How Demographic Factors Effect Organizational Commitment for Artificial intelligence business Employees

Feng-Hsiung Hou*, Chun-Yuan Wang, Jia-Jiun Shu

School of AI, Guangdong & Taiwan, Foshan University, Guangdong, China

*corresponding author.

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Abstract: This study empirically investigates the relationship between demographic factors (including position, gender, age, education, marriage, working experience) and artificial intelligence business employees' organizational commitment. The study was conducted on 553 artificial intelligence business employees in Foshan. They were drawn from a variety of artificial intelligence business in Foshan. The design of the present study is to test the means of groups against the overall sample; the data collected were analyzed using descriptive statistics by frequency distributions, percentages, means, and standard deviations. Also, a one-way analysis of variance (ANOVA) was conducted to determine if significant differences existed in demographic factors effect organizational commitment for artificial intelligence business employees. Working experience, education, and Position were found that the top three most effecting variables of artificial intelligence business employees' organizational commitment. Marriage was also found to affect the organizational commitment. Married artificial intelligence business employees were significantly more involved with their jobs than single artificial intelligence business employees. Work experience, age and education were found that the least three effecting variables of artificial intelligence business employees' organizational commitment. The ANOVA results also indicated that there had significant relationship between the demographic factors (including position, gender, age, education, marriage, working experience) and artificial intelligence business employee s' organizational commitment.

1. Introduction

Committed employees contribute greatly to organizations because they perform and behave on achieving organizational goals [1]. Furthermore, commitment to organizations has been found to be positively related to such organizational outcomes as job satisfaction, motivation and attendance [2]. Among antecedents of organizational commitment are such personal factors as gender, marital status, position, education and age [3,4]. Several scholars identified three types of organizational commitment: affective, continuance and normative [5]. These three classifications of commitment are conceptually and empirically separable [6]. Though there may be some overlap between affective and normative commitment, both were relatively independent of continuance commitment. Affective commitment is employee emotional attachment to, identification with, and involvement in the organization and its goals. It results from an agreement between individual and organizational values so it becomes natural for one to become emotionally attached to, and enjoy membership in the organization [7-10]. Continuance commitment is willingness to remain in an organization because of personal investment in nontransferable investments. These investments include close working relationships with coworkers, retirement, career, and skills that are unique to a particular organization. They also include years of employment in a particular organization, involvement in the community in which the employer is, and other benefits that make it too costly for one to leave and seek employment elsewhere. Normative commitment is that which is induced by a feeling of obligation to remain with an organization. This feeling of moral obligation is measured by the extent to which a person feels loyal to an organization, makes personal sacrifice to help it out, and not criticize the organization [11].

For this reason, this study empirically investigates the relationship between demographic factors (including position, gender, age, education, marriage, working experience) and artificial intelligence business employee s' organizational commitment. Demographic factors of this study included six options: (1) position (including general artificial intelligence business director, head artificial intelligence business employee, assistant artificial intelligence business employee), (2) gender, (3) age, (4) educational level, (5) marriage situation, (6) working experience. Therefore, the purpose of this study was to analyze organizational commitment of artificial intelligence business employees in different demographic factors.

Based on the discussion presented above, the current study proposes a little idea that demographic factors (including position, gender, age, education level, marriage situation, and working experience) and work setting could affect artificial intelligence business employees' organizational commitment. As such, the following hypotheses were explored:

Hypothesis 1: artificial intelligence business employees have different organizational commitment in different position.

Hypothesis 2: artificial intelligence business employees have different organizational commitment in different gender.

Hypothesis 3: artificial intelligence business employees have different organizational commitment in different marriage situation.

Hypothesis 4: artificial intelligence business employees have different organizational commitment in different age.

Hypothesis 5: artificial intelligence business employees have different organizational commitment in different educational level.

Hypothesis 6: artificial intelligence business employees have different organizational commitment in different working experience.

2. Methodology

The entire population of artificial intelligence business employees (N = 553) from 34 artificial intelligence business in Foshan were surveyed. Lists of personnel were generated from each artificial intelligence business personnel database. There were two different types of positions: managerial level, employee. Table 1 show the numbers and percentages of usable questionnaires based on artificial intelligence business employees' demographic factors (included position, gender, age, education level, marriage situation, and working experience).Lists of all Foshan artificial intelligence business personnel from the ten Foshan artificial intelligence business were generated and the questionnaire and a cover letter were mailed to the residential address of each employee. Two weeks after the first mailing, a post card reminder was sent. After another 7-10 days a follow-up questionnaire was sent to non-respondents.

The design of the present study is to test the means of groups against the overall sample; the data collected were analyzed using descriptive statistics by frequency distributions, percentages, means, and standard deviations. Also, a one-way analysis of variance (ANOVA) was conducted to determine if significant differences existed in demographic factors affect organizational commitment for artificial intelligence business employees. When the results of the ANOVA test were statistically significant, Post hoc Schefee multiple comparisons were conducted to determine where differences between means existed. Statistical significance was accepted at an alpha level .05.

3. Results

The response rate to the questionnaire was 57.0% (n = 265). Forty questionnaires used to establish test-retest reliability were also excluded. The remaining questionnaires (n = 265) comprised the sample. Ranking and mean values, in ascending order, of total organizational commitment variables of artificial intelligence business employees are presented in Table 1 Primarily, the variables of working experience (Mean = 7.81), education (Mean = 6.53), and Position (Mean = 6.31) were the top three most effecting variables of artificial intelligence business employees is employees.

commitment. Marriage (Mean = 4.93), gender (Mean = 4.37), and age (Mean = 3.11) were the least effecting variables among artificial intelligence business employees' organizational commitment.

3.1. Organizational Commitment based on Demographic Factors

Table 2 shows the ANOVA results of organizational commitment among artificial intelligence business employees based on their demographic factors (included position, gender, age, education level, marriage situation, and working experience). For organizational commitment based on position, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the position (F = 37.174, p = 0.000). The results of the Scheffe' post-hoc test (see Table 3) indicates the general artificial intelligence business directors had statistically significantly higher organizational commitment than head artificial intelligence business employees, and assistant artificial intelligence business employees. The results of ANOVA and Scheffe' post-hoc test supported the Hypothesis 1: artificial intelligence business employees have different organizational commitment in different position.

For organizational commitment based on gender, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the gender (F = 32.531, p = 0.000). The results of the Scheffe' post-hoc test (see Table 3) indicates female artificial intelligence business employees had statistically significantly higher organizational commitment than male artificial intelligence business employees. The results of ANOVA and Scheffe' post-hoc test supported the Hypothesis 2: artificial intelligence business employees have different organizational commitment in different gender.

For organizational commitment based on marriage, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the different marriage situations (F = 22.381, p = 0.000). The results of the Scheffe' post-hoc test (see Table 3) indicates married artificial intelligence business employees had statistically significantly higher organizational commitment than single artificial intelligence business employees. The results of ANOVA and Scheffe' post-hoc test supported the Hypothesis 3: artificial intelligence business employees have different organizational commitment in different marriage situation.

For organizational commitment based on age, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the different marriage situations (F = 27.442, p = 0.012). The results of the Scheffe' post-hoc tests (see Table 4) indicate artificial intelligence business employee's age is between 30-39 had statistically significantly higher organizational commitment than other artificial intelligence business employees. The results of ANOVA and Scheffe' post-hoc test supported the Hypothesis 4: artificial intelligence business employees have different organizational commitment in different age.

For organizational commitment based on education, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the different education (F = 34.513, p = 0.034). The results of the Scheffe' post-hoc test (see Table 5) indicates artificial intelligence business employee with a master's degree had statistically significantly higher organizational commitment than other educational level artificial intelligence business employees. The results of ANOVA and Scheffe' post-hoc test supported the Hypothesis 5: artificial intelligence business employees have different organizational commitment in different educational level.

For organizational commitment based on working experience, the results of the one-way ANOVA test indicate there were statistically significant differences between artificial intelligence business employee's organizational commitment based on the different working experience (F = 33.175, p = 0.041). The results of the Scheffe' post-hoc test (see Table 5) indicates artificial intelligence business employees with six to ten years of working experience had statistically significantly higher organizational commitment than other artificial intelligence business employees. The results of

ANOVA and Scheffe' post-hoc test supported the Hypothesis 6: artificial intelligence business employees have different organizational commitment in different working experience.

3.2. Summary

Position, work setting, and gender were found that the top three most effecting variables of artificial intelligence business employees' organizational commitment. General artificial intelligence business directors were had statistically significantly higher organizational commitment than other level artificial intelligence business employees. Private artificial intelligence business' artificial intelligence business employees had statistically significantly higher organizational commitment than artificial intelligence business employees who in other work setting. Female artificial intelligence business employees also had statistically significantly higher organizational commitment than male artificial intelligence business employees. In the present study, marriage was found to affect the organizational commitment. Married artificial intelligence business employees were significantly more involved with their jobs than single artificial intelligence business employees. Work experience, age and education were found that the least three effecting variables of artificial intelligence business employees' organizational commitment. The ANOVA results also indicated that there had significant relationship between the demographic factors (including position, gender, age, education, marriage, working experience) and work setting and artificial intelligence business employees' organizational commitment.

Variables	Mean Rank	Mean
Working experience	1	7.81
Education	2	6.53
Position	3	6.31
Marriage	4	4.93
Gender	5	4.37
Age	6	3.11

Table 1 Rankings of Total Organizational Commitment Variables

Table 2 ANOVA Results of Organizational Commitment among Artificial Intelligence Business Employees based on Their Demographic Factors

Variables Variable	Organizational commitment			
variables variable	F	р		
Position	34.127	0.000		
Gender	32.518	0.000		
Marriage	22.378	0.000		
Age	27.436	0.011		
Education	34.509	0.035		
Working Experience	33.171	0.039		

Table 3 Differences in Organizational Commitment Means based on Position,	Gender	and
Marriage (Scheffe Test)		

Groups for Position, Gender and Marriage		Means	1	2
Group 1—Managerial Level		6.85	*	
Position Groups	Group 2–Employee	5.74		*
Condon Crowno	Group 1–Female	5.71	*	
Gender Groups	Group 2—Male	4.98		
Marriage	Group 1-Single	4.53		
Groups	Group 2—Married	4.74	*	

Table 4 Differences in Organizational Commitment Means based on Age (Scheffe Test)

Education	Maana	1	2	2	4	5
Groups	Means	1	2	3	4	5

Group 1—High School or below	1.291				
Group 2-Associate Degree	1.59				
Group 3–Bachelors Degree	2.82				
Group 4-Masters Degree	3.09	*			
Group 5-Doctorate Degree	3.04		*		

Table 5 Differences in organizational commitment means based on Work Experience (Scheffe Test)

Work Experience Groups	Means	1	2	3	4	5
Group 1—Below 1 year	3.86					
Group $2-1-5$ years	5.01		*			
Group 3–6-10 years	5.84	*				
Group 4–11-15 years	3.75					
Group 5—Above 16 years	3.09					

4 Conclusion

This study suggests that demographic factors and work setting variables are directional in effect of organizational commitment. On the other words, the demographic factors and work setting can be the reasons for affect of involvement for artificial intelligence business employee's job. Any particular demographic factors and work setting may have more influence on organizational commitment for artificial intelligence business employees. The results of this study help artificial intelligence business's managers and leaders understand how to enhance their artificial intelligence business employees' organizational commitment.

Further research should be conducted in order to find other factors that could contribute to artificial intelligence business employees' organizational commitment. Second, further research should be conducted to find the relationship between demographic factors; work setting and organizational commitment in the different organizations. Finally, researchers could use another research method to find deeply result about artificial intelligence business employee's organizational commitment in future studies.

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