



Employee Retention, Job Performance and HR Practices: A study of E-Commerce Industry

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ABSTRACT

Employee retention has always been one of the main issues for organizations as it affects their long-term planning, productivity and efficiency. The main aim of this research is to investigate the issues with regards to employee retention, job performance and human resources practices in the internet industry in Jiangsu, China. Specifically, this study examines the following research objectives: (i) the relationship between training and development and employee retention, (ii) the relationship between salary and employee retention (iii) the relationship between performance appraisal and employee retention (iv) the relationship between competitive pay and employee retention, and (v) job performance mediates the human resources practices and employee retention. A questionnaire survey was conducted in Jiangsu, China where 222 respondents participated in this survey. Data collected were subsequently analysed using SPSS and SmartPLS 3.0. The study indicates that the four human resource practices (training & development, salary, performance appraisal and competitive pay) significantly affect job performance. Besides, job performance strongly and positively affects employee retention. Since human resource practices are critical to employee retention in the e-commerce market, through the development and improvement of human capital, employee performance may gradually improve. Employers should also strengthen training and development, salary, performance appraisal, and competitive pay and job performance to increase employee retention and reduce turnover

Keywords: HR Practices, Employee Retention, Job Performance, E-commerce, Training & Development

1. Introduction

The importance of employees in a company is beyond doubt. This is because they play an important role in helping the company to generate revenue, maintain product innovation, and ensure the company's viability and sustainable operations. Therefore, the contribution of employees cannot be neglected. However, in today's work environment, retaining good, experienced, and qualified employees poses a real challenge for the company. Failure to retain such employees affects the

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company's long-term health and success (Ezaili ,HazieqahRohmanan, Ismail ,Koe, & Othman, 2018).

The problem of employee retention is particularly prevalent in the e-commerce industry due to the following possible reasons: (i) excessive pressure caused by the nature of the work; (ii) heavy workload; (iii) job instability leads to deterioration of employee health (Padma Et al., 2015). In recent years, the rapid development of the global e-commerce industry has raised concerns about how to retain human capital in this industry. In fact, the issue of employee retention is not unique to the e-commerce industry and many scholars have conducted research on employee retention issues in different industries. For example, Zhang and Wallace (2008) studied employee retention issues in the construction industry of Chinese state-owned enterprises while Liu (2014) investigated employee retention in the restaurant industry in Shanghai, China. This may indicate that employee retention is a common phenomenon in industries where human capital is heavily involved, and this opens an avenue for conducting research to explore and further understand the fundamental issues pertaining employee retention and its related areas. It is believed that by doing so it provides effective remedial measures to curb this critical issue of employee retention.

A review of the literature shows that many scholars have proposed methods to help in retaining employees, including but not limited to methods such as increasing employee wages, strengthening training and development, and more comprehensive and relevant employee evaluation systems. It is well acknowledged that in order to retain employees, it is important for organizations to use appropriate human resource practices (Sohail, Delin, 2013; Saba, 2011) and according to Sutanto (2016), there is a very complex relationship between human resource practices and job performance. At the same time, training and development, salary, training and development efforts may affect job performance, which is of great significance for improving employee retention. Given in this situation, a research may seem to be in dire need to understand such complicated relationship and hence the current study aims to explore the following research objectives:

- (i) the relationship between training and development and employee retention,
- (ii) the relationship between salary and employee retention,
- (iii) the relationship between performance appraisal and employee retention,
- (iv) the relationship between competitive pay and employee retention, and
- (v) whether job performance mediates the human resources practices and employee retention.

It is hoped that the findings of this study will contribute to the existing knowledge in the literature. The results may serve as a reference to the management of the e-commerce industry. This specifically helping them to understand what motivate employee retention in this industry. Besides, the knowledge gained in this study will help to reduce employees' turnover rate which in turn enhance productivity and profitability of the company. It is widely believed that once the employee retention rate is high, this will minimise the recruitment and staff training cost. Hence, the operation cost will be reduced.

Job performance of employees is one of the key success factors that influence the sustainability and viability of a company. The study uncovers factors that affect the job performance of employees. Such findings help to identify bases to improve job performance of employees which likely to bring about better job satisfaction and thus strengthen the wellbeing of the employees. Additionally, the information obtained from this study will eventually improve the HR practices of companies in the industry.

2. Hypotheses Development and Literature Review

2.1 Employee Retention

Vance (2006) believes that companies should provide the best strategies to retain employees, such as working environment, supervisory support, rewards, career development, and work-life balance. By doing this, employees are more willing to serve the company. At the same time, many researchers also pointed out that other aspects such as job satisfaction, salary and benefits, training and development are also important for retaining employees (Iqbal, Guohao, & Akhtar, 2017, Kossivi, Xu, & Kalgora, 2016; Cloutier, Felusiak, Hill, & Pemberton-Jones, 2015). In addition, Cloutier, Felusiak, Hill and Pemberton-Jones (2015) found that employee diversity, inclusion, and integration are equally important, while Iqbal, Guhaohao, and Akhtar (2017) emphasized the importance of organizational culture in retaining employees as the organization creates a better atmosphere and makes employees feel more energetic and satisfied. This may also encourage them to stay in the organization for a long time. Other determinants of employee retention may include development opportunities, salary, work-life balance, management/leadership, work environment, social support, autonomy, training and development (Kossivi, & Kalgora, 2016).

2.2 HR Practices and Employee retention

2.2.1 *Training and development and Employee retention*

Training and development are defined as human resource improvement activities for employees, which refer helping employees to achieve mandatory understanding or skill levels to improve their performance (Forgacs, 2009). Training and development help to increase employee loyalty and commitment to ensure that they can work for the organization for a longer period. Therefore, training and development help to reduce turnover and increase employee retention (Samuel&Chipunza, 2009). Chang (1999) pointed out that if an organization can provide employees with more satisfactory training and development opportunities, their stay in the organization will be longer. According to Grace and Khalsa (2003) and Rosser (2004), they believe that training and development will affect job satisfaction and therefore increase their willingness to stay in the organization.

Martin (2003) asserted that organizations that provide training and development skills to improve the capabilities and skills of existing employees can easily manage employee retention. The study found that there is a significant correlation between training and development and employee retention. In addition, On the contrary, Haines, Jalette, and Larose (2010) found that training and development will reduce employee retention as when employee skills are strengthened, this will make them more attractive to other organizations. Similarly, Batt (2002) believes that training and development will have a negative impact on employee retention for the similar reasons.

Based on the conclusions of previous researchers above, no unified results are found in the relationship between employee training and development and employee retention and hence the relationship between them needs to be further studied and explained. Therefore, the following hypothesis is made:

H1: There is a positive correlation between HR practice (Training and development) and Job performance.

2.2.2 Salary and Employee retention

Msengeti&Obwogi(2015) found that salary and compensation will have an impact on employee retention. They explained that if the organization or employer can provide a sufficiently high salary to the employees, this will increase their willingness to stay as they will think that if they continue to stay in that organization, they will likely get higher salaries in the near future. According to Raihan and JoarderMohdHasanur (2012), they claimed in their research that there is a positive correlation between salary and retention rate as they found that emotions and continued commitment will partially affect employee salaries and fully affect employee retention rates. Likewise, Willis (2000) and Gardner (2004) believe that wages and salaries are the best way to motivate and retain skilled and capable employees.

The study conducted by Randy (2002) shows that salary is the most important factor in retaining and motivating employees. Iqbal, Guohao, and Akhtar (2017) pointed out in their article that benefits and wages are also important determinants of employee retention. The salary and benefits provided by the company have an important relationship with the employee retention in the company.

Based on review of past studies in the literature above, most researchers confirm that there is a significant relationship between salary and employee retention. Notwithstanding that research on this topic is still needed for further investigation and confirmation of the relationship between salary and employee retention. Therefore, the following hypothesis is made:

H2: There is a positive correlation between HR practice (Salary) and Job performance.

2.2.3 Performance appraisal and Employee retention

Performance appraisal is a kind of human resource practice. For example, regular evaluation of employee performance can improve the utilization of human resources in an organization (Raihan, 2012). Murphy (2020) believes that an effective and relevant performance appraisal system may help to improve organization and employee performance. Kuvaas (2006) pointed out that when the performance evaluation system is properly used in the development of the organization, it can be used as a tool for employee retention, development and motivation. At the same time, the study also pointed out that performance appraisal has an important impact on employee retention, because it helps to increase employee confidence, which will lead to better personal performance in achieving employment goals. Not only Kuvaas, Jihad and Farzana (2011) and Levy and Williams (2004) also believe that an appropriate performance evaluation system can improve employees' perception of their importance and recognition in the organization. This positive attitude will enable them to stay longer in the organization (Yi, Natarajan, & Gong, 2011).

In contrast, Riaz, Ayaz, Wain, and Sajid (2012) disagreed the above findings. They stated that performance evaluation does not affect employee retention, while Johari (2012) also stated in the research that there is no significant relationship between performance evaluation and employee retention. Although many researchers have studied the relationship between performance appraisal and employee retention, there are different conclusions for specific industries and organizations. For this reason, in-depth research is needed to explain this relationship. Therefore, the following hypothesis is made:

H3: There is a positive correlation between HR practice (Performance appraisal) and Job performance.

2.2.4 Competitive pay and Employee retention

Pay plays an important role in employee retention and it is one of the important reasons for an employee to decide whether he or she will stay or resign from a job (Abdullah Al Mamun, & Nazmul Hasan, 2017). According to Philips (2003), in his survey, 64.1% of people expressed their willingness to stay in a company because their salary is competitive. Lazear (1998) pointed out that within the same level, the higher the total salary, the lower the turnover rate, the higher the comparable salary, and the longer the retention time. Human capital theory proposes that under the same conditions, the probability of a worker leaving a position with a basic salary will be higher than the probability of a person with a high-tech job. Similarly, workers whose wages are lower than elsewhere are most likely to leave (Ehrenberg and Smith, 1994), which also means that people with higher wages are more likely to stay in the same position. Only a company with a highly flexible social welfare system can have a higher retention capacity than a company with a fixed welfare system (Vidal-Salazar, Cordón-Pozo, & de la Torre-Ruiz, 2016). However, whether there is a positive correlation between competitive salary and employee retention requires further research investigation. Therefore, the following hypothesis is formulated:

H4: There is a positive correlation between HR practice (Competitive pay) and Job performance.

2.3 Job Performance

2.3.1 Job performance and employee retention

According to the research of Motowidlo and Kell (2012), job performance is defined as the degree of completion of an individual's work and the organization's expectations over a period of time. Zimmerman and Darnold (2009) found that job performance is negatively correlated with turnover rate, and they also found that job performance affects employee retention rate. According to Scroggins (2008), there is a strong relationship between job performance and employee retention. Hence, improving employee performance can increase employee retention. The article by Chong and Lee (2017) pointed out that some HR practices have a significant relationship with job performance. They explained that when employees have the opportunity to develop their careers, employees tend to stay in higher-performing organizations. Similarly, the research of And Hausknecht and Howard (2009) clearly pointed out that non-hourly labor unions with higher job performance will stay in the company for work reasons, and the company tends to choose valuable employees with higher performance. Based on previous studies on the relationship between job performance and employee retention, the following hypothesis is proposed:

H5: There is a positive correlation between Job performance and employee retention.

2.3.2 Job performance with HR practices and employee retention

According to Preacher & Hayes (2004) and Alias & Hassan (2014), prerequisites must be met to establish a relationship. First, human resource practices are directly related to job performance. Second, human resource practices are directly related to employee retention. Third, job performance is directly related to employee retention. According to past research, there is a significant relationship between job performance and HR practices (Hee, Halim, Ping, Kowang, & Fei, 2019, Hassan, 2015) and there is also a significant relationship between job performance and employee retention (Scroggins, 2008, Chong, & Lee, 2017). For example, Rawes (2019) research shows that human resource practices will affect the development of employees, and the adoption of appropriate human resource practices can provide employees with a platform for new skills and behaviors. It also stated that the rational use of human resource practices can improve employees' performance in the organization.

In previous studies, many scholars have conducted research on job performance, and many scholars have studied it as a dependent variable or independent variable as well as mediator variable. For example, in Hou (2007), job performance is used as a mediator variable for personality interaction and emotional exhaustion. Taghipour and Dejban (2013) used job performance as a mediator variable to study job motivation and found a positive correlation. However, a limited study has adopted job performance as a mediator variable between human resource practices and employee retention. Therefore, such a study will contribute significantly to the literature (Kamil, Hamid, Hashim, & Omar, 2011). Thus, the following hypotheses are proposed to examine the relationship among job performance, human resource practices and employee retention

H6: Job performance mediates the relationship between HR practice (Training and development) and employee retention.

H7: Job performance mediates the relationship between HR practice (Salary) and employee retention

H8: Job performance mediates the relationship between HR practice (Performance appraisal) and employee retention

H9: Job performance mediates the relationship between HR practice (Competitive pay) and employee retention

2.4 Theoretical Framework

This research uses SET (Social Exchange Theory). Many researchers have adopted this theory to examine the effects of employee turnover and retention to understand the relationship between employers and employees (Coyle-Shapiro, & Conway, 2005). Based on the concept proposed by SET, it is said that better behavior should be rewarded, and it is also mentioned that different companies and organizations should adopt different human resource management practices. At the same time, SET pointed out that when employees are valued and supported in the organization, they will perform better (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). One of the assumptions of SET is that a person establishes a social relationship based on interests and hence the performance of employees depends on the treatment given to them in the organization, which is also called the exchange of interests between employers and employees. Therefore, when employers and organizations can meet

the needs and expectations of employees, employee loyalty and dedication will be increased and hence employee retention will also be increased (Trebilcock, 2011).

2.5 Research Framework

Based on the discussion outline above, the study aims to examine various hypotheses based on the following research framework:

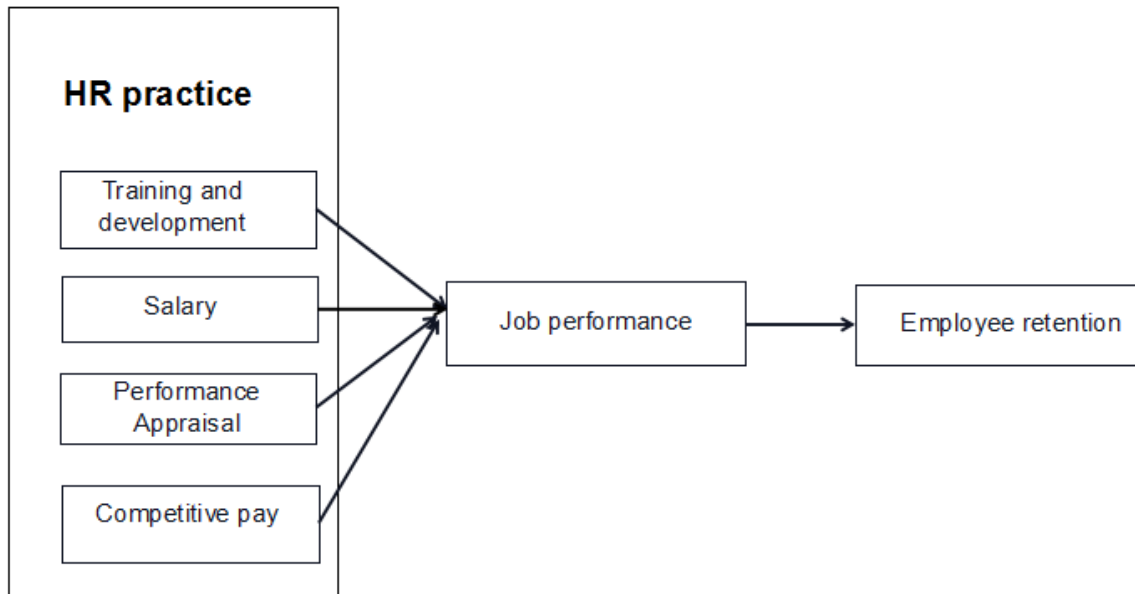


Figure. 2.1: Research Framework

Adapted from Imna, & Hassan (2015) and Villajos, Tordera, Peiró, & van Veldhoven (2019)

3. Research Methodologies And Data Analysis

3.1 Research Design, Population and Sample Size

The information in this study was collected through a questionnaire survey. The target population of this study are employees of two e-commerce companies in Jiangsu Province, China. In this study, 300 questionnaires were distributed to the employees of the two companies, and a total of 222 complete and valid questionnaire responses were collected. Respondents were randomly selected from the employees of the two companies, regardless of age, gender, working experience and job position.

3.2 Research Instrument and Measurement

The questionnaire consists of three parts. The first part is to collect demographic information, including information such as gender and job position. The second part of the questionnaire are questions related to HR practices while the third part are on job performance and employee retention. Two weeks were given to the employees and there is no pressure for them to participate in this survey. The survey was conducted anonymously and no personal information will be disclosed to the company's management to ensure that respondents' wellbeing will not be jeopardised.

In the questionnaire, two scales were used to measure HR practices, employee performance and employee retention. For example, in part B, HR practices were measured using the five-point Likert scale such as: 1 (not at all)-2 (very little)-3 (some)-4 (a fair amount)-5 (a lot). In Part C, job performance and employee retention were measured using the six-point Likert scale, that is: 1(Strongly disagree)-2(Disagree) -3(Somewhat disagree) - 4(Somewhat agree) - 5(Agree) - 6(Strongly agree). The 20 items of variable measurement used in the article are all based on the results and modifications of previous research (Villajos, Tordera, Peiró, & Van, 2019). There are 5 measurement items used to measure job performance (Ramos, 2019). The other 3 items measured employee retention with reference to Gupta(2018).

The 20 items of variable measurement used in the study were adapted from the previous research in the literature. Three items were used to measure training and development, such as "The opportunity to receive training and attend courses and workshops". It also includes three measurement items for salary evaluation, one of which is "The company provides a salary corresponding to my Performance" and it also includes three items measuring performance appraisal, such as "The periodic evaluation of my performance.". In addition, three items used to evaluate competitive pay, one of which is "A competitive salary on the job market". These 12 items were adapted from Villajos, Tordera, Peiró, & Van (2019). Eight measurement items were used in Part C, five of which were used to measure job performance, and they were adopted by Ramos (2019). One of them was "I managed to plan my work so that I finished it on time." The other three items that measure employee retention were adopted from Gupta (2018), such as "I do not think about leaving this organization."

3.3 Data Analysis

Sorting and cleaning of the data was done after data collection was completed. This is to ensure data consistency and avoid data duplication and omissions. After data processing, descriptive analysis will be performed to generate the demographic information of the respondents (Elliott, 2018). In addition, PLS-SEM was used to measure the relationship of the various variables based on the hypotheses developed in this study.

From the demographic data (Table 1), information of employees' gender, age, education background and marital status are obtained. Of the 222 respondents, 127 (57.2%) were male, and 95 (42.8%) were female. The age groups of the interviewees were mostly concentrated in the three ranges of 20-30 (42.8%), 31-40 (27.5%), and 41-50 (16.7%). In addition, there were 9 (4.1%) employees under age 20 and 20 (9%) employees above 51. There are 7 (3.2%) employees owned PhD, 126 (56.7%) undergraduates and 30 (13.5%) graduate students, 52 (23.4%) respondents with diplomas, and the remaining 7 (3.2%) have high school degrees. Among the respondents, 71 (32%) were single, married accounting for 144 (64.9%), and 7 (3.2%) divorced. The average working tenure of the 222 respondents in the company is 5.91 years.

Table 1 : Respondents' Demographic Profile

	Category	Frequency	%
Gender	Male	127	57.2
	Female	95	42.8
Age	<20	9	4.1
	20-30	95	42.8
	31-40	61	27.5
	41-50	37	16.7

	> 51	20	9
Educational Background	PHD	7	3.2
	Master's Degree	30	13.5
	Bachelor's Degree	126	56.8
	Diploma	52	23.4
	High school	7	3.2
Marital Status	single	71	32
	Married	144	64.9
	Divorced	7	3.2
Job Time	<1year	3	1.4
	1-3years	91	41
	4-6years	70	31.5
	7-10years	26	11.7
	>10years	32	14.4

Table 2 : Average working Tenure (years)

	Frequency	Minimum	Maximum	Average value	Standard deviation
Working Tenure	222	0	41	5.91	6.106

Data Analysis

Partial least squares was used to analyse the relationships among the variables (Ringle, Wende & Becker, 2015). The measurement model, testing the validity and reliability, and structural model, which predict the relationship of the hypothesis in our model (Hair, Hult, Ringle and Sarsdett., 2017) This research uses SmartPLS3 software to analyse the data, and the coefficient values of each latent variable.

Reliability Analysis, uses Cronbach's Alpha reliability coefficient, was conducted to check the internal consistency of the questionnaire research variables on each measurement item. Cronbach's Alpha coefficient to be greater than 0.7 for variables to have good reliability (Ringim, et al., 2012).

The Cronbach's Alpha (Table 3) for the variables show high reliability. Cronbach's Alpha coefficients of CP, ER, JP, PA, S, and TD are 0.853, 0.848, 0.872, 0.828, 0.839, 0.803, which are all greater than 0.7, indicating that each variable has good reliability and internal consistency. Hence, the data are safe to be used.

Table 3 : Reliability Test

Variable	Cronbach's Alpha
CP	0.853
ER	0.848
JP	0.872
PA	0.828
S	0.839
TD	0.803

Note : Measurement items : Competitive Pay = CP; Employee retention = ER; Job performance = JP; Performance appraisal = PA; Salary = S; Training and development = TD

Measurement Model

Convergent validity and discriminant validity are assessed under the measurement model. Validity refers to the validity and correctness of the questionnaire, that is, the degree to which the questionnaire can measure the aspect or characteristic it wants to measure. The purpose of questionnaire surveys is to obtain efficient measurements and conclusions. The higher the validity, the higher the authenticity of the behaviour to be tested. To achieve the purpose of the questionnaire test, the questionnaire is more correct and effective. Convergent validity and discriminative validity are effective methods in validity analysis. Convergent validity refers to the degree of similarity of measurement results when different measurement methods are used to determine the same feature, that is, different measurement methods should be aggregated together in the measurement of the same feature. The factor loadings, average variance extract and the composite reliability are launched to test the convergent validity. Past literatures suggested the loadings to be higher than 0.7, the composite reliabilities to be higher than 0.7 and the AVE to be higher than 0.5 (Hair et al., 2017; Fornell and Larcker, 1981).

Table 4 reported that the factor loadings of the various variables (CP, ER, JP, PA, S, and TD) are all greater than 0.7; the combined reliability are all greater than 0.7; the average variation extraction (AVE) values are greater than 0.5. The criteria are met and it shows that the questionnaire has good aggregate validity.

Table 4: Convergent Validity

Variable	Item	Factor Load	CR	AVE
CP	CP1	0.880	0.911	0.772
	CP2	0.883		
	CP3	0.873		
ER	ER1	0.869	0.908	0.768
	ER2	0.911		
	ER3	0.848		
JP	JP1	0.779	0.908	0.663
	JP2	0.864		
	JP3	0.802		
	JP4	0.856		
	JP5	0.766		
PA	PA1	0.857	0.897	0.745
	PA2	0.891		
	PA3	0.840		
S	S1	0.868	0.903	0.756
	S2	0.882		
	S3	0.860		
TD	TD1	0.859	0.884	0.718
	TD2	0.871		
	TD3	0.810		

Note : Average variance extracted = AVE; composite reliability =CR;

Measurement items :Competitive Pay =CP; Employee retention = ER; Job performance = JP;

Performance appraisal = PA; Salary = S; Training and development = TD

The discriminant validity shows when different methods are used to measure different constructs, the values observed should be able to be distinguished. The discriminant validity is verified by correlation analysis and factor analysis (Fornell and Larcker, 1981). The criteria for evaluating discriminative validity: (1) The square root of the value of each facet is greater than the correlation coefficient with other facets (that is, the value in the diagonal is greater than the value on the off-diagonal line); (2) Correlation coefficients between facets should be less than 0.85; (3) The cross load coefficients of all items are less than the factor loads of the corresponding latent variables. **Table 5** shows that the square root values of AVE of CP, IS, JP, PA, S, and TD are all greater than their respective correlation coefficients, which meet the Fornell-Larcker criterion. Hence, each latent variable was discriminant valid.

Table 5: Discriminant Validity

	CP	ER	JP	PA	S	TD
CP	0.879					
ER	0.500	0.876				
JP	0.562	0.652	0.814			
PA	0.563	0.509	0.648	0.863		
S	0.468	0.511	0.626	0.531	0.870	
TD	0.461	0.532	0.556	0.422	0.497	0.847

Note: The diagonal (bolded) = square root of the AVE; the off-diagonals = correlations

Competitive Pay = CP; Employee retention = ER; Job performance = JP; Performance appraisal = PA; Salary = S; Training and development = TD

The results of the cross-load coefficient are shown in **Table 6**. It is reported that the factor loads with larger values fall on the measurement items of the constructs and as such our measurements showed evidence of convergent validity of constructs (Ang, Ramayah, Amin, 2015). The differential validity of the latent variables meets the structural equation modelling requirements, and the next testing can be carried out.

Table 6: Cross Loadings

	CP	ER	JP	PA	S	TD
CP1	0.880	0.484	0.540	0.530	0.456	0.446
CP2	0.883	0.396	0.444	0.485	0.385	0.352
CP3	0.873	0.428	0.486	0.465	0.387	0.408
ER1	0.437	0.869	0.579	0.417	0.483	0.458
ER2	0.442	0.911	0.577	0.463	0.437	0.461
ER3	0.434	0.848	0.555	0.458	0.421	0.48
JP1	0.474	0.528	0.779	0.516	0.520	0.477
JP2	0.468	0.615	0.864	0.562	0.495	0.455
JP3	0.443	0.514	0.802	0.511	0.505	0.453
JP4	0.461	0.545	0.856	0.529	0.543	0.476
JP5	0.440	0.439	0.766	0.517	0.489	0.402
PA1	0.462	0.456	0.594	0.857	0.467	0.371
PA2	0.478	0.420	0.543	0.891	0.439	0.323
PA3	0.521	0.439	0.535	0.840	0.468	0.398
S1	0.441	0.460	0.560	0.486	0.868	0.484

S2	0.414	0.44	0.531	0.454	0.882	0.431
S3	0.366	0.431	0.543	0.444	0.860	0.381
TD1	0.414	0.465	0.500	0.378	0.464	0.859
TD2	0.391	0.463	0.477	0.321	0.413	0.871
TD3	0.364	0.422	0.435	0.375	0.382	0.810

Note: Competitive Pay = CP; Employee retention = ER; Job performance = JP; Performance appraisal = PA; Salary = S; Training and development = TD

Structural Model

PLS path analysis allows to evaluate mediation models and tests mediation hypotheses, using the bootstrapping method. This study uses bootstrapping method in SmartPLS to resample 5,000 times randomly to verify the mediation effect. If the bootstrap confidence interval of 95% does not contain 0, the corresponding indirect effect (the mediation) exists (Henseler et al., 2009; Hair et al., 2017).

To ascertain whether multicollinearity issues exist among constructs, Variance Inflation Factor (VIF) coefficient is observed. The criteria for R-square guidelines is that R-square values of 0.75 or higher are deemed as substantial, those are approximate 0.50 are considered to be moderate and 0.25 are viewed as weak. Further, f^2 values exhibit the strength between the exogenous construct on the endogenous construct. The value of 0.02, 0.15 and 0.35 respectively represent the small, medium and large effect of the exogenous constructs on the endogenous constructs (Cohen, 1988; Hair et al., 2017). Q^2 value is to access the predictive relevance of the model. Q^2 value exceeds 0 in a reflective endogenous variable suggests the model has predictive relevance whereas a value of Q^2 less than 0 implies the model is lack of predictive capability (Hair, et al., 2017).

The results of structural model calculated using blindfolding procedures are shown in **Figure 1** and **Table 7**. The variance inflation factor (VIF) in Table 7 reveals no cause for concern for multicollinearity problem using the criteria of variance inflation factor (VIF) value below 4.0 (Cohen, 1988). The results shown in **Table 7** tells that 42.5% of the variance of Employee retention (ER) can be explained by job performance (JP), and that 58.7% of the variance of Job performance (JP) can be explained by the independent variables, namely Competitive Pay (CP), Performance appraisal (PA), Salary (S), and; Training and development (TD). Hence, the R-squares of 0.425 and 0.587 observed indicating a substantial model. The t-values of the path coefficient should be more than 1.96 at 0.05 level in order to be statistically significant. All t-statistics reported exceed 1.96. The results also exhibit the significant impact of Competitive Pay ($\beta = 0.150$, $t = 3.057$, $p < 0.01$, $f^2 = 0.033$); Performance appraisal ($\beta = 0.326$, $t = 6.076$, $p < 0.01$, $f^2 = 0.151$); Salary ($\beta = 0.278$, $t = 4.491$, $p < 0.01$, $f^2 = 0.115$); and; Training and development ($\beta = 0.212$, $t = 4.282$, $p < 0.01$, $f^2 = 0.074$) are positively related to Job performance, explaining 58.7% of the variance. The results highlighted that strong and statistically significant evidence was found in support of hypothesis H1 (Bartlett, 2001; Groen, 2006; Owens, 2006), H2 (Agwu, 2012; Rahman, Hussain, and Hussain, 2011; Zanelli, 2004), H3 (Kuvaas, 2006; Waldman, 1987) and H4 (Dobre, 2013; Rynes (2004). Our results are in line with the past literatures. Next, Job performance ($\beta = 0.652$, $t = 13.412$, $p < 0.01$, $f^2 = 0.738$) is positive significant predictor of Employee retention (ER) and H5 is supported. The Q^2 ($0.379 > 0$) of job performance and Q^2 ($0.321 > 0$) of employee retention depicts that the model has sufficient predictive relevance.

Figure 3.1 Path Coefficient Model Diagram

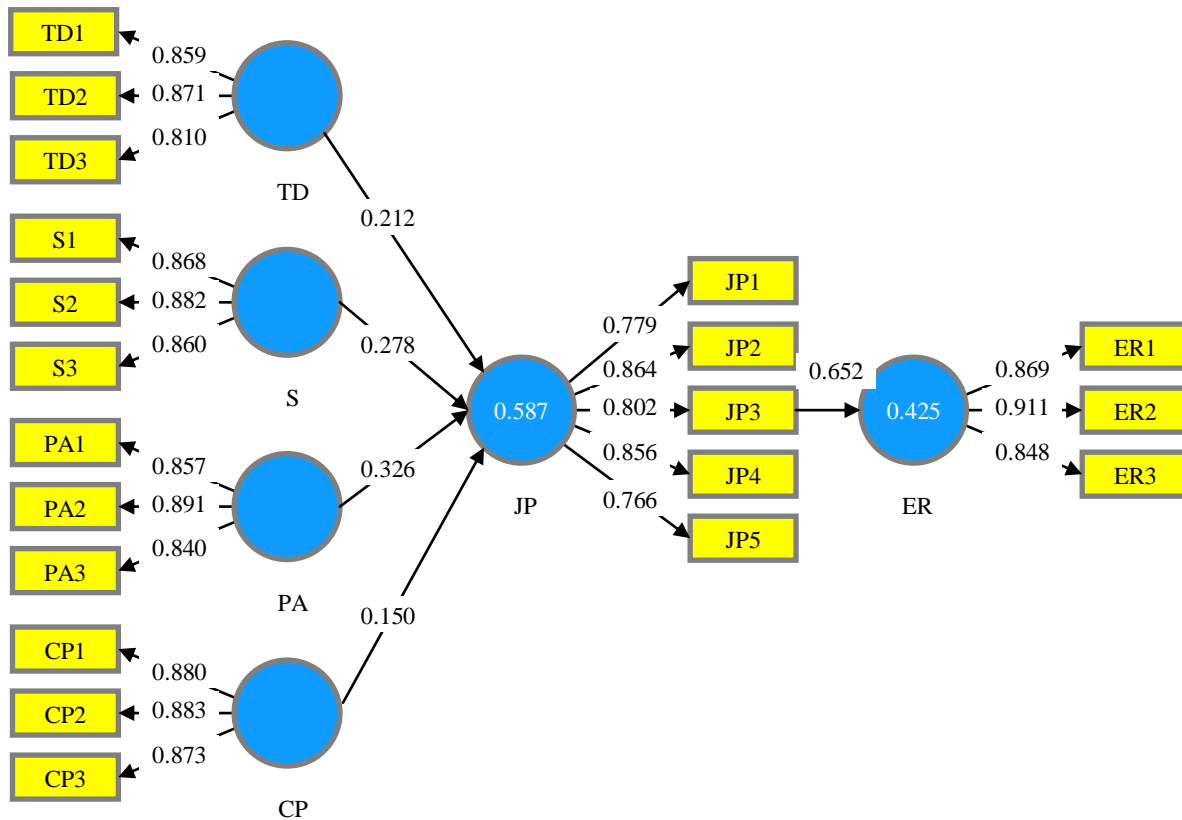


Table 7 – Analysis of Hypotheses

Path	Path coefficient (β)	SE	t-value	p-value	Decision	f ²	R	VIF	Q ²
CP -> JP	0.15	0.049	3.057***	0.002	Supported	0.033		1.646	
PA -> JP	0.326	0.054	6.076***	0	Supported	0.151	0.587	1.710	0.379
S -> JP	0.278	0.062	4.491***	0	Supported	0.115		1.632	
TD -> JP	0.212	0.049	4.282***	0	Supported	0.074		1.473	
JP -> ER	0.652	0.049	13.412***	0	Supported	0.738	0.425	1.000	0.321

Note: Competitive Pay = CP; Employee retention = ER; Job performance = JP; Performance appraisal = PA; Salary = S; Training and development = TD

***p<0.01

As in **Table 8**, the value of path CP -> JP -> ER (H9: mediating effect =0.098, p<0.001, confidence interval does not contain 0) indicating that the mediating effect exists and the hypothesis H9 is valid. The value of path PA -> JP -> ER (H8: mediating effect =0.213, p<0.001, confidence interval does not contain 0) indicating that the mediating effect exists and the hypothesis H8 is valid. The value of path S -> JP -> ER (H7: mediating effect = 0.181, p<0.001, confidence interval does not contain 0) indicating that the mediating effect exists and the hypothesis H7 is valid. The value of path TD -> JP -

>ER(H6: mediating effect =0.138, $p < 0.001$, confidence interval does not contain 0) indicating that the mediating effect exists and the hypothesis H6 is valid. On the whole, there is a significant positive relationship in the individual paths which make up these direct effects and the model is significant and relevant.

Table 8 Intermediate inspection

	Effect size	STDEV	T	P	Confidence Intervals	
					Lower	Upper
CP -> JP -> ER	0.098	0.033	2.923	0.003	0.038	0.168
PA -> JP -> ER	0.213	0.039	5.400	0.000	0.136	0.292
S -> JP -> ER	0.181	0.043	4.204	0.000	0.096	0.266
TD -> JP -> ER	0.138	0.034	4.036	0.000	0.067	0.204

4. Discussion and Conclusion

Notably, the findings of our study unveiled several key insights. As hypothesized, the study revealed that the four Human Resources (HR) Practices (training & development, salary, performance appraisal and competitive pay) significantly explained the job performance; and job performance strongly and positively explained the employee retention.

Company should provide employees with more training so that employees have a better ability to deal with assigned tasks. Given that employees get the benefits they require and the job performance will hence be improved (Bartlett, 2001; Groen, 2006; Owens, 2006). Besides, it is necessary to meet the salary that meets the performance of the employees because when wages or income increase, it is an affirmative incentive that will motivate work more. If employees do not receive reasonable salary/income, they will reduce personal satisfaction. Therefore, employee's job performance award is significantly tie to employee income /salary (Agwu, 2012; Rahman, Hussain, and Hussain, 2011; Zanelli, 2004).

Next, performance appraisal helps to improve and measure the job performance of employees. when a suitable performance appraisal system is used as a tool, it can better motivate employees in the organization and achieve better job performance. It increases employees' perception of being valued by the organization, and this positive perception enables employees to put more effort into work and allows employees to stay in the company longer. A qualified and fair performance appraisal system can enable employees to provide higher job performance (Kuvaas, 2006; Waldman, 1987). On the other hand, the provision of competitive pay by organizations can improve the overall performance of employees as it provides incentives to employees. Incentives are one of the driving forces to improve job performance. The higher the salary paid by the company, the stronger the incentive performance of employees and the higher the impact on job performance. The competitive salary can make the

employees better devote themselves to the work, thereby enhancing the work motivation of the employees, and can better improve the work performance, and it also better enhance the relationship between the cooperative and the employees (Dobre, 2013; Rynes (2004).

Above and beyond, the higher the job performance, the more obvious the employee retention. Thus, if organizations want to retain employees effectively, they need to actively improve the employees job performance (Heriyati& Ramadhan, 2012; Park, 2019). In addition, the relationship between Human Resources (HR) practices of training & development, Job performance and employee retention exists. Aldamoe&Ahmid (2012) stated in his research that job performance mediates the relationship between HR practice and employee retention. Like the results of the previous analysis, there is a significant relationship between HR practice and job performance. There is also a significant relationship between job performance and employee retention, and the mediating effect of job performance has also been proven. Therefore, for organizations to better retain employees, they need to pay more attention to Human Resources (HR) practices and improve job performance. Only in this way can we better retain outstanding employees in the organization.

Implications

As e-commerce is a rapidly developing emerging industry, the results of this study can provide real statistics to the e-commerce industry, which can supplement and support previous scholars' research on employee retention in the e-commerce industry. The findings of this research adds value to the research field dedicated to employee retention in the e-commerce industry.

In addition, this research provides useful information to the management. Employers can prevent unnecessary hitch and to enhance Human Resources (HR) practices and job performance to improve employee retention and thus reducing the turnover rate by meeting the needs and requirements of employees. In addition, employers have a better understanding about the factors that affect employee retention. Based on the findings of this research, researchers can visualise that training & development, salary, performance appraisal, and competitive pay are achieved through job performance mediation to retain employees. This shows that training & development has a positive relationship with employee retention in the e-commerce industry, and job performance play an important intermediary effect. Therefore, it has become a key factor for the organization to attract and retain employees in an effective manner. Improve employees' employability, knowledge skills and job performance (Rasheed, Jehanzeb, & Rasheed, 2013).

Since Human Resources (HR) practices are crucial for employee retention in the market, through the development and improvement of human capital, the job performance of employees should be improved gradually. Issues that should be paid attention to, in addition to raising salaries in the current environment, performance appraisal and other factors are also prominent. Together, this research will help the management to better understand the demands of employees and provide requirements that meet the expectations of employees, so as to better improve the retention rate of employees and stabilize the development of the company.

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