

The Moderating Impact of Gender and Family Location on the Relationship between Job Characteristics and Organizational Commitment

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Abstract: The present study explored the role of gender and family location in moderating the impact of job characteristics on organizational commitment. A valid sample of 389 Taiwanese expatriates was invited to participate by e-mail. The methods of data analysis used in this study consisted of exploratory factor analysis, internal consistency reliability, and moderated multiple regression. Findings provides that job characteristics sub-variables, variety and autonomy significantly positively influence organizational commitment, while friendship opportunity and task identity significantly negatively influence organizational commitment. Gender is identified as moderating relationships between job characteristics and organizational commitment. The implications for future research are also discussed.

Keywords: Gender, Organizational Commitment, Job Characteristics, Family Location.

I. INTRODUCTION

With global businesses relocating employees, there are those living and working abroad as international employees (Tharenou, 2002). Business is no longer limited by national boundaries, and retention of valuable expatriates is becoming a very important issue for international corporations. Therefore, organizations have increasingly realized that it is necessary not only to have expatriate employees willing to live and work abroad, but also to have a staff identifying closely with and supporting the organization. As expatriates' personal issues may have an impact on their overseas jobs, Aryee and Debrah (1992) conducted a study on the impact of family and career variables on organizational commitment. The findings from their study show that spousal support and marital satisfaction have a significant positive effect on organizational commitment. A positive family experience of an individual provides potency to his or her work role and satisfaction with the setting in which the role is performed. Furthermore, since mainland China instituted its "Open Door" policy, with a population of 1.2 billion, there has been a flow of foreign direct investment into the Chinese mainland that has resulted in a substantially increased number of foreign business executives working there (Selmer, 1998). According to the Ministry of Commerce of the People's Republic of China, by January 2009, the value of 661 296 foreign investments was in excess of US \$862.9 billion. Mainland China is the largest recipient of international foreign direct investment in the world (2009). Moreover, the five largest foreign direct investment (FDI) countries (areas) in mainland China are Hong Kong, followed by the British Virgin Islands, Japan, the United States, and Taiwan. If Taiwan's FDI offshore investment expenditures are included, Taiwan would be the second largest FDI in mainland China (Department of Investment Services Ministry of Economic Affairs, 2009). There are 77 642 companies from Taiwan operating in mainland China with fiscal expenditures exceeding US \$47.77 billion by the end of 2009 (Ministry of Commerce of the People's Republic of China, 2009).

There are several empirical studies examining the relationships among job characteristics, personal characteristics, and organizational commitment in different industries (Abbott et al., 2006; Bhuian et al., 1996, 2001; Bhuian and Menguc, 2002; Niehoff et al., 2001; Thomas et al., 2004; Lin and Hsieh, 2002; Morley and Flynn, 2004; Nauman et al., 2000; Naumann, 1993). However, only a few studies were found that examined the relationships emphasizing expatriate employees who were working in mainland China (Chen, 2001; Hutchings, 2003). No studies have been done examining the moderating effects of family location and gender differences on job characteristics and organizational commitment of Taiwanese expatriates working in mainland China. Based on the gap, the purpose of this study is to investigate the moderating effects of family location and gender on job characteristics and organizational commitment of Taiwanese expatriates working in mainland China. The research question in this study would be do gender and family location have an impact on job characteristics and organizational commitment for Taiwanese expatriates working in mainland China?

II. THEORETICAL BACKGROUND

Expatriates are international assignees and employees sent by a firm from the home country to work in a foreign location. Most expatriate employees are managerial employees going to work abroad and assigned significant responsibilities. With the growth in the globalization of business, expatriate employees are becoming very important and their numbers are expected to continue to increase. Hence, expatriate employees have an important role as representatives of the home office and as bearers of organizational culture (Ali et al., 1997; Guzzo, 1996). Expatriate failures include lost business or suppliers, potential damage to customers, and negative effects on staff members and employees in the local market (Frank E. Allen and Associates, n.d.). Consequences include financial failures, caused by increased direct costs, indirect costs, replacement costs, reduced productivity, or unstable corporate image, and lost sales (Ashamalla, 1998).

A. Organizational commitment:

The construct most often studied to explain employee attachment or loyalty to an organization is organizational commitment (Sommer et al., 1996). Two general forms of organizational commitment have been defined by theorists: moral and calculative. Moral orientation is the attitude in the form of an attachment between an individual and an organization. This is attitude-based commitment which includes identification, involvement, and loyalty. It tends to make the employee desire to maintain membership in the organization and reduces their desire to leave as they have a strong identification with the organization's goals and values (Mowday et al., 1982; Park et al., 2002). The calculative perspective is based upon exchange theory explaining organizational commitment as an investment that people make when they join an organization. After membership, all actions taken by the person are considered to justify the act of joining (Barge and Schlueter, 1988; Sager and Johnstone, 1989). In addition, organizational commitment can be linked to employees' attitude and behavior, including intention to leave, absenteeism, actual turnover, and customer service quality (Hartmann and Bambacas, 2000; Malhotra and Mukherjee, 2004). Employees with a higher level of commitment to their organization will exert higher levels of effort toward the organization, and identify with the organization's goals (Scholl, 1981).

B. Meyer and Allen's three-component model of organizational commitment:

Meyer and Allen (1984) conducted two studies to test the side-bet theory, one using 64 introductory psychology students and the other using 130 employees from several administrative departments of a large university and to test the side-bet theory. In 1960, Becker introduced his seminal side-bet theory based on an empirical study examining variables that influenced the personal motivations people had for being committed to an organization (Westrich, 2003). Side-bet theory focuses on the nature of the relationships between the individual and the organization. The underlying principle of side-bet theory is that during their employment, individuals accumulate "investments" in the organization that they would lose if they were to leave the organization. The major propositions of this theory relate to certain variables, including employee attitudes, beliefs about the organization, and their future career expectations if the company is restructured. From Meyer and Allen's research findings, they proposed a model of organizational commitment (Meyer and Allen, 1991). Furthermore, Powell and Meyer (2004) conducted a study to test Becker's (1960) side-bet conceptualization of commitment within the context of Meyer and Allen's (1991) three-component model of organizational commitment. Their findings provide strong support for Becker's theory. The three-component model of organizational commitment reflects a psychological state of employees as the basis for maintaining employment in an organization, including a desire (affective commitment), an obligation (normative commitment), and a need (continuance commitment). Affective

commitment is a feeling of attachment and belonging to an organization, including the structure of the organization, the type of work experiences, and personal characteristics (Hartmann and Bambacas, 2000). Normative commitment is the obligation an employee feels to remain with the organization (Tan and Akhtar, 1998). Continuance commitment refers to the awareness of the consequences associated with leaving an organization, or the awareness of a lack of alternatives. Employees choose to remain in an organization based on continuance commitment because they need to do so (Meyer and Allen, 1991).

C. Job characteristics model:

Hackman and Oldham (1976) propose their job characteristics model based on several theories: Herzberg et al.'s two-factor theory that indicates different factors cause employee satisfaction (recognition, achievement, responsibility, advancement, and personal growth) and dissatisfaction (company policies, supervisory practices, pay plans, and working condition) (Herzberg, 1959); activation theory that analyzes understanding the individual's work behavior in an organization (Scott, 1966); socio-technical systems theory (Cherns, 1976) that not only provides significant perception into the interdependencies between technical views of the work itself and the broader social environment in which the work is done, but also provides clear specifications of how the work itself and the social environment affect one another (Hackman and Oldham, 1976). Hackman and Oldham's (1976) job characteristics model attempts to systematize, refine, and extend the knowledge of the relationship between job characteristics and the responses of individuals to their work. This model includes three psychological states with five core job dimensions: experienced meaningfulness of the work (skill variety, task identity and task significance), experienced responsibility for the outcomes of the work (autonomy), and knowledge of the results of the work activities (feedback). This model speculates that the experience of an individual is positively affected by what an individual learns (knowledge of the results), what an individual has performed well on a job (experienced responsibility), and what an individual cares about (experienced meaningfulness). Those individual experiences also positively affect an individual's incentive to perform his or her job well in the future (Hackman and Oldham, 1976). The five dimensions of the model include skill variety, task identity, task significance, autonomy, and feedback. Skill variety is the degree to which a job requires a variety of challenging skills and abilities providing an employee the opportunity to undertake a wide range of options in his/her job. Task identity is the degree to which the job requires completion of a whole or identifiable piece of work as the result of individual effort. Task significance is a measure of the degree to which the job has an impact on the lives of others in an organization or in the world at large. Autonomy assesses whether the job allows an individual freedom and independence in scheduling his/her work and determining what he/she likes to do. Feedback concerns the degree to which workers receive information concerning their performance on the job and the effectiveness of their effort from others (Hackman and Oldham, 1976).

D. Job characteristics inventory:

The Job Characteristics Inventory (JCI) developed by Sims et al. (1976) is an extension of the job characteristics scales developed by Hackman and Lawler (1971). The six dimensions in the JCI are segregated into two categories: 1) variety, autonomy, task identity, and feedback (refer to job satisfaction), and 2) dealing with others and friendship opportunities (not related to job satisfaction, but were included to find out the impact of the interpersonal characteristics of job design). Dealing with others is the degree to which individuals need the abilities to communicate and cooperate with others when doing their job. Friendship opportunity is a degree to which individuals can know other people and attain friendship in their workplace. In order to demonstrate reliability, construct validity, discriminant validity and convergent validity of the JCI, Sims et al. (1976) test two highly divergent samples: 1,161 medical center personnel and 192 supervisors and managers from a southwestern U.S. manufacturing firm with approximate sales of \$120 million as reported in 1973. The reliability of all dimensions is above the 0.70 level for the final 30-item version of the JCI. Factor analysis is adopted to establish construct validity. Through the multiple discriminant analysis procedure, discriminant validity is evaluated. Different studies have indicated that the JCI has stronger internal consistency and empirical dimensionality. It has been most widely used by researchers to assess employee's perspective on job characteristics (Arnold and House, 1980; Brief and Aldag, 1978; Griffin et al., 1980; Pierce and Dunham, 1978).

E. Can gender and family location moderate the impact of job characteristics on organizational commitment?:

In this study, gender and family location are viewed as moderators between job characteristics and organizational commitment. Recent studies suggest that gender should be one of critical variables significantly correlating with organizational commitment (Hofstede, 2001; Mathieu and Zajac, 1990). Mathieu and Zajac (1990) point out that female

employee tend to be more committed to their organizations than male, as female experience more difficulty in finding a job than male. Most Asian countries demonstrate high-masculine societies. In masculine societies, for example, male are supposed to be assertive, tough, extroverted, and focus on competitiveness and material success, while female are presumed to be modest, tender, introverted, and pay attention to the quality of life (Hofstede, 2001). Like most Asian countries, Taiwan is a relatively high-masculinity society. As a result, gender in Taiwan plays different social roles. More often than not, therefore, individuals within organizations are assigned to different tasks depending on gender (Mathieu and Zajac, 1990). Therefore, it is recommended that gender should moderate the effect of job characteristics on organizational commitment.

Family location is also a critical factor influencing organizational commitment (Sikorsha-Simmons, 2005). Family location in this study is defined as whether or not the family is living with the expatriate in mainland China. Family support or marital satisfaction has a significant positive effect on organizational commitment (Aryee and Debrah, 1992). This is because the positive family experience of an individual provides potency to his or her work role and the setting within which the work is performed. When living with their families in mainland China, Taiwanese expatriates are presumed to obtain more family support. As a consequence, the turnover rate of these Taiwanese expatriates living with their family in mainland China should be reduced substantially. Evidence reveals that women in masculine societies are likely to place more emphasis on taking care of family life (Hofstede, 2001). Therefore, female Taiwanese expatriates living with their family in mainland China are presumed to place less emphasis on their work, which leads to lower organizational commitment. Therefore, it is recommended the role of family location is a moderating the effect of job characteristics on organizational commitment.

III. RESEARCH METHODOLOGY

An online self-report survey research design is used to explain the relationships among family location, job characteristics, and organizational commitment according to gender. With a response rate of 5.5 percent, a valid sample of 389 is obtained from the entire accessible population of 6,156 Taiwanese expatriates working in mainland China listed in the official report by the Ministry of Commerce of the People's Republic of China. The entire accessible population was invited to participate by e-mail. In this study, a moderated multiple regression (MMR) analysis is adopted so as to identify relationships between job characteristics variables and organizational commitment as well as explore whether gender and family location of Taiwanese expatriates working in mainland China moderate the impact of job characteristics on organizational commitment.

A. Data Analyses and Results:

The construct validity of two instruments had already been established by their developers and other researchers in different studies. To establish construct validity in this study, EFA is conducted to contrast with previous studies and further validate the instrument and examine the underlying structure for the total items of each variable. Furthermore, to examine the underlying structure for all variables, principal components analysis with varimax rotation is executed.

Before employing EFA, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test are conducted. The KMO value of each variable, job characteristics and organization commitment is greater than .70, meaning there are sufficient items for each factor. The Bartlett value has to be significant ($p < .05$) in order for EFA to be used. In this study, the significance value for each variable is .000, meaning the variables correlated highly enough to give logical support for factor analysis (Leech et al., 2005). After the KMO and Bartlett tests are conducted, principal components analysis with varimax rotation is executed for each variable. For job characteristics, based on the scree plot test and using an eigenvalue greater than one, after rotation, five factors are extracted with 59.12 percent of the variance accounted for by the five factors. This result is different from the original instrument containing six factors. According to the results of the new factor loading for job characteristics, the new five factors are renamed. Five sub-constructs of job characteristics are variety and autonomy (AV), friendship opportunity (FO), feedback, task identity (TI), and dealing with others (DWO). Moreover, the eigenvalues for these five factors were 9.726 (19.673 percent of the variance); 2.986 (13.791 percent of the variance); 2.149, (12.324 percent of the variance); 1.608 (7.398 percent of the variance); and 1.268 (5.983 percent of the variance), respectively. All items and factor loadings for the rotated factors were greater than .40, meaning that each item has absolute value (Leech et al., 2005).

With regard to organizational commitment, a principal components analysis with varimax rotation is employed to examine the underlying structure for the 18 items of the organizational commitment questionnaire. Three factors, affective, normative, and continuance commitment are extracted with eigenvalues of 3.079 (20.682 percent of the variance), 6.847 (25.605 percent of the variance), and 1.376 (16.501 percent of the variance), respectively. The loading values of all items were greater than .50, indicating that the validity of organizational commitment is acceptable (Leech et al. 2005). To assess the internal consistency reliability of the instrument in a study, Cronbach's coefficient alpha is the most commonly used method (Leech et al., 2005). In this study, Cronbach's alpha is used to assess consistency of these constructs. The coefficients of all the variables (see Table 1) are greater than .70 (ranging from .734 to .911), indicating that the item construct scale for each variable has rational consistency reliability.

The research question is assessed by a moderated multiple regression (MMR) adopting SPSS 14.0 so as to examine the impact of job characteristics on organizational commitment and the roles of gender and family location in moderating relationships between job characteristics and organizational commitment simultaneously.

In order to obtain an in-depth understanding of relationships between job characteristics and organizational commitment, general organizational commitment is categorized into three aspects, affective, normative, and continuance commitments. For affective commitment, as shown in Model 1 of Table 2, variety and autonomy positively influenced affective commitment, while task identity negatively impacted affective commitment. Findings also revealed that gender significantly strengthened the impact of friendship opportunity on affective commitment. The B weight value of .781 (see Model 3 of Table 2) for the interaction term between friendship opportunity and gender indicated that the effect of friendship opportunity on affective commitment was increased by .781 units for male expatriates. Through the moderating effect of gender, the negative impact of friendship opportunity on affective commitment is reversed into the positive effect of friendship opportunity on affective commitment because the sum of .781 and -.574 is positive (Aiken and West, 1991).

For normative commitment, findings (see Model 1 of Table 3) indicate that variety and autonomy positively influences normative commitment, while task identity negatively impacts normative commitment. Based on Models 2 and 3 of Table 3, not only does gender positively influences normative commitment, but it also moderates the effect of variety and autonomy, and friendship opportunity on normative commitment. Gender buffered the effect of variety and autonomy on normative commitment due to -.622 of the B weight value for the interaction term between variety and autonomy, and gender, while gender amplified the impact of friendship opportunity on normative commitment due to .784 of the B weight value for the interaction term between friendship opportunity and gender. Through the moderating effect of gender, the negative impact of friendship opportunity on normative commitment was reversed into the positive effect of friendship opportunity on normative commitment due to the positive sum of .784 and -.586 (Aiken and West, 1991).

For continuance commitment, findings in Model 1 of Table 4 indicate that variety and autonomy positively influences continuance commitment, while task identity negatively impacts continuance commitment. Model 2 points out that gender also positively influences continuance commitment. Based on Model 3, moreover, gender significantly weakened the effect of variety and autonomy on continuance commitment because of -1.188 of the B weight value for the interaction term between variety and autonomy, and gender. As a result, the positive effect of variety and autonomy on continuance commitment is reversed into the negative effect of variety and autonomy on continuance commitment due to the negative sum of 1.166 and -1.188 (Aiken and West, 1991). In contrast, the impact of friendship opportunity on continuance commitment is amplified by gender due to .807 of the B weight value for the interaction term between friendship opportunity and gender. Moreover, the negative impact of friendship opportunity on continuance commitment is reversed into the positive effect of friendship opportunity on continuance commitment due to the positive sum of .807 and -.779 (Aiken and West, 1991). Combining results in Tables 2, 3, and 4, the role of gender in moderating the effect of job characteristics on organizational commitment was identified.

Next, in order to further identify the effect of job characteristics on organizational commitment and explore the role of family location in moderating relationships between job characteristics and organizational commitment across gender differences, the full sample is separated into two sub-samples, male and women. For affective commitment and normative commitment, findings in Tables 5 and 6 point out that variety and autonomy has a strong positive impact on the two commitments, while friendship opportunity and task identity have a significant negative impact on the two commitments. Based on Model 3 of Table 6, after entering family location, for female expatriates living with family in mainland China the effect of friendship opportunity on normative commitment is increased by .997 units. Through the moderating effect

of family location, the negative impact of friendship opportunity on normative commitment was reversed into the positive effect of friendship opportunity on normative commitment due to the positive sum of .997 and -.774 (Aiken and West, 1991). For affective commitment, however, there are no significant interaction terms between family location and five job characteristics. That is, for the female sub-sample there was no moderating effect of family between job characteristics and affective commitment.

For continuance commitment, findings in Model 1 of Table 7 point out variety and autonomy positively influences continuance commitment, even though the impact of friendship opportunity on this commitment is significantly negative. However, Model 3 reveals that family location is unable to moderate the effect of job characteristics on continuance commitment.

For the male sub-sample, the three commitments, not only is affective commitment positively influenced by variety and autonomy, but it is also negatively influenced by task identity (see Model 1 of Table 8). After entering family location, findings (see Model 3 of Table 8) indicate that for male expatriates living with family in mainland China, the effect of dealing with others on affective commitment is significantly buffered by .928 units (Aiken and West, 1991). For normative commitment, findings (see Model 1 of Table 9) point out the impact of variety and autonomy on normative commitment is significantly positive, while the effect of task identity on normative commitment is significantly negative. Based on Models 2 and 3 of Table 9, not only does family location significantly positively influence normative commitment, but it also moderates the effect of variety and autonomy, and dealing with others on normative commitment. Family location, for example, strongly amplifies the impact of variety and autonomy on normative commitment and significantly weakens the effect of dealing with others on normative commitment. For continuance commitment, however, the combination of the five job characteristics and family location is unable to predict continuance commitment because of insignificant ANOVA F tests ($p > .1$) in regression models (Leech et al., 2005).

As indicated above, it is partly identified that the five job characteristic variables significantly influence organizational commitment. The roles of gender and family location in moderating the effects of job characteristics on organizational commitment are also partly identified. All findings are summarized in Table 10. These findings lead to the following conclusions, discussion, management implications, and future studies.

IV. CONCLUSIONS

This study not only represents relationships between job characteristics and organizational commitment, but also explores the roles of gender and family location in moderating the effect of job characteristics on organizational commitment. The findings of this study suggest several implications. For Taiwanese expatriates, first, variety and autonomy has the positive impact on general organizational commitment, while friendship opportunity and task identity have a negative impact on general organizational commitment. Furthermore, for only male Taiwanese expatriates, friendship opportunity will lead to positive organizational commitment. Like most Asian countries, Taiwan has a relatively high-masculine society. In Taiwan's society, male are supposed to be assertive, tough, extroverted, and focus on competitiveness and material success, while female are supposed to be more modest, tender, more introverted, and pay more attention to the quality of life (Hofstede, 2001). As a result, male making friends extensively are likely to possess more social resources. Therefore, friendship is an important factor that may strengthen organizational commitment of male Taiwanese expatriates. Unlike organizational commitment of female Taiwanese expatriates, organizational commitment of male Taiwanese expatriates will be reduced by variety and autonomy. This may be the case because the national culture of Taiwan leads to the result. Like most Asian countries, Taiwan also has a higher collective society. People in Taiwan's society are integrated into strong, cohesive in-groups, which protect them in exchange for unquestioning loyalty (Hofstede, 2001). Therefore, for male Taiwanese expatriates variety and autonomy likely leads to role ambiguity and further undermines their organizational commitment (Yousel, 2002). On the contrary, variety and autonomy will be reversed into having a positive impact on organizational commitment of male Taiwanese expatriates, when these expatriates live with their family in mainland China. This is because family support or marital satisfaction may provide potency to male's work role and the setting within which the work is performed (Aryee and Debrah, 1992).

With regard to the sub-variables of organizational commitment, variety and autonomy has a positive impact on affective commitment of Taiwanese expatriates. Task identity, however, has a negative effect on affective commitment of Taiwanese expatriates. This may be because the more task identity, the more job loadings. In contrast for female

Taiwanese expatriates, friendship opportunity has a positive impact on affective commitment of male Taiwanese expatriates which is the same result as general organizational commitment. Moreover, dealing with others has a negative impact on affective commitment of male Taiwanese expatriates living with their families in mainland China. This is because family life possibly reduces the chance of dealing with others on their jobs.

According to the results, variety and autonomy has a positive impact on normative commitment of Taiwanese expatriates, while task identity has a negative impact. However, for male Taiwanese expatriates, variety and autonomy decreases the impact on their normative commitment, while friendship opportunity increases the impact on their normative commitment. Moreover, it is interesting to find out that friendship opportunity has a negative effect on normative commitment of female Taiwanese expatriates. On the contrary, for female Taiwanese expatriates living with their families in mainland China, friendship opportunity will reverse the negative impact into a positive impact on their normative commitment. It may be the case because female Taiwanese expatriates working in mainland China with their families cause them to not only face the problems they have from their overseas assignment, but also having to deal with the problems of their family members living with them in the foreign country. An adjustment issue for expatriates' family can occur, while they are living in foreign countries. Therefore, friendship support can help them get accustomed to the overseas life more easily. For female Taiwanese expatriates living with their families in mainland China, friendship support may be an important factor that allows female Taiwanese expatriate to bind more tightly with their companies.

For male Taiwan expatriates living with their family in mainland China, variety and autonomy has a positive impact on their normative commitment, but dealing with others has a negative impact. Due to living with their families, family life is more likely the priority of these male Taiwanese expatriates and makes them unwilling to spend much time dealing with others on their job. Regardless of gender, variety and autonomy has a positive impact on continuance commitment, while friendship opportunity has a negative impact. However, in consideration of gender, the positive effect of variety and autonomy on continuance commitment is reversed, while the negative effect of friendship opportunity on continuance commitment is reversed.

From a managerial standpoint, the findings in this study suggest that the factors of job characteristics should place more emphasis on variety and autonomy, and less on the extent of task identity in order to improve expatriates' organizational commitment. Moreover, our findings indicate the role of gender in moderating the effect of job characteristics on organizational commitment. Therefore, it is recommended that the significance of each factor of job characteristics should be considered in light of gender. For Taiwanese expatriates, the extent of male organizational commitment is higher than that of female organizational commitment. Of the five job characteristic factors, furthermore, friendship opportunity is the most influential factor on organizational commitment of male Taiwanese expatriates. This may be the case as in Taiwan's society friendship is one of the most important social resources to secure social position (Hofstede, 2001). In contrast to friendship opportunity of male Taiwanese expatriates, friendship opportunity of female Taiwanese expatriates will lead to positive organizational commitment, when living with their families in mainland China. However, for male Taiwanese expatriates living with their families in mainland China, the effect of dealing with others on their jobs on their organizational commitment is negative, while the impact of variety and autonomy on organizational commitment is positive. As a consequence, when considering expatriate selection, the factors of job characteristics should be adjusted due to gender differences. When the factors of job characteristics are difficult to change, the prime candidates for an expatriate position would be men whose families are willing to live with them in mainland China.

This empirical study has several limitations. First, the geographic setting is limited to mainland China and the target population is limited to Taiwanese expatriates who are working in mainland China. As a consequence, findings may not be generalized to other countries' expatriates or Taiwanese expatriates working in other countries besides mainland China. Second, generalization of the findings may be weakened due to a low response rate and adjusted R^2 values. Based on the identification of the discussion and the limitations, this study also provides a direction for future research. First, this study only considers gender and family location as moderators between job characteristics and organizational commitment, so a future study should explore the moderating impact of the other constructs, such as race, religion, age, tenure, marital status and education (Mathieu and Zajac, 1990; Sikorsha-Simmons, 2005). Second, in order to avoid undermining generalization of findings, it is recommended that a future study should be conducted across different countries and cultures. Finally, observations or interviews should be combined with surveys in future studies to examine the relationships among gender, family location, job characteristics, and organizational commitment.

Table I Reliability Statistics

Variable	Number of Items	Cronbach's Alpha (α)
Variety and autonomy	10	.885
Friendship opportunity	7	.872
Feedback	7	.822
Task identity	3	.791
Dealing with others	3	.734
General job characteristics	30	.911
Affective commitment	4	.894
Normative commitment	9	.893
Continuance commitment	5	.812
General organizational commitment	18	.742

Table II Gender Moderates the Effect of Job Characteristics and Affective Commitment (n = 389)

	Model 1	Model 2	Model 3
constant	4.404*** (.060)	4.237*** (.107)	4.286*** (.117)
Job Characteristic			
Variety and autonomy	.920*** (.147, .379)	.850*** (.151, .350)	.989*** (.294, .408)
Friendship opportunity	-.101 (.137, -.051)	-.076 (.137, -.038)	-.574* (.234, -.289)
Feedback	-.078 (.128, -.038)	-.043 (.129, -.021)	.070 (.298, .034)
Task identity	-.460*** (.088, -.256)	-.450*** (.088, -.250)	-.441** (.158, -.245)
Dealing with others	-.191 (.143, -.078)	-.178 (.143, -.072)	-.307 (.269, -.125)
Gender		.250 (.133, .091)	.220 (.138, .080)
Interaction Terms			
VA*Gender			-.263 (.344, -.092)
FO*Gender			.781** (.290, .325)
Feedback*Gender			-.174 (.330, -.074)
TI*Gender			.054 (.191, .025)
DWO*Gender			.163 (.318, .055)
F	15.459***	13.554***	8.608***
df	5	6	11
Adjusted R ²	.157	.163	.177

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table III Gender Moderates the Effect of Job Characteristics and Normative Commitment (n = 389)

	Model 1	Model 2	Model 3
constant	4.275*** (.048)	4.128*** (.086)	4.210*** (.092)
Job Characteristic			
Variety and autonomy	.729*** (.118, .368)	.667*** (.121, .337)	1.074*** (.233, .542)
Friendship opportunity	-.119 (.110, -.074)	-.097 (.110, -.060)	-.586** (.186, -.362)
Feedback	.140 (.102, .084)	.171 (.103, .102)	.251 (.236, .150)
Task identity	-.380*** (.071, -.259)	-.371*** (.071, -.253)	-.344** (.125, -.234)
Dealing with others	.030 (.115, .015)	.041 (.115, .020)	-.249 (.213, -.124)
Gender		.220* (.107, .099)	.163 (.110, .073)
Interaction Terms			
VA*Gender			-.622* (.272, -.267)
FO*Gender			.784*** (.230, .399)
Feedback*Gender			-.140 (.262, -.073)
TI*Gender			.035 (.151, .020)
DWO*Gender			.372 (.252, .155)
F	18.515***	16.267***	11.285***
df	5	6	11
Adjusted R ²	.184	.191	.226

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table IV Gender Moderates the Effect of Job Characteristics and Continuance Commitment (n = 389)

	Model 1	Model 2	Model 3
constant	3.858*** (.058)	3.581*** (.102)	3.735*** (.109)
Job Characteristic			
Variety and autonomy	.466*** (.141, .214)	.349* (.144, .160)	1.166*** (.275, .536)
Friendship opportunity	-.367** (.132, -.206)	-.326* (.131, -.183)	-.779*** (.219, -.438)
Feedback	-.031 (.123, -.017)	.026 (.122, .014)	.017 (.278, .009)
Task identity	-.108 (.085, -.067)	-.091 (.084, -.056)	-.261 (.147, -.162)
Dealing with others	.121 (.138, .055)	.142 (.136, .064)	-.209 (.251, -.095)
Gender		.414*** (.127, .169)	.298* (.129, .122)
Interaction Terms			
VA*Gender			-1.188*** (.321, -.464)
FO*Gender			.807** (.271, .374)
Feedback*Gender			-.081 (.308, -.039)
TI*Gender			.327 (.178, .167)
DWO*Gender			.457 (.296, .173)
F	3.462**	4.726***	5.276***
df	5	6	11
Adjusted R ²	.031	.054	.108

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table V Family Location Moderates the Effect of Job Characteristics and Affective Commitment (female sample n = 129)

	Model 1	Model 2	Model 3
constant	4.286*** (.119)	4.250*** (.129)	4.278*** (.133)
Job Characteristic			
Variety and autonomy	.989*** (.301, .362)	1.024*** (.305, .375)	.966** (.345, .354)
Friendship opportunity	-.574* (.240, -.277)	-.581* (.240, -.281)	-.528 (.283, -.255)
Feedback	.070 (.305, .028)	.081 (.305, .032)	-.082 (.372, -.032)
Task identity	-.441** (.161, -.234)	-.430** (.162, -.228)	-.467* (.181, -.248)
Dealing with others	-.307 (.275, -.118)	-.308 (.276, -.118)	-.339 (.299, -.130)
Family Location		.215 (.290, .062)	.215 (.346, .062)
Interaction Terms			
VA*Family			-.086 (.819, -.017)
FO*Family			.272 (.651, .051)
Feedback*Family			.734 (.742, .128)
TI*Family			.155 (.461, .032)
DWO*Family			.124 (.853, .020)
F	5.758***	4.872***	2.920**
df	5	6	11
Adjusted R ²	.157	.154	.142

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table VI Family Location Moderates the Effect of Job Characteristics and Normative Commitment (female sample n = 129)

	Model 1	Model 2	Model 3
constant	4.210*** (.086)	4.207*** (.093)	4.214*** (.094)
Job Characteristic			
Variety and autonomy	1.074*** (.216, .511)	1.077*** (.220, .512)	1.239*** (.244, .590)
Friendship opportunity	-.586*** (.172, -.367)	-.586*** (.173, -.368)	-.774*** (.201, -.486)
Feedback	.251 (.219, .128)	.252 (.220, .129)	.312 (.264, .160)
Task identity	-.344** (.116, -.238)	-.343 (.117, -.237)	-.269* (.128, -.186)
Dealing with others	-.249 (.198, -.124)	-.249 (.199, -.124)	-.242 (.212, -.121)
Family Location		.018 (.209, .007)	-.198 (.245, -.075)
Interaction Terms			
VA*Family			-.980 (.580, -.255)
FO*Family			.997* (.461, .242)
Feedback*Family			.365 (.525, .082)
TI*Family			-.373 (.326, -.101)
DWO*Family			-.176 (.604, -.038)
F	10.279***	8.497***	5.377**
Df	5	6	11
Adjusted R ²	.266	.260	.273

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table VII Family Location Moderates the Effect of Job Characteristics and Continuance Commitment (female sample n = 129)

	Model 1	Model 2	Model 3
constant	3.735*** (.103)	3.737*** (.111)	3.687*** (.114)
Job Characteristic			
Variety and autonomy	1.166*** (.259, .479)	1.164*** (.263, .478)	.969*** (.296, .398)
Friendship opportunity	-.779*** (.206, -.422)	-.779*** (.207, -.422)	-.909*** (.243, -.493)
Feedback	.017 (.262, .007)	.016 (.263, .007)	.320 (.319, .142)
Task identity	-.261 (.139, -.155)	-.261 (.140, -.156)	-.226 (.155, -.135)
Dealing with others	-.209 (.236, -.090)	-.209 (.237, -.090)	-.222 (.257, -.096)
Family Location			
		-.008 (.249, -.003)	.240 (.297, .078)
Interaction Terms			
VA*Family			1.015 (.703, .228)
FO*Family			.177 (.559, .037)
Feedback*Family			-1.058 (.637, -.207)
TI*Family			-.024 (.396, -.006)
DWO*Family			-.203 (.733, -.037)
F	8.105***	6.700***	3.982***
df	5	6	11
Adjusted R ²	.217	.211	.204

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table VIII Family Location Moderates the Effect of Job Characteristics and Affective Commitment (male sample n = 260)

	Model 1	Model 2	Model 3
constant	4.506*** (.073)	4.463*** (.086)	4.487*** (.085)
Job Characteristic			
Variety and autonomy	.726*** (.175, .319)	.687*** (.180, .302)	.530* (.206, .233)
Friendship opportunity	.207 (.169, .108)	.214 (.169, .112)	.106 (.198, .055)
Feedback	-.104 (.142, -.056)	-.098 (.142, -.053)	-.032 (.167, -.017)
Task identity	-.387*** (.106, -.223)	-.381*** (.106, -.219)	-.212 (.125, -.122)
Dealing with others	-.144 (.167, -.061)	-.158 (.168, -.067)	.204 (.207, .087)
Family Location			
		.164 (.168, .059)	.056 (.186, .020)
Interaction Terms			
VA*Family			.482 (.426, .100)
FO*Family			.370 (.368, .099)
Feedback*Family			-.160 (.310, -.048)
TI*Family			-.426 (.235, -.140)
DWO*Family			-.928** (.346, -.234)
F	10.274***	8.720***	6.170**
df	5	6	11
Adjusted R ²	.152	.152	.180

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table IX Family Location Moderates the Effect of Job Characteristics and Normative Commitment (male sample n = 260)

	Model 1	Model 2	Model 3
constant	4.373*** (.061)	4.301*** (.070)	4.319*** (.070)
Job Characteristic			
Variety and autonomy	.451** (.145, .236)	.387** (.148, .202)	.136 (.170, .071)
Friendship opportunity	.198 (.140, .123)	.209 (.139, .130)	.215 (.164, .133)
Feedback	.111 (.117, .070)	.121 (.117, .077)	.212 (.137, .135)
Task identity	-.309*** (.088, -.211)	-.299*** (.087, -.204)	-.249* (.103, -.170)
Dealing with others	.123 (.138, .062)	.098 (.138, .050)	.313 (.171, .158)
Family Location		.275* (.138, .116)	.098 (.153, .042)
Interaction Terms			
VA*Family			.989** (.351, .243)
FO*Family			.056 (.303, .018)
Feedback*Family			-.314 (.256, -.112)
TI*Family			-.021 (.194, -.008)
DWO*Family			-.607* (.286, -.181)
F	12.650***	11.325***	7.490**
df	5	6	11
Adjusted R ²	.199	.212	.249

Note: Standard errors and standardized coefficients are in parentheses respectively.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table X The Impact of Job Characteristics and the Moderating Effect of Gender and Family Location

Variables	Affective commitment		Normative commitment		Continuance commitment	
Variety and autonomy	1.	P	1.	P / \ominus	1.	P / \ominus
	2.	P	2.	P	2.	P
	3.	P	3.	P / p	3.	
Friendship opportunity	1.	\oplus	1.	\oplus	1.	N / \oplus
	2.	N	2.	N / p	2.	N
	3.		3.		3.	
Feedback	1.		1.		1.	
	2.		2.		2.	
	3.		3.		3.	
Task identity	1.	N	1.	N	1.	
	2.	N	2.	N	2.	
	3.	N	3.	N	3.	
Dealing with others	1.		1.		1.	
	2.		2.		2.	
	3.	n	3.	n	3.	
Gender	1.		1.	P	1.	P
Family location	2.		2.		2.	
	3.		3.	P	3.	

Note. P: positive; N: negative; \oplus : gender has a positive moderating effect; \ominus : gender has a negative moderating effect.

p: family location has a positive moderating effect; n: family location has a negative moderating effect.

1: The full sample (n = 389), 2: The female sub-sample (n = 129), 3: The male sub-sample (n = 260).

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