

An Examination of the Moderating Role of Gender on Turnover Intention among Manufacturing Industry Employees in Malaysia

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Abstract: *This study investigates staff turnover in a manufacturing industry in Malaysia. Manufacturing is semi-capital intensive industry. Manufacturing contributes to employment, Foreign Direct Investment (FDI) and Gross Domestic Production (GDP). Skilled and semi-skilled workers. Manufacturing is one of key success factors to national economy, nevertheless, high staff turnover continues to be disastrous towards manufacturing industry performance. This study employs a second-order construct with moderating role of gender in evaluating staff turnover intentions among 392 manufacturing industry employees in Malaysia, providing a case study of a manufacturing company in the consumer sector. Six variables were studied: role overload, role ambiguity, role conflict, work family conflicts, gender and turnover intention. The analysis was undertaken via SEM-PLS 3.2.7. A total of four hypotheses were tested. Positive results were obtained with respect to role overloaded on turnover intention. Negative results were obtained for role ambiguity, role conflict and work-family conflict. The implication of this study reveals that organizations generally recognize the importance of staff retention for superior organizational performance.*

Keywords: *Role ambiguity, Role conflict, Work family conflict Manufacturing Companies*

I. INTRODUCTION

Since 1980, the manufacturing sector has presented a framework for the Malaysian economy as a driver for economic growth and a tool for poverty alleviation. In a calculated move, Malaysia shifted its economic attention from primary to secondary industry in order to achieve sustainable national income [18]. The manufacturing sector in Malaysia focuses on product groups such as rubber, electrical and electronics, food, woods, petroleum and

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chemical products. The manufacturing transformation identified as Malaysian industrial revolution owing to fundamental influence on labor markets [8]. Industrialization created large labour movements from rural to urban areas and from the agricultural to semiconductor and electronics sectors. Malaysia created many free trade zones and heavily invested in infrastructure development. Malaysia's pioneer status privileges that were used to attract research-based activities. Accordingly, Malaysia successfully attracted the largest foreign direct investment in the region. Government restrictions on trade union activities were seen as an important pulling factor for the growth of the manufacturing sector. Prime Minister Tun Dr. Mahathir's farsighted economic policy was instrumental in the economic and social transformation of Malaysia [92]. The manufacturing sector represented 23% of the total workforce in the country and 76.2% of its total exports in 2018. Currently, that industry has experienced rapid growth [18]. It is a strategic sector in the Malaysian economy, granting reasons to protect and energize it, systematically organizing its growth through cultivating strong staff retention.

On the one hand, due to increased regional competitiveness to attract FDI, the government was forced to increase economic benefits to investors. On the other hand, the government adopted ISO standards, safety and environmental standards for quality enhancement. Competitive measures were adopted by industry players that created stress in the workplace, mainly due to the non-flexible nature of production generating role overload and ambiguity, demanding longer working hours to complete the tasks at hand [19, 68 & 93].

Staff turnover is the rate of required staff recruitment and rate of personnel leaving the organization. Manufacturing organizations are involved in production. The production line in a manufacturing company is operated based on standard and fixed amounts of planned line workers. Owing to its inflexible nature, large workers turnover become management concern in many organizations [11]. On a different but related front, supervisors have responsibilities that require multi-tasking. Production supervisors' responsibilities are cost-sensitive in nature. Prior studies show that working in production and manufacturing create stress, staff turnover, occupational injuries and accident that deny organizational goals in the long run [15]. The literature indicates

that passive managerial decisions on human resources eventually leads to a loss in talent and skilled workers going to competitors, a rise in distress among the workforce, severe deterioration in employee performance and a shrinking of product market share [73]. Strategic leaders in organization are, therefore, expected to be more sensitive and proactive with regard to directing stress into productive energy, increasing employee satisfaction and retention to avoid staff turnover [94]. Contemporary employees prefer favorable environment that promotes work–family balanced culture and career progression. Quality time towards family takes equal priority with employment dedication [32 & 73]. The situation is complex. It requires strategic managers encourage, motivate and design workers-friendly policies to manage perceptions and reality of turnover intention in the manufacturing sector. Staff turnover intention is explored among manufacturing industry employees in the consumer sector. This study research on role overload, work family conflict, role ambiguity, and role conflict.

II. LITERATURE REVIEW

A. Turnover Intention

Staff turnover measures the rate of job recruitment and rate at which personnel resign from an organization during a year. Employees are human beings with emotional attachments. When employees realize that employers are genuinely protecting their rights and are providing favors, turnover intention seldom happens in the service industry. Intention to change jobs in the manufacturing industry has a negative relationship with good salary, supervisory support and job-related training programs [2 & 87]. Existence of job opportunities in the industry positively influences turnover intention. Employers' ability to create greater value and experience for employees in the service industry shows a negative relationship towards turnover intention [90]. Job hazard management is as important as job security to employees. The presence of proactive safety leadership in an organization tend to reduce job turnover intention [3]. Burnout, Job satisfaction, work pressure were all strongly inter-correlated with job turnover intention in mental health service, teaching profession and hospital nurses [14, 68 & 80]. In view of limited studies in relations to job turnover intention among staffs in manufacturing industries of Malaysia focusing at consumer sector.

B. Occupational Stress

Occupational stress is pertinent matter among workers and companies [79]. In the United States, occupational stress contribute 80% of all domestic injuries and 40% of factory-workers turnovers [4]. In Canada, 3.7 million cases of stress during ordinary workday [17]. Work-related stress has also been identified as an important feature to firm ineffectiveness [5]. This study employs a second-order construct that combine role overload, work family conflict, role ambiguity, and role conflict, gender and turnover intention constructs into a single higher-order construct, Occupational stress [28 & 29].

C. Work-family Conflict

The manufacturing industry is dominated by a female workforce. Work–family conflict is understood as discomfort arises due to imbalance between work environment and family [25]. [74] found low-impact Work–family conflict battles lead towards performance where else high impact Work–family conflict become source of negative performance. Supervisory support increases job satisfaction and personal development opportunities through lifelong education, reducing work–family conflicts [63 & 78]. The adverse atmosphere in work life versus family necessities increase stress and conflict among female workers [7]. Employee productivity drop by family conflict. Employers are thus encouraged to offer counselling services to increase morale, thus boosting staff productivity [84]. Past studies found that high job satisfaction reduces staff turnover [64]. Therefore, this study hypothesizes that work–family conflict negatively influences one's turnover intention.

H1: Work–family conflicts negatively influence turnover intention among manufacturing industry employees in Malaysia.

D. Role Overloaded

Role overload is described as situations where staff are handling too much tasks outside normal level of work a factory worker is able to accept in a given time frame [20]. Ordinarily, an organization will spell out a standard productivity schedule in a standard timeline for as an expected standard of productivity. Literature indicate that work stress occurs when a worker feel role overload where the workload requires more time and effort to complete beyond the ability of a staff member. Due to limited job knowledge and capabilities, excessive workload causes a person discomfort or task completion associated with substandard quality [25, 26 & 67]. Prior studies have also discovered that, even an employee engaged with passionate activity when overloaded tends to be inefficient and ineffective [81]. Role overloaded if found to be common in developing countries. Further research is highly needed on role overload to provide management remedy to work-related outcomes in an organization [81]. Therefore, this study hypothesizes that role overloaded would positively influence turnover intention.

H2: Role overloaded positively influences turnover intention among manufacturing industry workers in Malaysia

E. Role Ambiguity

Role ambiguity denote situation where poor information linked to one's job within an organization [35 & 86]. Frequently, role ambiguity arise when a subordinate feels uncertain and unsure about the expectations of superiors in the organization. Lack of empowerment, absence of clear job description, distrust of managers towards lower-level employees are seen as sources



of role ambiguity. Such situation commonly noticed in less-developed countries [1 & 34]. Higher degree of role ambiguity contribute greater job dissatisfaction, absence of work commitment, higher job-related stress and uneasiness and convince workers to leave the organization [1, 22 & 85]. Role ambiguity create lower confidence levels among employees, and higher job turnover [65]. This study hypothesizes that role ambiguity has a negative influence on turnover intention.

H₃: Role ambiguity negatively influences turnover intention among manufacturing industry employees in Malaysia.

F. Role Conflict

Role conflict is a job related environment when superior emphasis on non-job description responsibilities and, beyond that, unofficial job functions may be in the personal interest of superior or not in the best interest of organization [83]. Role conflicts that arise from other roles and affects one's personal integrity, viewed as unethical [62 & 76]. Prior studies indicate that, employees directed to perform role conflicts are unsatisfied with current job and organization. Past literature also revealed that role conflicts negatively influence staff integrity issues, damaging employee's personal goodwill and exposed to high risk [70 & 82]. Role ambiguity create lower confidence levels among employees, leading to lower performance levels, higher job dissatisfaction and higher job turnover [65]. Therefore, this study hypothesizes that role conflict negatively influences turnover intention among manufacturing employees in Malaysia.

H₄: Role ambiguity negatively influences turnover intention among manufacturing industry employees in Malaysia.

G. Moderating Role of Gender

Gender refers to whether an employee is male or female. The characteristics of gender contributes towards employee's decisions. [91], found male workers are more aggressive in making risky decisions and adopting new challenges compared to female workers. Male workers are more motivated to work in banking, finance, technology industries compared to female workers. [71], found that male workers are positively embrace M-mobile compare with female workers. [13] studied the relationship between gender and work retention. Gender of employee moderates the effect of role stress on an employee's behavior in financial industry. [13] found that department climate mediates the relationship between gender and job retention and job satisfaction in an organization. [37]. found the effect of role stress on job satisfaction impact female employees' more than male employees. However, [36], discovered that moderating effect on gender between role ambiguity and job satisfaction was insignificant. [12] found that turnover intentions positively influence by psychological contract breach, and adversity quotient significantly moderated that relationship. However, the moderating effect of gender was not found to be significant. [38] found attitudes and perceptions of had great influence on turnover intention. However, gender has negligible effects on turnover intention. [30] discovered that

career adaptability, perceived career management, and career success adversely influence on turnover intention. Gender has insignificant effect on turnover intention. [10] revealed that loss of job privileges and its impact on turnover intentions for both genders is significant.

III. METHODOLOGY

A. Sample and data collection

The researcher's adopted questionnaire survey to test the research model and hypothesis, similar to previous researchers found in the literature review. The research intends to measure relationship between selected independent variables and dependent variable moderated by gender. The population selected for the research comprise of existing individual employees from manufacturing companies. All required steps satisfied as pre-condition to apply the Statistical Package for Social Sciences (SPSS) version 24 and SEM through smart PLS 3.2.7.

B. Measures

The research intended to measure variables of role overload, role ambiguity, role conflict, work-family conflict and employee turnover intention in the manufacturing industry. All the constructs used in this research were adopted from past studies. Three industry captains were approached to ensure that the questionnaire was truly able to provide solutions to the research being considered. Three senior lecturers in the field of human resources were consulted for their academic view on the research. Thereafter, a pilot test was conducted based on thirty employees in a manufacturing company.

C. Measurement of Construction

This survey consists of adapted twenty-three measurement items from prior studies for six measurement components covering role ambiguity, role conflict, role overloaded, work-family conflict, gender and turnover intention. A quantitative research approach shows that the staff in this research adopted a realistic ontology and objectivist epistemology. Data collection is the procedure included the collection and measurement of variables of interest, using a verified systematic pattern, publishing responses for the particular questions, testing the hypotheses and performing an evaluation. [77] found that the data collection toolkit is typical to all fields of study, and it envelops the physical and social sciences, the humanities, business, etc. Even though the technique differs by field-specific regulations, the significance of ensuring reliable and genuine data collection is always the same. Stratified random sampling technique was used for data collection.

The main area of measurement covered in this chapter included a reliability test, descriptive analysis, together with a normality test and linearity test, homoscedasticity test, multiple regression and correlation analysis. The questionnaire used for this study has two sections consists of demography and variables which used a six-point Likert scale as an essential characteristic of the research instrument. Reliability and validity test done through a pilot test. Hence, the Cronbach Alphas for all items

stood at 0.7 and above (20 items scaled at 0.943 and above) as the recommended benchmarked threshold [31].

D. Data Collection

The finalized questionnaire was distributed to the manufacturing company that being take as case study. The estimated population of this study is 396 [66]. The research followed standard guide line for sample size of 300 as proposed by [31], for structural equation modelling (SEM) analysis for seven constructs in the structural model. The sample size was 392. 70% of the respondents were females. Three respondents were managers, ten ranked officers, fifteen ranked line leaders and the balance were line operators in the factory. All respondents were under sixty years old. The minimum education level was lower secondary and highest qualification was a university degree. The minimum work experience in the industry was months and the maximum was forty years. The highest job designation of the respondents was manager and lowest was line operator. Based on the past literature, the size of respondents and mixture of population is sufficient to analyse via SPSS version 24 and SEM through a smart PLS 3.2.7 approach to hypotheses testing and working towards obtaining quality and reliable findings.

E. Measurement Model Estimation

First, the hypothesized model been tested after the measurement model of all reliability, convergent validity and discriminant validity been analysed. Table 1 depict measurement model scores attained. Supporting Table 1, the loading factor of each construct stood above 0.70, as dictated by [31]. The common variance extracted (AVE) from all variables stood above 0.5 [6]. The composite reliability scores (CR) for all constructs stood above 0.7 as required by [31].

Items	Loadings	CR	AVE	VIF
Gender	1	1	1	1
RA	0.992	1	1	1
RA1	0.801	0.82	0.873	0.633
RA2	0.844			1.877
RA3	0.795			1.652
RA5	0.738			1.602
RC	1.002	1	1	1
RC1	0.822	0.882	0.909	0.666
RC2	0.85			2.312
RC3	0.808			2.016
RC4	0.837			1.184
RC5	0.762			1.744
RO	0.995	1	1	1
RO1	0.831	0.798	0.864	0.681
RO2	0.891			1.874
RO3	0.747			1.479
TI1	0.778	0.85	0.89	0.618
TI2	0.764			1.933
TI3	0.804			1.863
TI4	0.803			1.944
TI5	0.782			1.754
WFC	0.994	1	1	1
WFC1	0.821	0.878	0.907	0.62
WFC2	0.832			2.332
WFC3	0.758			1.861
WFC4	0.772			1.8
WFC5	0.791			1.996
WFC6	0.745			1.688

Based on the output, the researcher achieved convergent validity requirement. Table 4 displays output of the discriminant validity test. As suggested by [23 & 24], the AVE of every construct rightfully be above the correlation between contract under consideration and the other constructs in the model. Table 4, shows all constructs fulfill the discriminant validity criterion as advocate by [31]. As shown in Table 3, the loadings of all constructs satisfy that criterion. As such, we are able to conclude that discriminant validity had been achieved.

Table 2: Discriminant validity of construct

	Gender	M1	M2	M3	M4	RA	RC	RO	TI	WFC
Gender	1									
Moderating Effect 1	-0.017	1								
Moderating Effect 2	0.015	0.616	1							
Moderating Effect 3	-0.006	0.65	0.577	1						
Moderating Effect 4	0.007	0.769	0.662	0.599	1					
RA	0.058	0.04	-0.038	-0.017	0.048	0.795				
RC	-0.05	-0.038	-0.022	-0.065	-0.021	0.598	0.816			
RO	0.022	-0.017	-0.064	0.035	0.022	0.638	0.555	0.825		
TI	0.019	0.03	-0.075	0.107	0.064	0.741	0.561	0.811	0.786	
WFC	-0.024	0.048	-0.021	0.022	0.041	0.771	0.655	0.597	0.674	0.787

Table 3: Cross loadings

	Gender	M1	M2	M3	M4	RA	RC	RO	TI	WFC
Gender	1	-0.017	0.015	-0.006	0.007	0.058	-0.05	0.022	0.019	-0.024
RA* Gender	-0.017	1	0.616	0.65	0.769	0.04	-0.038	-0.017	0.03	0.048
RA1	0.008	0.015	0.019	-0.012	0.027	0.801	0.555	0.455	0.51	0.657
RA2	0.097	0.094	-0.024	0.026	0.075	0.844	0.44	0.358	0.685	0.61
RA3	-0.004	0.025	-0.106	-0.069	0.03	0.795	0.424	0.524	0.625	0.622
RA5	0.08	-0.024	0.008	-0.001	0.015	0.738	0.516	0.481	0.506	0.573
RC* Gender	0.015	0.616	1	0.577	0.662	-0.038	-0.022	-0.064	-0.075	-0.021
RC1	-0.057	-0.035	-0.036	-0.046	-0.053	0.535	0.822	0.436	0.457	0.551
RC2	0.016	-0.014	-0.018	-0.087	-0.028	0.566	0.86	0.506	0.524	0.575
RC3	-0.066	-0.005	0	0.025	-0.026	0.429	0.808	0.411	0.417	0.511
RC4	-0.019	-0.035	-0.061	-0.025	-0.007	0.465	0.837	0.493	0.475	0.535
RC5	-0.097	-0.071	0.036	-0.132	0.034	0.429	0.762	0.405	0.401	0.464
RO* Gender	-0.006	0.65	0.577	1	0.599	-0.017	-0.065	0.035	0.107	0.022
RO1	0.056	0.039	-0.033	0.089	0.042	0.5	0.457	0.831	0.699	0.502
RO2	0.009	-0.065	-0.086	0.018	0.005	0.598	0.445	0.891	0.765	0.523
RO3	-0.02	-0.01	-0.032	-0.035	0.006	0.474	0.494	0.747	0.505	0.453
TI1	-0.008	0.068	-0.096	0.071	0.066	0.63	0.43	0.533	0.778	0.56
TI2	-0.039	0.134	-0.015	0.149	0.085	0.6	0.377	0.475	0.764	0.547
TI3	0.035	0.02	-0.052	0.033	0.078	0.558	0.456	0.871	0.804	0.523
TI4	0.05	0.034	-0.022	0.162	0.043	0.565	0.463	0.738	0.803	0.552
TI5	0.004	-0.112	-0.108	-0.004	-0.009	0.573	0.468	0.728	0.782	0.477
WFC* Gender	0.007	0.769	0.662	0.599	1	0.048	-0.021	0.022	0.064	0.041

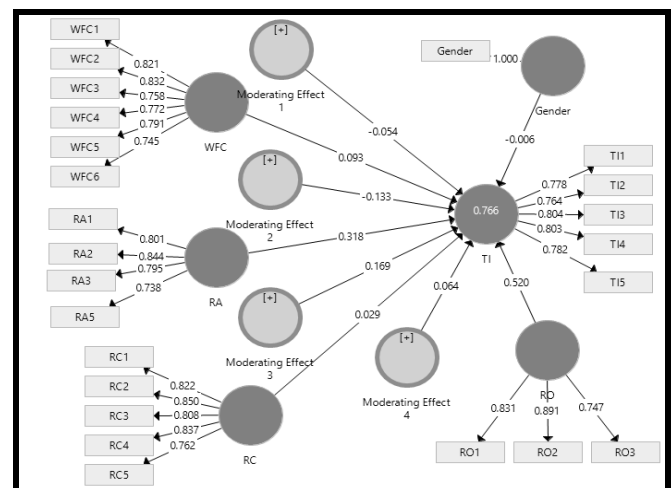


Figure 1: Measurement model



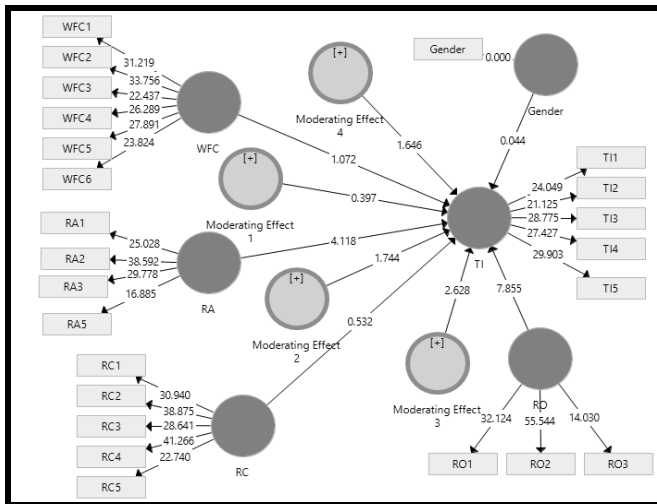


Figure 2: Structural model

Table 5: Hypothesis results

Hypothesis	Beta value	T-Value	P-Value	Decision
TI Moderating Effect 1>RA	-0.026	0.397	0.691	Not Supported
TI Moderating Effect 2>RC	-0.113	1.744	0.081	Not Supported
TI Moderating Effect 3>RO	-0.178	2.628**	0.009	Supported
TI Moderating Effect 4>WFC-TI	-0.056	1.646	0.1	Not Supported

IV. DISCUSSION AND CONCLUSION

This study explores the moderating role of gender on staff turnover intention among manufacturing industry employees in Malaysia. Six variables role overload, work family conflict, role ambiguity, and role conflict, gender and turnover intention were studied. To estimate the structural model, a bootstrapping procedure with 5,000 resamples was run to generate the *t*-values. Figure 1 presents the structural model while Table 5 presents the results of the hypothesis testing. [72]’s method of bootstrapping the indirect effect was applied. As shown in Figure 2 and Table 5, only H3 is supported ($\beta = 0.178, p < 0.05$). While H1 ($\beta = -0.026, p > 0.05$), H2 ($\beta = -0.113, p > 0.05$) and H4 ($\beta = -0.056, p > 0.05$). Thus, only H3 is supported as showed by [72] with the indirect effect lower level and upper level not linking a zero in between, confirming that moderating variable (gender) moderates between independent variables and dependent variable. Based on statistical analysis concluded that gender moderates between independent variables and dependent variable, indicating that H3 was significant and supported except for H1, H2 and H4.

Based on the literature above, role overload is generally common in developed and less-developed and developing countries. The finding suggests that when a staff is continuously overloaded with volume of work beyond manageable levels will eventually opt for a better environment. Manufacturing is a monopolistic industry. That finding comes as a signal to leaders where predominantly female workers must exercise caution when delegating workload among employees. Failing to do so may lead to the departure of skilled and semi-skilled workers to their competitors who are perceived to be more considerate towards female workers.

Based on the findings in the literature, in less-developed countries role ambiguity and role conflict have also

manifested negative relationships. The finding may be analysed from the cultural perspective of employees. Employees from the Eastern world have to be more obedient and worship their superiors’ mentality, even when the employee realizes that their superior is mistaken and need to conduct further investigation and fact-finding before issuing his instructions. The same situation also applies to role conflict. Superiors assess and capitalized on the soft spot of female workers. In situations where an employee is given instructions to perform a task or duty beyond his job specification for the benefit of a superior, be obedient and comply adoringly with their superiors’ attitudes, will convince such staff to commit a ‘wrongdoing’ hoping the same superior will do a favor in some other situation. Any sense of respect in strictly practicing employment law, a country’s constitution, a standard operating procedure, or protecting self-pride takes a backseat, while committing a mistake knowingly for the benefit of superior becomes a priority. Due to the weak legal system and lack of awareness to acquire legal knowledge, civil society must undergo a re-education process to create an informed workforce who understand their rights, along with what they should do and not do. The education must stress legal standards as taking priority rather than emotions or feelings.

Based on the literature, in less-developed countries work–family conflicts show a negative relationship. Women workers in developing nations complain a lot about decisions. Such happenings are yet another reflection of Eastern culture. Female workers prefer job security. Losing a job and monthly salary is considered an expensive mistake. Lack of self-confidence and preference for employment within their home’s vicinity could be additional reasons for staying in a job.

This paper explored the moderating role of gender on staff turnover intention among manufacturing industry employees in Malaysia, considering the case of a manufacturing company in the consumer sector. Six variables role overload, work family conflict, role ambiguity, and role conflict, gender and turnover intention. Researcher analysed role overload, role ambiguity, role conflict and work–family conflict if causing job turnover in the industry. Researcher also analyse Gender as moderator have relationship between constructs: role overload, work family conflict, role ambiguity, and role conflict and turnover intention. Past studies were reviewed to gain underlying knowledge. Well-structured questionnaires (153 items) were utilized to collect data to extend subject knowledge. Data was processed via SEM-PLS 3.27 software. Four hypotheses were tested. The relationship between role overload and turnover intention is significant and supported. The relationship between role ambiguity, role conflict and work–family conflict and turnover intention were not supported. The findings suggest that employee’s cultural background and personal attitudes towards an organization and their superiors influence their intentions to leave the firm. There is a clear gap between female employees in developed and developing nations.

Four hypotheses were tested. The relationship between role overload and turnover intention is significant and supported. The relationship between role ambiguity, role conflict and work-family conflict and turnover intention were not supported. The findings suggest that employee's cultural background and personal attitudes towards an organization and their superiors influence their intentions to leave the firm. There is a clear gap between female employees in developed and developing nations.

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