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The role of sustainable HRM in supply chain, profitability and resource utilization

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ABSTRACT

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The objective of this study was to examine the role of sustainable human resources management (HRM) in supply chain, profitability and resource utilization. The mediating role of operational accuracy was also examined. Finally, the relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization were also examined. The relationship was investigated among the cement manufacturing companies and cement manufacturing companies of Indonesian were selected for the purpose of this study. Finally, data were collected from the Indonesian companies and employees of these companies were the respondents of the study. Finally, 450 questionnaires were distributed among the cement manufacturing companies. The results of the study show that sustainable HRM has a major role to increase operational accuracy. Sustainable HRM practices had a positive effect on supply chain, profitability and resource utilization. Moreover, operational accuracy maintained a positive role to enhance supply chain, profitability and resource utilization among the cement manufacturing companies. Moreover, sustainable HRM showed positive role in operational accuracy and operational accuracy showed positive role to enhance supply chain, profitability and resource utilization.

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1. Introduction

In the current competitive environment, the competition among the various industries is increasing which requires higher performance from the companies to survive in the market. As with the increase in the companies, the competition is also increasing. The competition is also increasing in the cement industry. Number of companies in the cement industry are increasing day by day and in the same direction the competition in this industry is also increasing with great speed. However, the increasing competition in this industry requires better performance of the companies which is not easy to achieve. As there is a significant relationship between competition and performance (Deng, Zhang, Ahmad, & Draz, 2019; Pöchmüller, Schwingshackl, Colombani, & Hoffmann, 2016) which shows that to achieve the better performance, the survival in the competitive environment is quite important and it is one of the challenges for businesses.

Along with the other countries, the Indonesian cement industry also plays an important role through different aspects. This industry in Indonesia has several benefits to Indonesia. For instance, the cement industry has important participation to increase economic growth. As this industry generates heavy return which has a contribution to increase the overall nation's income. Increase in the revenue of the Indonesian cement industry also increases the economic contribution. Furthermore, it also has contributions at the local level in Indonesia. At the local level, the cement manufacturing companies are contributing to the welfare of the people by providing job opportunities. Hence, in this direction, the cement industry contribution to create employment opportunities cannot be neglected. Increasing contribution of cement industry in the economy as well as at local level required better performance of this industry. Higher performance of Indonesian cement industry is required to contribute to all sectors such as local and national level. The contribution of this industry can also be increased at international level by exporting cement to other countries. Hence, the cement industry has vital importance among various countries (Omrani,

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Jafari, & Mansori, 2019; Shubbar et al., 2019). However, the Indonesian cement industry is facing several issues in relation to the performance as well as other related industries having negative influence on the industry. Number of issues in the cement companies has a negative influence on overall performance. For instance, this industry is facing issues related to the supply chain. As the supply chain is the most important part of various companies (Ahmed et al., 2020), therefore, the low level of supply chain among the companies has negative influence. Moreover, these companies are facing low profitability. Low profitability is also one of the issues in this industry. The profitability is the major objective of the companies (Darina, Azam, & Bayu, 2020), therefore, it should be increased through different strategies. Finally, resource utilization is an issue in these companies. Resource utilization is a major part of cement manufacturing companies. However, misuse of resources shows a negative effect on the companies and decreases the overall performance. Hence, the issues related to the supply chain, profitability and resource utilization must be resolved.

According to the current study, sustainable human resource management (HRM) has the ability to increase the performance by decreasing these issues. Better implementation of sustainable HRM has positive influence to increase the performance through operational accuracy. HRM practices has major importance to train the employees to do operations in a better way (Kerdpitak & Jermittiparsert, 2020). Accuracy in the operation has the potential to increase the supply chain, profitability and resource utilization. Cement companies should have a competent HRM team to select the competent people for jobs in the related field. Hiring of incompetent employees in the organization may lead to decrease the performance by decreasing the operational accuracy. Therefore, the current study is one of the attempts to highlight the role of sustainable HRM and operational accuracy in supply chain, profitability and resource utilization. Sustainable HRM is important because several studies examined the idea in several companies and found valuable results (Giannakis, Chalikias, & Tsigioti, 2019; Guerci, Decramer, Van Waeyenberg, & Aust, 2019). Hence, Indonesian cement manufacturing companies should promote supply chain, profitability and resource utilization with the help of sustainable HRM and operational accuracy. Hence, the objective of this study is to examine the role of sustainable HRM in supply chain, profitability and resource utilization. The relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization were examined. Number of studies examined the cement industry in the literature (Clavier, Watts, Liu, Ferraro, & Townsend, 2019; Gonçalves, Silva, de Brito, Fernández, & Esquinas, 2020), however, literature have not examined the effect of sustainable HRM and operational accuracy on supply chain, profitability and resource utilization in the cement industry of Indonesia.

2. Literature Review

Cement industry is one of the most important industries globally. As this industry has the most important role in the construction industry. Construction work in the whole world is majorly based on the cement industry. As the construction work is increasing in the countries, in the same direction, it also required heavy production of cement to fulfil the growing requirement of cement. Work in the construction industry is not possible without the participation of the cement industry. Therefore, construction companies are also dependent on cement companies. The construction companies of Indonesia are also majorly based on the cement industry. However, to fulfil the growing importance of the cement industry in Indonesia, it requires higher performance of this industry. As previous studies show that higher performance of cement industry is required to fulfil all the requirements (Omrani et al., 2019; Saleh, El-Sheikh, Elshereafy, & Essa, 2019; Sarc, Seidler, Kandlbauer, Lorber, & Pomberger, 2019; Shubbar et al., 2019). Performance of this industry can be increased with the help of different ways. The performance can be increased with the help of sustainable HRM practices. Better practices of sustainable HRM can increase the performance through operational accuracy. According to this study, better performance requires a better supply chain system. High profitability and proper resources utilization. Lacking in any area can decrease the performance. For instance, the lack of a supply chain can decrease the overall performance. Lacking in profitability will lead to the failure of major objectives of the cement companies and lacking in resources utilization has the potential to decrease the performance of this industry.

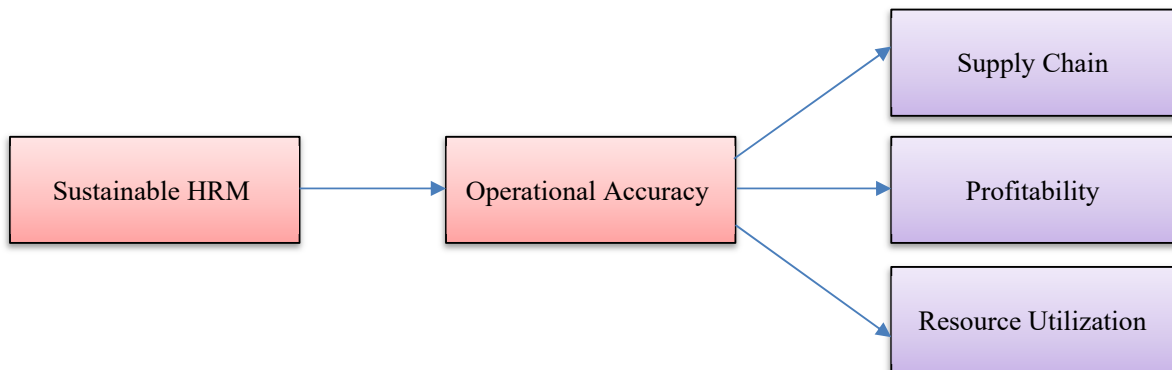


Fig. 1. Theoretical framework of the study showing the relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization

Therefore, it is really important for the cement industry to enhance overall performance. Therefore, this study is an attempt to show the role of sustainable HRM in supply chain, profitability and resource utilization. Fig. 1 shows the relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization. Human resource is the vital part of any industry. In each company, HRM has a separate department which has several duties to perform. The major role of the human resource department is to handle the employees of the company. It has the responsibility to recruit talented employees for the welfare of the company and to fulfill the needs of the company. The transfer of the employees from one department to another department is also the duty of the human resource team. Moreover, the training activities for the employees are also handled by the HR department. Therefore, it is central to the operations of the company. Better training of the employees shows a positive effect on their working which has a positive role to enhance the performance. Therefore, training has vital importance in operational accuracy (Ahmad et al., 2019; Maina & Bula, 2019).

Hypothesis 1. *Sustainable HR has a relationship with operational accuracy.*

Furthermore, operational accuracy has a relationship with the supply chain. Sustainable HR effect on operational accuracy and operational accuracy has an effect on supply chain. In the cement industry, the supply chain plays a critical role. In cement manufacturing companies, the supply of raw material has vital importance. The timely manufacturing of cement is based on the timely delivery of raw material to the companies. Furthermore, the supply chain is also vital to deliver cement to the customers which is important because it has an effect on the satisfaction level of employees. Previous studies show that the supply chain has a relationship with the cement industry (Khaksar, Abbasnejad, Esmaeili, & Tamošaitienė, 2016; Sharma & Khanna, 2020). Increase in the supply chain among the cement making companies increases the performance of these companies which is important and the major objective of all the companies. Therefore, the operational performance in cement companies has a vital role in the supply chain. The smooth working of operations in the cement companies is the guarantee of supply chain smooth working which leads to the following hypothesis.

Hypothesis 2. *Operational accuracy has a relationship with the supply chain.*

Moreover, according to the current study, operational accuracy also has a relationship with profitability. Profitability is the most vital area of any organization including cement manufacturing companies. As profitability is the very first objective of companies which leads to success in the market. Low profit generating companies cannot survive in the market since heavy investment in the market always requires considerable profit to pay back the invested amount and to increase the level of success by maintaining the business activities. However, the low profit level among the cement companies cannot compete in the market. As various previous studies show the important relationship of profitability with performance among the various companies (Murty & Chowdary, 2018; Snapp et al., 2018). In this direction, operational accuracy has a vital influence on profitability. Increase in the operational accuracy has a significant relationship with profitability.

Hypothesis 3. *Operational accuracy has a relationship with profitability.*

Finally, operational accuracy also has a relationship with resource utilization. Resources utilization is the major area of any organization. To get higher performance, proper utilization of resources is most important. Because the sources are the key part of any organization for the performance (Altaf, Hameed, Nadeem, & Arfan, 2019), however, improper utilization of resources has a negative effect on the performance. Misutilization of resources is also common among the companies which shows a negative effect on performance. Therefore, companies should avoid misutilization of resources (Rajan et al., 2019). In proper utilization of resources, operational accuracy is most important. Therefore, increase in operation accuracy increases the proper utilization of resources. Nevertheless, this study also examining the mediating role of operational accuracy which is highlighted in following hypotheses:

Hypothesis 4. *Operational accuracy has a relationship with resource utilization.*

Hypothesis 5. *Operational accuracy mediates the relationship between sustainable HRM and supply chain.*

Hypothesis 6. *Operational accuracy mediates the relationship between sustainable HRM and profitability.*

Hypothesis 7. *Operational accuracy mediates the relationship between sustainable HRM and resources utilization.*

3. Research Methodology

The relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization were examined after designing the questionnaire. For the design of the questionnaire, five variables; sustainable HRM, operational accuracy, supply chain, profitability and resource utilization were measured. The measures for these variables were adapted from the previous studies. Questionnaire was designed for data collection in which personal information of the respondents were also noted such as age, income, education and marital status to get findings related to the demographics of the respondents. The second section of the study was based on the scale items related to the sustainable HRM, operational accuracy, supply chain, profitability and resource utilization. Hence, a survey was applied in this study for data collection (Hameed & Naveed, 2019). For this study, the cement industry of Indonesia was selected. Cement industry was selected because this industry was facing several issues related to the supply chain, profitability and resource utilization. Therefore,

this study is an attempt to examine the solution for these issues. Therefore, data was collected from the cement manufacturing companies of Indonesia. Employees of these companies were the respondents of the study. Finally, 450 questionnaires were distributed among the cement manufacturing companies. From total questionnaires, 230 was used for data analysis. Simple random sampling was applied for data collection (Siuly, Li, & Wen, 2011). Before applying simple random sampling, the cluster sampling was applied to make clusters (Ul-Hameed, Mohammad, Shahar, Aljumah, & Azizan, 2019). Additionally, after data collection, the current study examined the missing value in the data (Aydin & ŞENOĞLU, 2018). As the missing value has a tendency to affect the original results of the study. Missing values as well as outliers are given in Table 1. Other errors such as normality can also affect the results. However, the current study used Partial Least Square (PLS) which is quite suitable to analyze data both in normal and non-normal causes (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014; Hair, 2010; Hair Jr, Hult, Ringle, & Sarstedt, 2016).

Table 1
Data Statistics

	No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
SHRM1	1	0	3.643	4	1	5	0.998	-1.25	-0.614
SHRM2	2	0	2.988	4	1	5	1.16	-0.663	-1.387
SHRM3	3	0	3.476	4	1	5	1.21	-0.519	-0.636
SHRM4	4	0	3.458	4	1	5	1.262	-0.698	-0.523
SHRM5	5	0	3.375	4	1	5	0.943	-1.869	-0.444
SHRM6	6	0	2.952	4	1	5	1.285	-0.823	-0.521
SHRM7	7	0	3.506	4	1	5	1.185	-0.61	-0.458
SHRM8	8	0	3.577	4	1	5	1.162	-0.344	-1.637
OA1	9	0	3.696	4	1	5	0.967	-1.492	-0.777
OA2	10	0	3.571	4	1	5	1.27	-0.776	-0.557
OA3	11	0	2.953	4	1	6	1.336	-0.972	-0.419
OA4	12	0	3.542	4	1	5	1.174	-0.478	-1.624
OA5	13	0	3.571	4	1	5	1.183	-1.729	-0.488
SUC1	14	0	3.524	4	1	6	0.915	-0.599	-0.388
SUC2	15	0	3.661	4	1	5	1.028	-0.638	-0.307
SUC3	16	0	2.985	4	1	5	1.053	-0.752	-0.295
SUC4	17	0	3.458	4	1	5	1.169	-1.395	-0.62
PRO1	18	0	3.494	4	1	5	0.968	-0.718	-0.535
PRO2	19	0	3.411	4	1	5	1.265	-0.899	-1.439
PRO3	20	0	3.565	4	1	5	1.208	-0.631	-0.523
PRO4	21	0	3.595	4	1	5	1.181	-1.433	-0.591
RU1	22	0	2.996	4	1	5	1.267	-0.492	-1.777
RU2	23	0	3.583	4	1	5	1.288	-0.777	-0.582
RU3	24	0	3.506	4	1	6	1.309	-0.89	-0.439
RU4	25	0	3.625	4	1	5	1.199	-0.443	-0.686
RU5	26	0	3.958	4	1	5	0.96	1.498	-1.139
RU6	27	0	3.958	4	1	5	1.014	0.565	-0.953

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

4. Findings

Utilization of PLS for data analysis is most effective to get results from primary data (Hair, 2010; Hair, Sarstedt, Pieper, & Ringle, 2012; Henseler et al., 2014). It is given in Fig. 2 that sustainable HRM is measured by using eight scale items. Operational accuracy is measured through five scale items, supply chain is measured through four scale items, profitability is measured through four scale items and finally, resource utilization is measured through four scale items. Two items were excluded from the survey due to low factor loadings. In the current study, as shown in Table 2, all the scale items for all the variables; sustainable HRM, operational accuracy, supply chain, profitability and resource utilization have factor loadings above minimum threshold of 0.5.

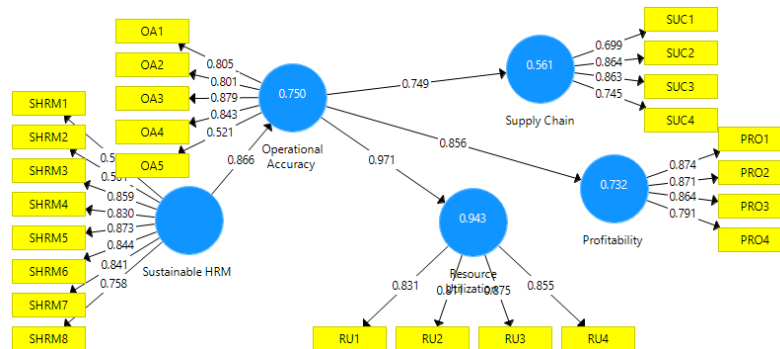


Fig. 2. Measurement Model

Table 2
Factor Loadings

	Operational Accuracy	Profitability	Resource Utilization	Supply Chain	Sustainable HRM
OA1	0.805				
OA2	0.801				
OA3	0.879				
OA4	0.843				
OA5	0.521				
PRO1		0.874			
PRO2		0.871			
PRO3		0.864			
PRO4		0.791			
RU1			0.831		
RU2			0.811		
RU3			0.875		
RU4			0.855		
SHRM1				0.519	
SHRM2				0.501	
SHRM3				0.859	
SHRM4				0.83	
SHRM5				0.873	
SHRM6				0.844	
SHRM7				0.841	
SHRM8				0.758	
SUC1					0.699
SUC2					0.864
SUC3					0.863
SUC4					0.745

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

It is given in Table 3 that; sustainable HRM, operational accuracy, supply chain, profitability and resource utilization have composite reliability (CR) above 0.7. Moreover, it is found that average variance extracted (AVE) is above 0.5 for sustainable HRM, operational accuracy, supply chain, profitability and resource utilization. Hence, both CR and AVE achieved the minimum level. Finally, the last step of PLS-SEM is discriminant validity, given in Table 4 and achieved with the help of cross-loadings (Fornell & Larcker, 1981).

Table 3
Reliability and Convergent Validity

	Alpha	rho A	CR	AVE
Operational Accuracy	0.83	0.853	0.883	0.609
Profitability	0.872	0.874	0.913	0.724
Resource Utilization	0.864	0.866	0.908	0.711
Supply Chain	0.81	0.834	0.873	0.633
Sustainable HRM	0.894	0.917	0.917	0.588

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

Table 4
Cross-Loadings

	Operational Accuracy	Profitability	Resource Utilization	Supply Chain	Sustainable HRM
OA1	0.805	0.654	0.821	0.551	0.64
OA2	0.851	0.716	0.814	0.515	0.684
OA3	0.879	0.746	0.865	0.643	0.757
OA4	0.843	0.736	0.826	0.565	0.767
OA5	0.721	0.44	0.374	0.703	0.493
PRO1	0.708	0.874	0.729	0.615	0.805
PRO2	0.763	0.871	0.766	0.662	0.857
PRO3	0.742	0.864	0.737	0.691	0.826
PRO4	0.696	0.791	0.704	0.577	0.706
RU1	0.799	0.657	0.831	0.551	0.65
RU2	0.776	0.721	0.811	0.526	0.681
RU3	0.864	0.771	0.875	0.651	0.749
RU4	0.835	0.761	0.855	0.57	0.767
SHRM1	0.429	0.362	0.361	0.557	0.519
SHRM2	0.387	0.328	0.281	0.548	0.501
SHRM3	0.75	0.77	0.75	0.873	0.859
SHRM4	0.715	0.853	0.718	0.89	0.83
SHRM5	0.751	0.857	0.754	0.895	0.873
SHRM6	0.729	0.778	0.732	0.899	0.844
SHRM7	0.72	0.827	0.702	0.872	0.841
SHRM8	0.706	0.78	0.696	0.874	0.758
SUC1	0.457	0.401	0.37	0.699	0.842
SUC2	0.524	0.511	0.437	0.864	0.895
SUC3	0.495	0.509	0.427	0.863	0.88
SUC4	0.776	0.81	0.778	0.745	0.826

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

Further to this study, after the factor loadings, the structural model of PLS was preferred to examine the effect of sustainable HRM on operational accuracy, the effect of operational accuracy was examined on the supply chain. Moreover, the effect of operational accuracy was examined on profitability and finally, the effect of operational accuracy was examined in resource utilization. These relationships were examined with the help of PLS-SEM (Addison et al., 2020; W. U. Hameed, Basheer, Iqbal, Anwar, & Ahmad, 2018; Henseler & Chin, 2010; Henseler & Fassott, 2010; Henseler, Ringle, & Sinkovics, 2009) as shown in Fig. 3. Finally, the results in Table 5 shows that sustainable HRM has a positive effect on operational accuracy. Better sustainable HRM has a positive role in operational accuracy. Moreover, it is found that operational accuracy has a positive effect on the supply chain. Operational accuracy has a positive effect on profitability. Finally, operational accuracy has a positive effect on resource utilization. Hence, operational accuracy has a significant positive effect on supply chain, profitability and resource utilization.

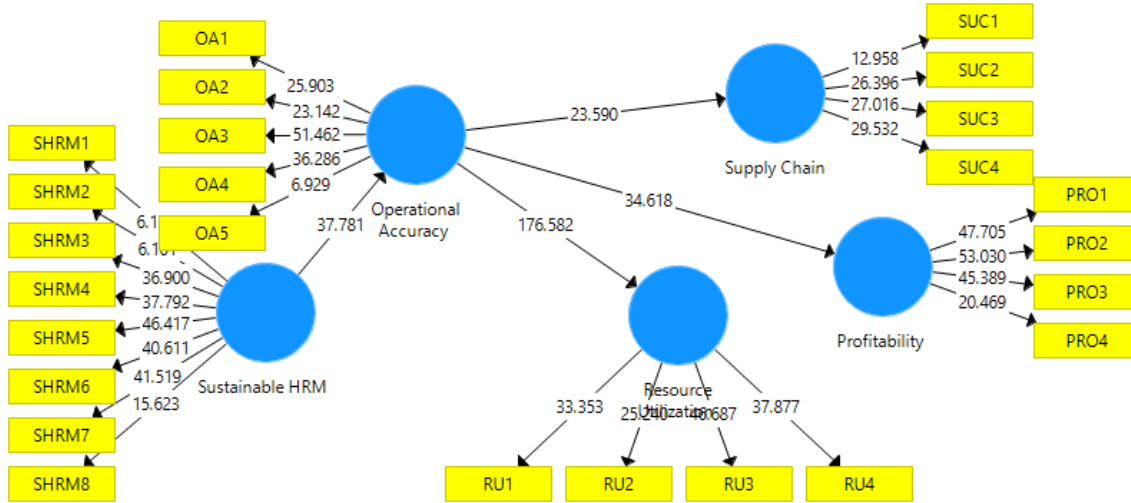


Fig. 3. Structural Model

Table 5
Direct Effect Results

	(O)	(M)	SD	T Statistics	P Values
Operational Accuracy → Profitability	0.856	0.857	0.025	34.618	0
Operational Accuracy → Resource Utilization	0.971	0.971	0.006	176.582	0
Operational Accuracy → Supply Chain	0.749	0.751	0.032	23.59	0
Sustainable HRM → Operational Accuracy	0.866	0.868	0.023	37.781	0

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

The mediating role of operational accuracy was examined between sustainable HRM and supply chain. The mediating role of operational accuracy was examined between sustainable HRM and profitability. Finally, the mediating role of operational accuracy was examined between sustainable HRM and resource utilization. The mediation effect results are given in Table 6. The mediating role of operational accuracy between sustainable HRM and supply chain is significant and positive with t-value 16.065. The mediating role of operational accuracy between sustainable HRM and profitability is significant and positive with t-value 18.877. The mediating role of operational accuracy between sustainable HRM and resource utilization is significant and positive with t-value 35.339. Thus, operational accuracy as mediating variables reflects the positive effect of sustainable HRM on supply chain, profitability and resource utilization. The mediation effect of operation accuracy was examined by following the instructions of Preacher and Hayes (2008). Moreover, all the mediation effect histogram is given in Figure 4, 5 and 6. Finally, this study also examined the r-square value which is 0.561 for the supply chain which is moderate. The r-square for profitability is 0.732 which is strong (Chin, 1998). Finally, the-r-square value for resources utilization is 0.943 which is also strong.

Table 6
Indirect Effect Results

	(O)	(M)	SD	T Statistics	P Values
Sustainable HRM → Operational Accuracy → Profitability	0.741	0.744	0.039	18.877	0
Sustainable HRM → Operational Accuracy → Resource Utilization	0.841	0.843	0.024	35.339	0
Sustainable HRM → Operational Accuracy → Supply Chain	0.648	0.652	0.04	16.065	0

Note: SHRM = Sustainable HRM; OA = Operational Accuracy; SUC = Supply Chain; PRO = Profitability; RU = Resource Utilization

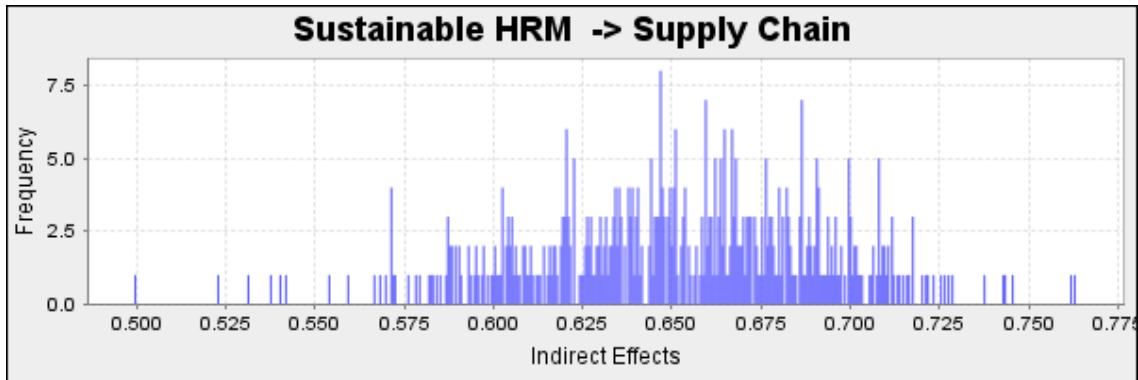


Fig. 4. Indirect Effect Histogram: Sustainable HRM \rightarrow Operational Accuracy \rightarrow Supply Chain

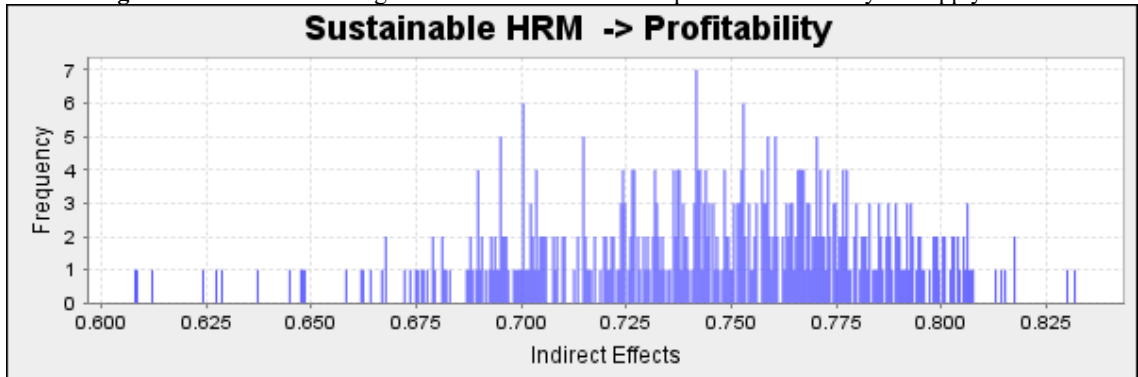


Fig. 5. Indirect Effect Histogram: Sustainable HRM \rightarrow Operational Accuracy \rightarrow Profitability

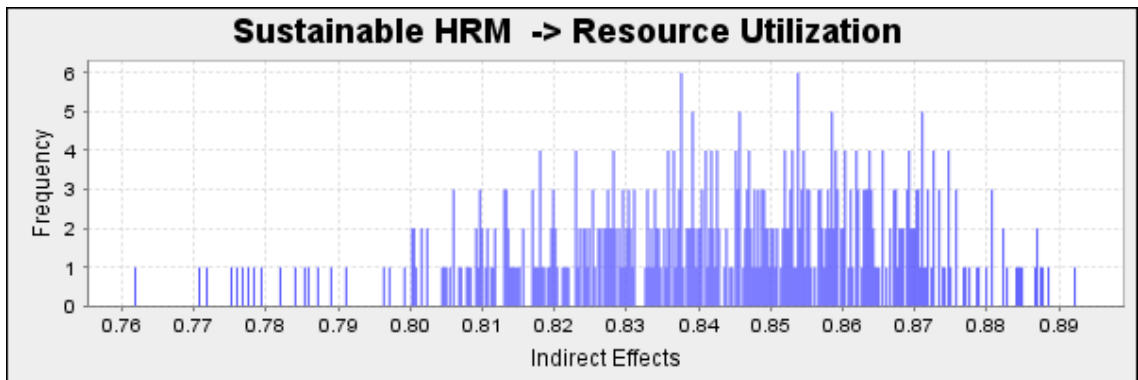


Fig. 6. Indirect Effect Histogram: Sustainable HRM \rightarrow Operational Accuracy \rightarrow Resource Utilization

5. Conclusion

The current study is the vital study in the field of cement industry and examined the relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization. Objective of this study was to examine the role of sustainable HRM in supply chain, profitability and resource utilization. Data were collected from the Indonesian companies and employees of these companies was the respondents of the study. Outcomes of the study provided vital outcomes and found the major role of supply chain activities in the field of cement industry. Better supply chain activities among the cement companies play major contribution to support cement industry. Moreover, it is found that profitability is key of success in cement industry. Along with this, resource utilization has major participation to increase the performance of this industry. However, all these elements; supply chain, profitability and resources accuracy can be increased with the help of sustainable HRM. Results of the study shows that sustainable HRM has major role to increase operational accuracy. Sustainable HRM practices has positive effect on supply chain, profitability and resource utilization. Moreover, operational accuracy has positive role to enhance supply chain, profitability and resource utilization among the cement manufacturing companies. As sustainable HRM shows positive role in operational accuracy and operational accuracy shows positive role to enhance supply chain, profitability and resource utilization. Sustainable HRM has positive effect on supply chain, profitability and resource utilization. It is found that sustainable HRM has positive effect on operational accuracy. Increase in sustainable HRM increases the operational accuracy. Therefore, it is found that increase in the operational accuracy increases the supply chain

activities. Moreover, increase in operational accuracy increases the profitability of cement manufacturing companies. Finally, operational accuracy has the ability to increase the resource utilization.

5.1 Implications of the Study

The relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization which is examined in this study has several implications for the literature. As this relationship is first examined in the cement industry. Therefore, it has influenced the cement industry literature. Particularly, the literature on Indonesian cement industry was missing to examine this relationship. The effect of sustainable HRM in relation to the supply chain, profitability and resource utilization is first time examined in this study. Therefore, this study has several implications for the theory. The major contribution of this study belongs to the mediating role of operational accuracy. The mediating role of operational accuracy was examined between sustainable HRM and supply chain. The mediating role of operational accuracy was examined between sustainable HRM and profitability. Finally, the mediating role of operational accuracy was examined between sustainable HRM and resource utilization. Moreover, the relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization have several practical implications. According to the findings, Indonesian cement companies should enhance the supply chain, profitability and resource utilization to improve sustainable HRM practices. Cement companies should enhance operational accuracy to promote supply chain, profitability and resource utilization.

5.2 Limitations and Future Directions

After examining the comprehensive relationship between sustainable HRM, operational accuracy, supply chain, profitability and resource utilization, this study found few limitations which could be the future directions. First, the study examined the sustainable HRM effect on supply chain, profitability and resource utilization, however, there are various other factors such as competitive environment and market conditions which may affect supply chain, profitability and resource utilization of cement companies. Hence, future studies should include various external factors. Second, this study examined the mediation effect of operational accuracy and data were collected from employees of the cement industry. Various questions included in the survey were expecting biased responses, therefore, interviews are better than questionnaires in the current study. Hence, future study should include interviews in the current study.

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