

**The Relationship Between Human Resource Practices And Employee Efficiency: The Mediating Role Of Job Satisfaction Among Private Higher Education Institutes In Malaysia**

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**Abstract**

In the previous literature, the topic of employee efficiency emerged as one of the major difficulties for the management of any firms. Private higher educational institutions in Malaysia must move outside of their comfort areas to examine new approaches of developing appropriate human resources practices. The main goal of the research is to study the relationship of human resources practices in private higher educational institutions in Malaysia on the efficiency of employees. This study also will focus on job satisfaction as mediating factor between human resource practices and employee efficiency. The present study will provide a foundation base for individuals or institutions that searching for the causes behind a poor efficiency among employees. In addition, this study also aimed at giving policy makers in Malaysian private higher education institutions essential advice to address the issue and to enhance staff efficiency in terms of human resource practices. A total of 203 questionnaires were administered in order to fulfil the aims of this study. The hypotheses were tested using the regression and process SPSS. In conclusion, the findings of the linear regression analysis show that all the factors under human resources practises are significant to the efficiency of employees. Furthermore, the result shows that the job satisfaction has the mediating effect between human resource practices and employee efficiency. The study will benefit the policymakers, human resource personnel and the private higher education institutes in Malaysia to overcome the employee efficiency issues.

**Keywords:** Employee efficiency, job satisfaction, human resource practices, private higher education, Malaysia

**INTRODUCTION**

The concern towards improving employee efficiency has been increasing in the recent years. Efficiency is the capacity to efficiently act or produce result with a minimum cost and waste. The focus is on the resources and the rate of achievement in accomplishing the organisational objectives (Fragouli & Iliia, 2019). According to Childs (2009), there are four steps that an organisation can follow in order to improve the efficiency by as much as 20%. Firstly, an organisation must set an achievable mission for all of the employees, then, organisation can empower the employees to creatively do their part to achieve the mission. Next, superior in the organisation need to measure the results to analyse the effectiveness of the method implement by the employees. Lastly, the organisation must consider adapting the method and improve for the better outcome. The practices discussed is beneficial in real-life workplace contexts where it also requires minimal time and resources.

The empirical literature has, in general, produced results involving human resources practices and employee efficiency. For instance, Hanaysha (2016) studied that the training, teamwork and employee empowerment have shown a positive impact to the employee efficiency. In addition, the performance assessment of employees also contributes to improve the employee performance which lead to performance standards development in the organisation. Assessment criteria also impact the efficiency of a company's employees positively (Kihama & Wainaina, 2019).

Khan and Abdullah (2019), in their study stated that there is strong positive association between training and teacher's efficiency in the workplace. The research also demonstrates that there was a positive association between employee efficiency and other independent criteria such as proficiency, knowledge, potential, enhancement, morale, expertise and skills. Researchers also suggest that technical and technological training for teachers in this region is the most appropriate training programme.

There are many recent researches that studied the relationship between human resource practices and employee efficiency including Ndungu (2017), Bawa (2017), Rodriguez & Walters (2017), Martono et al. (2018), Diamantidis & Chatzoglou (2019), Ekhsan et al. (2019) and Putri & Sinulingga (2020).

However, the investigation on the job satisfaction as mediator between human resources practises and employee efficiency lacks in the previous research. The main objective of this research was to examine the influence of job satisfaction as a mediator between human resources and the employee efficiency. The research will also explore the relationship between the dimension of human resource practise and efficiency of employees in Malaysia's private higher education institutions. These findings have a valuable impact on policymakers in defining their human resource practises methods to encourage both employee efficiency and job satisfaction.

Policymakers can establish or alter certain existing policies or practises to meet the needs of the academic staff in accordance with this study. In addition, policymakers' insights can help eliminate issues such as employee turnover for private higher education institutions. Policymakers should acknowledge the effects on human resource practices that would benefit the private higher educational sector and increase the welfare of academic personnel on job satisfaction and employee efficiency.

## **LITERATURE REVIEW**

In this section, the critical reviews have been discussed about the private higher education institutions in Malaysia, employee efficiency, job satisfaction and human resources practices.

### **Private Higher Education Institutions in Malaysia**

The development of private higher education is supported by the variety of institutions and curriculum. Private institutions have emerged throughout the years owned by a profit-making company or non-profit company. Proprietor company, private firms, company consortia, public listed company and government firms have set up profit-making institutions in Malaysia. On the other side, foundations, humanitarian groups and community finance established various non-profit educational institutions. In addition to disparities in ownership methods, private institutes of higher education also differ in market conditions (Lee, 2004).

Higher education institutes produce and foster knowledge for the construction of a contemporary world. Higher education institutes need a fast changing and technically demanding workplace that needs a better and more competent workforce compared to the present situation in order to continue to compete in the global economy. The question of job satisfaction among workers in each institution, in order to have a good effect both on the employees and the institution, should be encouraged in addition to satisfying the criteria of the institution. Satisfaction is an abstract thing and cannot be accurately quantified. Satisfaction will still take place if people perform things to their best.

### **Employee Efficiency**

In the literature, the topic of employee efficiency emerged as one of the major difficulties for the management in many firms. Employee efficiency is therefore represented as a great importance for the companies in order to improve organisational performance. This means that the efficiency of employees is a crucial issue which needs more attention, as the main objective of every organisation is to achieve the highest possible production at minimum cost.

According to Sultana et al. (2012), the capacity to execute particular activities in accordance with pre-set or defined exactness, comprehended, cost and speed may be described as efficiency. In other words, the employer's performance may be evaluated in terms of the employee's efficiency. In general, the efficiency of an employee may be measured according to the individual's production over a certain

timeframe. The author stated that it is crucial to investigate the essential practices of human resources that might affect employee efficiency.

Thus, human resource personnel must be able to develop the right human resource that will contribute to employee efficiency.

### **Job Satisfaction**

The terminology used to express the satisfaction of employee in terms of their desires and requirements known as job satisfaction. Multi-dimensional notions have been used to determine the job satisfaction, for instance, the impact of intrinsic and extrinsic elements in the workplace (Ssesanga & Garrett, 2005).

According to Stankovska et al. (2017), job satisfaction related to the feelings and emotions of the employees towards their job in the workplace environment. Job satisfaction is defined as a perceived link between what an employee desire from their job and what they think it offers. Job satisfaction is a set of feelings and ideas about the job in a workplace environment. The whole attitude of the employee towards his or her work might in reality also be seen as job satisfaction.

### **Human Resource Practices**

In a normal practice, employees are attracted to the rewards in order for them to fulfil the objective of every work. The rewards are includes monetary and non-monetary (Vroom, 1964). The degree of rewards may be shown to affect the quality and amount of effort which lead to productivity. Hence, the research on the rewards requirement to encourage workplace motivation and productivity is therefore necessary. Moreover, incentives can either be intrinsic such as affection, love and respect; or extrinsic such as money and work and both of these incentives cannot be traded evenly. Unequal exchange leads in a discrepancy in power within the group.

Training was also examined in the past studies in human resources practices. Training is seen as a major determinant for improved efficiency of organisation. According to Sepúlveda (2010), training can be defined as the key and powerful instrument to achieve corporate objectives and aims to enhance the productivity of employees. According to April (2010), training programmes, which use common knowledge, expertise and competences, are aimed to offer employees and the company an advantage in enhancing the efficiency. The statement is consistent with another study (Sabir et al., 2014) which mentioned that training might enhance efficiency for staff. Hence, if an employee obtains adequate training, he will be more efficient and productive in their workplace (Elnaga and Imran, 2013). Asava (2014) also identified that there is a positive significant effect between training and staff efficiency.

Moreover, in the present period of time characterised by high globalisation, businesses need to focus on empowerment, so that skilled workers can take essential choices and adapt to any changes in the economic environment at all times. Employee empowerment is created by developing an atmosphere in which people may make their own decisions on the basis of specific work circumstances (Elnaga and Imran, 2014). Empowerment is the process which management transmit power, responsibility, and accountability to their employees. Consequently, empowered employees frequently gain abilities to carry out their work actively using their expertise (Jacquiline, 2014). The advantages of staff empowerment include increased accountability, a high level of employee morality and improved working quality. Meyerson and Dewettinck (2012) considered employee empowerment as a motivating technique for enhancing organisational achievement when appropriately managed through increased involvement and staff autonomy.

### **Proposed Framework**

According to the previous literature, the association between human resource practices and employee efficiency is shown in Figure 1. The independent variable in this model is human resource practices involving reward, training and empowerment while the dependent variable is employee efficiency as well as job satisfaction as mediating factor. Therefore, proposed framework is developed to study the relationship of human resources practices with job satisfaction as mediating factor to the employee efficiency in private higher education in Malaysia.

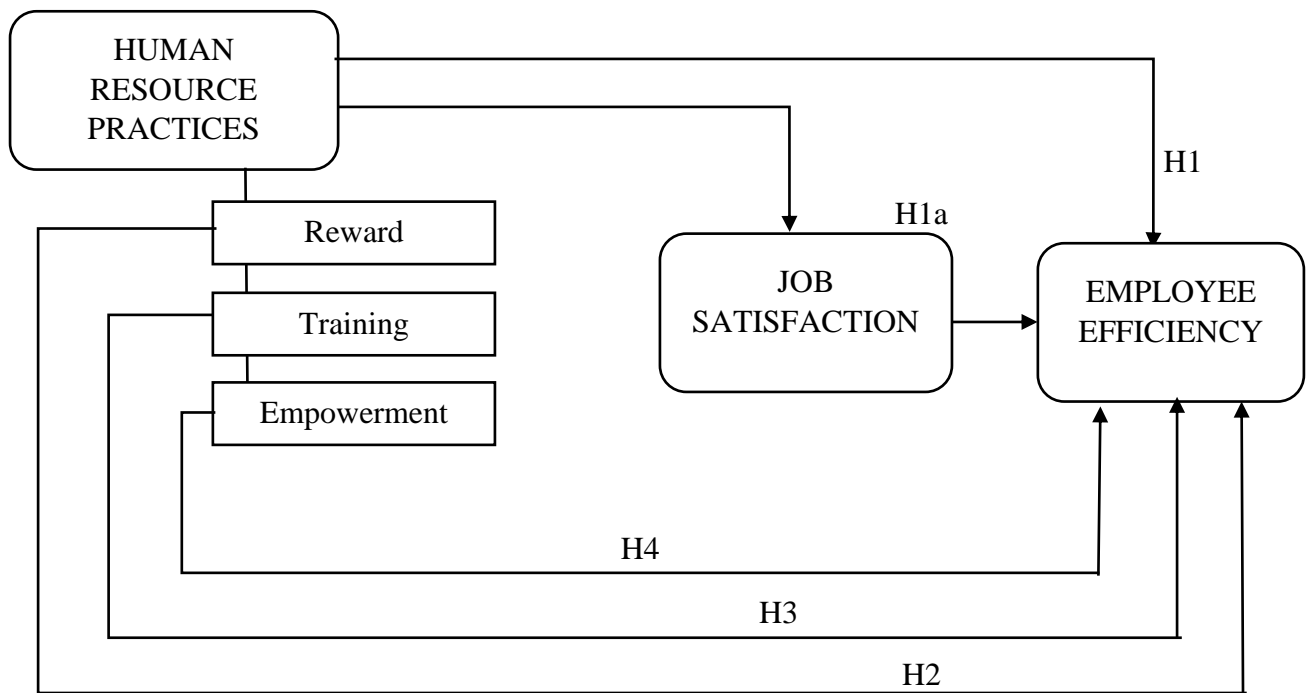


Figure 1. Proposed framework of the study

### Hypotheses

H1: There is a relationship between human resource practices and employee efficiency in Private Higher Education Institutes in Malaysia.

H1a: Job satisfaction mediates the relationship between human resource practices and employee efficiency in Private Higher Education Institutes in Malaysia.

H2: There is a relationship between reward and employee efficiency in Private Higher Education Institutes in Malaysia.

H3: There is a relationship between training and employee efficiency in Private Higher Education Institutes in Malaysia.

H4: There is a relationship between empowerment and employee efficiency in Private Higher Education Institutes in Malaysia.

### METHOD

In the present study, the theoretical framework outlined in the preceding part was validated using a quantitative method. Data were gathered utilising questionnaire instruments in order to assess the impact of human resource practices on employee efficiency at Malaysia's private higher institutions.

The population of this research is all academic staff of private higher education institutes, Malaysia. The sample size was calculated using Yamane (1967) formula.

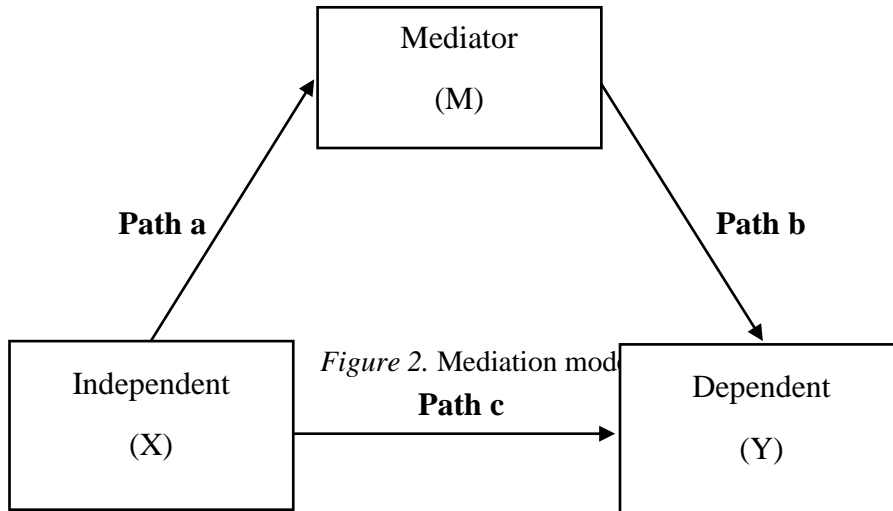
Yamane (1967) provides a simplified formula to calculate sample sizes. Where n is the sample size, N is the population size, and e is the level of precision. In this research, the total number of populations is 24,727 (Source: MOHE, 2020).

$$\begin{aligned}
 \text{Sample size} &= \frac{N}{1 + N(e^2)} \\
 &= \frac{24727}{1 + 24727(0.07^2)} \quad [1]
 \end{aligned}$$

= 202.411  
 ≈ 203

The questionnaire involves of two part which is demographic and factor part. A five-point Likert scale was employed to engage such index as the degree of agreement. The scale is defined by 1 (strongly agree), 2 (agree), 3 (neutral), 4 (disagree) and 5 (strongly disagree) for the questions in the second part. The return questionnaires were translated to SPSS data and analysed to test the hypotheses.

**Process SPSS**



Conventionally path c is referred to as ‘c-prime’ (as it is a partial regression slope). However, in this research, it will be naming the path as ‘c’ with the understanding that it is not reflecting a zero-order relationship, but rather that it is a partial regression slope. This will come in handy later in explaining mediation model.

In this simple mediation model in Figure 2, it has paths ‘a’, ‘b’, and ‘c’ being estimated. The paths that can be seen in this model and any mediation model are referred to as direct effects (Baron & Kenny, 1986). In short, the model is specified such that the X has a direct effect on the mediator (M), with the mediator having a direct effect on the outcome (Y). X is also presumed to have a direct effect on Y. Mediation is evidenced when there is evidence that the indirect effect of X on Y flows through mediator (M). The indirect effect (IE) in this model is computed as the product of paths ‘a’ and ‘b’:

$$IE = a \times b \quad [2]$$

Therefore, in mediation models, effects are described in terms of direct effects (represented with the single-headed arrows) and indirect effects (which are the products of paths that trace from one variable to another via one or more mediators).

At last, the total effect of X on Y will be discussed. It is simply the sum of all direct and indirect effects from X to Y. So, in this simple model, the total effect of X on Y is:

$$DE + IE = c + (a \times b) \quad [3]$$

In the context of mediation analysis, the classic “independent” and “dependent” variable designations break down. This is because mediating variables take on the roles of both independent and dependent variable. Instead of referring to variables as “independent” and “dependent”, we will refer to variables within mediation models as either being “exogenous” or “endogenous” (Kline, 2016). Exogenous variables are those that are not predicted by any others within a system of variables. As such, these variables do not have arrows drawn to them. Endogenous variables are those that are predicted by others within a system. These variables have arrows pointed at them. Because endogenous variables are predicted by others within the system, they have prediction error associated with them.

## RESULTS AND DISCUSSIONS

### Hypotheses Testing

*H1: There is a relationship between human resource practices and employee efficiency.*

The association between human resources practises and employee efficiency was analysed by conducting a simple linear regression test. Regression analysis is the best statistical technique to use as the aim of this study is to test the linear relationship among the two variables. Regression analysis is a collection of statistical procedures used to estimate interrelationships between one or more independent variables. The strength of the association between variables may be assessed and the future relation between them modelled.

Table 1  
*Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Unstandardized Coefficients		Sig.	
					B	Std. Error		
1	HR	.524	.275	.271	.56567	.609	.070	.000
a. Predictors: (Constant), Human Resource Practices (HR)								
b. Dependent Variable: Employee Efficiency (EE)								

Based on the result in Table 1, the strength of the relationship between human resource practices and employee efficiency is defined by the unstandardized coefficient (B=0.609) at p-value of 0.000. It shows positive strong relationship between human resource practices and employee efficiency. The p-value<0.001 implies that there is a significant association between those two variables. In addition, the coefficient of determination measured by r-square is 0.275 indicates that there is 27.5% of the variance in employee efficiency could be clarify by the human resource practices factor. Thus, H1 is accepted.

*H1a: Job satisfaction mediates the relationship between human resource practices and employee efficiency.*

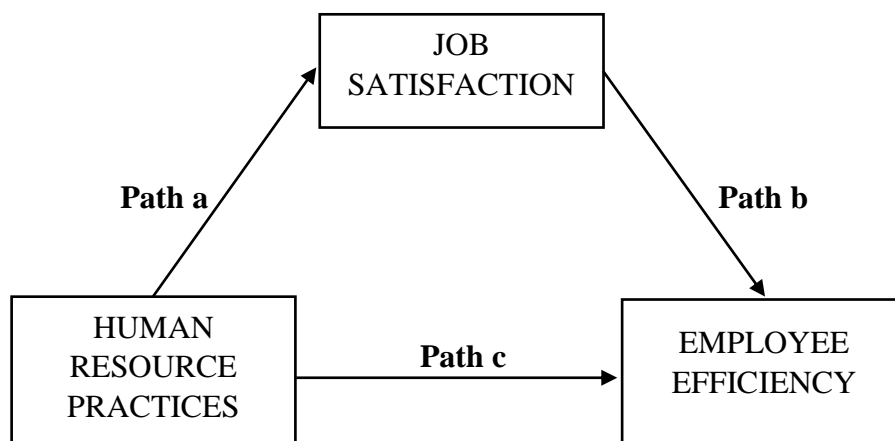


Figure 3. Mediation model of the study

Table 2  
*Model summary with outcome variable of job satisfaction*

Model	Coefficient	SE	t	p	LLCI	ULCI
Constant	.5444	.3509	1.5514	.1224	-.1475	1.2363

HR	.8560	.0985	8.9363	.0000	.6672	1.0449
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Note: Human Resource Practices (HR)

According to the result in Table 2, human resource practices is a significant (positive) predictor of job satisfaction ( $B=0.8560$ ,  $SE=0.0958$ ,  $p<0.001$ ). This coefficient reflects the direct effect of human resource practices on job satisfaction within the path model. The standardized path coefficient is also provided, which is 0.5323.

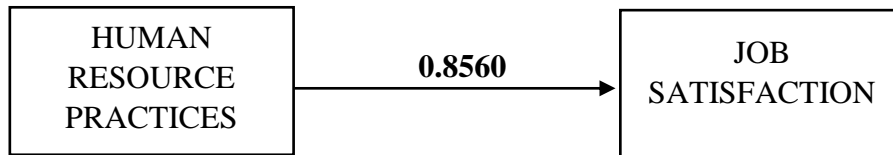


Figure 4. Direct effect of human resource practices on job satisfaction

Table 3  
Model summary with outcome variable of employee efficiency

Model	Coefficient	SE	t	p	LLCI	ULCI
Constant	1.9405	.2354	8.2420	.0000	1.4763	2.4048
HR	.3594	.0755	4.7626	.0000	.2106	.5083
JS	.2918	.0469	6.2173	.0000	.1992	.3843

Note: Human Resource Practices (HR), Job Satisfaction (JS)

The second regression model in Table 3 shows that both human resource practices ( $B=0.3594$ ,  $SE=0.0755$ ,  $p<0.001$ ) and job satisfaction ( $B=0.2918$ ,  $SE=0.0469$ ,  $p<0.001$ ) are significant, positive predictors of employee efficiency. These coefficients reflect the direct effects of both human resource practices and job satisfaction on employee efficiency within the path model. The standardized path coefficients for this portion of the model are 0.3094 and 0.4039 for human resource practices and job satisfaction, respectively.

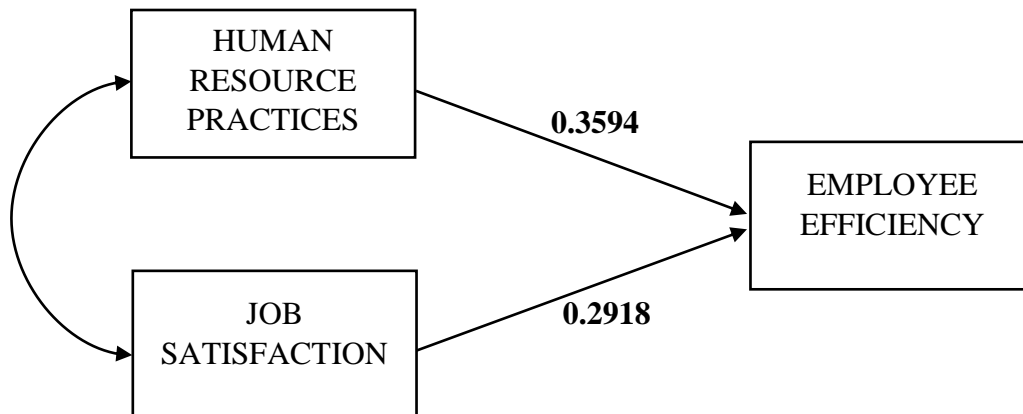


Figure 5. Direct effect of human resource practices and job satisfaction on employee efficiency

Table 4  
Indirect Effect of X on Y

Model	Effect	Boot SE	Boot LLCI	Boot ULCI
JS	.2498	.0436	.1727	.3434

Note: Job Satisfaction (JS)

The unstandardized indirect effect (0.2498) of job satisfaction stated in Table 4 is calculated as the product of paths a (0.8560) and b (0.2918) from the previous regression models



Figure 6. Unstandardized indirect effect of the mediation model

Table 5  
Summary of Total Effect and Direct Effect of X on Y

Type	Effect	SE	t	p	LLCI	ULCI
Total Effect	.6092	.0696	8.7539	.0000	.4720	.7464
Direct Effect	.3594	.0755	4.7626	.0000	.2106	.5083

The summary of total effect and direct effect of X on Y is stated in Table 5. The total effect value is computed as  $DE + IE = 0.3594 + 0.2498 = 0.6092$ . Since zero (the null) does not fall between the lower and upper bound of the 95% confidence interval, we infer that total effect of human resource practices on employee efficiency is significantly different from zero.

Table 6  
Partially Standardized Value for Total Effect and Direct Effect of X on Y

Type	Effect	SE	t	p	LLCI	ULCI	Partially Standardized
Total Effect	.6092	.0696	8.7539	.0000	.4720	.7464	.9193
Direct Effect	.3594	.0755	4.7626	.0000	.2106	.5083	.5424

The value of the partially standardized total effect in Table 6 is 0.9193. It is computed as following:

$$\begin{aligned}
 \text{Partially Standardized} &= \frac{\text{Total Effect}}{S_y} \\
 &= \frac{0.6092}{0.662678} \quad [4] \\
 &= 0.9193
 \end{aligned}$$

where  $S_y$  is the standard deviation for Y.

On the other hand, the value of the partially standardized direct effect stated in Table 6 is 0.5424. It is computed as following:



$$\begin{aligned}
 \text{Partially Standardized} &= \frac{\text{Direct Effect}}{S_y} \\
 &= \frac{0.3594}{0.662678} \quad [5] \\
 &= 0.5424
 \end{aligned}$$

Table 7  
*Completely Standardized Value for Total Effect and Direct Effect of X on Y*

Type	Effect	SE	t	p	LLCI	ULCI	Completely Standardized
Total Effect	.6092	.0696	8.7539	.0000	.4720	.7464	.5244
Direct Effect	.3594	.0755	4.7626	.0000	.2106	.5083	.3094

The value of the completely standardized total effect indicated in Table 7 is 0.5244. The standard deviation for the X; human resource practices variable is 1.753051. Thus, the completely standardized total effect is:

$$\begin{aligned}
 \text{Completely Standardized} &= \text{Partially Standardized} \times S_x \\
 &= 0.9193 \times 1.753051 \quad [6] \\
 &= 0.5244
 \end{aligned}$$

where  $S_x$  is the standard deviation for X.

In addition, the value of the completely standardized direct effect in Table 7 is 0.3094. The completely standardized direct effect is:

$$\begin{aligned}
 \text{Completely Standardized} &= \text{Partially Standardized} \times S_x \\
 &= 0.5424 \times 1.753051 \quad [7] \\
 &= 0.3094
 \end{aligned}$$

Table 8  
*Unstandardized and Partially Standardized Value for Indirect Effect of X on Y*

Type	Effect	Boot SE	Boot LLCI	Boot ULCI
Unstandardized	.2498	.0436	.1727	.3434
Partially Standardized	.3769	.0619	.2680	.5113

The partially standardized indirect effect is computed the unstandardized indirect effect divided by the standard deviation for Y. According to Table 8, the value of unstandardized indirect effect is 0.2498. The standard deviation for Y is 0.662678. As such, the partially standardized indirect effect is:

$$\begin{aligned}
 \text{Partially Standardized} &= \frac{\text{Unstandardized}}{S_y} \\
 &= \frac{0.2498}{0.662678} \quad [8] \\
 &= 0.3769
 \end{aligned}$$

Table 9  
*Completely Standardized Value for Indirect Effect of X on Y*

Model	Effect	Boot SE	Boot LLCI	Boot ULCI
JS	.2150	.0351	.1512	.2881

Note: Job Satisfaction (JS)

The standardized indirect effect is computed as the product of the standardized paths ‘a’ and ‘b’:

$$\begin{aligned} \text{Indirect Effect} &= 0.5323 \times 0.4039 && [9] \\ &= 0.2150 \end{aligned}$$

Based on the result in Table 9, there is a significant effect as value 0 does not fall between the lower and upper bound of the confidence interval. It is the important part of identifying if job satisfaction has the mediating effect between human resource practices and employee efficiency. According to the result, we can see that job satisfaction is the mediator, as 0 does not fall between the lower and upper bound of the confidence interval. Hence, the Hypothesis (H1a) is supported.

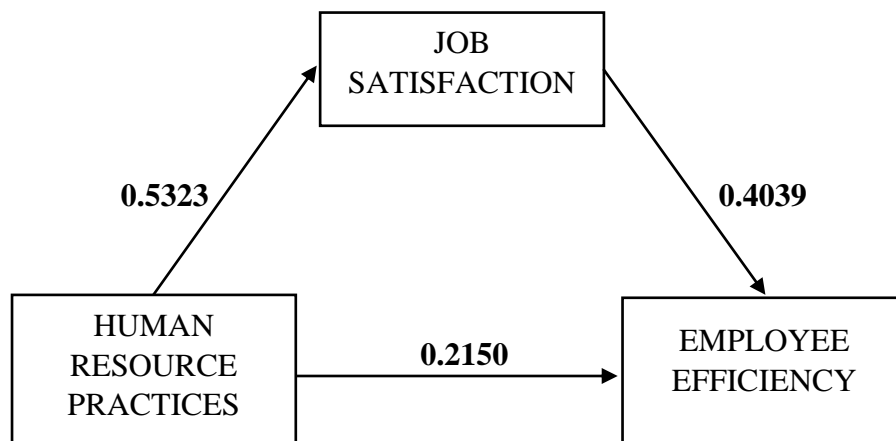


Figure 7. Standardized indirect effect of the mediation model

H2: There is a relationship between reward and employee efficiency.

Table 10  
*Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Unstandardized Coefficients		Sig.	
					B	Std. Error		
1	R	.644	.415	.412	.50816	.708	.059	.000

- a. Predictors: (Constant), Reward (R)
- b. Dependent Variable: Employee Efficiency (EE)

Based on the result in Table 10, the strength of the relationship between reward and employee efficiency is defined by the unstandardized coefficient (B=0.708) at p-value of 0.000. There is a positive strong relationship between reward and employee efficiency. The p-value<0.001 implies that there is a significant association between those two variables. In addition, the coefficient of determination measured by r-square is 0.415 indicates that there is 41.5% of the variance in employee efficiency could be clarified by the reward factor. Thus, H2 is accepted.

*H3: There is a relationship between training and employee efficiency.*

Table 11

*Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Unstandardized Coefficients		Sig.	
					B	Std. Error		
1	T	.391	.153	.149	.61147	.385	.064	.000
a. Predictors: (Constant), Training (T)								
b. Dependent Variable: Employee Efficiency (EE)								

Based on the result in Table 11, the strength of the relationship between training and employee efficiency is defined by the unstandardized coefficient (B=0.385) at p-value of 0.000. The p-value<0.001 implies that there is a significant association between those two variables. In addition, the coefficient of determination measured by r-square is 0.153 indicates that there is 15.3% of the variance in employee efficiency could be clarify by the training factor. Thus, H3 is accepted.

*H4: There is a relationship between empowerment and employee efficiency.*

Table 12

*Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Unstandardized Coefficients		Sig.	
					B	Std. Error		
1	E	.307	.094	.090	.63227	.254	.055	.000
a. Predictors: (Constant), Empowerment (E)								
b. Dependent Variable: Employee Efficiency (EE)								

Based on the result in Table 12, the strength of the relationship between empowerment and employee efficiency is defined by the unstandardized coefficient (B=0.254) at p-value of 0.000. The p-value<0.001 implies that there is a significant association between those two variables. In addition, the coefficient of determination measured by r-square is 0.094 indicates that there is 9.4% of the variance in employee efficiency could be clarify by the empowerment factor. Thus, H4 is accepted.

## CONCLUSIONS

The main findings of this study show that human resource practices have significant effect towards employee efficiency in private higher education institutions in Malaysia. Based on the analysis, all of the components under human resource practices including reward, training and empowerment indicated a significant relationship with employee efficiency. Therefore, the academic manager or human resource manager in private higher education institutions in Malaysia should endeavour to adopt high performance human resource practices that enhance the abilities and motivation of their workforce to work more efficiently. It can also create opportunities for the employees to use their skills within the workplace.

In addition, job satisfaction has proven to mediate the human resource practices and employee efficiency relationship. The results of this research investigation reveal that high-performance human resource practices not only affect staff productivity directly, but they also influence employee satisfaction indirectly. Hence, according to the current study, employer in private higher education institutes should improve the readiness of workers to serve institutes more effectively to meet

employees and organisational values and objectives. In order for the employer to improve the readiness of workers, this research suggested that employer focus more on the human resource practices such as reward, training and empowerment.

Reward has been discussed by many researchers earlier. Reward has proven give an impact towards employee efficiency. Same goes to training and empowerment; by providing the right training for the job scope and empower the employees to use their creativity in a workplace will enhance the employee efficiency. Another great finding in this research is the job satisfaction has mediating effect towards the employee efficiency. Therefore, employer will benefit from this by providing the right human resource practices, it will develop the job satisfaction and indirectly improve the employee efficiency. As for this research, the target population which is academic staff in private higher education believed that human resource practices have an impact on the employee efficiency while job satisfaction mediate the relationship. While this research might benefit private higher education institutions, it will however benefit public as well.

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