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Measurement of trust in dentistry, the example of Sweden-Denmark

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Background and aim

In the Copenhagen Psychosocial Questionnaire (COPSOQ) measures of horizontal and vertical trust have been developed, but the validity of the measures in a specific context as dentistry is unknown.

The aim of the present study was to apply the measurements of trust from COPSOQ to a population of general dental practitioners from Denmark and Sweden, comparing factor solutions and scoring norms to the original results. Besides, dentistry is an example of a human service organization, which implicates that also the patients take a central role in the daily work.

Methods

In 2008, a questionnaire was sent to 1835 general dental practitioners, randomly selected from the dental associations in Sweden and Denmark (17% of the eligible population). The response rate was 68% after two reminders.

Distribution analyses of two items concerning the importance of colleagues and relationship with patients were performed. Principal Components Analysis was applied to seven items concerning trust, taken directly from the second version of COPSOQ. The analyses were performed for the total sample as well as for subgroups according to gender, country, and employment sector.

Results

Factor analysis
Principal Component Analysis of the variables describing influence on the work resulted in a two factor solution explaining 66% of the variance.

The first factor was interpreted as *trust*, organized 4 variables, had an Eigenvalue of 3.572, and factor loadings 0.59-0.81.
The variables were combined into an additive index: *trust (*range 0-100) with a mean of 74.57, standard deviation 15.13(SD) and having a Cronbach's alpha value of 0.79 .

The second factor was interpreted as *hindered information flow*, organized 3 variables, had an Eigenvalue of 1.084 and factor loadings 0.58-0.89.
The variables were combined into an additive index: *hindered information flow (*range 0-100) with a mean of 23.07, standard deviation 17.63 (SD) and having a Cronbach's alpha value of 0.79.

Important relationships
37% of the dentists stated the atmosphere at work as of decisive importance for their job satisfaction. Concerning the relationship with colleagues and patients were the frequency respectively 31% and 32%. In comparison reported only 7% of the dentists income level or the reputation of dentists among the public as of decisive importance for their job satisfaction.

Empirical based alternative scales:

Trust
- *Does the management trust the employees to do their work well?*
- *Can employees trust the information that comes from the management?*
- *Are the employees able to express their views and feelings?*
- *Do the employees in general trust each other?*

Hindered information flow
- *Do the employees withhold information from each other?*
- *Do the employees withhold information from the management?*
- *Does the management withhold important information from the employees?*

Conclusion

Construct validity
The results from the present study did not corroborate the original formulated scales for horizontal and vertical trust.
The differing factor structure may be explained by a homogen sample from small work units.

Content validity of trust
Patients constitutes an integrated role in the work environment of human service workers.
This implicates the relevance of including a third dimension in measurement of trust in this kin of organisations

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