The relationship between organizational climate, job stress, workplace burnout, and retention of pharmacists

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Funding information
Cathay General Hospital, Grant/Award Number: CGH-TCUST106003

Abstract
Objectives: This study explored the relationship between organizational climate, job stress, workplace burnout, and retention of pharmacists. This study adopted a cross-sectional design and conducted a questionnaire survey of pharmacists working at three teaching hospitals (a district teaching hospital, a regional teaching hospital, and a medical center).

Methods: The sampling criteria were a license to practice pharmacy and willingness to sign a written consent form to participate in this study.

Results: One hundred ten questionnaires were distributed, of which 101 contained valid responses, yielding a valid return rate of 91.82%. A significant correlation was evident between organizational climate, job stress, workplace burnout, and retention. Hierarchical regression analysis revealed that demographic variables, organizational climate, job stress, and workplace burnout had a predictive power of 55.6% for retention ($F = 9.712^{***}$, $P < .001$). Organizational climate had a significant positive correlated with retention ($\beta = 0.401^*$, $P < .001$).

Conclusions: The results of this study can help hospitals to create a friendly and healthy workplace, instruct hospital managers how to improve their organizational climates, and reduce pharmacists’ job stress and workplace burnout, thereby enhancing the quality of pharmacy service and medication safety and eventually improving pharmacists’ intention to stay.

Keywords: burnout, job stress, organizational climate, retention

1 | INTRODUCTION

The high turnover rate among health care professionals is a serious topic of concern and a problem that must be addressed by medical policy makers and hospital administrators. The situation not only raises the burden of recruitment, employment, and training costs but also increases the workload of staff members who choose to stay on the job.

Organizational climate reflects employees’ perceptions of the work environment which are valuable information to an organization and can aid it in identifying and improving workplace deficiencies, thereby enhancing employees’ intention to stay. Studies have demonstrated that a supportive organizational climate, employee satisfaction, and motivation have a positive link and reduce the pressure on staff.
One study concluded that organizational climate exerts a significantly negative influence on intention to leave and that the negative influence increased with stress level. Furthermore, job stress had significant modulating effects on organizational climate and intention to leave. Higher levels of job stress highlight the importance of organizational climate. Therefore, in an environment with high job stress, institutions must create a favorable organizational climate to strengthen employees’ positive perceptions and effectively reduce their intention to leave.

High job burnout can lead to low retention. When employees face high job stress, job burnout causes a higher intention to quit. Employees who work under conditions of limited resources or time, work over time, shoulder an excessive workload, have inadequate rest, or are assigned to meet unrealistic job performance have a positive and significant impact on job satisfaction, turnover intention, organizational commitment, and job performance and have a positive and significant impact on job burnout. Individuals experiencing job stress become prone to negative attitudes, and their unrelieved negative emotions tend to accumulate for years, causing mental or physical harm and constituting an overlooked threat to patient safety medication. Results from relevant studies have also verified that employees’ job stress can cause workplace burnout.

Departments of medical institutions are organized according to the division of labor and specialization, but they are not immune from role conflict and role ambiguity phenomena. Because each person must play a different role in an organization, individuals who are assigned too many roles are negatively affected in terms of their health and performance when they attempt to meet the expectations of their supervisors.

Research has also pointed out that role conflict and role ambiguity in the workplace affect employee job satisfaction, turnover intention, organizational commitment, and job performance and have a positive and significant impact on job burnout. Therefore, this study used the Job Stress Questionnaire (JSQ) to measure the psychological stress response of workers.

Pharmacy is a highly skilled profession, and pharmacists often play a key role in healthcare teams. The job requires robust knowledge and experience to process ever-advancing information concerning medical technologies and environments; in addition, pharmacists’ behaviors tend to have a considerable influence on a patient’s treatment results and safety. As pharmacists endeavor to enhance the quality of pharmacy service, they must ensure the safety of medicine administered to people who seek medical advice. They perform their job under the constraints of various hospital accreditation and licensing requirements as well as the requirements imposed by the government’s national health insurance system. Constantly subjected to time constraints as well as the consumption of energy and brain power, pharmacists become vulnerable to workplace burnout and fatigue. This has emerged as an urgent problem to be quickly addressed.

Much research has focused on job stress and workplace burnout. However, none have investigated the relationships between organizational climate, job stress, workplace burnout, and retention.

Therefore, this study is expected to encourage medical institution managers in contemplating how to create a positive organizational climate that engenders positive emotions in employees, reduces their job stress, enhances their commitment to the organization, and increases their willingness to work, all of which can help to reduce the turnover rate and help hospitals establish a friendly and healthy workplace.

2 | MATERIALS AND METHODS

2.1 | Research design and participants

This study adopted a cross-sectional method. A questionnaire was administered to pharmacists at three teaching hospitals (a district teaching hospital, a regional teaching hospital, and a medical center) belonging to a consortium in northern Taiwan. The recruitment criteria were a license to practice pharmacy and a willingness to sign a written consent form to participate in this study. For the size of the sample size, scholars have proposed the following estimation methods from the perspective of theoretical statistics:

\[ N_{SAMPLE} = \frac{(N_p)(p)(1-p)}{(N_p-1)(E/C)^2 + (p)(1-p)} \]

where \( N_{SAMPLE} \) is the number of samples, \( N_p \) is the size of the parent population of the study, \( E \) is the tolerable sampling error value, \( C \) is the \( Z \)-value (=1.96) of the 95% confidence interval, and \( p(1-p) \) is the degree of heterogeneity of the parent population. In the case of a normal distribution and expected characteristics, the variation of the parent population is 50%. According to the aforementioned formula, the total number of pharmacists in the hospital in this study was 125 in January 2018; the questionnaire was distributed in February 2018. One hundred and ten questionnaires were distributed. The recovered questionnaires were then assessed and nine invalid responses with incomplete and monotonous answers were eliminated. Eventually, 101 valid responses were obtained, yielding a valid return rate of 91.82%. The number of samples that provided sufficient statistical data is 76, and thus relevant research statistical analysis can be conducted.

2.2 | Research instruments

The questionnaire was developed on the basis of a review of relevant literature. To confirm the instrument’s validity,
five experts in public health and healthcare administration reviewed and adapted the statements and questions according to the importance of the content, clarity of the questions and statements, and suitability of the items. The content validity index (CVI) was used to compute the experts’ validity scores, which were as follows: 0.91 on importance, 0.86 on clarity, and 0.88 on suitability. The overall CVI score was 0.89, indicating satisfactory validity. Reliability analyses were performed to ensure consistent measurement of the constructs. The overall Cronbach’s alpha (α) of the questionnaire was 0.868, and those of the individual constructs ranged from 0.855 to 0.937. Table 1 presents data indicating that each construct yielded a high level of internal consistency. The response options for the statements were structured as five-point Likert-type scales, except for those concerning personal characteristics. High scores indicated stronger agreement with the statements, and scores ranged from 1 = strongly disagree to 5 = strongly agree.

The questionnaire evaluated five aspects of pharmacist employment. 1. Demographic data: sex, age, marital status, educational attainment, and years of service at the current hospital. 2. Organizational Climate Inventory: the inventory was developed on the basis of the Organizational Climate Questionnaire19 and other relevant studies. The inventory comprised 30 items divided into nine constructs, namely structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity. The Cronbach’s α was 0.937. 3. Job Stress Inventory: the inventory was developed with reference to the JSQ17 and relevant studies. The inventory comprised 15 items divided into four constructs, namely work load, underutilization of skills, role conflict, and role ambiguity; the Cronbach’s α was 0.855. 4. Workplace Burnout Inventory: the inventory was developed with reference to the Copenhagen Burnout Inventory20 and the Effort–Reward Imbalance Model.21 The Chinese-language inventory of fatigue thus developed comprised 21 items divided into four constructs, personal burnout, work burnout, client-related burnout, and overcommitment to work. The Cronbach’s α was 0.905. The test items with 0, 1, 2, 3, and 4 indicating never, seldom, sometimes, often, and always, respectively; a higher score indicated a higher level of burnout. 5. Inventory of Intention to Stay: the 5-item inventory was developed with reference to relevant studies. The Cronbach’s α was 0.872.

2.3 | Data analysis

The data were coded and entered into the SPSS 22.0; descriptive and inferential statistics were generated to describe the distributions of personal characteristics and other variables using percentages, means, and standard deviations. Independent sample t tests and one-way ANOVA were used to analyze the relationships between organizational climate, job stress, workplace burnout, and retention for various demographic variables. Correlations between organizational climate, job stress, burnout, and intention to stay were computed using a Pearson correlation analysis. Organizational climate, job stress, workplace burnout, and retention were assessed through hierarchical regression analysis.

3 | RESULTS

3.1 | Descriptive statistics

The participants consisted of 25 men (24.8%) and 76 women (75.2%). Their ages mostly fell within the range of 21-30 years (58.4%), followed by the age ranges of 31-40 years (21.8%), 41-50 years (9.9%), and over 50 years (9.9%). The majority were unmarried (81.2%). Most had attained a junior college level education (82.2%), and the second largest proportion had attained a graduate level or higher education (16.8%). With respect to service years at their current hospital, the highest proportion of participants had been employed 1-4 years (45.5%), and the second largest group worked at their current hospital for more than 8 years (24.8%). The most common current job title among participants was general pharmacist (82.2%), followed by management pharmacist (17.8%; Table 2).

3.2 | Organizational climate, job stress, workplace burnout, and retention differences in various demographic variables

In the organizational climate section, pharmacists of different sex exhibited significant differences in the warmth, risk, and conflict secondary facets, indicating that women were more emotional than men (t = −2.873**, P < .01), preferred to comment (t = −2.278*, P < .05), and preferred to adopt new reform initiatives (t = −2.197*, P < .05; Table 3). Pharmacists of various ages exhibited significant differences in structure, warmth, and identity. Furthermore, Scheffe’s post hoc test demonstrated that those over the age of 50 had a higher sense of belonging to the workplace than did those under the age of 40 (F = 5.185**, P < .01). Marital status of the pharmacists was associated

### Table 1

| Construct                        | Mean  | SD   | Cronbach’s α |
|----------------------------------|-------|------|---------------|
| Organizational climate           | 3.70  | 0.4979 | 0.937         |
| Job stress                       | 2.92  | 0.4952 | 0.855         |
| Workplace burnout                | 1.817 | 0.543 | 0.905         |
| Intention to stay                | 3.313 | 0.9366 | 0.872         |

*P < .05.
TABLE 2  Demographic data (n = 101)

| Item                              | n  | %   |
|-----------------------------------|----|-----|
| Sex                               |    |     |
| Male                              | 25 | 24.8|
| Female                            | 76 | 75.2|
| Age (32.19 years ± 9.824 SD)      |    |     |
| 21-30                             | 59 | 58.4|
| 31-40                             | 22 | 21.8|
| 41-50                             | 10 | 9.9 |
| 51-70                             | 10 | 9.9 |
| Marital status                    |    |     |
| Unmarried                         | 82 | 81.2|
| Married                           | 19 | 18.8|
| Educational attainment            |    |     |
| Junior college (ie, 2-year, 3-year, and 5-year) | 1 | 1.0 |
| College/university                | 83 | 82.2|
| Graduate institute and above      | 17 | 16.8|
| Years of service in the current hospital (years) |    |     |
| <1                                | 17 | 16.8|
| 1-4                               | 46 | 45.5|
| 4-8                               | 13 | 12.9|
| >8                                | 25 | 24.8|
| Current job title                 |    |     |
| Pharmacist                        | 83 | 82.2|
| Certified Disease Manager         | 18 | 17.8|

with significant differences in the warmth and identity secondary facets, indicating that married people had more interpersonal relationships than did unmarried people ($t = -2.040^*, P < .05$) and they also tend to agree with the hospital ($t = -2.683^{**}, P < .01$). In addition, the management pharmacists had a higher recognition of the hospital than did the general pharmacists ($t = -2.023^*, P < .05$).

In the job stress section, women expressed feeling more overworked than did men ($t = -2.176^*, P < .05$), with those who had a service tenure of 4-8 years expressing a higher feeling of overwork than those with tenure of less than 1 year. ($F = 0.4812^{**}, P < .01$). Pharmacists of different ages exhibited significant differences in the underutilization of skills ($F = 1.677^*, P < .05$) and role ambiguity ($F = 2.817^*, P < .05$) sub-facets. Furthermore, according to the results of Scheffe’s post hoc test, there was no significant difference between the age groups. Unmarried than married to feel less workplace burnout and intention to stay was greater among management pharmacists than it was among general pharmacists ($t = -2.991^*, P < .01$).

Workplace burnout was higher among employees with a service tenure of 4-8 years than it was among those with less than 1 year of tenure ($F = 0.3.120^*, P < .05$). Management pharmacists expressed higher levels of workplace fatigue than did general pharmacists ($t = -4.613^{***}, P < .001$), and those with service tenure of more than 8 years had a higher tendency to overwork ($F = 0.6140^{**}, P < .01$).

Pharmacists aged over 50 years had a higher intention to stay than did those aged 21-40 years ($F = 7.990^{***}, P < .001$); those who were married had a greater intention to stay than did those who were unmarried ($t = -4.114^{***}, P < .001$). Moreover, pharmacists with tenure longer than 8 years had a higher intention to stay than did those with a tenure of 1-8 years ($F = 4.855^{**}, P < .01$), and the intention to stay was greater among management pharmacists than it was among general pharmacists ($t = -2.991^*, P < .01$).

### 3.3 Correlation analysis

A Pearson’s product-moment correlation analysis revealed a negative correlation between organizational climate and job stress ($r = -0.57^{***}, P < .001$), a negative correlation between organizational climate and workplace burnout ($r = -0.44^{***}, P < .001$), a positive correlation between organizational climate and intention to stay ($r = 0.62^{***}, P < .001$), a positive correlation between workplace burnout and job stress ($r = 0.70^{***}, P < .01$), a negative correlation between job stress and intention to stay ($r = -0.47^{***}, P < .001$), and a negative correlation between workplace burnout and intention to stay ($r = -0.31^{***}, P < .01$).

### 3.4 Hierarchical regression analysis of demographic variables, organizational climate, workplace burnout, and job stress on retention

In the hierarchical regression analysis (Table 4), demographic variables, organizational climate, workplace burnout, and job stress were assessed as independent variables and retention was considered a dependent variable. When the regression model had only demographic variables (model 1), the overall regression model $R^2$ was 32.3% ($F = 4.833^{***}, P < .001$) and was significant.

When the organizational climate independent variable was added to the regression model (model 2), the overall regression model $R^2$ was 54.9% ($F = 10.951^{***}, P < .001$), demonstrating an increase of 22.5% in explanatory power compared with model 1. When the independent variables of workplace burnout and job stress were added to the regression model (model 3), the overall regression model $R^2$ was 57.0% ($F = 9.712^{***}, P < .001$), exhibiting an increase of 2.1% in explanatory power compared with model 2. In model 3, demographic variables, organizational climate, workplace burnout, job stress, and retention on regression models were
| Variables          | Organizational climate | Job stress | Workplace burnout | Work‐load | Role ambiguity | Over commitment to work | Workplace burnout | Retention |
|--------------------|-------------------------|------------|-------------------|------------|---------------|------------------------|-------------------|-----------|
|                    | Structure               | Warmth     | Conflict          | Identity   | Risk          | Under utilisation of skills | Role ambiguity |          |
| Sex                |                         |            |                   |            |               | Work‐load               | Role ambiguity |          |
| Male               | $T = -2.873^{**}$       | $T = -2.278^*$ | $T = -2.197^*$    | $T = -2.176^*$ |               | $F = 5.185^{**}$         | $F = 1.677^*$ |          |
| Female             | $F > M$                 | $F > M$    | $F > M$           | $F > M$    |               | $F = 2.817^*$            |                  |          |
| Age                |                         |            |                   |            |               | Work‐load               | Role ambiguity |          |
| 21‐30              | $F = 3.115^*$           | $F = 3.636^*$ |                   |            |               | $F = 1.677^*$            | $F = 2.817^*$ |          |
| 31‐40              |                         |            |                   |            |               | $F = 7.990^{***}$        |                  |          |
| 41‐50              |                         |            |                   |            |               | over50 > 21‐30           |                  |          |
| >50                |                         |            |                   |            |               | over50 > 31‐40           |                  |          |
| Marital status     |                         |            |                   |            |               | $F = 7.990^{***}$        |                  |          |
| Unmarried          | $T = -2.040^*$          | $T = -2.683^{**}$ | $T = 2.288^*$    |            |               | $T = -4.114^{***}$       |                  |          |
| Married            | Married > Unmarried     | Married > Unmarried | Unmarried > Married | Married > Unmarried |                   |                  |          |
| Educational attainment |                     |            |                   |            |               | $F = 5.237^{**}$         |                  |          |
| Junior college     |                         |            |                   |            |               |                          |                  |          |
| College            |                         |            |                   |            |               |                          |                  |          |
| Graduate institute and above |         |            |                   |            |               |                          |                  |          |
| Years of service in the current |         |            |                   |            |               | $F = 0.4812^{**}$        |                  |          |
| <1                 |                         |            |                   |            |               | $F = 6.140^{**}$         |                  |          |
| 1‐4                |                         |            |                   |            |               | $F = 4.855^{**}$         |                  |          |
| 4‐8                |                         |            |                   |            |               | Over 8 > 1‐4             |                  |          |
| >8                 |                         |            |                   |            |               | Over 8 > 4‐8             |                  |          |
| Current job title  |                         |            |                   |            |               |                          |                  |          |
| General pharmacist | $T = -2.023^*$          | management pharmacist | management pharmacist > general pharmacist | $T = -4.613^{***}$ | management pharmacist | management pharmacist > general pharmacist | $T = -2.991^{**}$ |          |
| Management pharmacist |                     |            |                   |            |               |                          |                  |          |
established. Organizational climate had a positive and significant influence on retention ($\beta = 0.401^*, P < .001$). Being a man, being unmarried, and being a college graduate were factors that had significant relationship on retention.

### TABLE 4  
Hierarchical regression analysis of demographic variables, organizational climate, workplace burnout, job stress on retention

| Independent variables | Dependent variables | Mode 1 | | | Mode 2 | | | Mode 3 |
|-----------------------|---------------------|-------|-------|-------|-------|-------|-------|
|                       | Retention           | $\beta$ | $t$   | $\beta$ | $t$   | $\beta$ | $t$   |
| Sex (Female = 0)      | Male                | $-0.270^{**}$ | $-2.871$ | $-0.165^*$ | $-2.087$ | $-0.170^*$ | $-2.177$ |
|                       | Age                 | $0.499^{**}$ | $3.065$ | $0.296^*$ | $2.159$ | $0.271$ | $1.988$ |
| Marital status (married = 0) | Unmarried     | $-0.295^*$ | $-2.601$ | $-0.244^*$ | $-2.615$ | $-0.208^*$ | $-2.217$ |
| Educational attainment (Graduate institute and above = 0) | Junior college | $-0.063$ | $-0.681$ | $-0.034$ | $-0.451$ | $-0.044$ | $-0.577$ |
|                       | College             | $0.157$ | $1.624$ | $0.135$ | $1.695$ | $0.162^*$ | $2.035$ |
| Years of service in the current (over 8 = 0) | <1                 | $0.325$ | $1.807$ | $0.119$ | $0.787$ | $0.039$ | $0.253$ |
|                       | 1-4                 | $0.300$ | $1.455$ | $0.132$ | $0.772$ | $0.050$ | $0.290$ |
|                       | 4-8                 | $0.037$ | $0.269$ | $-0.015$ | $-0.133$ | $-0.015$ | $-0.133$ |
| Current job title (management pharmacist = 0) | General pharmacist | $-0.123$ | $-1.027$ | $-0.062$ | $-0.633$ | $-0.057$ | $-0.579$ |
|                       | Organizational climate | | | $0.507^{***}$ | $6.707$ | $0.401^{***}$ | $4.402$ |
| Workplace burnout     | Job stress          | | | | | $-0.012$ | $-0.119$ |
|                       | $R^2$               | $0.323$ | | | $0.549$ | | $0.570$ |
|                       | Adj $R^2$           | $0.256$ | | | $0.499$ | | $0.511$ |
|                       | $F$                 | $4.833^{***}$ | | | $10.951^{***}$ | | $9.712^{***}$ |
|                       | $\Delta R^2$        | $0.225$ | | | $0.021$ | | |

*P < .05,  
**P < .01,  
***P < .001.

4 | DISCUSSION

Health professionals face irregular work schedules, excessive job stress, and subpar work environments, all of which can easily cause mental and physical fatigue, reduce work satisfaction, affect their intention to stay, and result in high turnover rates.

Pharmacists play a key role in treatment teams and their work performance has a significant influence on patients’ treatment results and safety. Pharmacists engage in physically and mentally exhausting work that imposes time constraints. Determining how to enhance their intention to stay and improve the quality of pharmacy service has become an urgent problem.

The results demonstrated that pharmacists expressed the highest level of approval for the standards their organizations had designed, followed in sequence by their expressed approval of responsibilities and interpersonal network. This showed that the respondents valued organizational goals and performance standards, were willing to shoulder all their own responsibilities, and that the interpersonal network between employees was strong and supportive, which contributed to the creation of a harmonious atmosphere in the workplace. However, respondents expressed the lowest level of approval for the organizations, followed by risks and rewards. This suggested that respondents did not sense a high degree of
being valued and belonging perceived that they had to bear more risks at work, felt that they were not entirely satisfied with the rewards they could obtain from work and the promotional system.

Hospital management teams should pay attention to changes in the environment, social dynamics, and the labor market to formulate a favorable organizational climate and establish a supportive work environment and meaningful pharmacy-based work content. If they do so, employees should be willing to approve and accept the systems planned by their organizations. Moreover, bilateral communication should be initiated to seek a consensus, thereby facilitating the improvement of the organizational work atmosphere as well as reducing pharmacists’ intention to leave.

Organizational climate can motivate employees and induce the subsequent manifestation of favorable behaviors. Eventually, these behaviors cause organizational effects, among which employee staying is an influencing factor. The results of this study also verified that organizational climate was positively correlated with employees’ intention to stay. The higher the level of positive perception that employees had toward the organizational climate, the higher the employees’ commitment to staying was, thus, organizations that pay attention to organizational climate can reduce employees’ intention to leave.

The results revealed that pharmacists perceived a high degree of excessive workload, followed in sequence by role conflicts. In the construct of workload, items that received relatively high scores were the following: the work requires lengthy periods of concentration, the work is very busy, the work pace is fast, and the workplace is understaffed. Job stress is a product of the interaction between workload and job control. High workload coupled with low job control tends to trigger negative stress and symptoms of stress; conversely, high workload coupled with relatively high job control entail challenging jobs that can trigger people’s potential and positive stress. In addition, because pharmacists commonly need to play multiple roles, they can easily encounter role conflicts.

Department heads should seek to actively understand employees’ stress and perceptions of workload and then simplify and reallocate tasks. They should value pharmacists’ opinions and perceptions of their work and increase the pharmacists’ level of participation in work-related decision making and their sense of job control, thereby lowering pharmacists’ job stress.

Pharmacists expressed relatively high levels of personal burnout, followed by work burnout. Items in the construct of personal burnout that received relatively high scores were as follows: the job leads to emotional and physical exhaustion, feeling unmotivated before work when thinking about the work day ahead, and feeling exhausted after the whole day’s work. Hospital staff members generally report a relatively high sense of fatigue. This study inferred that this phenomenon may be related to pharmacists’ work pattern (ie, working on shifts), their responsibility for ensuring patients’ safe consumption of medication, the need for them to respond to patients’ and families’ questions and demands, and a relatively high degree of physical exhaustion.

Workplace burnout was positively correlated with job stress, job stress was negatively correlated with intention to stay, and workplace burnout was negatively correlated with intention to stay. The result is similar to that of another study on the workplace burnout of 5595 employed workers in Taiwan. That study determined that higher levels of perceived job stress correlated with higher levels of workplace burnout. When the life pressure is excessively high, workers must spend considerable energy handling such pressure, which first causes work–life conflicts and subsequently workplace burnout. The literature indicates that job stress is strongly correlated with workplace burnout and that job stress is a crucial predictor of intention to leave. High job stress can easily lead to burnout, and workers’ burnout has a significantly positive relationship with their intention to leave.

Job stress and workplace burnout are the results of a long-term process; however, this study adopted a cross-sectional design and was unable to present the long-term effect of job stress on workplace burnout. Subsequent studies can expand their research sample and area to increase generalizability, or they can adopt a longitudinal design to investigate the effects of time factors and job stress on workplace burnout.

Department heads can assist pharmacists in improving their recognition of stress and provide methods and strategies to relieve stress. Offering stress-relieving courses, forming support groups, introducing appropriate measures of workforce reallocation, and establishing a system of clinical mentorship could all significantly improve pharmacists’ intention to stay.

The results of this study can help hospitals to create a friendly and healthy workplace, instruct hospital managers how to improve their organizational climates, and
reduce pharmacists’ job stress and workplace burnout, thereby enhancing the quality of pharmacy service and medication safety and eventually improving pharmacists’ intention to stay.

ACKNOWLEDGMENTS

We express our gratitude for Cathay General Hospital (CGH-TCUST106003) for providing research funds and all participating pharmacists without whom this study could not have been successfully completed.

DISCLOSURE

Ethical approval: The research design and questionnaire in this study were reviewed and passed by the Human Subject Committee. Informed consent: all the respondents signed the Human Subject Consent. Registry and the Registration No. of the study/Trial: CGH-OP106005. Animal Studies: N/A.

CONFLICT OF INTEREST

Animal Studies: CGH-OP106005.

DISCLOSURE

Human Subject Consent. Registry and the Registration No. of the study/Trial: CGH-OP106005. Animal Studies: N/A.

REFERENCES

1. Mark LM, Michael D, Rana LM. Measuring tourism and hospitality employee workplace perceptions. Hospitality Management. 2005;24:75-90.
2. Altmann R. Understanding the organizational climate. Canadian Manager. 2000;25(2):15-18.
3. Shim M. Factors influencing child welfare employee’s turnover: focusing on organizational culture and climate. Children and Youth Services Review. 2010;32(6):847-856.
4. Allen TD. Family-supportive work environments: the role of organizational perceptions. J Vocat Behav. 2001;58:414-435.
5. Casper WJ, Buffardi LC. Work-life benefits and job pursuit intentions: the role of anticipated organizational support. J Vocat Behav. 2004;65:391-410.
6. Behson SJ. The relative contribution of formal and informal organizational work-family support. J Vocat Behav. 2005;66:487-500.
7. Lee DC, Liu YT, Hung LM, Mao KM. A cross multiply adjustment study of the effect of salary satisfaction and the work pressure on the organizational climate, organizational commitment on turnover intention. Hungkuang Academic Review. 2016;09(78):223-252.
8. Zeytinoglu IU, Denton D, Davies S, Baumann C, Blythe J, Boos L. Retaining nurses in their employing hospitals and in the profession: effects of job preference, unpaid overtime, importance of earnings and stress. Health Policy. 2006;79:57-72.
9. Rose CL, Murphy LB, Byard L, Nikzad K. The role of the big five personality factors in vigilance performance and workload. Eur J Pers. 2002;16(3):185-200.
10. Barrett L, Yates P. Oncology/haematology nurses: a study of job satisfaction, burnout and intention to leave the specialty. Australia Health Review. 2002,25(3):109-121.
11. Goodman EA, Boss RW. The phase model of burnout and employee turnover. Journal of Health and Human Services Administration. 2002;25(1):33-47.
12. Shaver KH, Lancey LM. Job and career satisfaction among staff nurses. J Nurs Adm. 2003;33(3):166-172.
13. Leung MY, Liang Q, Olomolaiye P. Impact of job stressors and stress on the safety behavior and accidents of construction workers. Journal of Management in Engineering. 2016;32(1):4015019.
14. Lin CH, Chou SY, Tsai YF. Impact of hospital personnel’s job stress on workplace burnout: an example of nursing personnel of hospitals in taichung city. Cheng Ching Medical Journal. 2017;13(3):20-32.
15. Chien CC, Weng CC. A study of the relationships among role stress, emotional exhaustion, depressive mood and job attitudes-local government accountants as examples. Chin J Mental Health. 2002;15(2):25-64.
16. King RC, Sethi V. The moderating effect of organizational commitment on burnout in information systems professionals. Eur J Inf Sys. 1997;6(2):86-96.
17. Caplan RD, Cobb S, French J, Van Harrison R, Pinneau SR. Job demands and worker health: main effective and occupational differences. Washington DC: US Government Printing Office; 1975.
18. Dillman DA. Presidential address navigating the rapids of change: some observations on survey methodology in the early twenty-first century. Public Opinion Quarterly. 2002;66:473-494.
19. Litwin GL, Stringer RA. Motivation and organizational climate. Cambridge: Division of Research Graduate School of Business Administration, Boston: Harvard University; 1968.
20. Yeh WY, Cheng YW, Chen MJ, Chiu WH. Development and validation of an occupational burnout inventory. Taiw J Public Health. 2002;27(5):349-364.
21. Siegrist J, Peter R, Junge A, Cremer P, Seidel D. Low status control, high effort at work and ischemic heart disease: prospective evidence from blue-collar men. Soc Sci Med. 1990;31:1127-1134.
22. Shen YC, Huang NT. A study on the influence of expectation discrepancy, organizational climate, organizational socialization on intention to stay. Employment Labor Relations Quarterly. 2012;2(2):208-235.
23. Karasek R, Theorell T. Healthy work: stress, productivity, and the reconstruction of working life. New York, NY: Basic Books; 1990.
24. Yeh WY, Cheng YW, Chen MJ, Chiu WH. Factors associated with workers’ burnout and “over-commitment to work”: a survey among employees of 36 companies in Taipei city. Taiwan J Public Health. 2008;27(6):463-477.

AUTHOR CONTRIBUTIONS

YUL and WTH conceived the ideas; YUL literature Review; WTH, CLK, and HJW collected the data; YUL analyzed the data and was involved in research design, literature discussion and data analysis; YUL, WTH, CLK, and HJW led the writing. WTH was involved in data collection, research findings and recommendations; CLK and HJW performed the data collection and provided research recommendations.

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REFERENCES
25. Lu KY, Chang LC, Wu HL. Relationships between professional commitment, job satisfaction, and work stress in public health nurses in Taiwan. *J Prof Nurs*. 2007;23(2):110-116.

26. Jenkins R, Elljott P. Stressors, burnout and social support: nurses in acute health settings. *J Adv Nurs*. 2004;48(6):622-631.

27. Jou R-C, Kuo C-W, Tang M-L. A study of job stress and turnover tendency among air traffic controllers: the mediating effects of Job satisfaction. *Transport Res Part E. Log Transport Rev*. 2013:57:95-104.

**How to cite this article:** Lan Y-L, Huang W-T, Kao C-L, Wang H-J. The relationship between organizational climate, job stress, workplace burnout, and retention of pharmacists. *J Occup Health*. 2020;62:e12079. [https://doi.org/10.1002/1348-9585.12079](https://doi.org/10.1002/1348-9585.12079)