

Relationship Among Work Pressure, Role Conflict, and Turnover Intention - A Case Study of the AI Companies

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ABSTRACT: The significant changes of late in the international political and economic environment have not only intensified the rivalry among nations but also escalated the competition faced by corporates for survival. Riding on the wave of artificial intelligence (AI), Taiwan has developed a complete supply chain for AI-related industries. Companies able to stay on top of key technologies in cutting-edge AI will secure an unassailable position. That said, companies also need to rely on high-caliber teams in order to ensure sustainable operations. To this end, it is necessary to pay special attention to the psychological well-being of employees across departments. Only in this way can the employee cohesion be strengthened, so that they can focus on what they are good at and work together in concert. This will ultimately achieve sustainable survival and development.

Accordingly, the main purpose of this study is to explore the relationship among work pressure, role conflict, and turnover intention of employees in one of the three leading AI companies publicly listed in Taiwan. The research sample is limited to employees of this top three TWSE-listed company, and purposive sampling was adopted. Data from valid questionnaires were compiled into a dataset, analyzed with SPSS statistical software, and the results were summarized and synthesized into relevant reports for analysis.

The empirical findings are as follows:

- (1) A high level of work pressure has a significant and positive impact on turnover intention;
- (2) A high level of work pressure has a significant and positive impact on role conflict and, in turn, this has a significant and positive impact on turnover intention;
- (3) A high level of role conflict has a significant and positive impact on turnover intention;
- (4) Among the three main constructs of this study, role conflict has a partial mediating effect;
- (5) Among the three main constructs of this study, the moderating effect of role conflict is not significant.

These findings may serve as a reference to the case study company for managerial decision-making.

KEY WORD: work pressure, role conflict, turnover intention, artificial intelligence (AI)

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I. RESEARCH MOTIVATION AND OBJECTIVES

1.1 Research Motivation

Today, the application and development of AI have become a global trend, with benefits outweighing drawbacks. In the Taiwan capital market, AI-related stocks are primarily centered on the AI server supply chain, chip design, semiconductor manufacturing, and software services. These companies include TSMC, MediaTek, Hon Hai (Foxconn), Quanta, Wistron, GIGABYTE, and Inventec, among others. In addition, some companies specialize in AI software and applications, such as Capital Securities Corporation (as a developer of algorithmic trading software) and other providers of AI solutions.

Given the rapid advancement of artificial intelligence (AI), the news agency Anue has reported in its previous two AI-focused series on the crises and opportunities brought to Taiwan amid this AI wave. The industries most vulnerable to these impacts will fail if they do not adapt (Google, 2025).

Furthermore, the significant changes of late in the international political and economic environment have not only intensified the rivalry among nations but also escalated the competition faced by corporates for survival. Riding on the wave of artificial intelligence (AI), Taiwan has developed a complete supply chain for AI-related industries. Companies able to stay on top of key technologies in cutting-edge AI will secure an unassailable position. That said, companies also need to rely on high-caliber teams in order to ensure sustainable operations. To this end, it is necessary to pay special attention to the psychological well-being of employees across departments. Only in this way can the employee cohesion be strengthened, so that they can focus on what

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they are good at and work together in concert. This will ultimately achieve sustainable survival and development.

1.2 Research Objectives

In summary, this study aims to explore the relationships among work pressure, role conflict, and turnover intention of employees in one of the three major AI companies listed in Taiwan. However, due to research resource constraints, the subjects were limited to employees of this top three company and purposive sampling was adopted to draw the sample from the population. The data files established were analyzed using relevant statistical methods and tools, such as the statistical software SPSS.

The primary purpose of this study is to examine the interrelationships among the main constructs in the proposed research model. The specific objectives are outlined as follows:

- (1) To determine whether a high level of work pressure has a significant and positive impact on turnover intention;
- (2) To determine whether a high level of work pressure has a significant and positive impact on role conflict;
- (3) To determine whether a high level of role conflict has a significant and positive impact on turnover intention;
- (4) To examine whether role conflict has a partial mediating effect among the three main constructs in this study; and
- (5) To determine whether the mediating effect of role conflict among the three main constructs in this study has a significant and positive impact.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Work Pressure (WP)

2.1.1 Conceptual Definition of Work Pressure

The conceptual definition of work pressure in this study is: "When an individual perceives environmental threats or dangers in the workplace, he or she will experience physical and psychological responses to tensions. These responses act as stimuli that may lead to maladaptation at work, manifesting in behaviors such as disorderly conduct, difficulties coping with peer competition, uncertainty caused by policy changes, or inability to manage work scopes. Such imbalances prevent the individual concerned from realizing self-worth". The above definition has been developed based on the integration of relevant literature below and the perspective of this study.

Gmelch (1982) indicates that work pressure arises when workers are unable to respond appropriately to threats caused by the workplace environment or tasks.

Li (1994) mentions that work pressure occurs when an individual maladapts to the work environment and cannot meet the demands from the workplace.

Fang (2000) defines work pressure as the psychological states of fatigue, anger, anxiety, depression, lowered self-esteem, dissatisfaction, and alienation that arise when employees face workloads beyond their capacity.

Li (2011) suggests that work pressure reflects a state in which the individual fails to adapt to the work environment.

2.1.2 Sub-Constructs of Work Pressure

Yu (2023) divides work pressure into five sub-constructs: (1) family support; (2) organizational structure; (3) work-related factors; (4) organizational climate; and (5) career planning.

Accordingly, the questionnaire on the main constructs of work pressure in this study was developed based on the sub-constructs identified by Yu (2023).

2.2 Role Conflict (RC)

2.2.1 Conceptual Definition of Role Conflict

The conceptual definition of role conflict in this study is "In line with social expectations, employees are assigned expectations by their supervisors and are required to play two or more roles simultaneously. Psychological discomfort arises when such expectations are not met". The above definition has been developed based on the integration of relevant literature below and the perspective of this study.

Kahn, Wolfe, Quinn, Snoek, & Rosenthal (1964) believe that role conflict occurs when individuals face expectations from others that are inconsistent with their own values or when they are required to perform two or more roles.

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Roles emerge during interactions with others and can be classified into three categories: role senders, expecters, and receivers. When the sender conveys expectations to the receiver, the receiver interprets such expectations and responds accordingly. Then the sender develops new expectations based on the receiver's response.

According to Wang (1999), when aligned with social expectations, individuals are assigned expectations by others and required to play two or more roles simultaneously. Psychological discomfort arises when these expectations are not met.

As mentioned by Wang (2002) and Liu (2010), when individuals are required by others to play roles inconsistent from their own perception, they face difficult choices about the given role. If such role expectations cannot be met or balanced, individuals may experience emotional tension or psychological burden. Role conflict occurs when an individual fails to meet one person's expectations on time, making it difficult to meet the expectations of others.

2.2.2 Sub-Constructs of Role Conflict

Chiu (2016) divides role conflict into five constructs: (1) conflict between personal expectations and supervisor expectations; (2) conflict between work expectations and family expectations; (3) conflict between family expectations and personal expectations; (4) conflict between work expectations and personal expectations; and (5) conflict between work expectations and taxpayer expectations

The questionnaire on the main constructs of role conflict in this study was developed based on the sub-constructs identified by Chiu (2016).

2.3 Turnover Intention (TI)

2.3.1 Conceptual Definition of Turnover Intention

The conceptual definition of turnover intention in this study is as follows: "Excessively high personnel turnover within a company will undermine the overall corporate performance. These include deterioration of employee work performance, inability to smoothly implement organizational strategies, reduced productivity, and other negative effects. In other words, the departure of employees causes losses to the company's time, expertise, performance, and human resources. Regardless of job level, once turnover intention arises, it will eventually lead to departures." The above definition has been developed based on the integration of relevant literature below and the perspective of this study.

Caplan & Jones (1975) indicates that when employees find work not meeting their own expectations, the thought of resignation arises and they will begin to search for the next job.

According to Mobley (1977), if employees are unable to obtain satisfaction and a sense of value from jobs after spending some time in the workplace, they will consider quitting after they have thought things through. Mobley (1982) posits that the predictive focus before departures occur lies in the employee's inclination to leave the current work environment or their job positions.

Smith & Brough (2003) believes that excessively high personnel turnover within an organization will undermine the overall organization's performance. These include deterioration of employee work performance, inability to smoothly implement organizational strategies, reduced productivity, and other negative effects. In other words, the departure of members causes losses to the organization's time, expertise, performance, and human resources. Regardless of job level, once turnover intention arises, it will eventually lead to departures.

Yu (2023) suggests that turnover intention refers to the state in which employees begin to think about leaving their current work environment but have not yet actually resigned. Before turnover behavior occurs, employees conduct a comprehensive evaluation of factors such as job satisfaction, workplace atmosphere, interpersonal relationships, workload, and comparisons of current employment with other job opportunities.

2.3.2 Sub-Constructs of Turnover Intention

Yu (2023) divides turnover intention into (1) the thought about leaving; (2) the inclination to seek other jobs; (3) job security.

The questionnaire on the main constructs of turnover intention in this study was developed based on the sub-constructs identified by Yu (2023).

2.4 Hypothesis Development

This study has established a research framework based on its research objectives and literature review. However, there is limited literature to date on the pairwise relationship between main constructs in the research structure. It is hereby emphasized that the pairwise relationships among constructs in this study are primarily based on Yu (2023).

2.4.1 Work Pressure and Turnover Intention

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In the study conducted by Cheng (1995) on the drivers working in private bus companies in Taipei City, it was found that the negative effects due to work stress—such as fatigue, anxiety, low self-esteem, and depression—accumulated over time and were positively correlated with subsequent turnover intention.

Lin (2018) conducted a case study on the teachers in junior high schools in Siaogang District, Kaohsiung City. The results indicate that work pressure and turnover intention are positively correlated.

According to an organizational study conducted by Sun (2016) on Marine Corps officers, there is a positive correlation between work stress experienced by members and turnover intention as an indirect result.

Based on the above, this study derives the following hypothesis:

H₁: A high level of work pressure has a significant and positive impact on turnover intention.

2.4.2 Work Pressure and Role Conflict

Wang (2002) conducted an analysis on the personnel working in the National Taxation Bureau of the Central Area. The results indicate that role conflict—categorized into family expectations, work expectations, taxpayer expectations, conflicts, and personal expectations—showed significant and positive correlations with dimensions of work stress such as low self-esteem, fatigue, and depression.

The study by Ou (2004) on the administrative personnel working in the Department of Cultural Affairs reveal significant and positive correlation among role conflict, work pressure and occupational burnout.

Chiu (2016) referred to the National Taxation Bureau of the Northern Area as an example and found significant and positive correlation between role conflict and work pressure.

Based on the above, this study derives the following hypothesis:

H₂: A high level of work pressure has a significant and positive impact on role conflict.

2.4.3 Role Conflict and Turnover Intention

Chiu (2016) referred to the National Taxation Bureau of the Northern Area as an example to illustrate the positive correlation between role conflict and turnover intention.

In a study on how supervisor–subordinate relationships affect the correlation between role conflict and turnover intention, Chang (2020) finds role conflict and turnover intention among military personnel are significantly and positively correlated.

Based on the above, this study derives the following hypothesis:

H₃: A high level of role conflict has a significant and positive impact on turnover intention.

2.4.4 Among the three main constructs of this study, does role conflict serve a partial mediating effect?

Lee (2007) examined role conflict and organizational commitment by conducting a study on teachers and exploring the mediating effect of work stress and the moderating effect of work value. The results suggest that role conflict serves an indirect mediating effect via work stress and hence negative influence on organizational commitment.

Based on the above, this study derives the following hypothesis:

H₄: Among the three main constructs of this study, role conflict serves a partial mediating effect.

2.4.5 Among the three main constructs of this study, is the moderating effect of role conflict significant and positive?

Huang and Wang (2013) conducted a study on the influence of role stress and job burnout on organizational citizenship behavior, with organizational cynicism as a moderating variable. The results indicate that role stress experienced by employees had a partial moderating effect on organizational citizenship behavior. Moreover, the interaction term of employees and role ambiguity aggravates the negative impact of role stress on organizational citizenship behavior.

Yu (2023) found that in the context of relationships among job stress, role conflict, and turnover intention, job stress has significant influence on turnover intention through the moderating effect of role conflict.

Based on the above, this study derives the following hypothesis:

H₅: Among the three main constructs of this study, the moderating effect of role conflict is significant and positive.

III. RESEARCH METHODOLOGY

Based on the aforesaid research motivations and objectives, literature review, and the establishment of hypotheses, the following research framework was developed, as shown in Figure 3-1.

III.1 Research Framework

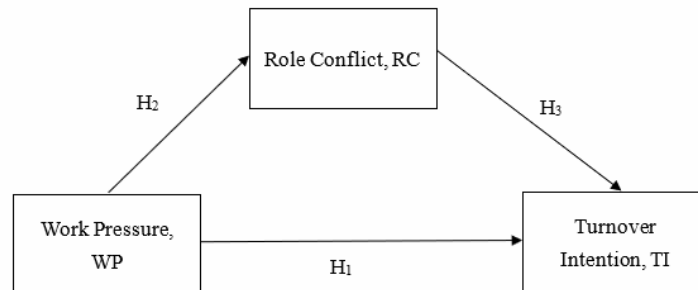


Figure 3.1 Research Model and Framework: Main Effect and H₁, H₂ and H₃

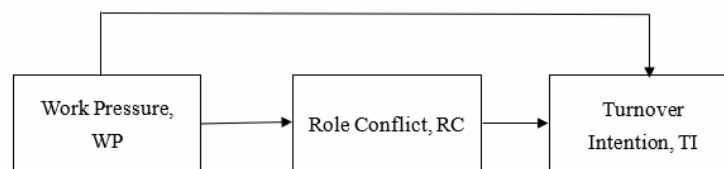


Figure 3.2 Research Model and Framework: Mediating Effect and H₄

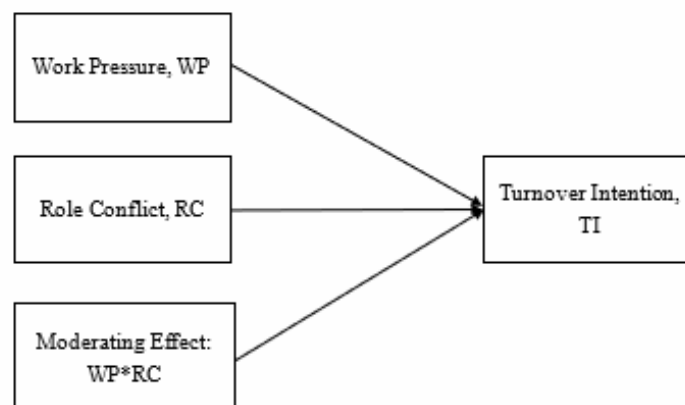


Figure 3.3 Research Model and Framework: Moderating Effect and H₅

3.2 Questionnaire Design

Work pressure, role conflict, and turnover intention, as the three main constructs of the model in this study, were measured with a questionnaire survey. The questionnaire design and collection were based on the author's previous research methods and slightly modified in reference to the above literature on the three main constructs. A five-point Likert scale was adopted for measurement, with scores from 5 to 1 indicating different levels of agreement or disagreement. A score of 1 represents disagreement, and the higher (lower) the score, the higher (lower) the agreement.

3.3 Sampling Method and Questionnaire Data

Due to resource constraints, the scope of this study was limited to employees of a large AI company publicly listed in Taiwan. Research subjects were sourced via purposive sampling of the population. The data files established were then analyzed with statistical methods and tools such as the statistical package software SPSS. A total of 15 expert questionnaires were distributed for the pilot test. Based on the feedback and improvement suggestions from scholars and experts, revisions were made before the post-test. This was done to ensure that the questionnaires for each main construct within the model met the standards of reliability and

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expert validity (Chiou, 2024). Furthermore, 1,500 formal questionnaires were issued and a total of 1,153 valid questionnaires were retrieved, at an effective response rate of 76.87%.

3.4 Statistical Software and Statistical Methods

The valid questionnaire data were compiled into a database and analyzed with the statistical package software SPSS. Statistical methods were applied for further analysis, and the results generated were organized into relevant tables and sequentially analyzed.

IV. RESULTS AND ANALYSIS

4.1 Correlation Analysis

Table 4.1.1 shows that all the construct variables show significant correlations. This study performed Pearson's product-moment correlation analysis to examine the relationships among constructs, and the degree of correlation between constructs is presented in Table 4.1.1. According to the correlation coefficient table, the highest correlation coefficient (0.892) is between "seeking other jobs" and "job security", while the lowest correlation coefficient (0.362) is between "work and employee factors" and "turnover intention".

Table 4.1.1 Correlation Coefficient Table

Variable	Role Conflict					Work Pressure					Turnover Intention		
	The individual and supervisors	Work and family	Family and the individual	Work and the individual	Work and employees	Family and salary	Organizational structure	Work-related factors	Organizational climate	Career planning	Turnover thought	Looking for other jobs	Job security
The individual and supervisors	1												
Work and family	.704**	1											
Family and the individual	.630**	.818**	1										
Work and the individual	.753**	.703**	.744**	1									
Work and employees	.552**	.557**	.562**	.393**	1								
Family and salary	.441**	.703**	.667**	.489**	.517**	1							
Organizational structure	.612**	.773**	.667**	.606**	.447**	.693**	1						
Work-related factors	.677**	.780**	.722**	.698**	.406**	.610**	.808**	1					
Organizational climate	.764**	.707**	.723**	.691**	.487**	.486**	.643**	.724**	1				
Career planning	.642**	.683**	.716**	.769**	.402**	.526**	.619**	.751**	.784**	1			
Turnover thought	.643**	.723**	.742**	.727**	.362**	.531**	.692**	.773**	.682**	.767**	1		
Looking for other jobs	.612**	.683**	.660**	.703**	.401**	.572**	.679**	.782**	.664**	.809**	.876**	1	
Job security	.589**	.628**	.632**	.619**	.368**	.576**	.697**	.776**	.669**	.777**	.823**	.892**	1

Note: *p<0.05, ** p<0.01, ***p<0.001

4.2 Hypothesis Testing

In the first multiple regression and analytical model, the independent variable is work pressure and the dependent variable is turnover intention.

Table 4.2.1 Analysis of Multiple Regression Model 1 (Test on H₁)

Dependent Variable: Turnover Intention							
Model 1	Independent variable		t	R ²	F	VIF	Significance
	Work Pressure	.83	14.182	.713	201.203	1	.001

Note: *p<0.05, ** p<0.01, ***p<0.001

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Table 4.2.1 shows the analysis on Multiple Regression Model 1 in which the independent variable is work pressure and the dependent variable is turnover intention. The model explains 71.3% of the variance, with an F-value of 201.203 and no collinearity ($VIF < 10$). The standardized regression coefficient (Beta) represents the path coefficient and a direct effect. Work pressure as the independent variable reports a coefficient of .83 on turnover intention as the dependent variable ($t = 14.182$, $p = .001$), reaching a statistically significant level.

In the second multiple regression and analytical model, the independent variable is work pressure and the dependent variable is role conflict.

Table 4.2.2 Analysis of Multiple Regression Model 2 (Test on H_2)

Dependent Variable: Role Conflict							
Model 2	Independent variable		t	R ²	F	VIF	Significance
	Work pressure	.862	15.261	.760	263.254	1	.001

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.2.2 presents the analysis on Multiple Regression Model 2 in which the independent variable is work pressure and the dependent variable is role conflict. The model explains 76% of the variance, with an F-value of 263.254 and no collinearity ($VIF < 10$). The standardized regression coefficient (Beta) indicates the path coefficient and a direct effect. Work pressure as the independent variable reports a coefficient of .862 on role conflict as the dependent variable ($t = 15.261$, $p = .001$), reaching a statistically significant level.

In the third multiple regression and analytical model, the independent variable is role conflict and the dependent variable is turnover intention.

Table 4.2.3 Analysis of Multiple Regression Model 3 (Test on H_3)

Dependent Variable: Turnover Intention							
Model 3	Independent variable		t	R ²	F	VIF	Significance
	Role Conflict	.766	11.431	.700	103.781	1	.001

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.2.3 summarizes the analysis on Multiple Regression Model 3 in which the independent variable is role conflict and the dependent variable is turnover intention. The model explains 70% of the variance, with an F-value of 103.781 and no collinearity ($VIF < 10$). The standardized regression coefficient (Beta) indicates the path coefficient and a direct effect. Role conflict as the independent variable reports a coefficient of .766 on turnover intention as the dependent variable ($t = 11.431$, $p = .001$), reaching a statistically significant level.

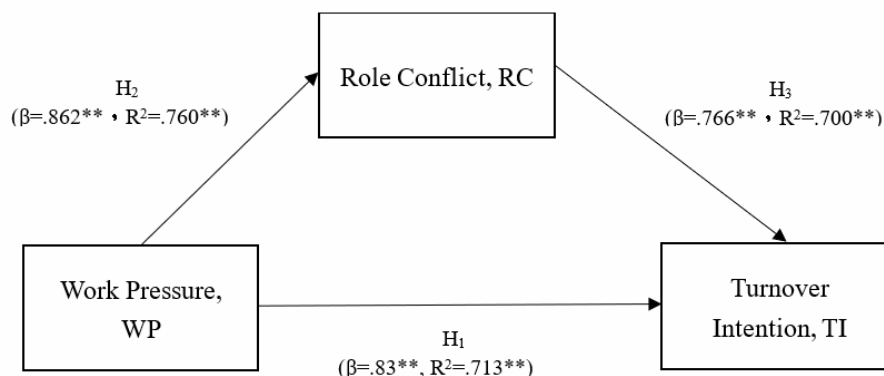


Figure 4.2.1 Research Model and Framework: Main Effect

Main Effect: Figure 4.2.1 above outlines the relationships among the variables tested in the regression analysis. The empirical results shown in Figure 4.2.2 support all the three major hypotheses in this study: (H1) There is a significant and positive correlation between work pressure and turnover intention; (H2) There is a significant and positive correlation between work pressure and role conflict; and (H3) There is a significant and positive correlation between role conflict and turnover intention. The second regression analysis (H5) involves the main pathway: work pressure → work pressure and role conflict → turnover intention. Role conflict can moderate the influence of work pressure on turnover intention. However, when role conflict is introduced as a

moderating variable, it does not produce a substantive effect on turnover intention, and the effect is not significant.

4.3 Mediation Testing: Sobel's Test (Testing on H4)

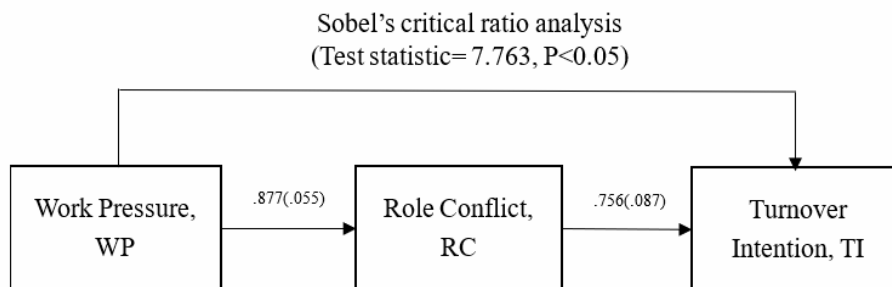


Figure 4.3.1 Sobel's Critical Ratio of the Data Path Analysis (H₄ Test Results)

Mediating Effect: Baron and Kenny's (1986) regression analysis procedure for testing of mediating effects and Sobel's (1982) Sobel test were used to examine whether the mediating effects among the variables reached significance. This study applied the Sobel test to determine whether the influence of work pressure experienced by employees on turnover intention through role conflict as a mediator was significant. The Sobel test results indicated that the indirect effect of work pressure on turnover intention, via the mediation of role conflict, reached statistical significance (Sobel test statistic = 7.673, $p < 0.05$), thus H₄ was supported in this study. In other words, work pressure may influence turnover intention either directly or indirectly through role conflict. Since role conflict acts both as a "cause" and an "effect", it serves as a mediating variable in this study, as illustrated in Figure 4.3.1.

4.4 Testing of Moderating Effects:

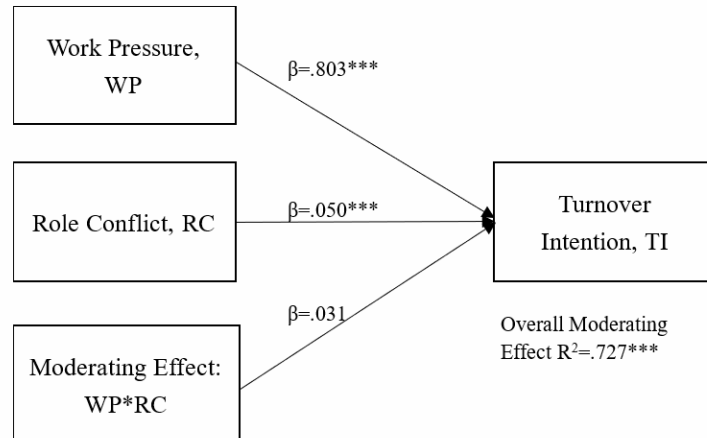


Figure 4.4.1 Research Model and Framework: Moderating Effect (H₅ Test Results)

When role conflict is treated as a moderating variable in this study, it can mitigate work pressure and, in turn, influence turnover intention. Therefore, with role conflict as a moderator, work pressure can reduce turnover intention. This confirms that work pressure exercises both a direct effect and an indirect effect (through role conflict) on turnover intention. In other words, work pressure experienced by employees can affect turnover intention via role conflict.

Moderating Effect: Table 4.4.1 shows the test on work pressure and role conflict as the two major factors of this study by using hierarchical regression analysis. Work pressure, role conflict (the independent variable significantly related to the dependent variable), and the interaction term of work pressure and role conflict (the moderating variable) were sequentially entered into the regression model. Finally, the interaction term of work pressure and the moderating variable was added, in order to verify the moderating effect by examining whether the explainability of the interaction term regarding R^2 of the dependent variable was statistically significant. Role conflict was included as the moderator in this test model to explore the influence of work pressure on turnover intention. The regression analysis results for H₅ were as follows: ($\beta = 0.031$, $R^2 = 0.727^{***}$, $p < 0.001$).

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The findings indicate that when role conflict was introduced as a moderating variable, the influence was not significant and it failed to affect the relationship between work pressure and turnover intention, as illustrated in Figure 4.4.1.

Table 4.4.1 Analysis of Multiple Regression Model 4 (Test on H₅)

Dependent Variable: Turnover Intention						
Moderating Effect		t	R ²	F	VIF	Significance
Work Pressure	.803	6.411			4.314	.000
Role Conflict	.050	3.412			4.303	.000
Work Pressure* Role Conflict	.031	.493			1.011	.621
Overall Moderating Effect			.727***	66.344		.000

Note: *p<0.05, ** p<0.01, ***p<0.001

As shown in Table 4.4.1 the hierarchical regression analysis, the moderating effect of role conflict is not significant; therefore, H₅ in this study is not supported.

Based on the above figures, tables and analyses, this study has derived the following results on the hypotheses:

- (1) H₁: A high level of work pressure has a significant and positive impact on turnover intention (fully supported);
- (2) H₂: A high level of work pressure has a significant and positive impact on role conflict (fully supported);
- (3) H₃: A high level of role conflict has a significant and positive impact on turnover intention (fully supported);
- (4) H₄: Among the three main constructs of this study, role conflict has a partial mediating effect (fully supported);
- (5) H₅: Among the three main constructs of this study, the moderating effect of role conflict on turnover intention is significant and positive (not fully supported). The influence is there but insignificant.

V. CONCLUSIONS AND SUGGESTIONS

5.1 Research Conclusions

Based on the above data analysis and results, the following conclusions and managerial implications are derived by this study:

- (1) A high level of work pressure has a significant and positive impact on turnover intention. This finding is consistent with Cheng (1995), Lin (2018), and Sun (2016). The managerial implication is that company managers must identify the sources of work pressure and formulate strategies to reduce work pressure, in order to mitigate turnover intention and increase employee retention. Only by encouraging personnel to stay and provide services can a company continue to attract more high-caliber talents.
- (2) A high level of work pressure has a significant and positive impact on role conflict. This finding is consistent with the studies of Wang (2002), Ou (2004), and Chiu (2016). The managerial implication is that managers must understand that work pressure arises from psychological stress caused by various external factors. The mutual influence between work pressure and role conflict can directly mitigate stress-related conflicts. When role conflict is relieved, the overlap of role expectations faced by individuals is decreased, allowing more time and flexibility to fulfill multiple roles. This creates the space for work performance, gradually accumulates the sense of achievement and in turn reduces work pressure. Therefore, role conflict is closely related to the human resource structure within the organization. The higher the role conflict, the greater the individual's work pressure; conversely, the lower the role conflict, the less the individual's work pressure. The relationship between the two shows a significant and positive correlation.
- (3) A high level of role conflict has a significant and positive impact on turnover intention. This result is consistent with the findings of Chiu (2016) and Chang (2020). The managerial implication is that company managers must recognize that when employees experience role conflict, it directly influences their turnover intention. If supervisors in the workplace can appropriately allocate workloads in line with employees' capabilities, this will mitigate role conflict and indirectly influence turnover intention. Consequently, employees are more likely to remain in their original

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positions. As a result, the company can retain talent and prevent loss of human capital.

- (4) Among the three main constructs of this study, role conflict has a partial mediating effect. This result is consistent with the findings of Lee (2007). The managerial implication is that managers must understand that work pressure has a positive effect on both turnover intention and role conflict. When work pressure and role conflict co-exist, turnover intention can be affected through role conflict. In other words, role conflict mediates the effect of work pressure on turnover intention. When employees face excessive work pressure, role conflict can serve to reduce turnover intention and help retain talent in the organization. Furthermore, conflicts within the human resource structure of an organization can be alleviated by addressing role conflict. This will reduce work pressure and lower the likelihood of turnover intention.
- (5) Among the three main constructs of this study, the moderating effect of role conflict is not significantly positive. This result is not entirely consistent with the findings of Huang and Wang (2013) and Yu (2023). This discrepancy may be related to industry differences, organizational culture, or leadership styles. The managerial implication is that managers must understand that when role conflict serves a moderating effect, such moderating effect cannot regulate work pressure or reduce turnover intention of employees.

5.2 Research Limitations and Recommendations for Future Research

5.2.1 Research Limitations

This study focuses solely on employees of a top three AI company publicly listed in Taiwan. Due to constraints such as the willingness of participants and the time available for the research, the levels of work pressure experienced and the turnover intentions caused by role conflict in different situations may vary. These issues constitute the most significant limitation of this study.

5.2.2 Recommendations for Future Research

Since this study was conducted only on employees of one of the three major listed AI companies in Taiwan, future researchers may apply this research model to other industries in order to enhance the universality of the findings.

Moreover, this study has gained insight from a literature review on role conflict, work pressure and turnover intention defined by different scholars for different research groups and under different research constructs. Future studies can therefore take different approaches and develop different constructs, to explore ways of mitigating turnover intention. In addition, follow-up researchers may investigate other variables, identify effective ways to reduce turnover intention and conduct in-depth examination of the effects at various levels. Furthermore, the government may encourage companies to adopt AI applications and smart technologies to accelerate industry transformation and upgrade, as well as to enhance overall industrial competitiveness.

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