The influence of organizational commitment and health on sickness absenteeism: a longitudinal study

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Introduction

This study focuses on the influence of organizational commitment, health complaints and behaviour (visits to general practitioners) on sickness absenteeism among nurses. The central question of this study concerns whether a generalized pattern of low commitment associated with the experience of health problems results in sickness absenteeism, or whether commitment and health of nurses are related to absenteeism in different ways. The study was designed to examine whether changes in commitment and health-related problems over time lead to an increase in absenteeism. The absenteeism measure used in this study is the
percentage of time lost because of absences that are attributed to illness (involuntary absenteeism).

It is commonly assumed that satisfaction, organizational commitment, and other workplace attitudes influence absenteeism behavior (Steers & Rhodes 1978). With regard to organizational commitment, most studies find no support for a direct relationship between commitment and absenteeism (Hackett 1989). For example, a test conducted by Brook and Price (1989) of an elaborated causal model of determinants of absenteeism revealed no significant relation between organizational commitment and absenteeism. The test was replicated in a study using a revised model (Price 1998). Burton et al. (2002) found no direct relation between (affective and continuance) commitment and overall absenteeism. In studies that consider the relation between organizational commitment and turnover (intention) as well as absenteeism (Angle & Perry 1981, Abelson 1983, Farrell & Petersen 1984, Shore et al. 1990, Geurts et al. 1999), a significant direct relation with absenteeism was either absent or much weaker than that between turnover and organizational commitment.

Workplace attitudes are more closely related to voluntary absence than they are to involuntary (sickness) absence. Sagie (1998) made a distinction between voluntary and involuntary absence, finding that commitment was related to the former, but not to the latter. This was in line with the results of an earlier study by Zaccaro and Collins (1988), in which commitment was related to unexcused absence, but not to excused absence. Gaziel (2004) reported that, among a sample of teachers, commitment influenced only voluntary absenteeism, and had no effect on involuntary absenteeism. In a sample of 283 nurses at three small hospitals in Israel (Cohen 2000), organizational commitment was indeed related to the total number of days absent from the job in the next year ($r = -0.19$, $P < 0.01$). In the same study, however, other work-related attitudes (e.g. work involvement, group commitment, and job involvement) were not related to absenteeism (Cohen 2000), thus supporting the general conclusion that there is no clear, direct, relation between organizational commitment and absenteeism.

Cross-sectional studies thus provide mixed results on the relation between commitment and absenteeism. We expect that commitment and health jointly influence absenteeism, for example when organizational changes violate psychological contracts, a situation that is likely to lead to deteriorating attitudes toward work, negative emotions, and health complaints (Schalk & Roe 2007).

This study therefore examines the causal relationship between organizational commitment, health complaints and sickness absenteeism, using data from a three-wave longitudinal study of employees in two nursing homes in the Netherlands. Absenteeism data from the nursing home employees that were obtained from the absenteeism registration system were linked to repeated questionnaire measurements. Organizational commitment is defined here as ‘the relative strength of an individual’s identification with and involvement in a particular organization’ (Mowday et al. 1982).

Method

Sample

Data are from a longitudinal study in two nursing homes in the Netherlands. In December (Time 1), May the following year (Time 2) and August (Time 3), questionnaires assessing workplace attitudes and health complaints were distributed among the employees. Absenteeism data of the 3 months after distribution of the questionnaires were linked to the questionnaire data. The 3-month periods were subsequent to the month in which the questionnaires were distributed.

At Time 1, the organizations employed 1085 employees; at Time 3, the number of employees had decreased by 17% to 931. The response rate on the three questionnaires in Organization 1 was 83% at Time 1, 69% at Time 2 and 57% at Time 3. In the other organization, the response rates were 76, 42 and 37%, respectively. Because of employee turnover, non-response to at least one of the three questionnaires and missing data in the questionnaires, full data were ultimately available for only 222 employees who were employed by the organizations during that period.

The research sample comprised of 191 female employees (86%) and 31 males; 161 (73%) respondents held part-time positions and 61 were employed full time. The average age of respondents was 36.1 years (at Time 1), and the average length of service of the workers in the sample was shorter than 5 years for 31%, and between 5 and 10 years for 27%. All departments and levels of the organization (nursing, maintenance, administration, management, and specialized staff) were represented.

Instruments

The questionnaire measured organizational commitment with nine items (on a scale of 1–5), derived from the Organizational Commitment Questionnaire (Mowday et al. 1982). The items were translated into Dutch. Factor analysis (Principle Axis Factoring) con-
firmed one major factor at each measurement point. Examples of items are: ‘I talk up this organization to my friends as a great organization to work for’; ‘This organization really inspires the very best in me in the way of job performance’; ‘It would take very little change in my present circumstances to cause me to leave this organization’ (Reverse scored); ‘I really care about the fate of this organization’.

Nine questions concerning the occurrence of psychosomatic health complaints (e.g. pain in the back, stomach problems; a 1–5 scale was used where 1 = never to 5 = always) were included in the questionnaire. Factor analysis (Principle Axis Factoring) confirmed one major factor at each measurement point.

The questionnaire included one question about visits to a general practitioner because of (psychosomatic) health complaints (1–4 scale used where 1 = no visits to 4 = repeated visits).

Absenteeism data were derived from personnel files. Because these data are also used for administrative purposes to provide sickness benefits, great care is given to the validity of the data in the organizations in which this study took place. The average absenteeism percentage, defined as (days absent/total days in period) × 100, was calculated for 3 months following the distribution of the questionnaire. For employees who did not work full time, the absenteeism percentage was calculated according to time lost because of sickness absence in proportion to working hours.

Statistical analyses

A model was tested with structural equation modelling using the AMOS statistical software program (Arbuckle, 2006). The model assumed that organizational commitment influences health complaints, and vice versa, at the same point in time, and that health complaints influence practitioner visits at the same point in time. Practitioner visits are expected to influence subsequent absenteeism, and absenteeism is expected to be related to practitioner visits at a later time. Variables measured at different points in time are assumed to be related over time.

Results

The scale and item characteristics are presented in Table 1, and the correlations between variables are presented in Table 2.

The mean scores on the variables measured at the three different times are relatively stable and show no major deviations. Commitment is above average and health complaints do not seem to occur very often. Absenteeism is consistent with what can be expected in health care in the Netherlands.

<table>
<thead>
<tr>
<th>Variable</th>
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<td>0.15*</td>
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*P > 0.05 (two-tailed); **P > 0.01, two-tailed.
As would be expected, the inter-correlations between the same variables measured at different points in time are high. Subjective experiences (commitment and health complaints) are more stable than is behaviour (practitioner visits and absenteeism).

Commitment is related to health complaints measured at the same point in time, but not to practitioner visits or to absenteeism. Health complaints are related to practitioner visits (and commitment) but not to absenteeism. Practitioner visits are related to absenteeism (and health complaints).

The test of the model with AMOS provided the estimates for the causal paths in the model (see Table 3).

The model fits the data well \( \chi^2 (41, n = 222) = 51.61, \ P > 0.05; \) Goodness of Fit Index = 0.96, Adjusted Goodness of Fit Index = 0.93, Root Mean Square Error of Approximation = 0.03, explaining 42% of the variance in commitment at Time 2, and 63% at Time 3. Fifty-one per cent of the variance in health complaints at Time 2 was explained, as was 62% of the variance at Time 3. The explained variance in practitioner visits was 16% at Time 1, 41% at Time 2 and 53% at Time 3. For absenteeism at Time 1, the explained variance was 3%, with 12% at Time 2, and 38% at Time 3.

The main conclusion is that there is no consistent causal relationship between health complaints and commitment. Health complaints are related to practitioner visits, practitioner visits are related to absenteeism and vice versa. Variables measured at different points in time are related.

**Discussion**

We found no direct relation between organizational commitment and absenteeism, or between health complaints and absenteeism, confirming the results of earlier studies (Brooke & Price 1989, Price 1998). We also found no evidence of a causal chain operating over time that would imply that organizational commitment influences health complaints. From the results of this study, however, we can conclude that organizational commitment is related to reported health complaints. Whether health complaints eventually result in absenteeism behaviour depends upon the question of whether the complaints result in practitioner visits. Health problems that are reflected in absenteeism, general practitioner visits, or both, are enduring; absenteeism behaviour is related over time, as are practitioner visits.

The model implied that the same variables measured at different points in time are (positively) related and that commitment is related to health complaints; it also suggested that health complaints influence practitioner visits and that absenteeism and practitioner visits are related.

Organizational commitment is in normal circumstances rather stable over time. One could imagine, however, that when something happens in the organization that is perceived by a nurse as having a very negative impact on his/her position (e.g. organizational changes that result in more business-like treatment of patients, cases of harassment that are not dealt with in a good way by the organization, missing a ‘desired’ promotion), commitment will suddenly strongly drop (Schalk & Roe 2007). In these cases, strong emotional reactions are expected, and these can lead to immediate health complaints and absenteeism. Often, in these circumstances, nurses will leave the organization. As our study was on nurses who stayed with the organization over a longer period of time, sudden reductions in commitment were unlikely to appear very frequently. It would be worthwhile for future research to examine this issue more in depth.

This study has some limitations. Absenteeism behaviour over a period of three months is highly skewed. Almost half of the employees in our sample \( n = 105, \) 47%) were not absent at all, thus limiting the range of variance of this variable. Because organizational commitment and health complaints were measured in the same questionnaire, common-method variance might occur. Because practitioner visits were also mea-
The context of the study should be taken into account. The sample consisted primarily of part-time, female healthcare employees who had been employed with the same organization for a period of approximately 1 year. Those who left the organizations (either voluntarily or involuntarily) were not included in the study, thus limiting the variation in attitudes and behaviour in this sample.

Implications for nursing management

With respect to managing sickness absenteeism of nurses it should be acknowledged by managers that nurses call in sick when they perceive that there is a real health problem, not because of negative work attitudes. It is important, however, for managers to identify signal signs of decreasing organizational commitment because this is associated with increases in health complaints. This can eventually result in increases in absenteeism.

A practical implication of this study for the prevention of absenteeism is that absence behaviour (and general-practitioner visits) should be monitored, as these behaviours are quite stable over time. Moreover, organizations should alert signals of decreasing organizational commitment or increases in health complaints. This can eventually result in increases in absenteeism behaviour.

This study shows that the personnel in the nursing homes did not tend to call in sick more frequently as their work attitudes became more negative. Absenteeism was related to health complaints that led to seeking medical assistance. Our conclusion is, therefore, that the employees call in sick when they perceive that there is a real health problem.

References


