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IMPACT OF TRAINING AND DEVELOPMENT AND EMPLOYEE ENGAGEMENT ON EMPLOYEE PERFORMANCE AMONG MEDIUM MANUFACTURING ENTERPRISES (MMES)

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ABSTRACT

This study's overarching goal is to empirically examine how training and development impact employee performance in Malaysia's medium-sized manufacturing enterprises (MMEs). A comprehensive questionnaire is used to collect the data from 280 employees of MMEs. This study conducted a cross-sectional survey, and the data were analyzed using SmartPLS 3.3.9 for multivariate statistical analysis. The partial least square structural equation modeling (PLS-SEM) method determines the relationship between exogenous and endogenous variables. The development of an integrated research framework was accomplished. According to the study's findings, training and development affect employee performance. The research was conducted in MMEs, and the analysis is based on cross-sectional data that cannot be contextualized for a broader range of industries. The study results will assist policymakers, legislators, and MME management in lobbying for practical and well-articulated training and development strategies to improve employee engagement and performance. This study contributes to the body of knowledge by providing empirical evidence that training and development influence employee performance in Malaysian MMEs by combining essential parts of existing literature.

Keywords: Social Exchange Theory; Training and Development; Employee Engagement, Employee Performance

1.0 INTRODUCTION

Medium-sized manufacturing enterprises (MMEs) are crucial to economic growth, industrial advancement, the creation of new jobs, and the alleviation of poverty in Malaysia, as they are in any other country (Sakib et al., 2022; Sannagy et al., 2023; Surya et al., 2021; Taghizadeh et al., 2020). Globally, approximately 90 percent of all industries comprise small and medium-sized businesses essential for job creation and economic growth. According to the World Bank, 600 million new jobs will be required by 2030 to accommodate the expanding population, making the rise of MMEs a global concern (SME Corporation Malaysia, 2020). MMEs in Malaysia are also the main contributor to Malaysian economy.

However, Figure 1.1 shows that although the contribution of Malaysian SMEs to GDP has grown over time, it has lagged behind that of its neighbours. SMEs are, therefore, necessary for creating jobs in Malaysia, and their productivity is closely related to employee performance (EP). EP thus makes a significant contribution to the GDP of the country.
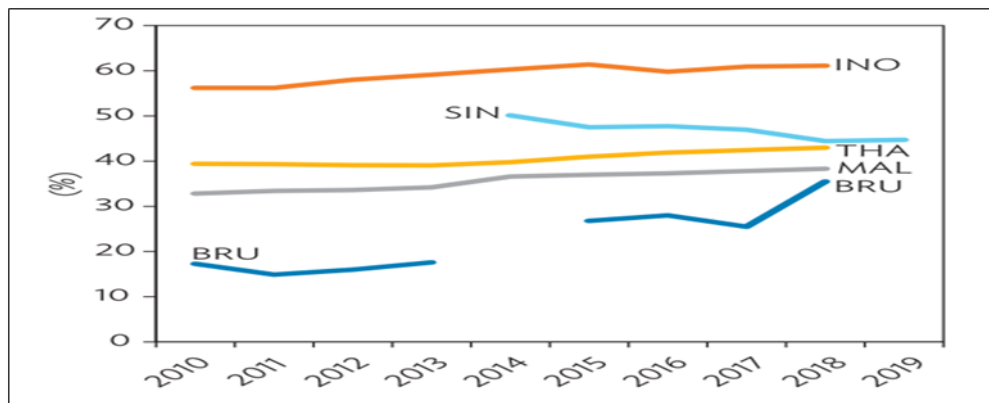
Source: ADB (2020)

Figure 0 : *MSME Contribution to GDP, 2010–2019*

However, SMEs have limitations in their ability to increase performance due to an inherent problem with a lack of resources and competencies. In light of this, it is crucial for SMEs to comprehend and cultivate a crucial capability that aids them in coping with an ever-evolving and competitive commercial environment(Ramdan et al., 2022). Several studies have shown that EP enhances organizational behavior and aids companies in achieving their objectives (Muhammad Kashif Imran et al., 2018; Shih, 2013). EP significantly influences work performance and has a competitive edge (Jeske Van Beurden et al., 2018) in business. Businesses have realized they need unique features to maintain their competitive edge in an ever-evolving business market. Furthermore, due to the manufacturing sector's working culture and corporate structure, which is considerably different from big organizations that are typically capital intensive, employees in Medium Manufacturing Enterprises (MME) are referred to as the principal asset (Galabova, L. & McKie, 2013). Therefore, empowering employees through training is a prime concern for Malaysian MMEs looking to gain a competitive edge. With proper engagement at work, employees can commit themself (Galabova, L. & McKie, 2013) to improving their EP. Therefore, training and development (TD) is the crucial factor of HR that enhances EP.

Nevertheless, the study by Hamid (2017) has demonstrated that formal training can benefit SMEs in terms of managing and enhancing their performance. SMEs frequently increase employability across geographical regions and industries, employ a substantial section of the labor force, particularly low-skilled workers, and offer employees the option to enhance their skills (SME Ministerial Conference, 2018) via TD. Practical training aids in developing a supportive and conducive employee learning climate and efficiently and rapidly resolves predictable difficulties (Samwel, 2018). As a result, SMEs play an essential role in developing human capital value, mainly through training and development (TD).

EP or individual performance is considered a minor component. In contrast, organizational performance is a substantial and crucial component affecting employees' ability to function efficiently and acquire a competitive edge over competitors (J. Van Beurden et al., 2018). Despite companies and HR developers focusing on this component by investing in their employees' potential, there has yet to be much success in improving effective EP (Na-nan et al., 2019). Despite the fact that numerous studies have been conducted in the field of TD in EP, it appears that organisational leaders continue to face gaps and challenges in this area (Rodriguez & Walters, 2017). Employees would be unable to complete their tasks to their full potential if they were not provided with adequate TD opportunities. Hence, it is a widely accepted fact that TD improves EP, but the focus of TD in SMEs still needs to be enhanced.

As a result, this study aims to look into the impact of TD on EP through the perspective of employee engagement (EE). Many businesses believe that EE is their most important source of competitive advantage. It has been claimed that it can assist them in resolving complicated organizational difficulties, such as increasing EE and performance in the face of a severe economic crisis (Macey & Schneider, 2008). According to Anitha J (2014), organizational EE and EP have a strong and significant relationship. EE enhances EP according to several real-world research (Munir & Ali, 2021). The majority of studies identified EE as a major predictor of an employee's performance in larger organizations. Although multiple studies using EE as the mediator discovered a positive association, additional research is needed to understand the significance of EE as a mediator in MMEs. However, there have been few studies on how EE impacts EP in MMEs, particularly in Malaysia. This study aims to shed some light on this important issue by investigating the relationship between TD and EP from the perspective of EE.

Finally, most EP studies have been undertaken in South-East Asian, European, and Western countries. Ironically, very few studies have been undertaken in Asian countries. There were very few studies on EP in MMEs, particularly in Malaysia. This study could be one of the first in Malaysian MMEs to build an integrated understanding of TD, EE, and EP, and it could also aid and assist MMEs in other Asian nations. Therefore,several research questions were formulated for this investigation to comprehend better the EP described in the literature. Specifically, this study will try to address the following three (3) key research questions to accomplish the research mentioned above objectives:

RQ1: Does training and development has an impact on employee engagement?
RQ2: Does employee engagement has an impact on employee performance?
RQ3: Does employee engagement mediate the relationship between training and development and employee performance?

This paper covers the following topics: literature review, methodology, data analysis, discussion, study limits, recommendations, and future research. The literature review focuses on building the study framework, whereas the research technique section discusses the data collection process. Furthermore, the section on data analysis goes into detail about the measurement and structural model analyses. The findings, as well as their theoretical and practical implications, are discussed in the section that follows. Finally, policy recommendations, limitations, and opportunities for further research are underlined.

2.0 LITERATURE REVIEW

2.1 Theoretical Foundation

The social exchange theory (Cropanzano & Mitchell, 2005) has been around for a very long time and is extensively applied (Cropanzano et al., 2017). Resources are exchanged through a reciprocal process in which one party tends to repay the good (or sometimes bad) deeds of another (Gouldner, 1960). The relationship between the actor and the target can sometimes influence the quality of these exchanges (Blau, 1964). Blau (1964) defines social exchange as contingent on receiving positive responses from others (M. Emerson, 1976). It is meant to represent a two-sided system with 'transactions' or 'exchanges' that are both mutually obligatory and mutually rewarding (M. Emerson, 1976). This exemplifies a social exchange connection in which there is an expectation of future compensation for any favor performed without elaborating on the nature of the compensation or the long-term relationship created (Holmes, 1981). Social exchange relationships are often initiated at work when an employer reaches out to an individual employee. In this study, social exchange relationships represent the employment relationships between the employee and employer, as expressed by TD, EE, and EP. According to SET, relationships between employees and employers help improve work and community relationships. Excellent work performance is achieved due to the organization's growing ties with its employees (Kuruppuge & Gregar, 2017). When employees are provided with training by their employers, they are more likely to feel a sense of engagement with the company, which is a crucial component of SET (Junaid Khan & Iqbal, 2020). Employees who receive training are expected to give back to their employers in the form of increased performance, as stated by the SET.

2.2 Hypothesis Development

2.2.1 The Relationship between Training and Development and Employee Engagement

Organizations continuously work to improve their EP in today's challenging and competitive world. Additionally, training gives workers a competitive edge and increases their efficacy and efficiency (U. V. Alola et al., 2018, 2019). U. V. Alola et al. (2018) assert that training TD directly affects EE and performance. According to Siddiqui & Sahar (2019), when employees participate in TD programs, their confidence leaps, and they feel more valuable, motivating them to be more enthusiastic about their work. There must be a significant amount of EE to prioritize and organize TD programs. Chaudhry et al. (2017) study involved 300 Pakistani workers in the banking industry. The research reveals that TD significantly benefited EE. EE helps the performance of the organization to be better. Both the company and its employees benefited from it. Alola & Alafeshat (2021) used the SET to investigate how human resource procedures (selection and recruitment, TD) affected employees. The results suggest that TD significantly improves EE. The results demonstrate that when employees receive proper TD, they will be eager to offer their fair share to the organization and the company's growth. As a result of the literature mentioned above review, the current study proposed the following hypothesis:

Hypothesis 1 (H1). Training and development have a positive and significant impact on employee engagement.

2.2.2 The Relationship between Employee Engagement and Employee Performance

Businesses must ensure that each employee is engaged and devotes their total energy to carrying out their job to maintain high production and functional efficiency (Lai et al., 2020). Firms today understand the importance of EE in attaining organizational success in a competitive environment (Albrecht et al., 2015). According to Demerouti & Cropanzano (2010), various variables might drive engagement, resulting in enhanced performance. According to Lawler (2008), it must be the manager's urgent focus. The performance management literature has grown to include research that looks at the role of EE in

EP and emphasizes the importance of engagement. According to Anitha J (2014), EE significantly affects EP. The study's findings revealed a significant positive relationship between EE and EP. Cesário & Chambel (2017) studied 274 Portuguese professionals with an average career length of 11 years and a median age of 39. The results reveal a favorable relationship between EP and EE, with EE demonstrating a stronger relationship. As a result, the findings indicate that EE is the best predictor of EP in this study. As a result of the literature mentioned above review, the current study proposed the following hypothesis:

Hypothesis 2 (H2). Employee engagement has a positive and significant impact on employee performance.

2.2.3 Mediating Role of Employee Engagement

In recent years, there has been significant attention on EE. People become more engaged at work when companies emphasize internal career opportunities, good training programs, job stability, clear job descriptions, and support for collective decision-making (Pradhan et al., 2019; Saks, 2006). As a result, EE significantly impacted HR procedures such as TD. In Uganda, Sendawula et al. (2018) did a cross-sectional and correlational study. Data were gathered from 150 people across four hospitals. When EE was included in the correlation between TD and EP, the effect of training TD remained stable regardless of how the correlation between TD and EP varied, according to the study. However, the fact that the relationship was not interrupted suggests that EE mediates the relationship between TD and EP to some extent.

Furthermore, the study finds a strong positive relationship between TD and EP, implying that changes in TD will lead to changes in employee competence, responsiveness, and performance. The outcomes of EE as a mediator have demonstrated a strong, significantly positive influence in a broad spectrum of studies. As a result, if HR practices affect EE and EE affects EP, it stands to reason that EE may act as a bridge between HR practices and EP. As a result, the study seeks to determine if EE mediates the relationship between TD and EP in Malaysian MMEs. As a result, EE is critical to the hypothesized framework in this work. As a result of the literature mentioned above review, the current study proposed the following hypothesis:

Hypothesis 3 (H3). Employee engagement mediates the relationship between training and development and employee performance.

Figure 2. *Research Framework*

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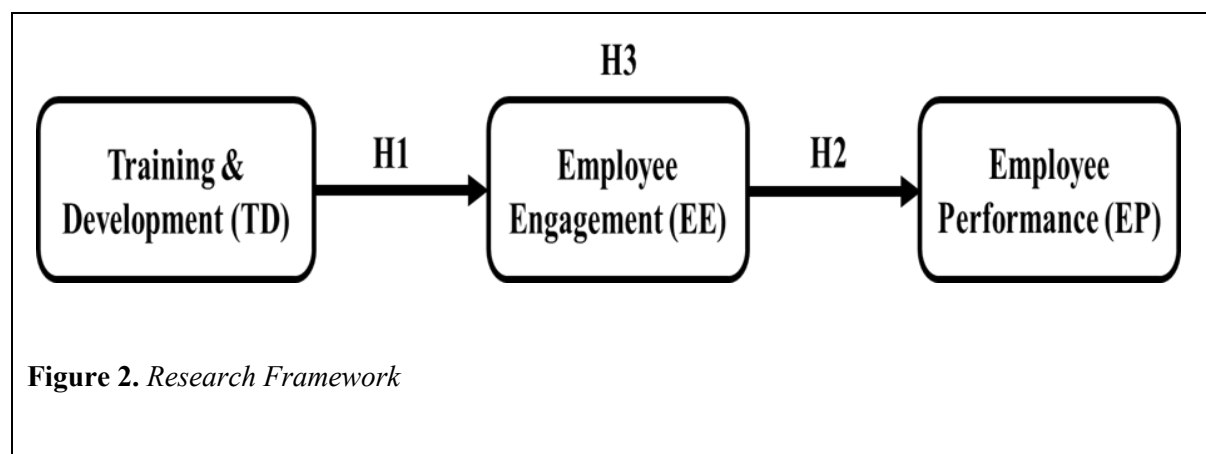
3.0 METHODOLOGY

3.1 Research Design

This cross-sectional survey design employed a questionnaire to measure the research participants' perception of TD concerning EP mediated by EE.

3.2 Measures

Table 1 includes all the constructs, items, number of items, construct reliability, and Likert scale employed in this study. Data for TD and EP were collected using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. On the other hand, EE was assessed using a seven-point Likert scale. According to MacKenzie & Podsakoff's (2012) research, using multiple scales when measuring study variables is one way to account for standard method variance (CMV).

Table 1:

The Measurement Items

Second Order Constructs	First Order Constructs	Items	No. of Items	Reliability	Likert Scale	Source
	TD	Extensive training programs are provided for individuals in this job.	4	.83	5	(Delery & Doty, 1996)
		Employees in this job will typically go through training programs every few years.				
		There are formal training programs to teach new hires the skills they need to perform their jobs.				
		Formal training programs are offered to employees to increase their promotability in this organization.				
EE	Vigour	At my work, I feel bursting with energy. [a]	6	.90	7	(Schaufeli et al., 2006)

		At my job, I feel strong and vigorous. [a]				
		When I get up in the morning, I feel like going to work. [a]				
		I can continue working for very long periods of time.				
		At my job, I am very resilient mentally.				
		At my work, I always persevere, even when things do not go well.				
	Dedication	The work that I do is full of meaning and purpose.	5	.95		
		I am enthusiastic about my job. [a]				
		My job inspires me. [a]				
		I am proud of the work that I do. [a]				
		To me, my job is challenging.				
	Absorption	Time flies when I am working.	6	.90	7	
		When I am working, I forget everything else around me.				
		I feel happy when I am working intensely. [a]				
		I am immersed in my work. [a]				
		I get carried away when I am working. [a]				
		It is difficult to detach myself from my job.				
EP	Quality	Job performance is neat and accurate.	5	.894	5	(Na-nan et al., 2019)
		Job performance meets the required standards.				
		Materials and equipment used for work operations meet the required standards.				
		Before products are delivered, quality				

		standards are always assessed.				
		Work quality is acceptable for external organizations and provides full benefits for users.				
	Quantity	Work quantity is balanced with the fleets in the work unit.	5			
		Work quantity achieves the expectations of the work unit.				
		Work quantity under my responsibility is appropriate with my capability.				
		Assigned work quantity is always completed in time.				
		Assignments are always completed in time.				
	Time	Each workpiece is completed successfully within the appropriate time duration.	3			

a. Shortened version (Utrecht Work Engagement Scale–9 [UWES-9]).

3.3 Population and Sampling

The research focused on employees from medium-sized SMEs confirmed to be permanent staff in the organization. Therefore, the level of the study was at the individual level. This descriptive and inferential analysis aims to discover the relationships between the variables. The data was collected from April 2022 to June 2022 using the non-probability purposive sampling technique. Because there were no sample frames, databases, or records from which to select respondents randomly. Because the study used Smart PLS's structural equation modeling, Joseph F. Hair et al. (2022) used the power analysis and the complexity of the model to decide on the minimum sample size for the study. According to Joseph F.Hair et al. (2022) and Ngah et al. (2019), the minimum sample size was estimated using GPower 3.1.9.4. With one predictor, at a medium effect size of 0.15, confidence level at 0.05, and power of 80% as proposed by Gefen, D., Rigdon, E. E., & Straub (2011) and Tan et al. (2020), the prior power analysis using G*Power has revealed that the number of adequate respondents is 55.

They were pre-screened to ensure that participants were qualified to answer the survey questions. They asked if they had attended any training programs organized by their organization within the past year. The data for this study came from employees of MMEs in Malaysia from five Northern regions, East Coast, Central, Southern, and East Malaysia. Survey questionnaires were given to selected HR departments of MMEs. The survey is divided into two distinct sections. Section one must be completed

by the respondent employee's immediate supervisor, while section two must be completed by the employee. The collection of data from double sources reduced the possibility of bias. In addition, Human Resource departments received follow-up phone calls, text messages, and emails as reminders. This boosts response rates (Uma Sekaran & Roger Bougie, 2016).

There were initially 280 respondents, but two were eliminated for the straight-lining issue, leaving 278 data for further analysis. Table 2 presents the respondents' demographic information. 43.9% of the 278 respondents were male, while 56.1% were female. The bulk of respondents (63.3%) were between the ages of 36 and 40; 62.6% of respondents held a bachelor's degree. 49.3% originated from central Malaysia (Selangor, Kuala Lumpur, and Putrajaya). In the sample, 37.1% had more than ten years of experience, and 48.2% were executives and professionals.

Outliers are data items that are different from what is considered normal because they have a unique mix of traits. Outliers are answers that are not typical for a particular topic or set of questions (H.Hair et al., 2018; Sarstedt et al., 2017). Six outliers were eliminated, leaving 272 data for further analysis. According to the chi-square statistical table, the researcher determined the number of outliers based on the value of degrees of freedom, which was 2 (total number of variables, which is 3-1). According to Mishra et al. (2013), the value of p is 0.001. A multivariate outlier is any case with a Mahalanobis D^2 greater than or equal to 13.8155. After removing the six outliers, there were 272 remaining data for analysis.

Table 2:

Demographic profile of respondents.

Demographic	Frequencies	Percentage (%)
Gender		
Male	122	43.9
Female	156	56.1
Age		
< 30 years old	41	14.7
30-35 years old	39	17.6
36-40 years old	176	63.3
> 40 years old	12	4.3
Education		
Ph.D	12	4.3
Masters Degree	69	24.8
Bachelor Degree	174	62.6
Diploma	1	0.4
Secondary School	16	5.8
Others	6	2.2
Location		
Northern	103	37.1
East Coast	6	2.2
Central	137	49.3
Southern	17	6.1
East Malaysia	15	5.4
Occupation		
Non-executive	26	9.4
Executive or professional	134	48.2

Manager	94	33.8
Others	24	8.6
Years of Service		
1-2 years	63	22.7
2-5 years	53	19.1
5-10 years	59	21.2
> Than 10 years	103	37.1

4.0 DATA ANALYSIS AND RESULTS

4.1 Data Analysis

The study's goal of making predictions was better met using smart partial least squares (PLS) (Joseph F. Hair et al., 2019; Sannagy et al., 2023). Also, it has been shown that partial least squares structural equation models are better for analyzing mediation because they are better at predicting than regression models (Preacher & Hayes, 2004; Sannagy et al., 2023). As suggested in the literature (Allen et al., 2004; Baran & Sypniewska, 2019; Moliner et al., 2008; Ngah et al., 2019), multivariate skewness and kurtosis were also measured in this study. The results did not have a multivariate normal distribution, as indicated by the results: Mardia's multivariate skewness (β = 12.1557, p< 0.01) and Mardia's multivariate kurtosis (β = 83.97384, p< 0.01) demonstrated that the data did not adhere to a multivariate normal distribution. As a result, SmartPLS was selected as the software for variance-based Structural Equation Modelling (SEM) employing nonparametric multivariate analysis (Nasir & Ngah, 2022; Sannagy et al., 2023). As suggested by experts (Anderson & Gerbing, 1998; Ngah et al., 2021; Sannagy et al., 2023), this study examined the measurement and structural models in two stages (testing the hypothesized relationships). Bootstrapping was utilized to determine the significance of path coefficients and loadings (10,000 resamples) (Becker et al., 2022).

4.2 Common Method Bias

Common method variance (CMV) may be an issue even though various measures were performed before question distribution. CMV testing is crucial for self-administered surveys, mainly when the dependent and independent variables are collected from the same individual (Podsakoff et al., 2003). To reduce the CMV, this study employs both procedural and statistical methods. The statistical method incorporating full-collinearity analysis (Kock, 2015; MacKenzie & Podsakoff, 2012; Nasir & Ngah, 2022) was utilized to fix the issue, and a procedural measurement method with a different anchor scale was applied to evaluate independent and dependent variables. If the variance-inflated factor (VIF) value is greater than 3.30, the CMV might be severe (Kock, 2015). Table 3 shows tolerances between 0.694 and 0.865 which are significantly greater than 0.1, and VIF values between 1.156 and 1.441 which are significantly smaller than 3.3. Hair et al. (2010) and Pallant (2010) indicate low collinearity by tolerance values greater than 0.10 and VIFs less than 3.

Table 3:

Full collinearity testing.

Collinearity Statistics	TD	EE	EP
VIF	1.156	1.400	1.441
Tolerance	.865	.714	.694

Note: TD = Training & Development, EE = Employee Engagement, EP = Employee Performance.

4.3 The Measurement Model: Convergent and Discriminant Validity

The study's first step is to assess convergent validity. Convergent validity is used to determine which items measure which concepts and how well they directly relate to those concepts (Nasir & Ngah, 2022; Podsakoff et al., 2003). According to J. Hair et al. (2017), to ensure convergent validity, the loading and AVE must both be ≥ 0.5, and the composite reliability (CR) must be greater than 0.7. (Joseph F. Hair et al., 2013; Ngah et al., 2021; Sannagy et al., 2023). According to Table 4, EE11 and EP10 were eliminated since their HTMT was above 0.90. However, the loading for all other components fell within an acceptable range in the measurement model (0.719-0.946), with AVE ranging from 0.631 to 0.872, CR from 0.886 to 0.965, and Cronbach Alpha from 0.814 and 0.951. Therefore, the measurement model for the first-order construct is valid.

Table 4.

The measurement model and convergent validity.

First Order	Items	Loadings	CA	AVE	CR
Training & Development (TD)	TD1	0.731	0.814	0.640	0.876
	TD2	0.744			
	TD3	0.824			
	TD4	0.890			
VIGOUR (VIG)	EE1	0.886	0.907	0.686	0.929
	EE2	0.899			
	EE3	0.879			
	EE4	0.804			
	EE5	0.754			
	EE6	0.730			
DEDICATION (DED)	EE7	0.903	0.951	0.872	0.965
	EE8	0.926			
	EE9	0.946			
	EE10	0.919			
ABSORPTION (ABS)	EE12	0.776	0.883	0.631	0.911
	EE13	0.765			
	EE14	0.802			
	EE15	0.849			
	EE16	0.783			
	EE17	0.788			
QUALITY (QUAL)	EP1	0.840	0.876	0.668	0.909
	EP2	0.859			
	EP3	0.830			
	EP4	0.769			
	EP5	0.785			
QUANTITY (QUAN)	EP6	0.719	0.831	0.663	0.886
	EP7	0.852			
	EP8	0.861			

	EP9	0.793			
TIME (TIM)	EP11	0.855	0.864	0.786	0.917
	EP12	0.898			
	EP13	0.906			

Note: Item EE11 and EP10 were deleted due to HTMT

TD = Training & Development, VIG = Vigour, DED = Dedication, ABS = Absorption, QUAL = Quality, QUAN = Quantity, TIM = Time

The heterotrait-monotrait (HTMT) assessment is then utilized to establish discriminant validity. The study establishes whether or not all model constructs are distinct (J. Hair et al., 2017). As shown in Table 5, discriminant validity has been established because all HTMT values are less than 0.90 (Henseler et al., 2015), according to Franke & Sarstedt (2019).

Table 5:

Discriminant Validity HTMT.

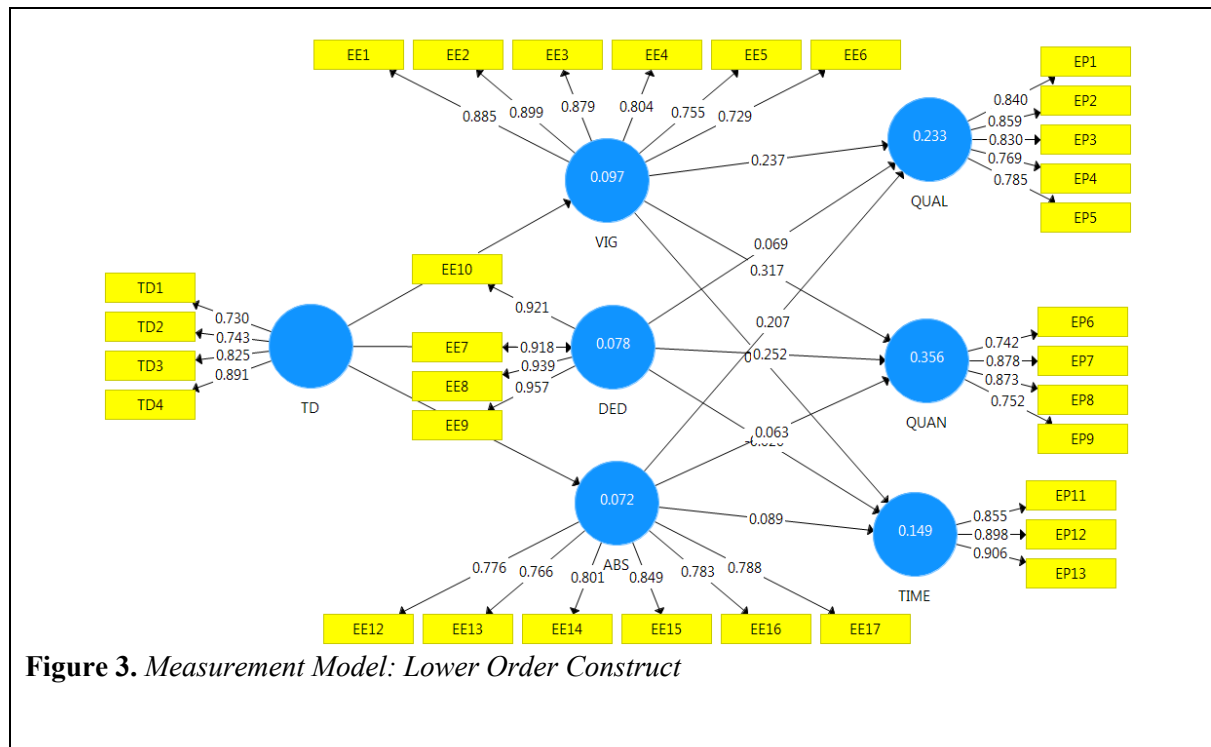|	ABS	DED	QUAL	QUAN	TD	TIME	VIG
ABS							
DED	0.876						
QUAL	0.503	0.459					
QUAN	0.591	0.607	0.878				
TD	0.308	0.301	0.379	0.415			
TIME	0.382	0.351	0.886	0.835	0.317		
VIG	0.896	0.881	0.499	0.641	0.349	0.429	

**Figure 3.** *Measurement Model: Lower Order Construct*

Higher-order constructs contribute to model parsimony by making the path model easier to comprehend (R. E. Johnson et al., 2011; Sarstedt et al., 2019). The reflective-formative method assessed EE and EP, both higher-order constructs. When both the VIF values and the t-values for the weights are statistically significant, convergent validity is established (Joseph F. Hair et al., 2019). For example, table 6 shows that the VIF values are all less than 5 and that the t-values were significant (t-value ≥ 1.645) for variables representing vigor, dedication, and quantity but not for absorption, quality, and time. Thus, as stated by Joseph F. Hair, Jr., and G. Tomas M. Hult (2017), the study should depend on the significance of the outer loading. Since all variables have good outer loadings and outer weights except for time, the convergent validity of the study's higher-order constructs was established.

Table 6:

Higher Order Construct Validity.

HOC	LOCs	Outer Weight	T Values	Outer Loadings	VIF
	VIG	0.535	2.924	0.964	3.719
EE	**DED**	0.388	1.948	0.938	3.772
	ABS	0.137	0.802	0.881	3.490
	QUAL	0.250	1.447	0.786	2.134
EP	**QUAN**	0.963	6.888	0.987	2.425
	TIM	-0.235	1.396	0.621	2.659

EE = Employee Engagement, EP = Employee Performance

Figure 4. *Measurement Model: Higher Order Construct.*
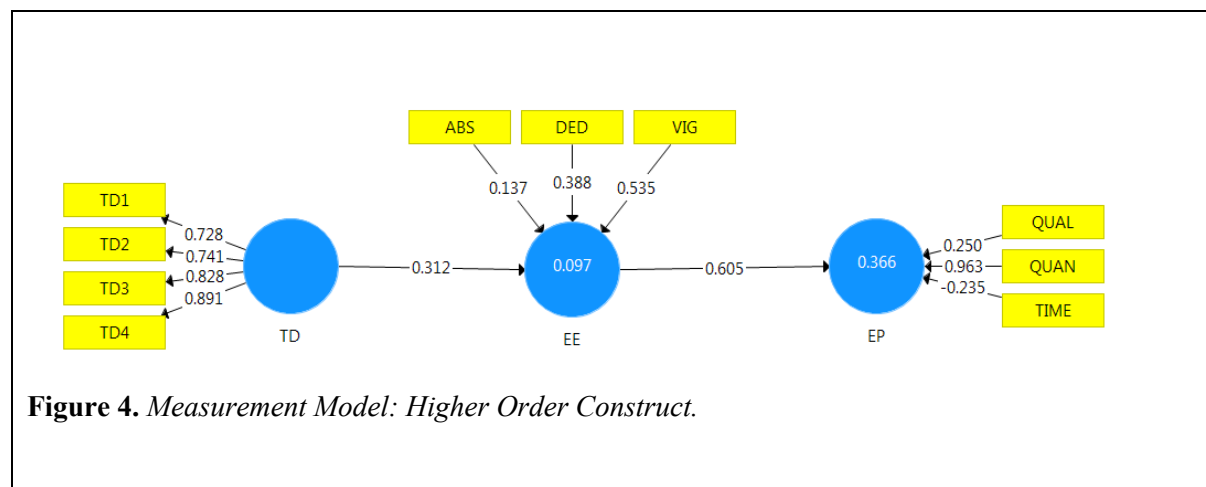
4.4 Structural Model

According to Joseph F. Hair et al. (2019), the study used the beta value (the direction of the beta value must coincide with the direction of the hypothesis), t-values (≥ 1.645), p-values (≤ 0.05), and confidence intervals derived from a bootstrapping procedure (no zero value between the lower level (LL) and the upper level (UL)) with 10,000 resamplings (Becker et al., 2022). Table 7 outlines the requirements for the study's hypotheses, focusing on the direct effect, whereas Table 8 discusses the mediating effects. All hypotheses, both direct and indirect, were supported.
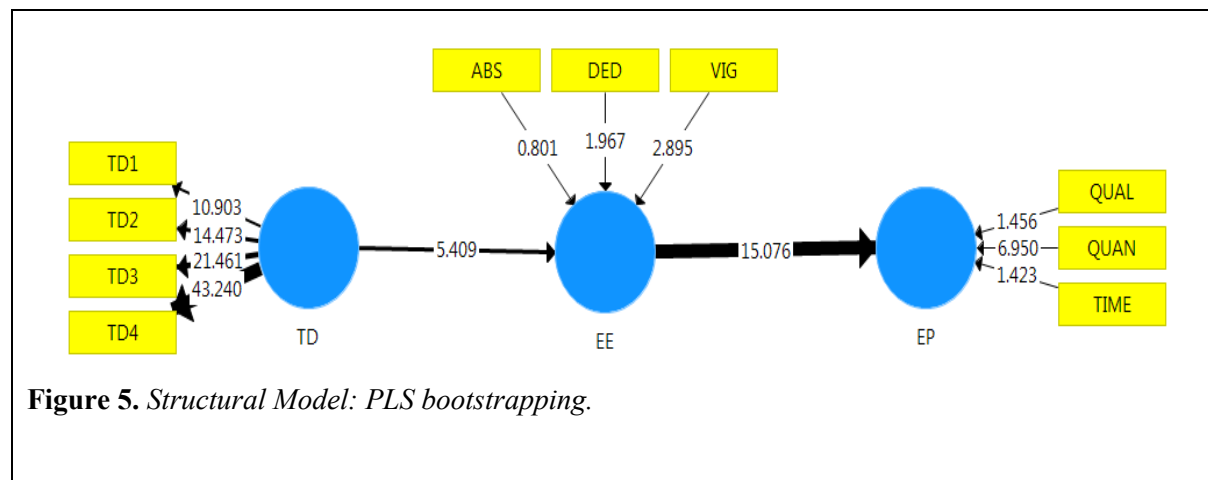
Table 7:

Strutural Model: Hypotheses Testing Direct Effects.

Hypothesis	Relationship	Beta	Std Error	T Values	P Values	BCI LL	BCI UL	F^2	R^2	Decision
H1	TD -> EE	0.312	0.058	5.409	0.001	0.207	0.397	0.108	0.097	Supported
H2	EE -> EP	0.605	0.040	15.076	0.001	0.526	0.661	0.577	0.366	Supported

Note: LL = lower level; UL = upper level; f2 = effect size; R2 = variance explained;
*:p<0.1; **:p<0.05;***:p<0.01
Note: We use a 95% confidence interval with a bootstrapping of 10000.

Figure 5. *Structural Model: PLS bootstrapping.*

Table 8:

Hypothesis Testing Indirect Effects.

Hypothesis	Relationship	Beta	Std Error	T Values	P Values	LL	UL	Decision
H3	TD -> EE -> EP	0.189	0.037	5.092	0.001	0.111	0.254	Supported

The explained variance (R^2) for the predictor of EE was 0.097, meaning that TD accounts for 9.7% of the variance in EE. Furthermore, the analysis revealed that H1 (TD) was positively significant to EE (b = 0.312, t = 5.409, LL =0.207, UL = 0.397, p < 0.01). Next, (R^2) for the predictor of EP was 0.366, meaning that EE accounts for 36.6% of the variance in EP. So, the analysis revealed that H2 (EE) was positively significant to EP (b = 0.605, t = 15.076, LL =0.526, UL = 0.661, p < 0.01). To summarise, all direct effect hypotheses are supported. The study also concentrated on the effect size of the supported hypotheses for future study. The effect size (f^2) represents the change in R^2 when a specific construct is removed from the model. The f^2 values of 0.02, 0.15, and 0.35 represent small to medium, medium to large, and large effects, respectively (Cohen, 1988). TD on EE has a medium effect size, and EE on EP has a large effect size. This shows that EE is the most critical construct of the study.

The study followed the recommendations of Preacher & Hayes (2008) for testing the mediation analysis by bootstrapping the indirect effect. TD -> EE -> EP (β = 0.189, t = 5.092, p<0.01) was significant, as

indicated in Table 8. Furthermore, the 97.5% corrected confidence intervals did not contain any intervals straddling a 0, supporting the findings. Thus, H3 is supported.

Table 9:

PLS-Predict.

Item	PLS RMSE	LM RMSE	PLS-LM	Q²_predict	Decision
ABS	0.974	0.985	-0.011	0.060	
DED	0.971	0.974	-0.003	0.066	
VIG	0.962	0.974	-0.012	0.084	Strong
QUAL	0.967	0.961	0.006	0.072	
QUAN	0.955	0.945	0.010	0.094	
TIME	0.981	0.979	0.002	0.045	Not confirmed

According to Ngah et al.(2021) and Shmueli et al. (2019), PLS makes predictions using a sample-based holdout procedure that makes case-level predictions at the item or constructs level using a 10-fold procedure to look at prediction. If all of the item differences (PLS-LM) are low, there is strong predictive power; if the majority is low, there is moderate predictive power; if there is a minority, there is low predictive power; and if they are all high, there is insufficient evidence to support the predictive relevance. Table 9 shows that the model has a mix of strong and unconfirmed predictive power.

5.0 DISCUSSION

Findings show that TD has a positive and significant effect on EE. The results show that TD is a strong predictor of EE, especially for people who work in MMEs. The reciprocity norms of social exchange relationships (Blau, 1964; M.Emerson, 1976) say that employees are more likely to be content with their jobs if they think their employers value and recognize them by giving them adequate opportunities for TD (Gruman & Saks, 2011). Similarly, intensive TD programs convey to employees that TD is a long-term investment in their personal development and advancement, making them feel obligated to repay with high EE (Karatepe, 2013; Presbitero, 2017). Memon et al.(2021) found a positive correlation between TD and EE and claimed that acquiring new abilities keeps a job exciting and retains high EE. Chaudhry et al.(2017), Siddiqui & Sahar (2019), Jain & Khurana (2017), and K. R. Johnson et al. (2018) all found a significant positive correlation between TD and EE. Consequently, based on the previous and current literature, it is plausible to conclude that TD has a favorable influence on EE; therefore, the proposed hypothesis (H1) is accepted.

The study reveals that EE has a significant and positive association with EP. The findings indicate that EE is a significant predictor of EP among the employees of the MME. This notion was expanded by Kataria et al. (2013), who claimed that SET underlay the relationship between employees and employers. The SET implies that people are self-centered and that selfish thought is prevalent (Blau, 1964). In other words, a person will initially assess the possible benefits of social interaction (Ohemeng et al., 2019). Employees that are emotionally invested in their work are more likely to put in extra effort when they are engaged (Ohemeng et al., 2019). According to M. Gupta et al. (2015), higher EE is associated with higher EP. Karatepe's (2013) study also demonstrates that EE improves EP. The key finding of the Ismail et al. (2019)study is a significant positive relationship between EE and EP. A recent longitudinal study by Carter et al. (2018)found a strong and positive relationship between EE and EP and the prediction of EP by EE.

The study reveals that EP has a positive and significant relationship with EE. According to the findings, EE is a significant predictor of EP among SME employees. Numerous prior studies reveal a significant relationship between EE and individual performance (Bakker & Bal, 2010; Demerouti & Cropanzano, 2010). Employees that are engaged show effort because they are emotionally involved in their work (Ohemeng et al., 2019). M. Gupta et al. (2015) conclude that when EE is high, EP rises.

Similarly, Ismail et al. (2019)stated that there is a strong correlation between EP and EE. This finding is substantiated by a recent longitudinal study by Carter et al. (2018), which discovered a strong and positive relationship between EE and EP and the prediction of EP by EE. Based on the literature presented, it is feasible to conclude that EE has a positive effect on EP, and the proposed hypothesis is accepted. Based on the presented literature, it is conceivable to conclude that EE has a significantly positive influence on EP, and the proposed hypothesis is therefore accepted.

EE is found to serve as a mediator between TD and EP. The findings show that EE has a significant indirect or mediating effect on the relationship between TD and EP. The results suggest that MMEs should implement TD to improve EP through EE. This will result in improved outcomes for MMEs, and enhanced EP will assist MMEs in contributing to the country's GDP growth. When individuals receive economic and social-emotional resources from their organization, they feel obligated to reciprocate them (Cropanzano & Mitchell, 2005). Dajan (2015) revealed that EE was a mediator between TD and EP. According to Otieno et al. (2015), when employees obtain training and resources from the employer, they are more likely to feel obligated to repay the organization by boosting their EE and, as a result, exhibit improved attitudes and behaviors. In conclusion, the findings lend more credibility to the factor that EE is an essential aspect and ingredient for boosting TD among employees, enabling employees to improve their performance.

5.1 Theoretical Contribution

This study provides academics and scholars with valuable new information. The findings make critical theoretical contributions to EP in Malaysian SMEs. The current study employed an empirical approach to determine if TD is correlated with EP. In addition, the current study examined how EE affected the relationships between independent and dependent variables. This study is likely highly useful for business professionals interested in learning more about how EP influences the performance of SMEs, particularly in developing nations like Malaysia. Firstly, the current study's findings provide additional empirical support for the research framework. As a result, the current study contributes to the SET by combining TD and EE through the SET lens. According to the SET, the relationship between the employer and the employee is reciprocal. When companies provide TD for employees, the employees contribute their knowledge to enhance the overall EP. This improves the engagement level of the employee.

According to the findings, EE mediates the link between TD and EP. This means that the EP of Malaysian MMEs improved due to TD. As a result of the current research, MMEs may need to acquire more benefits from EE to achieve better EP for their future company growth.

5.2 Practical and Managerial Implications

According to the findings of this study, the two variables studied in the framework are equally significant in influencing EP. Understanding all the variables in this study will thus bring significant insight to employers, SME managers, and scholars. The study made considerable practical contributions for SME managers looking to improve TD in their businesses. Awareness of TD in SMEs still needs to be improved. They understand the aspects that drive EP allows managers to design more efficient and pertinent TD programs or initiatives to enhance EE among SME employees. The government should also develop an SME TD policy that will further emphasize employees in SMEs getting a considerable

amount of TD. These measures will enable more SMEs to compete globally by utilizing government-provided TD programs, which increase EP.

5.3 Limitations and Future Research Recommendations

Despite its theoretical and practical implications, the study has several limitations. First, the study was limited to Malaysian SMEs. As a result, the study should be replicated among SMEs in various countries to ensure model compatibility. Malaysia's findings should be compared with those of other ASEAN countries using comparable benchmarks in the future. Furthermore, new variables such as mentoring, performance appraisal, compensation, and benefit should be considered to increase the model's ability to forecast EP in SMEs. Second, this study employed a quantitative methodology and only one mode of data collection. Respondents may be hesitant to submit correct responses because the study solely used a survey questionnaire to collect data. Because of the uneven and erroneous responses in measuring the study's variable, future research could employ a mixed-method approach to undertake a comprehensive evaluation of EP in Malaysian SMEs. Finally, data were gathered using a cross-sectional approach. The cross-sectional technique makes it harder to determine a relationship between variables (Sekaran, U., & Bougie, 2011). On the other hand, longitudinal investigations allow for establishing causal relationships and formulating conclusions (Cohen et al., 2013). As a result of this limitation and to appreciate the long-term behavior of EP in Malaysian SMEs, a longitudinal study is suggested. Finally, the findings were applied to Malaysian SMEs from all states. EP in Malaysia may differ between urban, rural, and state locations. As a result, future research might compare EP in SMEs across various Malaysian geographical locations.

5.4 Conclusion

In conclusion, Malaysian SMEs need to prioritize EP as a field of study. However, it is a crucial factor in determining the performance of SMEs. Organizations should be proactive in identifying the implications of the EP on Malaysian SMEs. This paper discusses how TD affects EP using SET as its underlying theory. The SEM analysis offered additional empirical validity for the framework by integrating the TD towards EP. The EP is also supported by the results of the EE's mediating effects. The study contributed significantly to the inclusion of EE into the framework and investigation of its mediating impact on TD and EP within the context of SET.

6.0 ACKNOWLEDGEMENT

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