more demands. Women are still likely to take the main responsibility for home and family and are also known to be more prone to family-work conflicts (115-117). In addition, the findings in Paper I and other research on dentists (31) also agree with the need for support from colleagues being greatest among young dentists. To sum up, the results corroborate that perceived *Collegial Support* reflects the actual need as well as the perception of availability.

Dentists working alone may be prone to social isolation, because they need to be more active in finding support, especially in relation to practical issues. Paper II showed that dentists from both large and small practices met colleagues to an equal extent outside the workplace. Participation in such network activities was associated with perceived social support (Paper IV). However, in Paper I the informants emphasized the importance of having colleagues around in daily work. This result was corroborated by the main result from

Paper II showing that dentists working in group practices reported more support than those working solo. It was further confirmed as size of practice and also frequency of common breaks were associated with social support in Paper IV. Moreover, other research on dentists has also concluded that the number of dentists in a practice appear to have a protective effect against some aspects of burnout (75). Being together with colleagues may thus be regarded as a prerequisite for the possibility of supporting each other. All in all, the findings indicate the importance of the organizational setting for developing a professionally and personally supportive psychosocial working environment in dentistry.

Dentists working in a practice with a professionally oriented climate also reported higher levels of *Collegial Support*. From the perspective of dentistry as a classical profession (26,27,31,118), this result is not surprising. Professionals, such as dentists, establish, maintain, and develop their norms also through their social work relations (32,119).

In Paper II social support did not depend on whether the respondent was owner or employee, while dentists with a managerial responsibility perceived less social support than their unpromoted colleagues in Paper IV. This inconsistency in findings may be due to differences in the samples as to kind and size of practice. However, it may also indicate a paradigm shift concerning management, due to more emphasis on this part of the job. In the Danish workforce as a whole, better leadership is reported over the period from 1997-2005 (120). Leadership for professionals has typically been legitimized through being *primus inter pares* (the first among equals) (121). However, the modern leader in dentistry has, besides the traditional professional leadership, in addition a more complex role, calling for additional competencies, to which managerial education may contribute (121,122).

Community with Trust

Potential antecedents for Community with Trust

Dentists who had decision authority and were working in practices with frequent common breaks and a professionally oriented climate also stated to a greater extent that they took part in a *Community with Trust* (Paper IV).

This result corroborates the findings from Paper I concerning the importance of freedom to keep up odontological professionalism and a positive atmosphere with mutual trust. Also results from other qualitatively based studies of dentists point to the importance of factors such as sense of community and trust in relationships when aiming to capture positive factors in the working environment (31,118). Cohesiveness and “we-feelings”, implicating collegial relations with management as well as friendly relations with peers and auxiliaries, were stated as important for well-being (31). Common work-breaks and regular meetings may constitute a frame for exchange of viewpoints, transference of knowledge, and time for common reflection (114,122). Another way to consolidate and develop positive relations is to see workmates in leisure time (31). Such opportunities may help in coping with difficulties and ethical considerations at work, as well as contributing to common learning processes and development of a work-related community. Thus, common breaks can be understood as a structural condition facilitating *Collegial Support* as well as *Community with Trust*.

Having influence over issues at work may contribute, for example, to selecting workmates with whom one gets along, and to meeting the expectations of patients in a better way, and thereby reducing stress and conflicts (Paper I). Creativity, professional development, and influence are regarded as essential for delivering high quality health care and are therefore also fundamental for the perception of having a Good Work (Paper I, (67)). Thereby, the results indicate that it is more an issue if the climate supports the ideals of the profession than it is a question of managerial factors, - in other words, managerial factors can only be effective through professional ethos.

Collegial Support and Community with Trust in relation to job satisfaction and health

As hypothesized, the results showed positive associations with job satisfaction related outcomes and self-rated health for *Collegial Support* as well as *Community with Trust* (Paper III). These findings are congruent with the literature concerning job satisfaction as stated in the introduction. Moreover, it concords with the findings from Paper I and previous research on dentists in Sweden (67,78) and Denmark (48). Theories suggest social support to be a buffer

between stress and health and to have a main effect on health (123,124). However, the strength of the bivariate associations was weaker than expected, and around half of the corresponding associations for *Community with Trust*. Nor did social support meet expectations in relation to health in another Swedish study of dentists (125). These findings point to a need for more research to clarify the relative importance for outcomes such as health, disease and job satisfaction and to explore the causal paths between them.

Strengths and limitations – a methodological discussion

Triangulation

Triangulation, the use of more than one approach to the investigation of a research question, is a way to enhance confidence in the findings (126). In this thesis triangulation was applied in a number of ways thus accomplishing results from different methodological approaches: qualitative and quantitative methods.

Triangulation of data was used in relation to participants from different organizational settings and work country, and for social support, also in relation to time. Investigator triangulation was done, as the articles are teamwork, with participating researchers with different educational, cultural and theoretical backgrounds. Theoretical schemes from different fields of knowledge have been applied, e.g. organizational theory, work environment theory, and public health theory. Finally, the methods were triangulated through the use of qualitative and quantitative methods.

Design

Studying only one professional group, as in the present thesis, provides an opportunity to achieve deeper knowledge and to make it more reliable that the findings are related to work conditions rather than to differences due to different kinds of work. However, a next step could be to further test the instruments and hypotheses stated for yet another kind of HSO for testing generalizability in a wider context.

A limitation is that all the studies are based on a cross-sectional design which excludes causal conclusions. It is not possible to determine the chronological sequence, but the hierarchical analyses render the probable order. Another limitation of the thesis is the use

of self-reported data which may have introduced a risk of common methods bias (127), as discussed in more detail in Paper IV.

Measurement

The scales were developed especially for the field under study. Thereby it was possible to target the content and the wording to make the questions more relevant for the respondents (128). The development and translation procedure contributed to assure that the content of the scales was relevant and valid in both countries. Classical psychometric analyses were combined with modern test theory (DIF). DIF analyses are a way to evaluate consistency in the use of items across subpopulations (129,130). In the present study only three items showed DIF when we used the conservative criterion of 2% (109). All in all, DIF in relation to the scales was considered to be of a magnitude that did not compromise the use of the scales for comparisons between the studied dentists according to gender, nationality or sector. The DIF validation thus constitutes a strength as the scales were used as outcome variables in Paper IV, and it was of relevance to know that the comparisons were based on equivalent scales across sector, country and gender.

Response and non-response

The response rate in the study from 2002 (Paper II) was high and the age and gender distribution among respondents and population did not differ. Stress and health troubles could have been possible sources of selection bias. However, analyses did not show differences between those respondents who answered before and those who answered after a reminder. The sample was considered representative for Danish dental practitioners who fulfilled the qualification criteria of the population description. In comparison, the response rate in the 2008 study was satisfactory in general, but it was considerably lower for Danish private practitioners, a group roughly similar to the one from the 2002 study. One may wonder what reasons can contribute to this difference.

Possible explanations might be the questionnaire or survey in itself, external circumstances or simply chance. The questionnaire used in 2008 included more questions, was broader and did not include particular questions concerning attitudes to management

and business. Many questions dealt with issues typically assumed to appeal to women. This explanation corresponds with the overrepresentation of female dentists in the sample of Danish private practitioners. The lower response rate could also reflect work intensification, as interviews with non-respondents revealed that many simply felt a lack of sufficient time to respond to questionnaires in general (107). For the Danish Work Environment Cohort Study, an analogous tendency of a decreasing response rate has been reported. The response rate of that study was 90 % in 1990, 80% in 1995, 76% in 2000 and only 63% in 2005 (131,132). The problem of increasing difficulties in obtaining a high response rate, and the fact that a high non-response rate enlarges the risk of bias are also well known in a broader context (133,134). However, analyses showed no significant differences in central variables such as job satisfaction and self-rated health, even though non-respondents from Danish private practices were more likely to be males with a managerial responsibility than respondents (107). The DIF analyses confirmed that the items related similarly to the two scales independently of gender, nationality and sector. The overall pattern for the regression models was similar across organizational affiliation, and as gender and position were also included in the models the response bias may not be regarded to bias the overall conclusions. Thereby, the findings are believed to be representative for general dental practitioners in Sweden and Denmark.

Ethical considerations

When participating in an interview or answering a questionnaire, many informants will probably reflect on their own work situation and attitudes, and maybe even for a time afterwards. This may influence them personally (135). As an example, one of the questions in the interviews promoted a reflection in the respondent over issues assumed to increase work fulfilment. It is quite possible that some respondents became more conscious about their work life in this way and placed new demands on the work place, their colleagues or themselves.

Some of the informants in Paper I expressed a great concern for the risk of being recognized from the presentation of results. This was somewhat surprising, as positive factors in work life were assumed

to be less sensitive than, for example, alcohol habits, health issues, and socially undesirable attitudes (128). Thereby, it is also relevant to consider ethical issues in research concerning positive aspects of work life, as in the present thesis.

Reflections about my own role

Often, the necessity of a reflection about one's own role as a researcher is emphasized in relation to qualitative methods (e.g. (104,135)). I find it at least as relevant in relation to the quantitative methodology. A positivistic perspective on science ascribes an objective truth somewhere out there, which can be measured and weighted. When dealing with the kind of concepts as in this thesis it may be apparent to everyone that several choices were made during the process, ranging from how questions about social support or practice climate should be conceptualized to which concepts should be included in regression models, and how the findings could be translated into a theoretical framework.

My personal work experience from the field and educational background in dentistry, public health and management may have influenced the choices of theoretical perspectives. Having insight knowledge in the field under study can be viewed as an advantage. On the other hand, it may also implicate a lack of distance. Therefore, it has been of great value to be member of a research group, providing rich opportunities for discussions.

Conclusions

- Good Work is a multifaceted concept, where the relations with patients and the handicraft constitute the core of work. Social relations at the workplace, as well as organizational values and conditions, were perceived as influencing the opportunities to achieve the rewarding aspects from the clinical encounter. The relational character of human service work entails a time dimension pointing to continuity as important for sustainability.
- Scales concerning work relations in a HSO perspective were developed and evaluated for dentists in Sweden and Denmark from private and public practices.
- Dentists perceived in general more social support in relation to difficulties in the handicraft than in the relations with patients and personal well-being.
- Managerial education of the daily leader and organizational conditions supporting availability of colleagues in daily work seem to facilitate a professional and personal supportive psychosocial working environment.
- Influence at work and common breaks seem to facilitate *Community with Trust*.
- A professionally oriented practice climate was important for both *Collegial Support* and *Community with Trust*.
- Especially *Community with Trust*, but also *Collegial Support*, were related to job satisfaction outcomes and self-rated health.
- The professional and relational character of the work must be taken into consideration when organizing and managing dentistry. An overall conclusion may be that managerial factors can be effective only through the professional ethos.

PERSPECTIVES

Prevention and health promotion

A healthier work can emerge through both preventive and health promoting strategies. In the following sections the main results of this thesis will be regarded from these two approaches.

The preventive tradition is founded in pathogenesis as the aim is to prevent illness and consequences of illness, or to cure illness. The approach is typically based on identification and elimination of risk factors for the individual, or for a population such as a work group (136,137). Demands of work constitute a risk factor which to some extent can be influenced through organization and management of work (78). However, some demands are unavoidable as a natural part of the work, and must be coped with to avoid stress and illness. In HSO work the demands arise not only from the workplace and from oneself, but also from the interaction with patients and their families. Several coping strategies are possible, and some are healthier than others, for example social support.

A general strategy to make a work situation manageable can also be to distance oneself from work, when the resources do not match the demands (137). In HSO work this is especially problematic as it implies a moral dilemma, when the dentist is not able to live up to quality standards in handicraft or in the relation with another human being. In other words, using such a coping strategy will result in more emotional demands, and perhaps even a vicious circle. Therefore, the health promoting concept of empowerment and the development of relevant competences to meet the demands may to an even greater extent than for other kinds of work be essential for human service workers. A complementary perspective is therefore to

look closer at salutogenesis, the way to promote health in a broad sense (137). The Ottawa Charter (138) defines health promotion as:

“Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.”

Providing high quality handicraft and good relations with patients gives an intrinsically positive feeling. Thereby, the core of Good Work contributes to motivation and meaningfulness in work. The contextual conditions can add to greater comprehensibility and manageability through, feedback from colleagues, for example. *Community with Trust* can be interpreted as an indicator of Social Capital, which is recognized as a health promoting concept (12). Support from colleagues and trustful relations at work may also contribute to comprehensibility and manageability, and thereby to a work-related, health promoting *Sense of Coherence* (p. 113-142 in (137)). *Collegial Support* and *Community with Trust* can even be regarded as indicators of social well-being and thereby a part of the WHO definition of health.

To sum up, promoting work conditions which facilitate *Collegial Support* and *Community with Trust* can also be expected to enhance overall sustainability for work as a dentist.

The reverse side of the medal

Another important reflection is that when there is too much of a good thing, it may also result in negative consequences. From literature, a number of such considerations have been emphasized of which a few of the main ones will be mentioned.

A classical example is the balance between solidarity and cohesiveness within a profession and the need for transparency,

fairness and clarity when dealing with complaint proceedings. Moreover, a group can be so self-sufficient that others may be excluded. Therefore, Putnam argues that social capital is a balance between bonding and bridging social capital (139). In a context with emphasis on competition it is also worthwhile drawing attention to the risk of social isolation for solo practitioners if dentists from group practices primarily manifest *Collegial Support* internally.

From a managerial point of view a balance exists between having positive relations at work and getting things done as described in the managerial grid (140). Finally, a managerial balance has also been argued between autonomy and coordination (121).

Implications

This thesis provides insight into the logic of dentists as human service providers. Previous research on job satisfaction in relation to different systems can thereby be understood in a more holistic perspective. This offers improved opportunities for decision-makers to plan, implement, and predict possible impacts of changes in the overall organization of dentistry. In addition, inspiration for further development of existing models may be found for researchers in work environment.

Implications for work environment research

The findings in this thesis corroborate Söderfeldt's and van Vegchel's conclusions of a need for further development of work environment models such as the DCS and ERI models (43,44).

The position of moral values in relation to work with patients confirms the theories concerning HSO by Hasenfeld (13,17,141). The moral dimension in work is an essential difference with regard to psychosocial work environment between industrial contexts and HSO settings (44). Thereby, the relational character of patient work influences both sides of work environment balance models.

On the demand side of generic models, such as ERI and DCS, it is important to consider inclusion of demands arising from the core of work with people besides the traditional demands from the organization and oneself.

The reward side of the ERI model in its original form does not reflect intrinsic rewards which were found to be essential for dentists

(Paper I), as is also the case for other HSO workers as for example nurses (142). A suggestion is, therefore, to develop the model by including intrinsic rewards when applied to HSO work.

The concept of control in the DCS model could take its starting point in the core of work for HSO, in other words in conditions facilitating achievement of intrinsic rewards. As stated in the introduction, the original conceptualization of social support by Johnson and Hall is rather broad. The scales developed in this thesis provide an opportunity to test more specifically which parts of the concepts are of importance in HSO work. Social support as formulated here can be regarded as a way to cope with problems at work, a resource which may buffer the effect of high demands. Turning to the active learning diagonal rather than the strain diagonal of the DCS model, indicators of social capital may prove to be more important.

A proposal for a future research project in HSO work environment is to test Hakanen's idea of gain spirals (60) further in relation to the idea behind the NOVO triangle (143): outcomes for the individual and for the work group, the organization and the patient. Theoretical considerations based on the conclusions of the present thesis could be to test gain spirals concerning work factors and outcomes such as *Community with Trust* and overall job satisfaction, social capital at group level, and e.g. turnover rate, sickness absence, efficiency at organizational level and patient satisfaction related outcomes.

Implications for policy

It is not possible from studies like this to declare the exact conditions that will provide the best work situation for the individual dentist. Even though it was possible to find a common understanding of what constitutes the core of Good Work, it will always be an individual weighting which aspects are more important and which conditions facilitate them. It depends on personal attitudes, on the actual life situation and the possibilities given. However, knowing about main values and conceptions about work life as a dental practitioner, and factors associated with positive elements such as work relations, might provide useful insight for decision makers at policy level. The information will enable them to better predict consequences of

their decisions for dental practitioners as a whole, for organizational efficiency, and for population health.

From the results of Paper I it is obvious that the core of dentists' perception of Good Work has its starting point in doing the best for the individual patient. This is naturally positive for patients already enrolled in the system and able to respond positively to the treatment. On the other hand, there are the demands of the population as a whole, and especially disadvantaged groups, who for different reasons may have difficulties in access and adherence to dentistry. The Ottawa Charter advocates for a need to re-orientate health services towards the needs of the population (138).

Even though much emphasis has been put on New Public Management reforms implying changes in health care culture (91), the results show that professional culture is still predominant. This implicates a special awareness of the political responsibility for adaption of the overall organization of health care to the needs of the population. Inequality in oral health is still an issue in the Scandinavian context (144). The insight coming from qualitative studies such as Paper I may be of importance for planning and evaluating different ways of organizing dentistry, such as task division (145). Organization of dentistry, including incentive systems and task division, should be addressed especially to avoid built-in contributors to inequality in health. It is important to take into consideration that incentives are needed for recruitment and the maintaining of dentists in the workforce, especially for dentists working with vulnerable groups. Work conditions facilitating opportunities for achievement of personal satisfaction in work also with other groups than that of the "ideal patient" are needed to avoid further inequality in oral health. Therefore it is relevant to emphasize the importance of alternative organizational forms than those supporting productivity through economic incentives.

From an American marketing and business point of view, there are two basic dental forms of organization, which may be most successful. At one end of the spectrum is *the service theatre* and at the other end is *the service factory*. In *the service theatre* the service is customized to a very great extent and fits rhetoric from the artistic world, while *the service factory* is characterized by mass production, low costs, standardization and inflexibility (146). All

though standardization of for example administrative tasks may be useful, the present study clearly points to advantages of the theatre analogy when working with patient relations.

The core of the work as a general dental practitioner is the same, no matter whether the work takes place in the public or the private sector, in Denmark or in Sweden (Paper I). Nevertheless, the level of *Collegial Support* and *Community with Trust*, and overall job satisfaction, varied among the different organizational forms seen in the two countries (Papers III, IV,(107)). As a former manager in a public dental health care organization I have often reflected during my studies over how I should organize and manage the work in light of the findings. Even though it may have more character of common logic than rocket science, I cannot resist sharing some of these reflections in the following section.

Practical implications

My basic understanding of the overall goal for management in a HSO is sustainability for the three mutually dependent dimensions: 1) quality in care and positive patient relations 2) personally and professionally developing work environment, 3) and finally a long-term efficient organization.

From the findings of this thesis, it makes sense to start with the logic of a HSO professional: meeting the needs and demands of the patients to do the best for them. In a thesis specifically taking up patient perspectives Moore has a conclusion which corresponds well with the core of Good Work for dentists. He states that two main issues are essential to the patients; the dentists' technical competence and emotional issues, of which trustworthiness and sensitivity are the most important (p. 87 in (16)).

In the following sections, I will reflect on the overall findings from the present thesis in relation to patient and organizational aspects.

Continuity of care

Continuity of care can be seen as a prerequisite to build trustful and empathic relations between a health care team and their patients (147,148). From the logic of the dentist it will also be a means to achieve rewarding and personal satisfaction in work and professional development (Paper I). In terms of organizational

efficiency continuity in care may minimize the time needed to obtain overview over the patient record (Paper I). In addition, continuity may probably add to patient loyalty and adherence to the practice (149).

Professional freedom and participative decision-making

The dental team is in the front row meeting the demands and the needs of their patients. I consider professional freedom to be an empowering resource for clinical work. Influence on for example which materials should be available, which technician is to be used, how much time to be scheduled, and which courses to attend, gives liberty of action to a qualified and flexible response to demands and needs of the patients.

Real, not formal, participative decision-making of organizational goals will help to achieve correspondence between patient demands, organizational demands and personal expectations. Especially issues such as which services to be provided and to what extent the services should be customized are essential (146). To sustain the organization, it is also important that incentive structures support the overall organizational requirements of efficiency rather than pure productivity measures.

From an organizational perspective, professional freedom and participative decision-making enhance a flexible response to a changing environment compared to a primary rule-based, bureaucratic, organizational form. Thus, it is my belief that a flat organization with decentralized management combined with professional responsibility is recommendable.

Reflection time and professional development

Social relations at the practice are of importance not only for dentists, but also related to quality in the outcome for patients (19-21). From an organizational point of view, relationships at work are determinants of turnover rate and whether people are retained full-time in the labour market (22). Such associations point to the importance of social relations for long-term organizational efficiency.

Goffmann's classical theory of front stage and backstage can also be applied to dentistry (146,150). Backstage includes all the acts, which the patients do not experience as e.g. planning of treatments

and sterilization of equipment. Most of the dentist's work is typically done at front stage, where socially recognizable performances are done in the presence of patients, which implies emotional labour (146). My personal experience is that patients are very sensitive to the atmosphere - you may even say that they are aware of what is going on backstage. Having correspondence between what you feel and what you express implicates fewer emotional demands. Therefore, I find it of greatest importance to provide opportunities for common reflections and backstage opportunities for complying with diverging points of view. Such opportunities depend on e.g. common breaks, regular staff meetings, and dialogue.

Up-dated professional competence is essential for delivery of high quality care. An important feature of dentistry today is consequently a desire for lifelong learning and reflective practice (151). The organization must support professional learning and development through access to knowledge, creation of knowledge and sharing of knowledge, for example by facilitating availability of colleagues in daily practice and establishment of mentor arrangements. A leader style supporting an open, friendly, rather than competitive atmosphere helps to place emphasis on learning from failures as well as successes.

Too much weight on productivity and low costs may be an expensive choice in the long run. Efficiency, I believe, must be seen in a holistic view, taking in a sustainable work environment over time, organizational development and adaptation to a changing context. All in all, this thesis points to the importance of collegiality and work-related community with freedom in work with patients, and respect for the core professional values for long-term sustainability of dentistry.

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The Danish author H.C. Andersen wrote in his autobiography book this famous quotation:

“To travel is to live”

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APPENDIX

Paper I

Paper II

Paper III

Paper IV

The Danish questionnaire from Paper II is published in: Berthelsen H. Stress, helbred og kollegial støtte i en tid med nye udfordringer til tandlæger. Copenhagen: Copenhagen University. Master of Public Health, 2003:96 (Dissertation).

The Swedish and Danish 'Good Work questionnaires' are available at the homepage of Malmö University, Faculty of Odontology, Department of Oral Public Health.

[<http://www.mah.se/fakulteter-och-omraden/Odontologiska-fakulteten/Avdelning-och-kansli/Samhallsodontologi/Arkiv/Good-Work>]

The questionnaires can be requested from the Department of Oral Public Health, Malmö University.



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