RESEARCH ARTICLE

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Exploration and test of a model of employees' voluntary turnover in China

Abstract   By collecting a nationwide sample, the model of employee voluntary turnover in China is explored. There are three conclusions: 1. there exist significant correlation between any two variables including salary, job involvement, interpersonal support, job satisfaction, organizational commitment and turnover intention; 2. job involvement, interpersonal support and salary predict significantly organizational commitment, and interpersonal support and salary predicted significant job satisfaction; 3. job satisfaction can predict significantly turnover intention.

Keywords   employees, voluntary turnover, model of voluntary turnover

摘要   通过采集全国范围的样本来探讨我国雇员主动离职模型，可发现：1. 薪酬福利、工作投入、人际支持、工作满意度、组织承诺度、离职倾向之间均存在显著相关；2. 工作投入、人际支持、薪酬福利对组织承诺度有显著的预测作用，同时人际支持和薪酬福利对工作满意度也有显著的预测作用；3. 工作满意度对离职倾向有显著的预测作用。

关键词   雇员，主动离职，主动离职模型

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1   Introduction

Since the establishment of modern business management, the study of employee turnover, especially of voluntary turnover has attracted researchers' interest for many years. In reality the turnover of most key employees, who are critical to the survival and growth of the enterprises, are voluntary. It is, therefore, of great significance to investigate the causes and processes of employee voluntary turnover.

2   Research framework

Employee voluntary turnover has been extensively studied over a long time. For example, Price (1977) put forward the first influential employee turnover model. After an exploration of employee turnover by combining the corporate and individual variables, it was identified that the determinant factors which result in the employee turnover include salary, integration, intercommunication media and approach, normal communicative channels and centralization. However, the job satisfaction and opportunity of alternatives were the mediating variables of employee turnover. Later, other researchers proposed voluntary turnover motivation models to explain the mechanism of voluntary turnover from different perspectives (e.g., Mobley et al., 1979; Steers and Mowday, 1981; Price, 2001). Mobley (1979) claimed the four determinants of employee turnover are job satisfaction, expectation of current employment, anticipation of job transfer, work-unrelated values and occasional factors. Based on the models and theories by Price and Mobley et al., Steers and Mowday (1981) considered that subjective attitudes towards work and organization had an impact on employee turnover intention, including individual characters, opportunity for job-hunting, work expectation, job satisfaction, job participation and organizational commitment. Job satisfaction and organizational commitment are likely to be the mediating variables affecting the employee turnover process. From different perspectives, these researches have explored determining factors of employee turnover and systematically brought forward factors that affected the turnovers, such as environment variables, individual variables and structural variables, which lay a solid theoretical foundation for this research.

However, these studies also had some limitations. First of all, the process variables of voluntary turnover have not been well studied. Second, the factors related to individual, group and organization have not been integrated as a whole to examine the turnover process. Third, prior models have contained too many variables and have not offered a parsimonious approach to analyzing the turnover determinants.

Based on the results of prior studies, the integration of employee turnover theories, and interviews conducted in the early phase of this study, we determined initial factors affecting voluntary employee turnover in China, namely, salary, job involvement, interpersonal support, job satisfaction and organizational commitment. We intended to explore the employee voluntary turnover models and the relationship among the variables that affect employee voluntary turnover. To this end, we carefully designed questionnaires and performed statistical data analysis to examine the relationship of these variables.

3   Methods

3.1   Sampling

We conducted a survey on 315 in-service employees (172 male, 143 female) in different trades and areas. Among them, there are 133 associate degree holders, 138 bachelor's degree holders, 21 masters and 23 PhDs. There are 105 technicians, 88 low-level managers, 59 middle and high-level managers and 63 in other capacities. There are 106 SOE (State-owned Enterprise) employees, 102 privately-run business employees and 107 foreign-funded business employees.

3.2   Procedure

The study involves revising mature questionnaires already existing in foreign countries, conducting the survey and data statistics, revising the questionnaires, conducting official questionnaires and analyzing the results of data statistics. Payment is measured by the Five-item Scale of Price-Mueller (1986), job involvement by the Ten-item Scale of Kanungo (1982), interpersonal support by the Six-item Scale of Price (1997), job satisfaction by the Three-item Scale of Brayfield (1951), organizational commitment by the Nine-item Scale of Allen and Meyer (1990) and turnover intention by the Three-item Scale of Farth etc. (1998). The statistics are performed by SPSS11.0 and AMOS 4.0.

4   Results and discussion

4.1   Factor analysis and descriptive statistics

The major component analysis and Cattell Scree Plot were used. The factor weight of the items was selected according to their respective contribution to the factors by deleting those items with the weight lower than 0.40. The factors after variance maximum rotation and Cronbach internal coherence coefficient are shown in Table 1.

Table 1   Factor analysis result and descriptive statistics

	Salary	Job involvement	Interpersonal support	Job satisfaction	Organizational commitment	Turnover intention
M	3.68	3.75	4.57	4.05	3.80	3.21
SD	1.14	1.14	0.893	1.05	0.899	1.20
α	0.887	0.804	0.852	0.739	0.882	0.802

The questionnaire showed high internal coherence credibility, and α coefficients of the variables were between 0.739 and 0.887. It is suitable to be used in the formal study.

4.2   Related analysis

From the related analysis (Table 2), we observed significant correlations between any two variables among the factors including salary, job involvement, interpersonal support, job satisfaction, organizational commitment and turnover intention. Salary, job involvement, interpersonal support, job satisfaction and organizational commitment related significantly negative to turnover intension. The other correlations were significantly positive.

Table 2   Related analysis

	1	2	3	4	5	6
1. Salary	1					
2. Job involvement	0.418**	1				
3. Interpersonal support	0.299**	0.213**	1			
4. Job satisfaction	0. 570**	0.349**	0.380**	1		
5. Organizational commitment	0.688**	0.481**	0.367**	0.648**	1	
6. Turnover intention	−0.507**	−0.279**	−0.299*	−0.670**	−0.554**	1

Note: **$P<0.05$, *$P<0.1$.

4.3   Regression analysis

According to above correlations, we further did a regression analysis on data. Job satisfaction, organizational commitment and salary showed significant regression to turnover intention, while interpersonal support and job involvement did not show significant regression to turnover intention.

Baron and Kenny (1986) considered that three regression equations must be examined in the analysis of mediator regressions. James and Brett (1984) also

stated that the determination of a variable as a mediator variable must meet that the coefficients of the three regression equations are significant. However, the regression model has some limitations. It can only have one dependent variable and only analyze the direct effect. In addition, the operation is complicated. Therefore, the structural equation modeling analysis was further used (Table 3).

Table 3   Regression analysis

| Model	Coefficient (turnover intention)					Parameter
	B	$Std.E$	$Beta$	t	$Sig.t$	
Constant	13.632	0.587		23.212	0.000	$R^2 = 0.481$
Job satisfaction	−0.387	0.043	−0.506	−8.987	0.000	$F = 57.239^{***}$
Job commitment	−4.89E-02	0.022	−0.147	−2.248	0.025	$Sig.F = 0.000$
Interpersonal support	−2.95E-02	0.060	−0.022	−0.488	0.626	
Salary	−5.07E-02	0.025	−0.120	−2.050	0.041	$Df = 315$
Job involvement	2.332E-02	0.050	0.022	0.470	0.639	

Note: $^{***}P < 0.01$.

4.4   Structural equation modeling analysis

A primary model of relationships among variables was set up, and the model was examined by Scanning Electron Microscope (SEM) (Amos 4.0). The structural equation model can deal with several dependent variables at the same time and allow for the existence of measuring errors of independent variables and dependent variables. It can also estimate factor structure and relations among factors, allow for measuring models with even more elasticity, and estimate the goodness of fit for the whole model (Hou et al., 2004).

The SEM analysis showed that there was the satisfying goodness of fit between the data with the model: $\chi^2 (187) = 318.2$, $NFI = 0.913$, $CFI = 0.961$, $GFI = 0.918$, $RMSEA = 0.048$ (confidence interval [0.039, 0.056]). Generally, if $RMSEA$ is below 0.08 (the smaller, the better) and CFI is above 0.9 (the larger, the better), then the model is a good model (Hou, et al., 2004). The above indice of the study indicated that the model was well-founded and consistent with the data.

The result (Fig. 1) showed that job involvement, interpersonal support and salary can predict significantly organizational commitment ($\beta = 0.18$, 0.18, 0.72). Interpersonal support and salary can predict significantly job satisfaction ($\beta = 0.11$, 0.63). Job satisfaction can predict significantly turnover intention ($\beta = -0.83$).
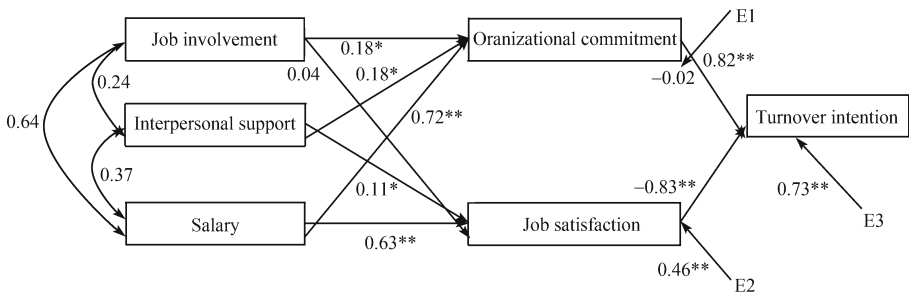
Note: **$P<0.05$, *$P<0.1$.

Fig. 1   Structural equation model

5 Conclusions

A nationwide sample was collected to explore the model of employee voluntary turnover in China and the relationships among the variables in the model were examined in this paper. The conclusions of this study are as follows.

(1) There exists a significant correlation between any two variables including salary, job involvement, interpersonal support, job satisfaction, organizational commitment and turnover intention. Among them, the correlations among salary, job involvement, interpersonal support, job satisfaction, organizational commitment and turnover intention are significantly negative and the other correlations are significantly positive.

(2) Job involvement, interpersonal support and salary predicted significantly organizational commitment. Interpersonal support and salary predicted significantly job satisfaction.

(3) Job satisfaction can predict significantly turnover intention. There exists a significant negative correlation between organizational commitment and turnover intention, but there is no significant predictive effect.

Employee turnover is a complex comprehensive system covering many disciplines, such as management, sociology, economics, and psychology. By means of successful model construction, the research manifests better predicting ability in accounting for the psychological process of Chinese employees' voluntary turnover. It is held that the reasons for employees' voluntary turnover lie in not only necessities such as salary, but also psychological and organizational factors which should be taken into full consideration. Therefore, in order to reduce great negative side effect on organizations from voluntary turnover, the organizations are supposed to supply employees with splendid salary and favorable interpersonal relationship, and accelerate the employees' job involvement. Further more, organizations should improve business regulations, cultivate harmonious corporate culture, value adequate psychological support

towards employees, strengthen employees' psychological contract behaviors and activate employees' job satisfaction and organizational commitment. Nevertheless, It is also believed that this study is only the starting in researching Chinese employee's voluntary turnover and there are many more factors affecting employees' voluntary turnover. Future studies should upgrade previous models and build up a relatively systematical turnover model so as to provide theoretical support for Chinese corporation development.

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