



Causal factors influencing organizational commitment of employee in the automotive and auto parts industries: A case study of Amata City Industrial Estate Thailand

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Abstract

This study analyzed causal factors influencing the organizational commitment of employees in the automotive and auto parts industries of Amata City Industrial Estate Thailand. The research used a structural equation model based on an extensive review of relevant literature. The population and samples were drawn from employees in the automotive and auto parts industries of Amata City Industrial Estate Thailand. A questionnaire survey was used to collect empirical data. The data were analyzed by structural equation modeling (SEM). The results indicated that the model was consistent with the empirical data at a good level ($\chi^2/df = 1.53$, RMSEA = .03, $p = .00$, RMR = .03, GFI = .90, CFI = .97, IFI = .97, TLI = .97). The research findings indicated that the employees showed a high level of organizational climate, job satisfaction, organizational commitment and quality of work life. The results showed that the quality of work life had a direct effect on organizational commitment, and job satisfaction had an indirect effect on organizational commitment through the quality of work life. Moreover, this research found that the organizational climate had an indirect effect on organizational commitment through job satisfaction and the quality of work life. Nevertheless, the combined causal factors in the model could account for 78 percent of the variance of organizational commitment.

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Introduction

The current economic situation has caused organizations to adapt to domestic and foreign competition intensified by trade liberalization. Therefore, organizations need to find administrative strategies involving staff, money, materials, and management methods to be competitive (Rajamangala University of Technology Thanyaburi, 2014). In particular, “staff” or “human resource” is an important mechanism for an organization to move forward steadily, and is the only resource

that can become enhanced in proficiency and expertise and creates new ideas. Competition for personnel with knowledge and abilities between various organizations always takes place (Noknoi, 2009). However, many organizations around the world are experiencing increasing resignation rate, resulting in high administrative costs (Teerathanachaiyakun, 2014). Such conditions also occur in Thailand. In 2012–2016, the number of voluntary resignations was greater than that of dismissals or contract endings, and is likely to increase every year. In 2016, 143,246 people resigned voluntarily, equivalent to 12 percent increase (Office of the Permanent Secretary, n.d.). Therefore, organizations responsible for driving the country’s economy must find strategies to maintain high quality human resources by prioritizing and developing methods to induce organizational commitment of employees (Tepwan, 2011), which will affect the performance of the organization in term

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of customer satisfaction, increased profits, increased levels of working effort, and decreased resignation tendency (Gallup, 2010 cited in Sanglimsuwan, Naksawat, Suksawang, & Sanglimsuwan, 2013). Organizational commitment is also related to the rate of absenteeism, productivity, quality of work, and avoidance of quality personnel to defect to competitors (Khejonn, 2008).

Organizational climate is a set of characteristics of organizational environment, or perception of employees to the climate of the organizational environment (Castro & Martins, 2010). When the employer creates good climate in the organization and the employees perceive it positively, they will become more determined, motivated, satisfied and organizationally committed, resulting in improved organizational efficiency (Putter, 2010). The relationships between organizational climate and various variables have been specified as follows: 1) organizational climate has a direct influence on organizational commitment (Noordin, Omar, Sehan, & Idrus, 2010; Putter, 2010); 2) organizational climate has an indirect influence on organizational commitment through job satisfaction (Alajmi, 2016; Bhaesajsanguan, 2010; Putter, 2010); and 3) organizational climate has an indirect influence on organizational commitment through quality of work life (Yasvari & Kimiagary, 2014).

Job satisfaction was found to be another factor affecting organizational commitment, making employees enthusiastic, determined, high-spirited and encouraged in work. This affects efficiency and effectiveness of work, and also achievement of an organization's goals (Vonganurutto, 2010). The relationships between job satisfaction and other variables have been specified as follows: 1) job satisfaction has a direct influence on organizational commitment (Bhaesajsanguan, 2010; Kaewduang, 2009); and 2) job satisfaction has an indirect influence on organizational commitment through quality of work life (Kaewduang, 2009; Phutachoti, 2013).

In addition, quality of work life is an important variable affecting an organization in 3 aspects: 1) direct results in increasing satisfaction at work, inducing organizational commitment and reducing job turnover rate; 2) higher productivity; and 3) higher organizational performance, such as profits and achievement of the organization's goals (Greenberg & Baron, 1995 cited in Tatsiwat, 2010). Quality of work life was found to have a direct influence on organizational commitment (Chinomona & Dhurup, 2014; Gnanayudam & Dharmasiri, 2007; Kaewduang, 2009).

This study focussed on causal factors influencing employees' organizational commitment in the automotive and auto parts industries, considered as top ranking industries in Thailand during 2012–2016 and 1 of the 10 target industries in the Eastern Economic Corridor (EEC) project of Thailand (The Board of Investment of Thailand, 2017). Moreover, the number strongly demonstrates the more value added production of Thailand, which is the major development goal of the country (Office of Permanent Secretary Ministry of Commerce, n.d.). The study took place in Amata City Industrial Estate Thailand, one of the largest industrial estates in the EEC region and regarded by the World Bank as one of the highly successful large industrial development areas in Asia (World Bank cited in Amata Group, 2017). This research

aimed to study perception levels of organizational climate, job satisfaction, quality of work life and organizational commitment of employees, and to examine models of causal factors that influence employees' organizational commitment in the automotive and auto parts industries in Amata City Industrial Estate Thailand. The conceptual framework was created for use in the research by synthesizing all these theories and concepts as illustrated in Figure 1.

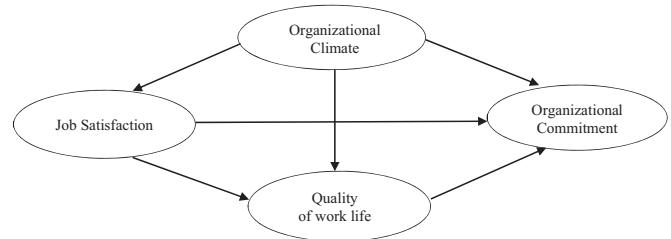


Figure 1 Framework of the study

Methodology

Participants

The population was employees who worked in 289 automotive and auto parts establishments in Amata City Industrial Estate Thailand, including 216 in Amata City Chon Buri Industrial Estate and 73 in Amata City Rayong Industrial Estate (Amata Group, 2017). The optimal sample size at an excellent level was determined as proposed by Comrey and Lee (1992 as cited in Pearson & Mundform, 2010), resulting in a sample size of 500. The sample size was increased to 620 to prevent data collection errors and sampling was performed by using a two-stage sampling method. In stage 1, sampling was performed by drawing lots of 20 establishments, 15 from Amata City Chon Buri Industrial Estate and 5 from Amata City Rayong Industrial Estate. In stage 2, stratified sampling was performed using unequal proportions and simple random sampling to choose the sample members from each company.

Research Instrument

A questionnaire was used as research instrument and divided into 5 parts, including: Part 1, 6 multiple choice questions about personal information (gender, age, academic degree, job position, work experience, and industrial estate of affiliation); Part 2, organizational climate test based on Putter (2010) with 23 positive questions; Part 3, job satisfaction test based on the Minnesota Satisfaction Questionnaire (MSQ) of Weiss et al. (1967 as cited in Pitakthepsombat, Vadhanasindhu, & Panyasiri, 2009) with 20 positive questions; Part 4, work life quality test based on Timossi, Pedroso, Francisco, and Pilatti (2008) with 32 positive and negative questions; and Part 5, organizational commitment based on Mowday, Steers, and Porter (1982) with 14 positive and negative questions. The measurement levels of the questionnaire was adjusted from the original 7 levels (Mowday, Steers, & Porter, 1979, 1982) to

5 levels to make it easier for respondents to decide. However, the instrument still has a high level of reliability and is a widely used instrument in the organizational commitment evaluation to the present (Pitakthepsombat, Vadhanasindhu, & Panyasiri, 2009; Emami, 2012). For parts 2–5, each question had 5 interval scales with scores from 1–5 (Wanitbancha, 2013).

Assessment of Research Tools

Research instrument quality inspection was performed through content validity examination by 4 experts, yielding IOC between 0.50–1.00. The questionnaire was tested by 30 non-sample employees. Confidence test results of the variables organizational climate, quality of work life, job satisfaction and organizational commitment showed Cronbach's alphas of 0.93, 0.91, 0.90 and 0.82 respectively, meaning that the quality of the research instrument met the specified criteria and could be used to collect actual data (Griethuijsen et al., 2014 as cited in Taber, 2017).

Data Collection

In total, 620 questionnaires were sent to human resource managers of the sample establishments and 562 completed questionnaires were returned, accounting for 90.65 percent. The sample size was still considered to be excellent in suitability (Comrey & Lee, 1992 as cited in Pearson & Mundform, 2010). The data collection period was from August 2017 to August 2018.

Protection of Research Subjects' Rights

For this study, a certificate of ethics in human research no. 79-2561, was certified by the Committee on Ethics of Human Research of the Graduate School of Public Administration, Burapha University. The participants had the right to accept or refuse participation in the research, and once participating, they could withdraw at any point of time without having to give a reason. This would not have any effect on participants, and the obtained information would be kept confidential and presented in an overall perspective only.

Data Analysis

The level of organizational climate, job satisfaction, quality of work life and organizational commitment were analyzed using descriptive statistics, and the fit of models of causal factors influencing organizational commitment of employees was examined by structural equation modeling (SEM). SEM used to depict relationships among observed variables, with the same basic goal of providing a quantitative

test of a theoretical model hypothesized by the researcher. More specifically, various theoretical models can be tested in SEM that hypothesize how sets of variables define constructs and how these constructs are related to each other (Schumacker & Lomax, 2010). The maximum likelihood test was used to test the fit of the hypothetical models with the empirical data by considering the harmonization of the model's overall measurements from the goodness of fit measures for testing the theoretical models hypothesized in this research.

Results

From 562 samples, most of the respondents were female (63.52%) aged between 25–29 years (36.83%), graduated with bachelor's degrees (55.87%), had job positions at staff level (75.09%) with 1–3 years of work experience (34.52%) and worked in Amata City Chon Buri Industrial Estate (76.16%) (Table 1). The samples had organizational climate perception ($\bar{x} = 3.88$, $SD = 0.56$), job satisfaction ($\bar{x} = 3.91$, $SD = 0.61$) and overall organizational commitment at a high level ($\bar{x} = 3.64$, $SD = 0.69$). The overall quality of work life was at a good level ($\bar{x} = 3.79$, $SD = 0.62$) (Table 2). The structural equation model was fitted to the empirical data at a good level (Table 3).

Table 1 Demographic characteristics

Characteristic	%
Gender	
Male	36.48
Female	63.52
Age (years)	
< 25	12.10
25–29	36.83
30–34	30.61
≥ 35	20.46
Academic degree	
Lower than bachelor degree	40.04
Bachelor's degree	55.87
Greater than Bachelor's degree	4.09
Job position	
Staff	75.09
Supervisor/ Manager/ Executive	24.91
Work experience (years)	
< 1	16.19
1–3	34.52
4–6	19.22
7–9	10.32
≥ 10	19.75
Worked in Amata City Industrial Estate	
Chon Buri	76.16
Rayong	23.84

Table 2 Level of overall organizational climate, job satisfaction, quality of work life and organizational commitment

Variables	\bar{x}	SD	Skewness	Kurtosis
Organizational climate (OC)	3.88	0.56	-0.33	0.24
Job satisfaction (JS)	3.91	0.61	-0.24	0.47
Quality of work life (QWL)	3.79	0.62	-0.32	0.39
Organizational commitment (OCM)	3.64	0.69	-0.04	0.15

Table 3 Fit test results of the model

Fit Index	χ^2/df	RMSEA	RMR	GFI	CFI	IFI	TLI
Recommended Value	$\leq 3^1$	$\leq .08^2$	$\leq .08^3$	$\geq .90^4$	$\geq .90^5$	$\geq .90^6$	$\geq .90^4$
Structural model (result)	1.53	.03	.03	.90	.97	.97	.97

Source: ¹Bollen (1989 cited in Kaiwan, 2013); Kline (1998 cited in Wanitbancha, 2013); ²Schermelleh-Engel, Moosbrugger, and Muller (2003); Hooper, Coughlan, and Mullen, 2008; ³Kaiwan (2013); ⁴Schumacker and Lomax (2010); ⁵Schumacker and Lomax (2010); Ramlall (2017); ⁶Bollen (1986 cited in Wanitbancha, 2013); Ramlall (2017)

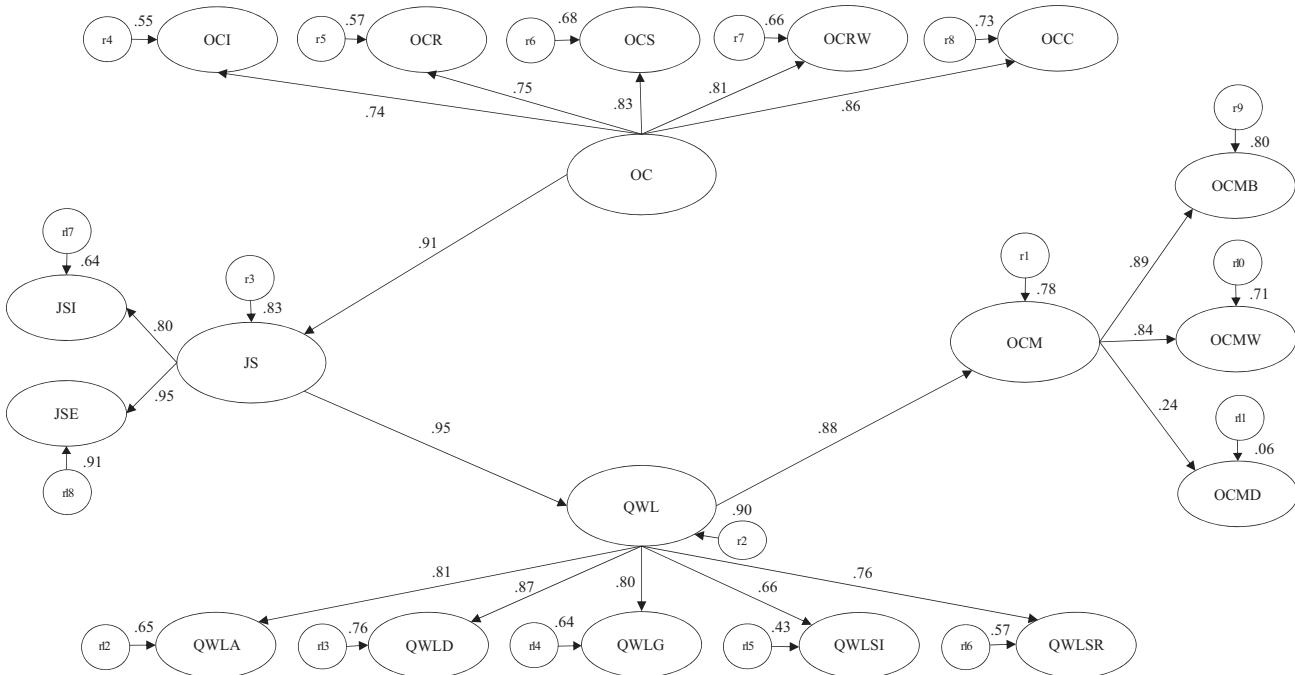
The results of the hypotheses tests showed that quality of work life had a direct influence on organizational commitment, and job satisfaction had indirect influence on organizational commitment of the employees through quality of work life. Moreover, organizational climate had indirect influence on organizational commitment of the employees through job

satisfaction and quality of work life (Table 4 and Figure 2). In addition, the causal factors in the model could jointly explain 78 percent of the variance in organizational commitment of the employees ($R^2 = .78$).

Table 4 Direct effects (DE), indirect effects (IE) and total effects of variables

Result Variables	JS			QWL			OCM			
	Causal Variables	DE	IE	Total	DE	IE	Total	DE	IE	Total
OC	.91	-	.91	-	.86	.86	-	.76	.76	.76
JS	-	-	-	.95	-	.95	-	.84	.84	.84
QWL	-	-	-	-	-	-	-	.88	-	.88

Note: JS = job satisfaction; OC = organizational climate; OCM = organizational commitment; QWL = quality of work life



Chi-square/df = 1.53, $p = .00$, RMSEA = .03, RMR = .03, GFI = .90, CFI = .97, IFI = .97, TLI = .97

Figure 2 Causal relationship model of organizational commitment

Note: JS = job satisfaction; JSE = extrinsic satisfaction; JSI = intrinsic satisfaction; OC = organizational climate; OCI = innovation; OCR = responsibility; OCS = standards; OCRW = rewards; OCC = clarity; OCM = organizational commitment; OCMB = a strong belief in and acceptance of the organization's goals and values; OCMD = a strong desire to maintain membership in the organization; OCMW = willingness to exert considerable effort on behalf of the organization; QWL = quality of work life; QWLA = self-sufficiency; QWLD = development of human capacities; QWLG = growth and security; QWLSI = social integration in work organization; QWLSR = social relevance of work life

Discussion

The results findings were; the employees showed a high level of organizational climate, job satisfaction, organizational commitment, and quality of work life and consistent with previous studies (Kaewduang, 2009; Saelee, 2014; Rahothan, 2015). It was found that only quality of work life had a direct influence on organizational commitment of the employees, consistent with previous studies in the SME sector (Chinomona & Dhurup, 2014) and apparel industry (Gnanayudam & Dharmasiri, 2007; Kaewduang, 2009). However, organizational climate and job satisfaction had no direct influence on organizational commitment of the employees and consistent with previous studies (Pavapatta & Narkwiboonwong, 2015). This might be because most of the samples were Generation Y people, who were born between 1979–1995, or less than 39 years of age, and had no more than 3 years of work experience. Generation Y is likely to be less enduring but creative and innovative, resulting in short-term commitment to organizations that function with employer/employee relationship. Generation Y also chooses jobs freely according to his/her satisfaction and interest (Chevarunotai, 2012). However, job satisfaction had an indirect influence on organizational commitment of the employees through quality of work life, in accordance with the proposed hypotheses and consistent with previous studies (Kaewduang, 2009; Phutachoti, 2013).

Therefore, despite the perception of good organizational climate or job satisfaction, it was not enough to directly affect organizational commitment of the employees. Lastly, organizational climate was found to have indirect influence on organizational commitment of the employees through quality of work life and job satisfaction, which did not conform with the proposed hypotheses. Therefore, the organizational climate variable was also important in the causal factors model of organizational commitment of the employees. Therefore, future research should expand into other sectors to develop the human resource management in the organization.

Conclusion and Recommendation

From this study, it can be concluded that organizational climate, job satisfaction and quality of work life were found to affect organizational commitment of the employees. The findings showed that quality of work life had a direct influence on organizational commitment, and job satisfaction indirectly influenced organizational commitment through quality of work life. In addition, organizational climate had an indirect influence on organizational commitment through job satisfaction and quality of work life. The following recommendations are concluded from this work:

1. Quality of work life has an important influence on organizational commitment. Therefore, it is important for an organization to promote good quality of work life for the employees in the organization to become committed to the organization.

2. Executives should create a good organizational climate by specifying and communicating directions and goals of the organization clearly to all employees and must pay more attention to promoting job satisfaction in order to ensure a higher level of organizational commitment.

3. Additional variables may be included in future study such as organizational culture, perception of justice in the organization, motivation at work, leadership, and happiness at work.

Conflict of Interest

There is no conflict of interest.

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