



## THE EFFECT OF KNOWLEDGE MANAGEMENT AND EMPLOYEE TRAINING ON PERFORMANCE OF SMALL AND MEDIUM-SCALED ENTERPRISES (SMEs): EMPLOYEE TRAINING AS A MEDIATOR

I. P. W. Sirinaga<sup>1i</sup>,  
Ali Khatibi<sup>2</sup>,  
S. M. Ferdous Azam<sup>3</sup>

<sup>1</sup>PhD Candidate,  
Management and Science University,  
Shah Alam, Malaysia  
and  
Commercial Bank of Ceylon PLC,  
Sri Lanka

<sup>2</sup>Prof. Dr., Management and Science University,  
Shah Alam, Malaysia

<sup>3</sup>Dr., Management and Science University,  
Shah Alam, Malaysia

### Abstract:

The main purpose of the study is to examine whether owners of apparel sector Small and Medium-scaled Enterprises (SMEs) in Sri Lanka are practicing knowledge management and providing training opportunities to their employees on how those practices have an effect on performance of those SMEs. Also, the mediating role of employee training between knowledge management and performance of apparel SMEs has been analyzed. A new model was developed to explain the relationship between knowledge management and employee training on the performance of apparel SMEs and also to determine whether the mediating effect of employee training is a full or partial. 235 owners of export-oriented apparel SMEs in Sri Lanka were taken as the population sample for the analysis. The outcome of SPSS statistics 21.0 established the relationships. The results highlight owners of apparel SMEs are currently practicing both knowledge management and employee training at workplaces in average level. The results further reveal a strong relationship between knowledge management and employee training on performance of apparel sector SMEs and a partial mediating effect of employee training. Accordingly, key findings of the study are a) higher the knowledge management higher the performance of apparel sector SMEs b) higher the employee training higher the performance of apparel sector SMEs c) and employee training partially mediates the relationship between knowledge management and performance of apparel sector SMEs.

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<sup>i</sup> Correspondence: email [indikasinaga@gmail.com](mailto:indikasinaga@gmail.com)

The outcome of the study further confirms statistical significance of the proposed hypotheses.

**Keywords:** knowledge management, employee training, performance of small and medium-scaled enterprises

## 1. Introduction

The employee training improves organizational performance (Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández, 2018) and quality and quantity of employee's work (Nwankwo, 2018). Further, a significant positive relationship among employee training and employee performance (Sendawula, et al., 2018). Moreover, employee training measures knowledge flows that reshape innovative performance of the organizations (Caloghirou, Giotopoulos, Korra & Tsakanikas, 2018). Accordingly, any organizations, whether it is big or small, should consider employee training as the most studied human resources practice (Esteban-Lloret et al., 2018) and need to provide more training opportunities to their employees (Nwankwo, 2018).

However, many SMEs do not conduct employee training due to the high cost and spending over employee training is considered as a big investment although there is a demand for it (Priyantha & Premarathne, 2015). The employee training enables SMEs to retain competitive globally as well (Peter et al., 2018). Out of the many training methods, informal training is the largely accepted training method in SMEs than the formal training which is often given to the employees from external resources when require (Suseno, Bao, Baimbridge & Su, 2019).

Despite of the effectiveness of informal training methods for the employees of SMEs, a skilled based training is considered as the most suitable approach for the employees of apparel sector (Singh et al., 2018). However, the apparel sector in Sri Lanka is currently providing different types of training for its employees, especially for the executive carder (Padmasiri, 2018). Nevertheless, Padmasiri, Sandamali, Mahalekamge & Mendis (2018) argued that apparel sector executives are not showing wiliness to attend on training programs although the outcome of employee training is beneficial to achieve higher performance levels of the executive carder. Accordingly, only few employees are benefited due to the low participation on training (Wiyesena & Padmasiri, 2016).

Based on the above empirical evidences, the general objective of this study is to understand the nature of knowledge management, employee training and performance of apparel sector SMEs in Sri Lanka. However, there are some specific objectives as well.

### 1.2 Research Objectives

- 1) To understand the nature of response with regard to knowledge management, employee training and performance of apparel sector Small and Medium- scaled Enterprises.

- 2) To examine the relationship between knowledge management and employee training with the performance of apparel sector Small and Medium- scaled Enterprises.
- 3) To determine whether employee training has a mediate effect to the relationship between knowledge management and performance of apparel sector Small and Medium- scaled Enterprises.

### 1.3 Research Questions

- 1) What is the nature of response with regard to knowledge management, employee training and performance of apparel sector Small and Medium- scaled Enterprises?
- 2) Is there a relationship between knowledge management and employee training with the performance of apparel sector Small and Medium- scaled Enterprises?
- 3) Is employee training having a mediate effect to the relationship between knowledge management and performance of apparel sector Small and Medium- scaled Enterprises?

## 2. Theoretical Literature Review

### 2.1 Four Levels of Kirkpatrick Evaluation Model

The different training theories provide a better understanding of training processes (Milhem, Abushamsieh & Aróstegui, 2014). The Kirkpatrick model (1959) has been discussed up to date by many scholars for different studies (Campbell, Taylor & Douglas, 2019; Sitzmann & Weinhardt, 2019; Choudhury & Sharma, 2019). It describes how to measure training effectiveness with the help of four levels of training evaluations namely a) reaction b) learning c) behavior d) results.



**Figure 1:** Kirkpatrick Four Level of Learning and Evaluation Model (1996).

The level 1 is reaction. It documents employees' reaction to the training. On the other hand, the employee engagement which comes either way of in - class training or at

work would be more crucial factor to be productive in businesses. However, it may be difficult to achieve. The feedback of employees who have undergone a particular training is based on employees perceive on the training and it gives an insight to determine what is workable, what are the areas to be improved and what are the possible changes to be done, if any, for future iterations of training programs.

The level 2 is learning. It determines extract level of employee learned or did not learn in the training. The progress of the training could be measured through skilled-based evaluation or interviewing methods before and after the training. The process to be more effective, the participants should be encouraged to share the specific outcome of the training and the outcome to be reviewed before and after the training.

The level 3 is behavioral change. It describes how the training impacts on behavior of the employee thereby understanding whether the employees are applying what they have learned. However, application of new knowledge and skills to the work performance cannot be accomplished overnight. Sometimes it takes weeks or months and will be depending on the employee's confidence level and availability of opportunities to demonstrate the training out come at the workplace. Further, lack of behavioral change does not mean that training is ineffective. Need to evaluate the cultural conditions and current business processes to build a favorable environment to encourage learning and positive changes. Finally, the level 4 explains that behavioral changes have an impact to the business and whether the investment made on the training generates a good return (Lucidchart Content Team, 2019). Accordingly, some items in the questionnaire were developed based on the Kirkpatrick four level of evaluation model and the other items in the questionnaire were developed based on the SWISS Forum Building Block of Knowledge Management (Probst, 1998) and the SECI Spiral Model (Nonaka & Takeuchi,1995).

## **2.2 Empirical Literature Review and Hypotheses**

### **2.2.1 Performance of Apparel Exports and Apparel SMEs in Sri Lanka**

The apparel industry in Sri Lanka has been considered as the largest foreign exchange earner to the county's economy over the last many decades (Kelegama, 2009). The apparel industry has established USD 5 billion milestone in 2018 which is the country's first industry that reached USD 5 billion export revenue since the country embraced free economy policy in 1977 (Sri Lanka Export Development Board, 2019). The industry today provides 300,000 direct and 600,000 indirect employments, out of which 80 per cent of them are women, who work as sewing-machine operators (Madurawala, 2017). They value experience and soft factors than financial benefits (Chen, Perry, Yang & Yang, 2017). However, high mobility rate (Madurawala, 2017; Hancock et al., 2015; Kelegama, 2009) and stressful workload (Jayaratna & Rathnayake, 2016) and also lack of smooth labour practices (Piyasena & Kottawatta (2015) create labour shortages in the industry (Maderawala, 2017) which is difficult to fill (Ranasinjge, Madurawela, Su & Thushara, 2016) especially young people (Madurawale, 2017). Accordingly, more studies on knowledge categories in apparel sector is important because retaining of the existing

labour is vital (Thushari, 2011). Further, the trend of shifting workers to other sectors seeking new employments is also high (Lopez & Robertson, 2016).

As per the above evidences, the apparel sector exports has been identified as the highest foreign exchange earner to Sri Lanka's economy out of the other exports categories (Sri Lanka Export Development Board). The SMEs sector is also being considered as the back bone of the county's economy (Central Bank of Sri Lanka). However, in the year 2018, the total apparel exporters in Sri Lanka was amounted to 495, generating a turnover worth of Rs. 807,699 million; out of which, 399 were belonging to the SMEs category, generating a turnover worth of Rs. 24,352 million. Accordingly, 81 per cent of the total apparel exporters were SMEs, however, their turnover contribution was only 3 per cent of the total apparel exports. This shows the stagnating situation in SMEs performance despite of having a larger number of exporters of its kind. The stagnation of performance has been highlighted over the consecutive years. However, the country is expecting apparel sector to reach ambitious export target of USD 8.0 billion in 2025 (Sri Lanka Export Development Board, 2018) although the export performance of apparel sector SMEs has been stagnating.

### **2.2.2 Knowledge Management and Performance of SMEs**

In a knowledge intensive market environment, organizations need to effectively manage the knowledge available with them for survival and the knowledge management became a well demanded concept due its practicality (Probst, 1998). As a result, the knowledge management concept has been largely accepted in the scientific community and the management literature as a field of research (Gaviria-Marin, Merigó & Baier-Fuentes, 2019). Further, knowledge is a sustainable source to achieve competitive advantage in knowledge intensive economies and long-term sustainability and survival are depending on organizations' abilities in leveraging the knowledge through an effective knowledge management practices (Tow & Kim, 2017). Hence, many scholars have continuously argued how the knowledge is to be managed (Nonaka & Konno, 1998).

With the recognition of knowledge as a very powerful and abstract concept, the knowledge management has been further emerged as a necessary process and critical resource of organizations which is to be deal with the knowledge (Bolisani & Bratianu, 2018). Abdullah & Othman (2019) explains, if the employee's knowledge is managed properly, it adds more value to the firm and also argues a positive relationship with the knowledge management and performance of SMEs.

Accordingly, knowledge management is identified as an important factor which add values to SMEs in achieving their competitive advantage (Hassan & Raziq, 2019). Saqib, Udin & Baluch (2017) also similarly argued that knowledge management has a positive relationship with the organizational performance. Moreover, as the knowledge management is a practical tool for any organization; it may be more particularly important for SMEs because the SMEs can easily put knowledge management into practice as they are more dynamic and agile than larger organizations due to the smaller number of employees. Hence, managers of the SMEs need to know more about the

knowledge management and its implementation in the organizations (Handzic, 2006). The above empirical evidences have provided a clear understanding that knowledge management plays a significant role in achieving performance.

Accordingly, it was hypothesized that:

**H1:** Knowledge management is positively related to the performance of apparel sector SMEs.

### **2.2.3 Employee Training and Performance of SMEs**

The collective skills, abilities and experience of people and their the knowledge, skills and experience which are required for the business success and competitive advantage of organizations can be gained through training and if those factors are being embodied to the organization, the people who are working in those organizations will individually and collectively contribute to achieve organizational objectives (Armstrong 2006). Accordingly, organizations need to spend more on training and development of their employees aiming at long term sustainable competitiveness because the employee development leads to employee performance and outcome of the both training and development will be able to increase the employee performance (Younas, Farooq, Khalil-Ur-Rehman & Zreen, 2018). Further, knowledge flow is measured on the basis of human resource training practices and benefit of the knowledge flow is strengthened by knowledge stocks which is being accumulated through employees' education (Caloghirou, Giotopoulos, Korra & Tsakanikas, 2018).

However, training is a complex process which includes professional developments, workshops, trade fairs and conferences. It is one of the key areas of knowledge management in business organizations. Nevertheless, managing of intellectual potential of workers, managing of knowledge resources and relevant information and technology support are identified as some of the areas of the knowledge management (Matecka, 2018). A regular training programs enhances employee's ability in performing a given job task (Obeng, 2018) and the employee training positively and significantly effects on individual performance of the employees (Alemu, 2019). The positive effects on the employee's individual performance includes productivity, service quality and job satisfaction (Aboyassin & Sultan, 2017). The job satisfaction leads to the job performance of apparel employees (Perera, Khatibi, Navaratna, Chinna, 2014). Dhar (2015) argued that training enhances service quality of the employees. Barrios, Reficco & Tabora, (2019) pointed out participants of the training programs have shown a significant increase in perceived goal attainment as well as their hope levels.

A proper training need analysis and training effectiveness are having a positive association with the employee's performance (Mahmood, Hee, Yin & Hamli, 2018) and the employee learning has an influence on employee development, individual performance of the employee and the organizational performance as well (Hameed & Waheed, 2011). Accordingly, outcome of the training is the critical factor for organizational success which enhances the organizational performance (Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández, 2018). However, personal performance and

organizational performance could only be achieved if the training programs are formulated based on the job requirement (Firesibehat, 2018). Megdadi, Al-Sukkar & Hammouri, (2012) identified that training and education as significant factors which have an effect on business success of SMEs and the training and development have a positive impact on the performance of employees at SMEs (Otoo, & Mishra, 2018). Surprisingly, Al Karim (2019) argued that there is no significant relationship between job training and employee performance although the other training methods such as orientation training, carrier development training, environment, health and safety training have a significant impact on employee performance.

The employee training and development programs also have an influence on employee retention (Fletcher, Alfes & Robinson, 2018). The employee training and development have a significant effect on employee retention in SMEs as well, although, the training and development do not provide a desired outcome from the youth as it was not a motivational factor for them to stay in the job (Sanda & Ntsiful, 2013). However, the success of an organizations could be achieved when organizational strategies are linked with the training and development. Accordingly, employee training is considered as one of the main determinant factors for employees to continue in the employment (Amarathunge, 2016). Moreover, the employee training enables to build a stable work force (Khan, 2018). The organizational support and perceived carrier opportunities are positively related with training and development even in multinationals (Ambrosius, 2018). However, comparative to the larger organizations, SMEs are less focused on formal management practices, although, the returns are more visible when investing on training (Bryson, & Forth, 2018). The business performance of Micro, Small and Medium-scaled Enterprise (MSMEs) is also depending on the level of training that female carder attended (Aliyu, Ahmad & Nordin, 2019). This argument is more relevant to the apparel sector in Sri Lanka as well because the sector is dominated by the female carder. Further, export related training programs has an influence on export of SMEs (Malca et., al 2019). Accordingly, employee training and development enables SMEs to be remained competitive globally (Peter et al, 2018). The above arguments empathized that employee training has a significant effect on performance of SMEs; therefore, employee training should be embedded to the apparel sector SMEs as well as a regular human resources practice.

Accordingly, it was hypothesized that:

**H2:** Employees training has a positive correlation to the performance of apparel sector SMEs.

#### **2.2.4 Mediating Role of Employee Training**

Byukusenge & Munene (2017) explain full mediating effect between the knowledge management and business performance of SMEs. Mira & Odeh (2019) argued that mediating effects of authentic leadership between the relationship of employee training and employee performance and also significant relationship between employee training, authentic leadership and the employee performance. Mahmood, Hee, Yin & Hamli (2018)

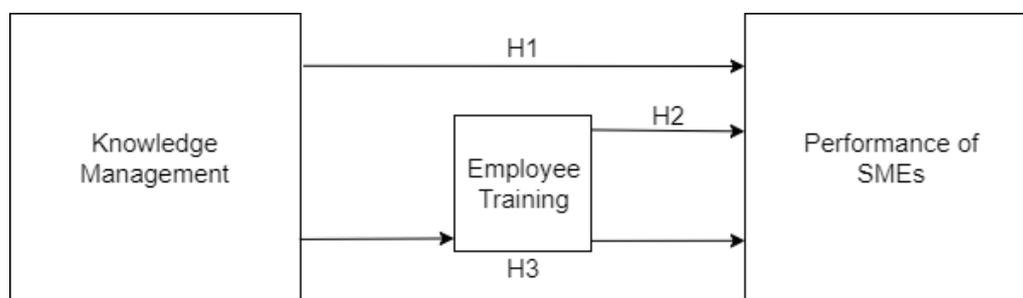
pointed out that training need analysis and training effectiveness have a positive effect on employee performance and the relationship between training functions and employee functions is partially mediated by the employee competency. The findings further revealed that innovation fully mediates the relationship between knowledge management and business performance of SMEs. Khalil & Mehmood (2018) argued that organization-learning significantly mediates the relationship between knowledge management, team work, emotional capability and innovativeness. However, lack of empirical evidences on how employee training mediates the relationship between the knowledge management and performance of SMEs encourage to hypothesized that:

**H3:** Employee training has a mediating effect between the relationship of knowledge management and performance of apparel sector SMEs.

### 3. Research Methodology

A critical literature review enables to develop the conceptual framework which represents and elaborates the relationships between the variables. The conceptual framework of the proposed study is logically designed as per the figure 2. Based on the conceptual framework, research hypotheses were developed and statistically tested. Accordingly, the proposed study was a survey research in a deductive approach.

#### 3.1 Conceptual Framework



**Figure 2:** Conceptual framework of the study and research hypotheses

The chosen variables have been identified as most relevant to the study area. Accordingly, the above conceptual framework explains the interrelations among the independent variables (knowledge management and employee training), the dependent variable (performance of SMEs), and the mediating variable (employee training) of the proposed study.

#### 3.2 Population and Sample

The study population is 402 export-oriented apparel SMEs in Sri Lanka which engaged exporting during the year 2017. The sample frame was export performance indicators of Sri Lanka Export Development Board as of 2017. A simple random sampling technique was used to select the sample population out of the total population. Krejcie and Morgan

(1970) have provided a scientific guideline for the selection of appropriate sample size based on the population size (Sekaran and Bougie, 2016, p. 268). According to Krejcie and Morgan, the corresponding sample size for the population of 402 is 210 or the maximum of 217. However, for the safe side of ensuring reliability of items in the questionnaire, 235 owners of export-oriented apparel SMEs were chosen as the sample population out of the total population. Simple random sampling technique was used to ensure every element in the population has a *known and equal chance* of being selected as a subject (Sekaran and Bougie, 2016, p. 247).

### **3.3 Data Collection Method**

The unit of analysis is individual, the owners of export-oriented apparel SMEs. A self-administrated questionnaire was used to collect the unbiased opinion from the respondents for the questions asked in the survey instrument enabling the respondents to answer questions on his/her own. The items which represent each construct were taken from the previous studies and some of them were adopted and developed. To give many options for the respondents to provide answers and to examine how strongly they mark agree or disagree on the given statements, a 5-point Likert scale questionnaire was designed with the following anchors: 1= Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree. The data were gathered from the respondents just once within three months. Hence, the time horizon of the study was cross - sectional.

### **3.4 Statistical Techniques and Measures**

The Cronbach's Alpha value was used to test reliability of the questionnaire. The collected data was quantitatively analyzed with the use of SPSS 21 version to generate results and to test hypotheses. The results of the descriptive statistics were addressed the first research objective. Pearson's correlation analysis was applied to address the second research objective. The outcome of the Sobel test followed by Barron and Kenny approach are addressed the third research objective.

## **4 Results**

### **4.1 Reliability Analysis**

The internal consistency of the Likert scale items was initially tested before the variables are operationalized. In this regard, 50 questionnaires were initially distributed among the owners of export-oriented apparel SMEs and 30 questionnaires were used to carry out the pilot test to determine the internal consistency of the items in the questionnaire and to ensure the reliability of the questionnaire. The direction of the responses is determined the uni-dimension. The Cronbach's Alpha values was considered to determine the directions of the items in the questionnaire thereby determining the reliability.

Formula is given by Eq. 01.

$$\alpha = \frac{rk}{1 - (1 + k)r} \text{ --- Eq. 01}$$

Where:

r: Average inter item correlation pair wise

k: Number of items in the scale.

The results are provided by Table 1.

**Table 1: Internal Consistency**

Variables	Cronbach's Alpha	Number of Items
Knowledge Management	0.813	4
Employees Training	0.702	8
Performance	0.704	14

The first column of the table provides the variables of the study. Second and third columns provide Cronbach's Alpha results and the number of items used to operationalize the corresponding variables. All the variables consist of Cronbach's Alpha values more than 0.7. Therefore, Likert scale items are having acceptable responses to create variables based on these items. The theory or the concepts are well represented by them and the researchers have high confidence to operationalize the variables of knowledge management, employee training and performance of SMEs. As all the Cronbach's value are in the accepted rage, the rest of the questionnaire were distributed among the owners of the export-oriented apparel SMEs and followed up to collect the duly completed questionnaires until the required count is received.

#### 4.1.1 Descriptive Statistics of Knowledge Management, Employee Training and Performance Apparel Sector SMEs

The nature of responses with regard to knowledge management, employee training and performance of SMEs have been analyzed by the descriptive statistics. The results are provided in the Table 2.

**Table 2: The nature of knowledge management, employee training and performance of apparel sector SMEs**

Measures	KM	Training	Performance
Mean	4.2644	4.1410	4.2629
Std. Deviation	0.2598	0.32235	0.26600
Skewness	-1.391	-1.116	-1.267
Std. Error of Skewness	0.159	0.159	0.159
Kurtosis	2.831	2.955	3.671
Std. Error of Kurtosis	0.316	0.316	0.316

According to descriptive statistics, mean values of knowledge management, employee training and performance of SMEs comprise agree level responses as the Likert scale

average is beyond 4. Results indicate that there are positive responses for the knowledge management, employee training and the performance of SMEs. Meaning, the apparel sector SMEs are practicing knowledge management and employee training at work places at the average level. The highest standard deviation that is 0.32 belongs to employees training. This represents that it is highly deviated comparatively to other factors. The knowledge management consists of minimum deviation as it is having the minimum standard deviation that is 0.25. When both exogenous and endogenous variables are analyzed, knowledge management is representing minimum variance comparatively. All the coefficients of skewness are between -2 and +2. Therefore, data are normally distributed.

#### 4.1.2 Relationships between Knowledge Management and Employee Training with Performance of Apparel Sector SMEs

Pearson’s correlation analysis has been applied to identify the relationship between knowledge management and employee training with the performance of SMEs. Result is given by Table 3.

**Table 3:** Relationships between knowledge management and employee training with performance of apparel sector SMEs

Variables		Training	Performance
Knowledge Management	Pearson Correlation	.640**	.537**
	Sig. (2-tailed)	0.000	0.000
Training	Pearson Correlation	1	.410**
	Sig. (2-tailed)		0.000

According to correlation analysis, p value of the association between knowledge management and performance is 0.000. Result is highly significant with 0.537 coefficient of correlation. This indicates that knowledge management is positively correlated with the performance of SMEs. Accordingly, higher knowledge management represents higher performance of SMEs. Probability and coefficient of correlation of the relationship between employee training and performance of SMEs are respectively 0.000 and 0.410. This means that employee training also has a highly significant positive association with performance. Accordingly, higher employee training makes higher performance in SMEs.

#### 4.1.3 Mediate Effect of Employee Training between Knowledge Management and Performance of Apparel Sector SMEs

Researchers have made an attempt to test the mediate effect of employee training by applying Sobel test statistics. If there is a mediate effect, further full mediate or partial mediate effect is examined. For this purpose, Sobel test is applied twice making employee training and knowledge management as mediate variables separately. After constructing regression models, following beta values, standard error and their significance is provided by the Table 4.

**Table 4:** Beta Values and Standard Errors

Effect	Beta	Standard Error	Sig
KM on Performance	0.582	0.062	0.000
KM on Training	0.762	0.062	0.000
Training on Performance	0.374	0.056	0.000
Training on KM	0.538	0.044	0.000

#### 4.1.4 Knowledge Management Effect on Performance of Apparel Sector SMEs Through Employee Training

$$Sobel\ Test = \frac{ab}{\sqrt{b^2SE_a^2 + a^2SE_b^2}} \text{ --- Eq. 05}$$

Where a: Beta value of the regression model from Knowledge Management to Employee Training. b: Beta value of the regression model from Employee Training to SMEs performances.

SE: Standard errors.

- a) Considering the employee training as a mediate variable, researchers tested the effect by EQ 01.

$$Sobel\ Test = \frac{0.761 \times 0.374}{\sqrt{0.761^2 \times 0.056^2 + 0.374^2 \times 0.062^2}} = 5.866 \text{ --- EQ 01}$$

As per the formula 1, Sobel test statistic is 5.866 and the critical value of the standard normal distribution at 5% level of significance is 1.96. Test statistic belongs to the rejection region and there is enough evidence to reject null hypothesis and employee training has a mediate effect to the relationship between knowledge management and performance of apparel sector SMEs.

#### 4.1.5 Employee Training Effect on Performance of Apparel Sector SMEs Through Knowledge Management

Taking the knowledge management as a mediate variable, researchers tested the effect by EQ 02.

$$Sobel\ Test = \frac{0.538 \times 0.582}{\sqrt{0.538^2 \times 0.062^2 + 0.582^2 \times 0.044^2}} = 7.445 \text{ --- EQ 02}$$

As per the formula 2, Sobel test statistic is 7.445 and the critical value of the standard normal distribution at 5% level of significance is 1.96. Test statistic belongs to the rejection region and there is enough evidence to reject null hypothesis and the relationship between employee training and performance of apparel sector SMEs is mediated by knowledge management. It indicates that knowledge management also has a mediate effect to the relationship between employee training and performance of

apparel sector SMEs. As there are mediate effects to both directions, employee training has a partial mediate effect.

#### 4.1.6 Mediate Effect of Employees Training by Barron and Kenny Approach

Researchers expected to test the mediate effect of the employee training further by applying Barron and Kenny approach. From this analysis, researchers confirmed the results of the Sobel test and improved the validity of the test results. Table 5 is providing the individual beta values constructed from the simple and multiple regression models.

**Table 5:** Individual Beta Values for Barron and Kenny

<b>Simple Regressions Model</b>			
<b>Effect</b>	<b>Beta Value</b>	<b>t</b>	<b>Sig.</b>
KM on Performance	0.582	9.409	0.000
KM on Training	0.761	12.302	0.000
Training on Performance	0.374	6.645	0.000
<b>Multiple Regressions Model</b>			
KM on Performance	0.504	6.279	0.000
Training on Performance	0.102	3.187	0.000

According to the individual beta values, all the probabilities of the simple regression model are highly significant. Therefore, knowledge management is having individual effect on both performance of apparel sector SMEs and employee training. The employee training is also influencing significantly on performance of the apparel sector SMEs. In the multiple regressions model, knowledge management has a highly significant positive effect on performance of apparel sector SMEs as the P and beta values are respectively 0.000 and 0.504. Employee training is highly significant with 0.102 beta value and employee training is also influencing positively on performance of the apparel sector SMEs. As the P values are highly significant, employee training has a partial mediate effect on performance of those SMEs. Accordingly, Sobel test results have been further confirmed and validated by the Barron and Kenny results indicating that employees training has a partial mediate effect.

#### 4.2 Hypothesis Summary

The hypothesis summary is provided by the Table 6.

**Table 6:** Hypothesis Summary

Hypothesis 1	Knowledge management is positively related to the performance of apparel sector SMEs.	Supported
Hypothesis 2	Employee training has a positive correlation to the performance of apparel sector SMEs.	Supported
Hypothesis 3	Employee training has a mediating effect between the relationship of knowledge management and performance of apparel sector SMEs.	Partially Supported

According to the outcome of the study, the proposed hypotheses are statistically significant.

## 5. Discussion

The objectives of the proposed study were to understand the nature of knowledge management, employee training and performance of apparel sector SMEs in Sri Lanka and to examine the relationship between knowledge management and employee training with the performance of those SMEs and also to determine the mediating effect of employee training between the relationship of knowledge management and performance of the apparel sector SMEs. The findings of the descriptive statistics (table 2) highlighted that owners of export-oriented apparel sector SMEs in Sri Lanka are currently adhering to the knowledge management practices at the work place and provide training to their employees at average level.

The study further revealed that knowledge management has a significant positive correlation with the performance of apparel SMEs. It means higher the knowledge management higher the performance of apparel sector SMEs (table 3). The critical literature on knowledge management was an evidence to understand that several studies were done by many academic around the world similar to the proposed study area. The knowledge management has become a growing concept due to its practicality (Probst, 1998). The knowledge management enhances organizational performance (Saqib, Udin & Baluch, 2017). It achieves competitive advantage through innovation (Hassan & Raziq, 2019) and also ensures long term sustainability and survival (Tow & Kim, 2017). The relationship between the knowledge management and performance of SMEs is also highlighted by Abdullah & Othman (2019). The current study findings have further proven that employee training also has a highly significant positive association with the performance of SMEs (table 3). Meaning, higher the employee training higher the performance of apparel SMEs. Similarly, Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández (2018) argued that training outcome enhances organizational performance.

The formula 1 of the Sobel test statistic indicates 5.866 and the critical value of the standard normal distribution at 5% level of significance is 1.96. The results say employee training has a mediate effect to the relationship between knowledge management and performance of apparel sector SMEs. As per the formula 2, Sobel test statistic is 7.445 and the critical value of the standard normal distribution at 5% level of significance is 1.96. It says knowledge management also has a mediate effect to the relationship between employee training and performance of apparel sector SMEs. The mediation of the both directions reveals employee training has a partial mediate effect between the relationship of knowledge management and performance of apparel sector SMEs. A similar argument was discussed by Byukusenge, & Munene (2017). Although, hypothesizes which have been developed in line with the proposed study were statistically proven (table 5) there were limited studies on knowledge management and performance of apparel sector

SMEs in Sri Lanka, especially on the mediation effect. Hence, the empirical findings of the study further contribute to the existing literature on the area of the study.

In view of the empirical evidences of the study, managing of knowledge asset in apparel sector SMEs in Sri Lanka through better knowledge management and employee training should be viewed by the owners of those SMEs as an important practice which will enhance performance of the SMEs despite of many challenges such as cost and other difficulties they encounter when implementing knowledge management at the work place (Narayanasamy & Shetty, 2008) and also providing training to the employees (Priyantha & Premarathne, 2015).

### **5.1 Conclusion and Recommendation**

The findings of the study empathize knowledge management and employee training are in existence at average level in the apparel sector SMEs in Sri Lanka and successful implementation of those practices enhance performance of the apparel SMEs. A partial mediation effect of employee training between the relationships of knowledge management and performance of the apparel sector SMEs is further highlighted. Accordingly, the study findings encourage owner of apparel sector SMEs to continue knowledge management practices and employee training at the work places focusing to enhance export performance in a situation where export earnings of the apparel sector SMEs have been stagnating over the years. Hence, successful implementation of knowledge management practices and employee training at the work place are the practical solutions for the owners of those SMEs to overcome the stagnation thereby thriving the county from the existing USD 5 billion export revenue land mark to further heights of USD 8 billion which is the ambitious export target set for the year 2025 by Sri Lanka Exports Development Board.

### **5.2 Limitation and Future Research**

First limitation: The time horizon of the proposed study is a cross – sectional. Accordingly, data were gathered from the respondents just once, over a specific period of time. Hence, a longitudinal study is to be carried out to gather data at two different points in time in the future researches proving opportunities to the respondents to provide answers across a period of time instead of one-shot kind thereby clearly identifying the cause and effect relationships though the longitudinal study process though it is costly and more time consuming when compared to the cross-sectional studies (Sekaran & Bougie, 2016, p, 106 – 107).

Second limitation: The study was focused to one particular country and one particular export category without considering other export categories. Also, population sample taken for the study was only from the exporters of apparel SMEs who engaged exporting in 2017 without taking other export statistics from the previous years although Sri Lanka Export Development Board has already published annual export statistics from 2006 onwards with the annual publication of Export Performance Indicators of Sri Lanka. Accordingly, collection of statistical data was also restricted to one single government

institute of Sri Lanka without taking the relevant export statistics from the other government institutions.

Third limitation: The data analysis was also done by using only one statistical software package to generate the results without using other analytical software packages or combination of them. However, confining to the one software package (SPSS version 21) has not been affected to the results as the reliability of the questionnaire was tested (table 1) with the accepted Cronbach Alpha values before the operationalization of full study. Further, SPSS analysis is more appreciate as per the research objectives of the study. However, the above limitations encourage more studies to further generalize the validity of the outcomes.

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