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Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses

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Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses*

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Abstract

Background. Stress-related outcomes of job satisfaction and absenteeism among nurses should receive more attention in Hong Kong because absenteeism is costly. Many nurses’ complaints are due to organizational change in privatization since the establishment of the Hong Kong Hospital Authority in 1991. Organizational climate is found to be an antecedent of job dissatisfaction and absenteeism in many studies in western societies.

Aim. To investigate the role of organizational climate and psychological distress on job satisfaction; and the role of climate, distress and job satisfaction on absenteeism in Hong Kong nurses, while controlling for demographic variables.

Methods. A self-administered questionnaire survey method was used to collect data from two samples of nurses within a 8-month period. They are, respectively, 144 (74 general nurses, 70 psychiatric nurses; 47 males, 97 females) and 114 (85 general nurses, 29 psychiatric nurses; 17 males, 97 females) nurses.

Results. Multiple regression analyses revealed that occupational type (psychiatric/general), environment (the physical conditions in the work area) and psychological distress were significant predictors of job satisfaction for sample 1; and well-being (social relations, welfare and health issues) was the only significant predictor of job satisfaction for sample 2. However, age, involvement (the degree of commitment displayed towards employees by the organization), psychological distress and job satisfaction were significant predictors of absenteeism for sample 1; and occupational type, organization (the interaction between the worker and the organization), and involvement were significant predictors of absenteeism for sample 2.

Conclusions. The empirical findings provide support for the climate–job satisfaction and climate–absenteeism relationships. Psychological distress could be an antecedent of job satisfaction; and job satisfaction could be an antecedent of absenteeism. Certain climate dimensions should be improved to enhance job satisfaction and reduce distress, which in turn will reduce absenteeism.

Keywords
job satisfaction, absenteeism, nurses, organizational climate, psychological distress, stress, Chinese, multidimensional scaling

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Introduction


Some of these stress-related outcomes are costly. Cooper and Cartwright (1996) estimated that almost 12% of the United States of America's (USA) Gross National Product (GNP) and 10% of the United Kingdom's (UK) GNP is lost because of stress-related absenteeism and turnover. In Hong Kong, there were 47,500 workdays lost as a result of employee sick leave in 1998, and the average duration of sick leave per incident is 11.7 days (Population by census, 1998), representing a considerable loss of resources.

Most research on the causes of job satisfaction and absence behaviour among nurses has been conducted in Western societies. It cannot be assumed that their results can be generalized to Chinese nurses. Büssing and Glasser (1999), for example, have pointed out that there are considerable differences in the nature of nursing between Western countries, such as Germany and the UK and USA, suggesting the need to examine nurse stress in different cultures. In another study, Johns and Xie (1998) compared reasons leading to absenteeism between Chinese and Canadian managers. They concluded that Canadians were less likely to endorse domestic reasons for absence, whereas Chinese were less likely to endorse illness, stress and depression. These findings suggest that nurses in Hong Kong may have different causes of absenteeism.

Antecedents of job satisfaction amongst nurses

Several theories suggest that various features of the job environment are causes of job satisfaction. One of these is the job characteristics theory (Hackman & Oldham 1976), which suggests skill variety, task identity, task significance, autonomy and job feedback are core characteristics contributing to job satisfaction. The relation between these job characteristics and job satisfaction is consistent as summarized by a meta-analysis conducted by Fried and Ferris (1987).

In recent years, organizational climate has been found to be a potential source of stress among

Organizational climate has been defined as shared perceptions of organizational policies, practices, and procedures, both formal and informal, indicative of the organizations goals and appropriate means to goal attainment (Reichers & Schneider 1990, p. 22).

One of the shortcomings of previous research investigating the relationship between organizational climate and stress among nurses has been the use of global climate measures. As Hemingway and Smith (1999) have argued, attempts to reduce stress amongst nurses using a global climate change approach are likely to be unsuccessful.

Siu (2001) has adopted a multifaceted approach to organizational climate and found that ‘immediate upper level’ was an important predictor of psychological distress amongst Hong Kong nurses. It would be worthwhile to investigate further if such distress leads to job dissatisfaction as evidenced in Western societies (Jain et al. 1996). The present study, an extension of Siu’s (2001) study, again adopts this multifaceted approach to organizational climate.

Based on Siu’s (1999) work, the model of organizational climate consists of three facets: organizational unit, organizational trait and organizational referent (a detailed description of the facet approach to facilitate an understanding of the validation of the climate model can be found in Siu (2001). In Siu’s (1999) model, three elements of the organizational unit facet are proposed: organization (the interaction between the workers and the organization), immediate upper level (departmental policies, supervisors, head nurses) and coworkers (colleagues).

The organizational trait facet is hypothesized as shaping the interaction between the worker and the organization, which comprises two elements: involvement in employees (the degree of commitment displayed towards employees by the organization, for example) and flexibility towards employees (the degree of flexibility which is frequently used in an organization or shown by co-workers and supervisors, for instance, autonomy, personalization). Both of these elements relate to issues of care and support that have previously been shown to be of importance in relations to nurses’ stress (Hemingway & Smith 1999).

The organizational referent facet refers to the area of organizational or work life to which the traits apply. Siu (1999) proposed three referents: work (e.g. the challenge and variety of work, decision-
making, and communication), environment (the physical conditions in the work area) and well-being (social relations, welfare, and health issues). Again there is a correspondence between these elements and issues covered in previous research examining stress amongst nurses (Landeweerd & Boumans 1994, Hemingway & Smith 1999).

The structure and validity of the climate measure was demonstrated using the Multidimensional Scaling (MDS) procedure of Smallest Space Analysis (SSA-I) in Siu’s (1999, 2001) study. The use of MDS procedures has a number of advantages over the more usual factor analytic approaches (Canter 1985, Donald 1995). For instance, nonlinear structures that may not be evident from factor analysis can be represented using MDS.

Predictors of absenteeism amongst nurses

In Hong Kong, the nursing profession is a highly valued career because of its high pay and job security. It may be argued that even dissatisfied nurses would not think of turnover, as there is no place else to work, and this is particularly true after the Asian financial crisis in 1997. Therefore, the present study does not look at the issue of turnover but only investigates absenteeism (in the form of self-reported sickness-absence) as withdrawal behaviour among Hong Kong nurses.

There have been some studies carried out in Western societies, investigating the climate-absenteeism relationship. For instance, Peiro et al. (1999) adopted a model of the antecedents of job absenteeism, to determine the relative influence of job characteristics and some relevant work-team related variables on absenteeism, while controlling for demographic variables in a sample of public health services employees. They found that gender, age and the work-team climate dimensions of rule and goal orientation have statistically significant influences on absenteeism.

In a recent study of health care professionals and hospital staff, Weinberg and Creed (2000) have concluded that support from supervisors and colleagues at work reduced absenteeism. They then argued that changing the psychosocial environment at work is a way of reducing sick leave. As far as nurses are concerned, Fagin et al. (1996) reported that poor morale was one of the main stressors leading to greater self-reported sickness-absence in mental health nurses. Hemingway and Smith (1999) have shown that specific climate dimensions (work pressure, supervisor support, poor cohesion and autonomy) affect withdrawal behaviours (turnover and absenteeism) among nurses both directly and indirectly through the mediating effects of specific occupational stressors.

Many studies show that job satisfaction and absenteeism are related among employees, but the connection between job satisfaction and absenteeism is inconsistent (Farrell & Stamm 1988, Tharenou 1993). Spector (2000) has suggested that perhaps absence and job satisfaction are more
strongly related under some conditions (e.g. blue collar workers). As mentioned earlier, job satisfaction is negatively and closely related to withdrawal behaviours in nursing assistants (Anderson et al. 1991, Grieshaber et al. 1995). Furthermore, Grieshaber et al. (1995) argued that ultimate stress and frustration would result in emotional, physical and behavioural problems because of substantial dissatisfaction.

**Demographic variables**

Many studies have shown that older workers are more satisfied than younger workers. This difference may be attributed to better adjustment at work, better conditions and greater rewards at work (Birdi et al. 1995). In Hong Kong, Siu et al. (2001) also found that age was positively related to well-being (job satisfaction and mental well-being) in managers. Concerning gender, Zawacki et al. (1995) reported that male nurses tend to be somewhat more satisfied with their supervisors than female nurses; and male nurses rated the five characteristics of work (skill variety, task identity, task significance, autonomy and feedback) more meaningful and satisfying than female nurses.

Age has also been shown to be negatively related to absence frequency among hospital employees (Gellatly 1995). This relationship can be explained by the fact that older workers usually take up higher responsibility at work, and they will not ask for a sick leave as a result of minor illness (Clegg 1983). However, Peiro et al. (1999) found that age was positively related to absenteeism. In terms of gender difference, females reported more absences than males (Clegg 1983, Mathieu & Kohler 1990). Some of the reasons are: women have more health complaints with female phenomena; working women have multiple roles as they are also married and/or have children.

Muscroft and Hicks (1998) found that general nurses reported stress levels that were higher than those of psychiatric nurses in the UK. However, Siu (2001) reported that psychiatric nurses perceived higher work pressure and more distress than did general nurses in Hong Kong.

**The study**

Researchers working in the West have found a relationship between organizational climate and stress, mostly based on the conceptual framework of Gray-Toft and Anderson (1981) and Ivancevich et al. (1982). In brief, organizational climate is an antecedent of stress outcomes. The current study extended this conceptual framework to include psychological distress and demographic variables as antecedents of job satisfaction and absenteeism, and job satisfaction is also an antecedent of absenteeism. The proposed model for the research is presented in Figure 1.
Aim

To examine and determine the roles of organizational climate and psychological distress on job satisfaction and absenteeism amongst nurses in Hong Kong, while controlling for demographic variables. It is hypothesized that facets of organizational climate that are experienced positively will be related to greater job satisfaction and lower absenteeism among Hong Kong nurses. In addition, it is also hypothesized that psychological distress is a predictor of both job satisfaction and absenteeism; and in turn, job satisfaction is also a predictor of absenteeism.

Methods

Measures

Organizational climate. Siu (1999) 26-item measure of organizational climate, in eight climate scales, was used: organization (items 1, 9, 15, 17), immediate upper level (items 3, 5, 22, 25), co-workers
(items 7, 8, 23, 24), involvement (1, 16, 21, 22), flexibility (2, 6, 11, 19), work (items 2, 3, 4, 5), environment (10, 12, 13, 14), well-being (18, 23, 25, 26). Six items were used in more than one scale once (a detailed description of scale construction can be found in Siu (1999). Each item is rated by a 7-point scale from strongly agree (7) to strongly disagree (1).

Psychological distress. Thirteen items were constructed to measure the psychological consequences of distress including measures of physical ill-health (five items), mental ill-health (five items) and depression (three items). Each item is rated on a six point scale ranging from very often (6) to never (1) (high score = high distress). Ten items of this measure (excluding the three items measuring physical ill-health) were used by Siu and Cooper (1998), and found to be reliable (α = 0.85). Leung et al. (2000) also reported that this 13-item is reliable (α = 0.88).

Job satisfaction. A global approach is adopted to measure overall feeling towards the job and the hospital where they work. Two items were constructed: ‘All in all, how satisfied are you with your job?’, ‘All in all, how satisfied are you with the hospital you work at?’ Each item is rated by a 5-point scale from very satisfied (5) to very dissatisfied (1). In Siu and Cooper’s (1998) study, the first item was found to be correlated highly with the five items measuring satisfaction with the job itself devised by Cooper and Williams (1996) (r = 0.78, P < 0.001), and the second item was found to be correlated highly with the six items measuring satisfaction with the organization devised by Cooper and Williams (1996) (r = 0.58, P < 0.001). A sum of scores of these two items measures job satisfaction.

The author chose the above instruments because they have been used and validated using Chinese samples, so it was considered appropriate to use the measures in the local context.

Absenteeism. One item was constructed to measure self-reported sickness-absence in terms of number of absence days in the last 12 months. The answers are coded as: 0 day (0), 1-2 days (1), 3-5 days (2), 6-10 days (3), 11-15 days (4), more than 15 days (5).

In addition, demographic information on age (measured in age-bands because age is usually a sensitive issue for Chinese), gender, marital status, education level (secondary/tertiary, the education requirement for nurse training in Hong Kong was secondary level in the past, but the requirement has been changed to a degree level recently), working experience, and occupational types (psychiatric/general) were also collected.

Sample and procedures

Data were collected from two broad cross-sectional samples of Hong Kong nurses with an 8-month interval between, using a self-administered questionnaire survey. The purpose of a two round data
collection design in this study was to allow examination of the convergent validity of results, and therefore to test the generalizability of findings. The samples were not analysed as one sample because there may be sample differences that confound the results.

Sample 1
A two-stage cluster random sampling method was employed to choose one psychiatric and three acute hospitals from eight clusters of hospitals in Hong Kong. In the first stage, four clusters were selected from eight clusters of hospitals; and in the second stage, a hospital was chosen among the hospitals within a selected cluster. A purposive sampling method was then employed to choose a ward from each selected hospital, so that comparable samples of nurses in similar wards were targeted. All nurses within each chosen ward were given questionnaires by a ward manager, and completed questionnaires were collected by the same person. The data collection from psychiatric nurses was conducted in April 1998, and from general nurses in June 1998. The response rate was 100%. The two sets of data were not collected simultaneously caused by limited manpower available.

Sample 2
In the second sample, similar sampling procedures were employed to choose one psychiatric and four acute hospitals from the eight clusters of hospitals in Hong Kong. The same distribution and collection procedures were followed. Data collection took place between December 1998 and February 1999. The response rate was 57%.

Results Demographics
Sample 1
The sample comprised 47 (32.6%) males and 97 (67.4%) females. Amongst them, 74 (51.4%) were general nurses and 70 (48.6%) were psychiatric nurses. The majority of the nurses were from 26 to 30 (30.6%) and from 31 to 35 years (25%) of age. The education level of the participants was 77.8% secondary education and 22.2% tertiary education. Most of the respondents’ current job experience was between 6 and 10 years (30.7%). In terms of marital status, 42.4% were single, 55.6% were married and 2.1% were divorced.

As far as absenteeism is concerned, 29.2% of the respondents reported no sickness-absence in the last 12 months, 22.2% reported 1-2 days absence, 23.6% reported 3-5 days absence, 17.4% reported 6-10 days absence, 2.1% reported 11-15 days absence and 5.6% reported more than 15 days absence.

Sample 2
The sample included 17 (14.9%) males and 97 (85.1%) females. Amongst them, 85 (74.6%) were general nurses and 29 (25.4%) psychiatric nurses. The majority of the nurses were from 21 to 25 years (35.1%) of age. The education level of the respondents was 69.3% secondary education and 30.7%
tertiary education. Most of the respondents’ current job experience was between 1 and 5 years (39.6%). The marital status of the sample was 58.8% single, 36.8% married and 0.9% divorced.

Concerning absenteeism, 29.8% of the respondents reported no sickness-absence in the last 12 months, 28.9% reported 1-2 days absence, 28.1% reported 3-5 days absence, 12.3% reported 6-10 days absence, 0.9% reported 11-15 days absence and none reported more than 15 days absence.

Validity of climate scales

The structure and validity of the climate measure was demonstrated using MDS procedure of SSA-I. The results of the SSAs based on the two samples corroborate previous findings (Siu 1999), in that the model of organizational climate comprising the eight scales described earlier has been confirmed [for detailed statistical analyses, see Siu (2001)].

Validity of psychological distress measure

The validity of the 13-item psychological distress measure was verified by factor analysis. Principal components analysis with a varimax rotation (taking eigenvalues greater than 1) was used to extract the underlying factors. Three factors emerged for sample 1, with the first factor explaining 42.1% of the variance (included five items, named as mental ill-health), the second factor 10.2% (included four items, named as depression), and the third factor 8.0% of the variance (included four items, named as physical ill-health). Slightly different results were obtained for sample 2, with three factors emerged: the first factor explains 29.6% of the variance (included five items, named as depression), the second factor 15.9% (included four items, named as mental ill-health), and the third factor 13.3% of the variance (included four items, named as physical ill-health).

| Table 1: Mean, SD, reliabilities of main variables in sample 1 and 2 |
|------------------------|--------|--------|------------------------|--------|--------|--------|--------|
|                        | Sample 1 (n = 144) |        | Sample 2 (n = 114) |        |        |        |        |
|                        | M      | SD    | \(\alpha\)  | M      | SD    | \(\alpha\)  | n   |
| Organizational unit    |        |        |            |        |        |            |     |
| Organization (U1)      | 16.63  | 3.80  | 0.72       | 16.73  | 3.35  | 0.76       | 4   |
| Immediate              |        |        |            |        |        |            |     |
| Upper level (U2)       | 17.58  | 3.87  | 0.73       | 16.56  | 3.58  | 0.80       | 4   |
| Co-workers (U3)        | 19.08  | 3.67  | 0.82       | 17.73  | 3.35  | 0.84       | 4   |
| Organizational trait   |        |        |            |        |        |            |     |
| Involvement (T1)       | 16.22  | 3.95  | 0.79       | 16.35  | 3.38  | 0.78       | 4   |
| Flexibility (T2)       | 15.87  | 3.57  | 0.68       | 15.35  | 3.55  | 0.78       | 4   |
| Organizational referent|        |        |            |        |        |            |     |
| Work (R1)              | 17.02  | 3.37  | 0.85       | 16.23  | 3.85  | 0.89       | 4   |
| Environment (R2)       | 17.13  | 3.85  | 0.74       | 17.18  | 2.90  | 0.67       | 4   |
| Well-being (R3)        | 20.08  | 3.74  | 0.81       | 18.99  | 3.40  | 0.77       | 4   |
| Psychological distress | 48.48  | 9.64  | 0.88       | 40.97  | 6.92  | 0.78       | 13  |
| Job satisfaction       | 6.61   | 1.71  | 0.73       | 6.23   | 1.17  | 0.60       | 2   |

\(n\), number of items.
Reliability of scales

Table 1 shows the means, SD, and a coefficients of the main variables. The a coefficients of climate scales ranged from 0.68 to 0.89 for both samples 1 and 2. The a coefficients of job satisfaction in sample 1 and 2 were 0.73 and 0.60, respectively; whereas the α coefficients of psychological distress were 0.88 and 0.78, respectively.

Intercorrelations among main variables

Based on research literature as mentioned earlier, age, gender and occupational type are expected to be related to job satisfaction and absenteeism, these demographic variables are therefore included in the correlational analyses. Table 2 presents the correlation coefficients among climate scales, psychological distress, job satisfaction, absenteeism and demographic variables for sample 1. Nearly all of the climate scales correlated positively, and most were significantly positively related to job satisfaction in both samples (Tables 2 and 3). However, psychological distress was negatively related to job satisfaction for the first sample but not for the second sample. Most of the climate scales correlated negatively with absenteeism for the first sample, but not for the second sample. In addition, absenteeism was negatively related to job satisfaction and positively related to psychological distress for the first sample only.

Predictors of job satisfaction

Hierarchical multiple regression analysis (Cohen & Cohen 1983, Peiro et al. 1999) was conducted to find out the predictors of job satisfaction by controlling for demographic variables. Two steps were conducted: the demographic variables were entered first and, in the second step, climate scales and psychological distress.

Since only gender and type were statistically significantly correlated with job satisfaction for sample 1 (Table 2), these two demographic variables were controlled for in the equation. Table 4 shows that in Step 1, both gender and type account for 15% of the variance, with type being the significant one. In Step 2, the climate variables and psychological distress between them explained a further 20% of the variance, with environment (R2) and psychological distress being the significant factors.

As none of the demographic variables were found to be statistically significant in predicting job satisfaction for sample 2 (Table 3), a stepwise regression analysis was conducted by putting the eight climate variables and psychological distress into the equation as independent variables. The results show that well-being (R3) appeared to be a significant predictor of job satisfaction, explaining 21% of the variance ($\beta = 0.47$, $F = 31.16$, $P < 0.001$).
Table 2: Intercorrelations among main variables in sample 1 (n = 144)

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<td>0.17*</td>
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U1, organization; U2, immediate upper level; U3, co-workers; T1, involvement; T2, flexibility; R1, work; R2, environment; R3, well-being; PSYD, psychological distress; JS, job satisfaction; JS1, the job itself; JS2, the organization; Abs, absenteeism
†Gender: 1 = male, 0 = female.
†Type: 1 = psychiatric, 0 = general.
*P < 0.05, **P < 0.01, ***P < 0.001.
Table 3: Intercorrelations among main variables in sample 2 (n = 114)

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<td>0.83**</td>
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<td>T2</td>
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<td>R3</td>
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U1, organization; U2, immediate upper level; U3, co-workers; T1, involvement; T2, flexibility; R1, work; R2, environment; R3, well-being; JS1, psychological distress; JS2, job satisfaction; JS1, the job itself; JS2, the organization; Abs, absenteeism.

Gender: 1 = male, 0 = female.

Type: 1 = psychiatric, 0 = general.

*P < 0.05, **P < 0.01, ***P < 0.001.
Predictors of absenteeism

Again, a series of hierarchical multiple regression analyses was conducted to find out the predictors of absenteeism by controlling for demographic variables. Table 2 shows that only age and type were statistically significantly correlated with absenteeism for the first sample, and type showed statistically significant correlation with absenteeism for the second sample, these variables were then controlled for in the respective equations (Table 3). Two steps were conducted: the demographic variables were entered first, and the climate variables, psychological distress, and the two facets of job satisfaction were introduced into the regression equation in the second step.

For the first sample, as expected, Table 5 shows that age and type account for 6% of the variance. In Step 2, the climate variables, psychological distress, and job satisfaction (The Job Itself and The Organization) between them added 9% to the variance explained, with age, involvement (T1), psychological distress and the two facets of job satisfaction being the significant factors.

For the second sample, Table 5 shows that type accounts for 8% of the variance. In Step 2, the climate variables, psychological, and job satisfaction added 4% to the variance explained, with type, organization (U1) and involvement (T1) being the significant factors.

Discussion

The present study is one of the very few studies conducted on Hong Kong nurses, investigating the
effects of organizational climate on job satisfaction and absenteeism, exploring the relationship between psychological distress and job satisfaction, and that between job satisfaction and absenteeism. In terms of the climate-job satisfaction correlates, all the hypothesized relationships between the climate elements and job satisfaction were in the expected direction, with favourable climate scores related to higher scores on job satisfaction (see Tables 2 and 3). These results corroborated previous studies of other industries in Hong Kong (Siu 1999) and Western societies (Landeweerd & Boumans 1994, Hemingway & Smith 1999). They also found that organizational climate measures were related to nurses’ job satisfaction. Furthermore, as hypothesized, some facets of organizational climate that are experienced positively were related to lower absenteeism for the first sample. These results also corroborate previous studies conducted in Western societies (Fagin et al. 1996, Weinberg & Creed 2000).

**Predictors of job satisfaction**

The aim of the study is to explore the roles of organizational climate and psychological distress as predictors of job satisfaction and absenteeism in two samples of nurses in Hong Kong. For sample 1, environment (the physical conditions in the work area) was found to be a significant predictor of job satisfaction, while controlling for demographic variables. In other words, only one of eight climate scales was found to be an antecedent of job satisfaction. Nevertheless, as hypothesized, psychological distress was a predictor of job satisfaction. This result corroborates the findings obtained by Jain et al. (1996). Potentially, the ultimate work-related stress would result in physical, mental and depressive symptoms that contributing to job dissatisfaction. It is therefore essential to provide workplace counselling services for distressed nursing staff in order to enhance their positive attitudes of job satisfaction.

Yet these results cannot be consistently found in sample 2. Well-being (social relations, welfare and health issues) was found to be a predictor of job satisfaction, but psychological distress did not have any significant impact on job satisfaction. It seems that nurse managers still need to pay more attention to these two climate variables (environment and well-being) that might affect nurses’ job satisfaction. Obviously, by job nature, the physical environment of the hospitals cannot be changed much. But, nurse managers could play an important role in improving job satisfaction among subordinates, by maintaining good social relations with staff, and showing concern for staff’s welfare and health issues. It is believed that this kind of organizational climate is more manageable and less expensive than intervention, which is less narrowly focused.

As far as demographic variables are concerned, neither age nor gender was found to be a predictor of job satisfaction in both samples. These results are different from previous studies conducted in Hong Kong and Western societies (Birdi et al. 1995; Zawacki et al. 1995, Siu et al. 2001). Concerning
occupational type, psychiatric nurses in sample 1 who reported lower job satisfaction. Obviously, these results are different from those obtained in Western societies (Muscroft & Hicks 1998). One possible reason is that the duration of preservice training for general and psychiatric nurses is the same in Hong Kong. It seems that psychiatric nurses should receive longer preservice training than general nurses should, as is the European practice.

**Predictors of absenteeism**

Organization (interaction between the worker and the organization) (for sample 1 only) and involvement (for both samples) were found to be significant predictors of absenteeism. These results provide logical consistency of the data because absenteeism is claimed to be one of the stress outcomes of organization (Kahn & Byosiere 1992). The implications of these results are that involvement and commitment displayed by the organization towards employees are deemed important among nurses. Nurse managers should alter the psychosocial environment at work (Weinberg & Creed 2000), and cultivate an organizational climate which support staff and facilitate effective communication. These kinds of positive climate could help reducing nurses’ absent days. These results also corroborate research findings partially provided by Hemingway and Smith (1999). They found issues of care and support were predictive of absenteeism.

As hypothesized, psychological distress and job satisfaction were predictors of absenteeism. These results provide support to that of Grieshaber et al. (1995), who argued that stress and frustration resulted in emotional, physical and behavioural problems as a result of substantial dissatisfaction. Because of the possible direct and indirect impacts of organizational climate on absenteeism, nurse managers should show more concern about staff’s emotions and work attitudes in addition to climate management. Nonetheless, one may argue that each of these climate scales only explained a small percentage of the variance in absenteeism. That means stress from organizational climate is not the main reason for absence. To a certain extent, the argument put forward by Johns and Xie (1998) can be supported, in that Chinese are less likely to be absent from work due to stress or depression.

Unexpectedly, neither age nor gender was a significant predictor of absenteeism in any of the samples. These results are different from those obtained from Western societies (Clegg 1983, Gellatly 1995, Peiro et al. 1999). As argued earlier, this might be caused by the relatively young respondents recruited in the present study. Concerning occupational type, again it is the psychiatric nurses who reported more sickness-absence. The implication of this finding is that top management of the Hong Kong Hospital Authority should pay attention to the well-being of psychiatric nurses. Stress management programmes and counselling services should be provided to hospital nursing staff, particularly psychiatric nurses, on regular basis.
The psychometric properties of climate and psychological distress measures are demonstrated except that the factor analytic results of psychological distress are slightly inconclusive. The reliability coefficients of all variables are acceptably high, except the job satisfaction scale in sample 2, perhaps because this scale is only made up of two items. These reliable results are expected as Hong Kong nurses are often surveyed about work stress and job satisfaction, and most nurses feel safe enough to be honest in their answers because most of them are tenure staff. However, as the response rate was only 57% for sample 2, the results obtained from this sample should be interpreted with caution. It seems that the validated organizational climate instrument can be used by the Hong Kong Hospital Authority to tap into the specific climate dimensions that relate to job satisfaction and absenteeism among nurses so that long-term solutions can be implemented.

Conclusions

The hypothetical relationships depicted in the proposed model relating organizational climate, psychological distress, demographic variables, job satisfaction and absenteeism are partially supported (see Figure 1). Generally, some demographic variables and some facets of organizational climate are significant predictors of job satisfaction and absenteeism; psychological distress could be an antecedent of job satisfaction; and job satisfaction could be an antecedent of absenteeism among Hong Kong nurses. These results provide some evidence of the generalizability of Western theories to Chinese nurses in Hong Kong.

Concerning the theoretical contribution of the study, the empirical analyses presented in the study provide partial support for the conceptual framework of Ivancevich et al. (1982) that relates organizational climate and stress. The acceptably high a coefficients for the scales provide support for the reliability of the proposed climate measure. It can be concluded that the 26-item climate instrument can be used as a diagnostic measure in future research in nursing staff of different occupational types. Because of some inconclusive results obtained from the two samples, however, further research in organizational climate among nurses and other occupational groups should be replicated in both Asian and Western societies.

Study limitations

It should be kept in mind that these data all came from a cross-sectional self-report design, with data collected from two samples of nurses. One cannot draw causal conclusions, and there is the concern about possible percept-percept bias. In other words, it is certainly possible that the climate variables are not really the explanations. The limitations of the study also include the relatively small sample size, unmatched gender ratio, unmatched occupational type and fairly low response rate in sample
2; and the fact that the samples were not entirely randomly chosen. This study is also flawed by its use of self-report sickness absence. As Johns (1994) argued, employees do not have accurate perceptions of their own absenteeism, some employees underestimate their own absenteeism and overestimate the absenteeism of their co-workers. Future research in this area should adopt a longitudinal design using a larger random sample and some objective measures of stress.

Acknowledgements
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References


