

ORIGINAL ARTICLE

Moral values and career: Factors shaping the image of healthy work for female dentists

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Abstract

Objective. Female unpromoted general practice dentists (GPDs) constitute about one-quarter of all dentists in Sweden. These female dentists suffer from many problems relating to their psychosocial working conditions. There are wide discrepancies between their perception of the ideal job situation and reality. Previously, three factors were found to constitute the ideal job situation. The aim of this study was to analyze patterns in two of these factors, i.e. the moral and the career factors, for understanding how ideal circumstances are conceived, i.e. how “good work” for the dentists could be obtained. **Material and Methods.** In the year 2000, all female unpromoted GPDs (183 persons) within the Public Dental Health Service (PDHS) in a region in Sweden received a questionnaire; response rate 94%. Four multiple regression models were constructed for two factors of good work and for the differences between the ideal job situation and reality concerning these factors. **Results.** In all models, the explained variance was high. Those dentists who were committed to moral issues perceived large differences between the ideal and reality concerning moral values. Dentists committed to career issues experienced large differences between the ideal and reality concerning career development. Those dentists – about 60% – who would not want to be a dentist if they were to choose today, perceived large discrepancies concerning moral and career issues. **Conclusions.** The PDHS organization has failed to convince or engage those whom it ought to engage, that is those with the highest level of commitment. Dentists’ emphasis on moral values confirms the character of dentistry as primarily a human service work.

Key Words: *Good work, human service organization, public health dentistry, work environment*

Introduction

Much research has been devoted to problems at work and its related psychosocial environment. According to Arnetz, the psychosocial work environment in the medical profession has worsened. Demands at work have increased at the same time as influence over one’s work and intellectual stimulation from work have decreased [1]. Arnetz suggests that more focus needs to be concentrated on the psychosocial aspects of physicians’ work. We believe that there are many similarities between physicians’ and dentists’ psychosocial work situation. In this study, we focus on the dentists’ situation.

Increasingly, psychosocial problems around subtle phenomena have been reported; for example emotional demands, emotional dissonance [2], and stress caused by ethics dilemmas – “moral distress” [3]. One may regard work performed by, for example, dentists, physicians, teachers, or pharmacy and

hospital staff as a human service work, where the theory of the Human Service Organization (HSO) connects and structures the character of work with others as patients, customers, or pupils [4,5].

Indeed, one could argue that work in such organizations with direct person-related jobs is especially exposed to those more subtle problems, as mentioned above. HSOs are fundamentally based on moral values [4] and therefore human service workers are prone to moral distress and suchlike.

However, the moral character of human service work can also be regarded as an asset. A problem is, however, that surprisingly little is known about what is perceived as good in the workplace. There is a large tradition of studies of healthy work [6–16]. The concept of healthy work means work conducive to health. However, “good work” is a wider concept that transcends the boundaries of health.

Gardner et al. [17] use the concept of good work in a dual sense; first, as work deemed to be of high

quality, and secondly as work that is socially responsible. These investigators have studied the consequences of the tension between people's achievements and ambitions on the one hand, and their good citizenship and sense of duty on the other. They introduced four key elements that lay the foundation for good work: *development, decency, democracy, and education*. "We are social animals after all, and we need to feel that our behavior makes sense to others" [17]. These four key elements offer a venue for meaningful action in this context.

One of the few research studies on the psychosocial work environment touching on good work is that of Aronsson et al. [18], who studied aspects of healthy work for persons with an academic background in Sweden. We have ourselves [19] also studied the conceptual content of healthy work for dentists, and the present study is part of a larger project.

In both Aronsson's and our own study [18,19], the respondents emphasized free, influential and intellectually stimulating work as a fundamental dimension of what they regarded as components of ideal work. These are also fundamental values for work in human services [4]. In this context, we prefer to regard these dimensions as components of good work.

In our study, the participants discerned three dimensions of good work: 1) *moral values and possibilities for skill discretion*, 2) *career development*, and 3) *a good work environment*. Moral values covaried with a desire for skill discretion and this first dimension stood out as the most important one [19]. The dentists perceived large discrepancies between the ideal work situation and the reality concerning these three dimensions of good work [19].

When Gardner et al.'s key elements [17] were compared with these three dimensions, there were clear-cut similarities. Gardner's concept "development" is similar to the first dimension we found in good work. His second concept "decency" draws attention to the moral values in the relations between management and employees, and it is thus connected to the first of our dimensions but also to our third dimension. Gardner's concept "democracy" emphasizes the support and influence of rank-and-file workers in the organization and is thus also connected to our first and third dimensions. Gardner's fourth concept "education", finally, is the core of any professional work and is connected to our second dimension, "career development".

The objective in this paper was to analyze patterns in the perception of good work and in the perception of the discrepancy between the ideal job situation and reality in order to understand how good work could be obtained for the dentists. More specifically, the aim was to construct empirical models for two factors of good work, i.e. the moral and the career

factors. We used explanatory variables from three domains: social, job, and personal attributes.

This study was carried out on the same group, where we found the good work dimensions, i.e. unpromoted female dentists [19]. Unpromoted means that the dentists have a position with no management tasks in the Public Dental Health Service (PDHS). The female unpromoted general practice dentists (GPDs) constitute about one-fourth of all dentists in Sweden [20]. It has previously been shown that this group suffers from many psychosocial problems connected to their work conditions [7,8].

Material and methods

Study base

All female unpromoted GPDs (183 persons) within the PDHS general practice in a region in Sweden received a mailed questionnaire comprising 76 questions; response rate 94%. The questionnaire was for the most part designed for this study. Piloting was done mainly in one of our previous studies. Several questions from existing questionnaires were used, after permission had been granted. The data were collected during July and August 2000. The chosen region has 1.2 million inhabitants, one-eighth of the population of Sweden. The region was chosen since previous studies focusing on network establishments took place there.

Addresses and permits were given by the relevant authorities. Permission to conduct the study was also obtained from the Research Ethics Committee of Lund University, Sweden.

Questionnaire

Dependent variables. The dependent variables were constructed to capture aspects of healthy work. The question, "What defines 'good work' for you and to what degree is this fulfilled in your present work?" was taken from the study by Aronsson et al. [18] and is described in detail in another article [19]. There were two parts to the question: one with the headline "defines good work" and the other "fulfilled in my present work". The parts were subdivided into 12 items covering aspects of good work:

1. The work is well paid.
2. Opportunity for career advancement.
3. Intellectually stimulating.
4. The work is of benefit to others/society.
5. The work is compatible with important personal values.
6. The work provides opportunities to specialize in areas of special interest for me.
7. Hazard-free work environment.
8. Stimulating fellowship.
9. Free and independent.

10. The work provides opportunities to have an influence on important decisions.
11. Personal qualities can be utilized constructively.
12. Innovative thinking and initiative-taking are appreciated.

The question battery was factor analyzed. The first factor was interpreted as aiming at moral values and possibilities for skill discretion, i.e. properties specific for human services. Six questions (numbers 3, 5, 9, 10, 11, and 12) were included in this “moral values and skill discretion” factor (Cronbach’s $\alpha = 0.73$) concerning intellectual stimulation, moral, freedom, and possibilities for personal influence and development [19].

The second factor was interpreted as a factor for career development. This factor, a “career development factor” (Cronbach’s $\alpha = 0.66$), included three questions (numbers 1, 2, and 6). The variables contained aspects of a well-paid job, possibilities of specialization, and a career [19].

There was also a third factor (“work environment factor”) defined as “work environment”, including three questions about aspects of fellowship, benefit and a hazard-free work environment. The interpretation is reported in detail in the article referred to above [19] and will be further analyzed as a dependent variable in a forthcoming paper. Here it is used as an independent variable.

Independent variables. We subdivided the independent variables into three groups: individual, social, and job attributes.

Among “individual attributes”, two questions were used. The first one concerned marital status with the alternatives “married/living with a partner” or “single”. The second question was intended to measure work experience: “How long (approximately . . . in years) have you worked as a dentist?”

For “social attributes”, again, two questions were used. The first one – “general social network question” – is a well-established question in research about social networks [11]: “Do you feel a strong affinity to . . . your community? . . . to your residential area?”, and the response alternatives were “to a high extent”, “to a certain extent”, “not especially”, and “not at all”. The question had four response options for the two alternatives, respectively, added into an index ranging from 2 to 8. The second question – “dentist network participation question” – was about support from colleagues [9]: “I am a member of a local female network (‘support group’) for dentists” (‘yes’ or ‘no’).

Among “job attributes”, one question concerned support from colleagues: “Does it happen that you feel lonely at work?” The 5-grade responses were dichotomized into “never” in contrast to the other

alternatives. There was another question about support, with an introduction worded as: “I feel that the categories mentioned below work actively to improve my work situation”. The 5-grade responses were here dichotomized into “agree” or not. The categories from the question used here were “the management of the PDHS” and “the clinic head”. We also asked about the gender of the clinic head.

We asked the female dentist if she worked full time, with the corollary question, “if ‘no’, percentage of full time”. One question was about the extent (approximately in percent) to which the dentist worked with dentistry for adults. We also asked whether she continued to educate herself in odontology each year, and here the corollary question was the number of course days per year. Finally, we asked the respondent: “If you could choose a job again would you, with your present experience, choose the same job again?” (‘yes’ or ‘no’).

Statistical methods

Four multiple regression models were constructed for the dependent variables “moral values and skill discretion” and “career development” and for the difference variables “moral difference” and “career difference”. The models were run with pairwise exclusion of missing data and with residual plots for assessment of possible heteroscedasticity. Outliers were detected by calculating Cook distances. Inclusion of variables followed the checklist originated by Studenmund [21].

There were no correlations larger than 0.49 in a correlation matrix encompassing all dependent and independent variables, and hence no risk for multicollinearity.

Of the variables, only the “moral values and skill discretion” factor displayed a somewhat skewed distribution (mean = 16.8, SD = 1.6, skewness = -1.5). It had, however, a satisfactory variation as indicated by the standard deviation.

Results

The first model had “moral values and skill discretion” as the dependent variable and is presented in Table I. After calculation of outliers, 21 cases were excluded as unduly influential. Their exclusion rendered satisfactory residual plots. Not all independent variables were included, because of the small material. Thus, only those variables with significant associations were included in the final model.

In the model the explained share of the variance was high ($R^2 = 0.49$). The strongest covariation was found for the work environment factor, while the career factor only had about a fourth of its impact. Support from the clinic head played an important role, as well as feelings of loneliness at work. Those dentists who said they would choose the same job

Table I. Dependent variable moral values and skill discretion

Independent variables	b	p
Individual attributes		
Marital status, unmarried (0–1)	0.51	0.022
Work experience (in years)	0.03	0.005
Job attributes		
Feel lonely at work (1–5)	0.38	0.000
Support from clinic head (1–5)	0.28	0.001
Would not choose the same job again (0–1)	–0.48	0.007
Attitude factors		
Career development factor (4–9)	0.16	0.010
Work environment factor (4–9)	0.72	0.000

Range (10–18), $n=138$.

Adj. $R^2=0.49$; $F=19.8$; $df=7/130$; $p<0.0001$.

again and those dentists who had a long work experience had a higher degree of moral commitment.

We also calculated a model for the difference between the ideal work situation and reality concerning the items loaded onto moral values and skill discretion. The dependent variable was “moral difference”. This model is presented in Table II. A Cook distance calculation was not needed.

The explained share of the variance was almost as high as that in Table I ($R^2=0.48$). The high value is probably due to the fact that the independent variable “moral values” and the dependent variable “moral difference” are closely related. However, their meanings are theoretically different.

Those dentists who found moral values important, which most of the dentists did, also had the largest difference between the ideal work situation and

Table II. Dependent variable moral difference

Independent variables	b	p
Individual attributes		
Marital status, unmarried (0–1)	–0.04	0.927
Work experience (in years)	0.02	0.345
Social attributes		
Social network (0–5)	0.07	0.623
Network participation (0–1)	–1.30	0.021
Job attributes		
Feel lonely at work (1–5)	0.30	0.174
Support from management (1–5)	–0.32	0.187
Support from clinic head (1–5)	–0.93	0.000
Clinic head, female (0–1)	0.26	0.494
Work full time (0–1)	0.03	0.943
Number of course days (1–11)	–0.10	0.285
Would not choose the same job again (0–1)	0.97	0.011
Attitude factors		
Moral values and skill discretion (10–18)	0.96	0.000
Career development factor (4–9)	0.12	0.363
Work environment factor (4–9)	–0.10	0.628

Range (–3 to +12); $n=142$.

Adj. $R^2=0.48$; $F=10.4$; $df=14/127$; $p<0.0001$.

reality, indeed almost a one-to-one correspondence. Furthermore, the dentists who thought that the clinic head gave support perceived a smaller difference than those without perceived support from the clinic head. The dentists who would not choose the same job again perceived a greater difference than those who would. Finally, the dentists who participated in networks (support groups for dentists), perceived a smaller difference than the others. It was bivariately significant (but not multivariately) that the dentists felt a smaller difference if they perceived support from the management. Still, only a few experienced such support.

The third model had the factor “career development” as the dependent variable. This model is described in Table III. Seven cases were excluded after a Cook distance calculation. The final model included six independent variables following the Studenmund checklist [21].

Also here, support from the clinic head was important but in the sense that the support produced lower career ambitions, as did longer work experience. Higher career ambitions, however, were found among those who valued the moral part of the work and also among those who worked more with dentistry for children than with dentistry for adults.

The fourth and final model is presented in Table IV. Here, we studied what it is that makes the dentist perceive a large difference between the ideal work situation and reality concerning career development. The dependent variable was “career difference”.

The explained share of the variance was very high ($R^2=0.71$). One reason may be that the independent variable “career development factor” constitutes part of the dependent variable. However, the two variables are conceptually different. Those setting high values on “career development” experience the greatest difference – almost a one-to-one correspondence. A Cook distance calculation was not needed.

Table III. Dependent variable career development

Independent variables	b	p
Individual attributes		
Work experience (in years)	–0.05	0.000
Social attributes		
Network participation (0–1)	0.55	0.075
Job attributes		
Support from clinic head (1–5)	–0.31	0.000
Dentistry for adults in per cent (0–100)	–0.01	0.002
Would not choose the same job again (0–1)	–0.30	0.139
Attitude factor		
Moral values and skill discretion (10–18)	0.23	0.000

Range (4–9); $n=144$.

Adj. $R^2=0.30$; $F=11.1$; $df=6/137$; $p<0.0001$.

Table IV. Dependent variable career difference

Independent variables	b	p
Individual attributes		
Marital status, unmarried	-0.39	0.052
Job attributes		
Support from clinic head (1-5)	-0.39	0.000
Work full time	-0.28	0.090
Would not choose the same job again (0-1)	0.46	0.004
Attitude factors		
Moral values and skill discretion (10-18)	-0.04	0.464
Career development factor (4-9)	0.97	0.000

Range (-2 to +6); $n = 158$.

Adj. $R^2 = 0.71$; $F = 65.5$; $df = 6/151$; $p < 0.0001$.

In this model, too, we followed the Studenmund checklist [21] when including the variables.

In this model, support from the clinic head played an important role. If the dentist perceived that the clinic head worked actively to improve the dentist's work situation, she sensed a smaller difference between the ideal and reality concerning career development.

As could be expected, those dentists who would not choose the same job again were disappointed, in the sense that they experienced large differences between the ideal and reality concerning career advancement. There was also a tendency for unmarried dentists to perceive a smaller difference than the married dentists.

Discussion

In this study, we have constructed empirical models of two aspects of good work for female unpromoted dentists, i.e. the moral aspect and the career aspect. We have used explanatory variables from the social, job, and individual domains to understand patterns in the perception of good work and in the perception of the difference between the ideal work situation and reality.

As has been shown previously, the female dentists have a high degree of moral commitment. However, the dentists with these high moral values also experienced large differences between the ideal work situation and the reality they lived in [19]. Long duration of work experience led to a higher degree of moral commitment. The strong association between the work environment and moral factors was expected. We were also able to show that those who felt lonely at work regarded the moral values higher, as did those dentists that would choose the same job again. However, those dentists who would not choose the same job again, i.e. about 60%, experienced a wider difference between the ideal job situation and reality. They were obviously disappointed.

As Hasenfeld [4] has shown concerning human service organizations, human service workers actively participate in shaping the organization's moral rules, with the basic moral values as their guides. However, Hasenfeld also focuses on the multitude of moral rules in these organizations and the wide variations in organizational forms, owing to different local practices regarding both moral ideologies and political economies. It is therefore alarming that the dentists with high moral values in our study did not experience having any influence on the shaping of the organization's moral rules, while they perceived that their job climate was to a large extent different from the ideal job climate concerning moral values.

The importance of perceived support, especially from the clinic head, was obvious, i.e. those dentists who believed that they had support from the clinic head felt a smaller difference between ideal and reality concerning moral values than those who did not.

Furthermore, network participation was an important factor concerning moral values, since the dentists who participated in networks (support groups for dentists) perceived a smaller difference between the ideal and reality than those dentists who did not.

The more important the dentists regarded the moral values, the larger the differences they perceived. This may be the most alarming result. The organization has failed to convince or engage those whom it ought to engage; that is those with the highest commitment. This result unfortunately coordinates well with the finding that economic values have tended to replace those of professional engagement and skill in human service organizations [22,23].

As to career ambitions, higher career ambitions were found among the dentists who were more morally engaged and also among those who worked more with dentistry for children. The latter could be explained by the fact that a great many dentists in the PDHS have chosen to work in the PDHS because they like working with children. The typical Swedish female dentist is unpromoted in the PDHS and works for the most part with dentistry for children, in contrast to the typical male dentist who works mainly with dentistry for adults in his own private clinic [20]. Perceived support from the clinic head was interpreted as giving lower career ambitions and also a smaller difference between the ideal work situation and reality concerning career development. Those on good terms with the clinic head may be satisfied with their situation, and without any ambitions to move on. The lower perceived difference between the ideal and reality may indicate that people with a good boss are quite content with their situation.

Furthermore, longer duration of work experience, which obviously often covaries very closely with age,

gave lower career ambitions. One explanation might be that as people grow older, they lose some of the ambition and drive they have had in the past.

Furthermore, married dentists had a tendency to perceive larger differences than the unmarried ones. Unmarried dentists might have better possibilities for a career and perhaps they find their job more important. An expected result was that those dentists who stated that they would not choose the same job again experienced large differences concerning their career and were disappointed. Finally, the dentists who valued career development perceived a larger difference concerning career.

In conclusion, dentists who were committed to moral issues experienced a large difference between the ideal work situation and reality concerning moral values, and dentists who were committed to career issues experienced a large difference between the ideal and reality concerning career issues. There were clear patterns among the explanatory variables and the precision of the models was high.

The valuation of the work environment will be discussed separately. However, in this paper we have shown that those who valued a good work environment also were morally committed.

There are some weaknesses in the present study. The results were based on self-reported data and the material was rather small. On the other hand, there are also strengths, e.g. that the response rate was very high and that we obtained a high explained variance. The models can also be discussed – there is no perfect model specification – but the Student-mund checklist [21] of specification criteria was followed for the inclusion of variables, i.e. theoretical anchorage of variables, *t*-test significance in the expected directions, improvement of the overall fit of the equation when adding a variable and changes in other coefficients when a variable is added to the equation.

The contribution of Gardner et al. could be interpreted [17] such that the dentist's job could be an instance of good work as work of expert quality benefiting society; work where excellence and ethics meet. But the four key elements of good work – *development, decency, democracy, and education* – do not agree in all aspects with the dentist's reality today. Development and education are of course important factors, but lack of decency and democracy in an HSO constitutes a serious problem. Such an organization ought to engage and take good care of its co-workers' high commitment by giving them more freedom, influence, and better support resources concerning good work issues. Possible means to such objectives could be through facilitating the establishment of networks/support groups [9], thus providing fora for discussing the moral values and the ethically troubling phenomena and situations of daily dental practice [3]. In such a way, the human service workers could actively

participate in shaping and maintaining the HSO's moral rules.

We will in future studies probe further in a more comprehensive investigation of good work and employees' well-being, in order to find ways and means towards job redesign. The main contribution here is, however, the emphasis found on moral values, confirming the character of dentistry as human service work.

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