The Vitality of Employee Based Pharmaceutical Brands' Equity in Indonesia: Relationship between Environmental Management Accounting and Organization Performance

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ABSTRACT

Environmental management accounting and employee-based brand equity are experienced by every organizations' front-line employees. This study has a vital aim to analyze the relationship between environmental management accounting and organizational performance, while the employee-based brand equity and its aspects such as brand endorsement, brand consistent behavior, band allegiance have played an important mediating role between them. The data has been collected from 399 individuals, consisting of front-line employees of pharmaceutical sectors. The data has been analyzed by applying various software such as AMOS and SPSS. The data analysis techniques that have been used are SEM and CFA. The discussion has shown that all the hypotheses have been accepted. The results have indicated that employee-based brand equity and its aspects such as brand endorsement, brand consistent behavior, brand allegiance have played an important mediating role between environment management accounting

and organizational performance. The study is also effective in terms of theoretical, managerial, and practical implications. The study has aided employees, companies, and managers to understand the role of environmental management accounting, employee-based brands' equity in maintaining the performance of an organization.

Keywords: environmental management accounting, employee-based brands' equity, brand endorsement, brand consistent behavior, brand allegiance, organizational performance.

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INTRODUCTION

Pharmaceutical industries undergo a wide range of chemical synthesis during the manufacturing of different products (Kazantzi, Kazi, Eljack, El-Halwagi, & Kazantzis, 2019). The manufacturing processes of the pharmaceutical industries consumes large amounts of energy and this results in the production and emission of greenhouse gases (GHG) along with the high amounts of waste generation (Chaturvedi, Sharma, Dangayach, & Sarkar, 2017). The increasing concerns for environmental sustainability and awareness of

environmental issues resulted in careful considerations, from the pharmaceutical industries, for the environmental conservation by reducing the generated waste and emission of harmful greenhouse gases (Pinto, Pedroso, Moraes, Pilatti, & Picinin, 2018). Growing interest in the environmental sustainability also impacts the employee's behavior towards an organization (Wu & Kimura, 2018) because society is increasingly concerned about the environmental problems and thus the employees also prefer the firms that look for environmental sustainability (Mohd Fuzi, 2019). Below figure present the firms performance in Indonesia.
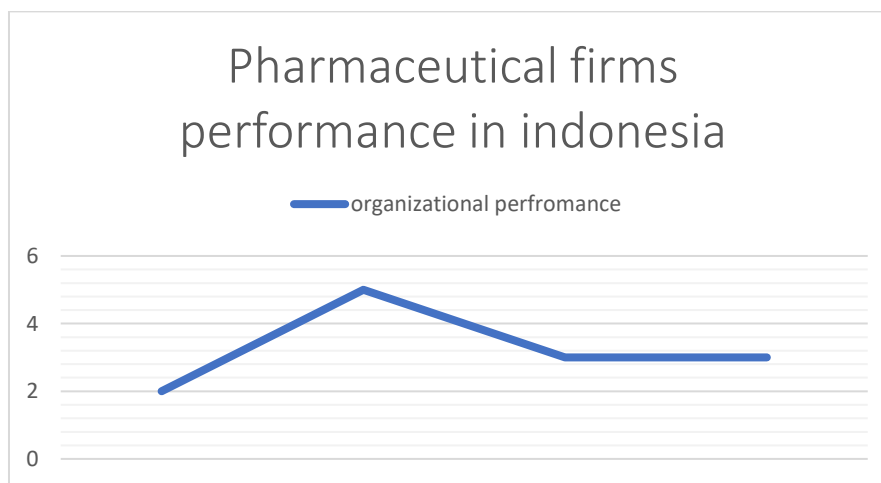

Figure 1: Pharmaceutical Firms Performance in Indonesia

Organizations have to make sure that their employees are loyal to the organization and their future stay at the company (Yang, 2019). To make sure the attachment and loyalty of employees towards the organization, the top management have to make the organizational environment suitable and friendly and also have to deal with the social issues that may impact employee's behavior (Srivastava Rajesh, 2018). One

such issue is the environmental conservation, literature studies shows that perceived environmental uncertainty influence the employee based brand equity significantly (Poulis & Wisker, 2016). Along with the employee's preference, shareholder's behavior is also affected by the environmental orientation of the firm (Mokhtar, Jusoh, & Zulkifli, 2016).

Loyal and satisfied employees provide many benefits to their organizations and firm owners know the importance of such employees (Sürücü, Öztürk, Okumus, & Bilgihan, 2019). Thus, they look for ways to make their employees stay longer for the better performance of the organization (Molinillo, Ekinci, & Japutra, 2019). The organizations having considerations regarding environmental sustainability sends a message to its employees, stakeholders and consumers that the firm is sensitive towards environmental issues (Achilleas Boukis & Christodoulides, 2018). This makes the consumers and employees loyal towards the organization because of their commitment to protect the environment (Wang & Sengupta, 2016). This practice is a sort of internal branding that makes sure that the firm will fulfill the expectations of the employees, which will increase self-esteem of the employees. It also strengthens the relationship of the employees with the company and influence employees' perspective towards the firm (Piehler, Grace, & Burmann, 2018). This will eventually build trust in the workers and that trust in the firm leads towards the better performance and productivity that results in success of the organization. The psychological behavior of employees is changed as a result and the feeling of belongingness retain them in the organization (Kashive & Khanna, 2017).

The impact of satisfaction of employees is directly linked with the performance of the organizations and also with their commitment with the company and productivity, literature studies have also shown proves of this (De Neve, Krekel, & Ward, 2019). But the impact of employee based brand equity on the relationship of environmental management accounting and the organization's performance is not well studied and the literature is deficient regarding this issue. Also the relationship between the two factors is also not prioritized and there is a serious lack in literature about this. But because of the growing concerns for environmental issues and societal pressure on the firms for environmental conservation and reduction of waste and harmful gases, the need to study this relationship has increased. Thus, this research study was conducted to investigate these issues.

TABLE 1. Brand equity and its related Dimensions in pharmaceutical companies

Brand type	Dimension	Dimension	Dimension
Brand equity	Brand loyalty	Brand identity	Brand association
Brand personality	Brand perception	Brand image	Brand recall

The research study will provide efficient information regarding the employee based brand equity and its vitality for the pharmaceutical industries of Indonesia. It will also provide evident knowledge about the relationship of environmental management accounting and the organization's performance. The obtained research results will be beneficial for providing scientific information regarding the impact of employee based brand equity on the relationship of environmental management accounting and the organization's performance. The research findings will enable the firms to get benefits form the practical implications of the study. The study outcomes will also provide information for the future studies that will be of theoretical and practical significance.
Research objectives of the study are following:
1- To investigate the vitality of employee based brand equity of pharmaceutical industry of Indonesia.
2- To investigate the relationship between environmental management accounting and performance of the organizations.
3- To determine the impact of employee based brand equity on the relationship of environmental management accounting with the performance of the organization.
The next chapters of the research thesis will provide further information regarding the selected topic. Chapter 2 will provide the review of literature for the study, chapter three will explain the research methodology used for the study and chapter 4 will describe the results and analysis of the data and the last chapter will conclude the study and will also explain significance of the study along with the limitations.

Literature Review and Theoretical Background
The environmental resources of the world are depleting slowly and organizations can no longer ignore these raising concerns.

Sustainability has become a high priority for organizations in recent times, as they realize their role in the depletion of environmental resources (Dubey, Gunasekaran, & Ali, 2015). The practices aiming towards environmental sustainability are becoming a common practice for developed and responsible organizations. Environmental sustainability is defined as the activities performed under the assumptions of a conscientious interaction with the environment, with the motive of avoiding exhaustion and dilapidation of resources of the nature, in turn allowing for long-standing environmental quality (Lin & Chen, 2017). Thus organizations have started putting sustainability and environmental protection objectives at high priorities. In context of these practices the notion of green intellectual capital has also sparked interest in academicians and practitioners alike (Yong, Yusliza, Ramayah, & Fawehinmi, 2019). The vast knowledge pool and extant literature supports the ideas of sustainability and the business organizations are focusing on the different dimensions of sustainability (Rayner & Morgan, 2018). The environmental, economic and social dimensions of sustainability are being correlated with environmental performance of firms. Additionally, strategists realize the depravity of the situation and believe in the implementation of these strategies at the micro-levels in their organizations as well. In order to attain the goal of organizational sustainability the activities of organizations internally need also be focused upon (Yahya, Arshad, & Kamaluddin, 2015). Researchers have stated before that the effective actions and working stipulations of the human capital has the potential of improving organizational efficiency and performance, whereas it was a positive relation between green employee behaviors and environmental knowledge by Rayner and Morgan (2018). Management's dedication towards sustainability and in general towards anything sparks interest and has the power of influencing

behavior in employees (Akhtar, Khan, Frynas, Tse, & Rao-Nicholson, 2018). Therefore the practices of the top management aimed towards green policies and sustainable actions also motivates the employees in doing the same. The organizational structure, human capital and culture are three tiers of a system that helps in the avoidance of environment harming practices and developing strategies that help reinforce this concept throughout the organization (Akhtar et al., 2018; Yong et al., 2019).

Environmental Management Accounting and Organizational Performance

The concept of environmental management accounting (EMA) gathered attention in late 1970's due to the increased concern about the environmental outcomes of businesses and a regard for the society (Poulis & Wisker, 2016; Schaltegger & Burritt, 2017; Wisker & Kwiatek, 2018). EMA is related to the information needs of managers related to accounting and corporate activities that have a direct impact on the environment, it also takes into consideration the impacts of environment related activities that might have an effect on the organization (Phan, Baird, & Su, 2017). The data gathered through EMA processes helps the organizations in measuring the environmental impacts the business activities are spreading around them and also helps in the decision making processes that lead towards organizational and environmental performance (Fuzi, Habidin, & Effendy, 2016). EMA is further classified as MEMA and PEMA (Fuzi et al., 2016; Fuzi, Habidin, Janudin, & Ong, 2019). MEMA is focused on the environmental characteristics of the organizational activities expressed in terms of monetary units, whereas PEMA is focused on the impact of organization on the natural resources and environment. In simple terms MEMA activities are used to express and measure the organization's financial performance as a consequence of the environment and PEMA activities are directed at effects of organization on the environment (Fuzi et al., 2016). The EMA methodology is focused on the reporting of the basic corporate environmental costs as well as the material related costs. Environmental costs are defined as the inclusion of all costs of those activities that may or have already damaged the environment and also amounts for the costs inculcated for environmental protection e.g. contaminated sites, waste disposals, landfills etc. the EMA process has various techniques, they are characterized as costing analysis (activity based costing, material flow cost accounting, life cycle assessment), investment appraisal (total cost assessment) and performance management (balanced scorecards). Environmental management accounting practices are becoming significant in terms of the environmental evaluation, management, reporting, allocation of costs and performance evaluations (Latan, Jabbour, de Sousa Jabbour, Wamba, & Shahbaz, 2018). EMA practices are carried out for the collection, identification and analysis of information regarding the environmental harm and protection activities carried out by the business, for the purpose of internal reporting and decision making. EMA is a source or managerial activity concerned with the environmental quality and efficiency and also inculcates measures like eco-efficiency to improve management and performance activities targeted at the environment (Phan et al., 2017).

The performance of the organization is governed by the activities and conduct of the business as well as its employees

(Shin & Konrad, 2017). There is a significant relationship between the employees' satisfaction, commitment, retention, productivity and organizational performance (Corvellec, 2018). Almost every individual in today's environment is culturally, socially and politically aware. Employees of the 21st century are concerned about the environment as well and are inclined to work with organizations that share their vision (Dubey et al., 2015). Therefore the inculcation of EMA will have a significant effect on the organizational performance.

H1: There is a significant relationship between EMA and organizational performance.

Employee Based Brand Equity

Employee based brand equity is conceptualized as the effect knowledge relating to the organizations brand has on the employee in relation with his/her work environment (Wisker & Kwiatek, 2019). King, Grace, and Funk (2012) contended that an organization needs t develop brands that are meaningful and relevant. These brands should have characteristics that enable the employee to display his/her values, creating a positive work environment that influence positive behavior at work. There are three dimensions of brand equity, brand allegiance, brand endorsement and brand consistence (King et al., 2012).

The Mediating Effect of Brand Endorsement

Brand endorsement is defined as the degree to which the employee is eager to contend to positive revelations about the organization, speak positively about it to others and recommend the organization to others (Achilleas Boukis & Christodoulides, 2018). Employees who have a positive opinion of their organizations are inherently motivated and influence to speak in high regard about their organizations. Employee advocacy contributes towards positive organizational outcomes and benefits including increased performance, recruitment efficiency, commitment, perceived organizational support and organizational performance (Poulis & Wisker, 2016). The alignment of organizational and employee perspectives also produces possibilities of brand endorsement (Achilleas Boukis & Christodoulides, 2018). Therefore we ca state that employees who are interested in sustainable activities like environmental management accounting will be factors in producing increased organizational performance and brand endorsement ideology will mediate this relationship.

H2: There is a significant mediating effect of brand endorsement on the relationship between EMA and organizational performance.

The Mediating Effect of Brand Consistent Behavior

The performance of employees inside their work environments is a substantial result of their commitment to the organization (Achillleas Boukis & Christodoulides, 2016). Employees who are satisfied and contended with their work environment demonstrate behaviors that aren't formally part of their job requirements. Brand consistency is defined as the behavior of employees that isn't formally prescribed or spoken, but consistent with the ideologies, character and values of the organization (Poulis & Wisker, 2016). The significance of demonstration of such behavior, brand-

supportive behavior- is that although it is optional or non-mandatory it is still considered to be fundamental for achievement of prescribed organizational productivity (Wisker & Kwiatek, 2018). This scenario is often seen actualized in the case of service organizations, where the behaviors required to attain success or influence customers can't always be pre-determined. Much of these behavioral outcomes aren't in the formal control of organizations because most of the times they are demonstrated in consequence of some work-related situation, however this doesn't entail the organization's inefficiency or control issues. Brand consistent behavior or brand citizenship behavior is deemed to be one of the most essential behavioral component of organizational success and performance. This behavior is also demonstrated when the brand's (organization) purpose is matched with the personal values of the employee. Employee becomes an advocate of the brand's message, and demonstrates pivotal behaviors to achieve organizational success (Petrenko, Aime, Ridge, & Hill, 2016). Employees who are concerned about the environment will be highly active in committing towards sustainability and will try to demonstrate activities delineated towards achievement of sustainability. Similarly employees of an organization where EMA is practiced will become factors in the success of organizational performance.

H3: There is a significant mediating effect of brand consistent behavior on the relationship between EMA and organizational performance

The Mediating Effect of Brand Allegiance
Employee's brand allegiance (defined as intentions of purchase in the consumer context) is the intention of employees to remain with the brand (organization) in the future. This dimension is an important part of the employee's brand equity, due to the significant outcomes faced by organization son the loss of knowledgeable workers if they decide to quit (Latan et al., 2018). The economic significance of this behavior or decision is supported by the concept of human capital where employees of an organization are contenders of specific valuable skills, knowledge and experience that creates economic value for organizations through consistent performances and efficiencies (Dubey et al., 2015; King et al., 2012). The retention of knowledgeable and productive employees who demonstrate significant brand related behaviors conceive success for the organizations. The brand success (organizational performance) will probably increase as a consequence of employee retention. Employees whose goals align with that of the organization are expected to demonstrate brand allegiance activities (King et al., 2012; Poulis & Wisker, 2016; Wisker & Kwiatek, 2018, 2019). Employees of an organization interested in the environmental efficacy will be interested in the operationalizing of an EMA system and will likely demonstrate strong allegiance to the organization.

H2: There is a significant mediating effect of brand allegiance on the relationship between EMA and organizational performance.

Research Model
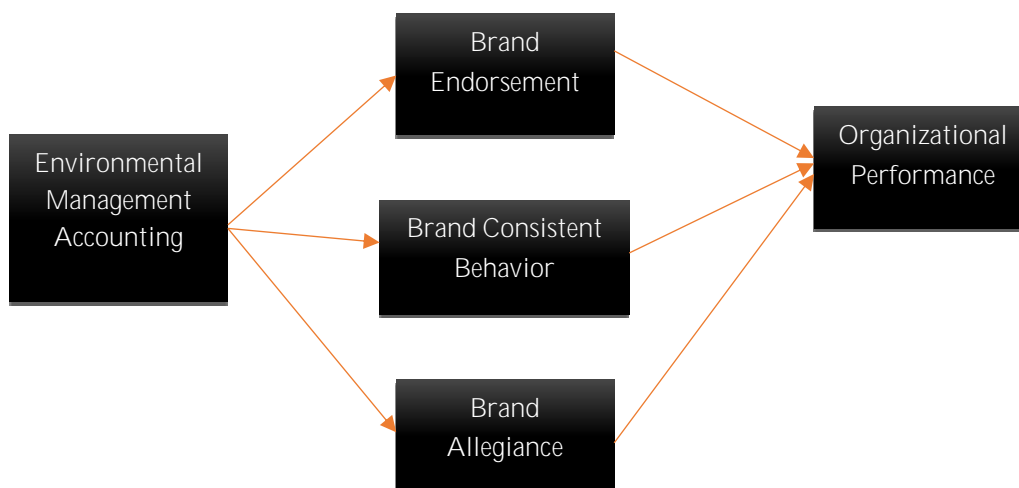
Methodology
To observe the relationship between the concerned research variables i.e. environmental management accounting, and organization performance prevalent in Indonesian pharmaceutical firms, the researcher conducted a field research and surveyed two pharmaceutical firms in Indonesia. Two sampling frames, in which the researcher used hand-delivered questionnaire and online surveys to collect the response data, were considered in the study. As suggested by Fraj-Andre et al in their research that they conducted in 2009, the environmental orientation of a firm or a company has an effect on the size of the firm. Following this context, the

researcher gathered the data sample from two Indonesian pharmaceutical firms that cover market share that of 70%. The two companies that were under this specification were PT Kalbe Farma Indonesia, and PT Kimia Farma Indonesia with 17,000 and 5,758 employees respectively. Due to their large market size, they have a bigger influence on their environmental orientation thus giving the researcher more observing space for the suggested variables. The researcher contacted the production facilities of both firms via email drawn from both companies' official website and asked for their consent on getting responsive data from their employers.

The email contained a detail of the purpose of the study along with the method of administrating the questionnaire.

Sampling Frame 1
The first frame consisted of senior employees of managerial staff, specialists in environmental field and financial executives from pharmaceutical firms' different departments.

In this sampling frame, an online link was sent and the respondents were asked to reply to questions that were based on organizational performance and environmental management accounting, thus data related to these two variables was collected.

Sampling Frame 2
Cross section of staff of both firms was administered in the second sampling frame. The data that was collected in this framework was related to variable i.e. employee based brand equity. Employees from different units of the pharmaceutical firm were the major participants in this framework. Professional assistants approached the employees with previously notified consent forms along with the questionnaires. Their responses were collected along with giving them a note to represent researcher's acknowledgement.

Measurement of variables
To measure the concerned variables in this study, the researcher made use of scales that were used in past research studies and the researchers those of the studies endorsed the validity and reliability of the offered scales. The concerned variable i.e. environmental management accounting (EMA) was calculated via using a scale that was adopted from a study conducted in 2012 by King et al. The scale consisted of 7 items and the validity and reliability of the measure was offered by the past research that shows greater internal consistency (greater than 0.7)

The researcher made use of a scale that consisted of 11 items to measure the other concerned variable that was under study in this research i.e. employee-based brand equity. King et al. in formerly suggested the scale in 2012. The 11 items were divided into 3 parts based on different functionalities of the brand. Four items were those that dealt with brand endorsement, other four with brand allegiance and the remaining three addressed the brand consistent behavior. The next scale that dealt with the relevant variable i.e. organization performance was adapted from the study conducted by Li and Zhang in 2007. The scale consisted of five items that measured the variable using five-point scale. Both measures' Cronbach's Alpha turned out to be more than 0.7, indicating the reliability of the measures.

Control variable
As implied by a research study carried out by Roxas and Coetzer in 2012, the variables that may affect an organization will have different effects on organizations with difference in their size. Thus, conforming to the idea, the researcher has taken into consideration the pharmaceutical firms whose share equal market size. Hence, the variable is controlled and will be considered constant in the research.

Analysis Techniques
In this study, the researcher analyzed the data with the help of SPSS and AMOS that are two software used for statistical data analysis. The results of the data are endorsed for its reliability and validity with the help of analyses done by the software e.g. composite reliability test. Descriptive statistics as well as regression test is carried out using SPSS via using descriptive, reliability and factor analyses. Moreover, AMOS is used in carrying out confirmatory analysis, test for both structure equation modeling and model fitness.

Data analysis and interpretation
Demographic details
The main objective of this study was to know the direct impact of environmental management accounting on organizational performance. The aim of this study was also to know about the important mediating impact of brand endorsement between environment management accounting and organizational performance. The mediating impact of brand consistent behavior between environmental management accounting and organizational performance and the mediating effect of brand alliance between the environmental management accounting and organizational performance was also the core purpose of this study to fulfil. The study took a total sample of 399 individuals, out of which 220 were males and 179 were females. The percentage of males was higher than the females in sample. Out of 399 individuals, 56 were under graduation, 188 were graduates, 117 had master's degree and 38 had some other degree. Out of 399 individuals, 93 were between 18 to 25 years of age, 122 were between 26 to 30 years of age, 124 were between 31 to 35 years of age and 60 were above 36 years of age or of 36 years in age.

Descriptive statistics

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
OrgInnPer	399	1.00	5.00	3.4622	1.22522	-.399	.122
BrandAllg	399	1.00	5.00	3.3546	1.13885	-.498	.122
BrandCoB	399	1.00	5.00	3.2777	1.22293	-.521	.122
BrandEnd	399	1.00	5.00	3.4073	1.25521	-.517	.122
EnvMngAc	399	1.00	5.00	3.4062	1.10194	-.564	.122
Valid N (listwise)	399						

The descriptive stats show the results of the analysis done in order to prove normality and the validity of the data. The sole purpose of the test is to prove whether or not the data is good to go for further testing and analysis and this data shows that there is almost no outlier that is present in the data, there is this column representing values of skewness in the table 1, these values are present in between the values of -1 and +1, which shows that the data is present in the range that accounts

for normality. Moreover, it has also been observed that the data has values that are present in the range and limit of the five-point Likert scale values. The data is valid and sufficiently authentic to proceed for analysis.

Loading and Convergent Validity

Table 3: Factor Loading and Convergent Validity

	1	2	3	4	5	CR	AVE
IP1		.853				0.918	0.844
IP2		.859					
IP3		.872					
IP4		.871					
IP5		.855					
BR1					.823	0.925	0.805
BR2					.762		
BR3					.777		
BC1			.829			0.930	0.835
BC2			.830				
BC3			.835				
BC4			.822				
BE1				.815		0.914	0.839
BE2				.830			
BE3				.822			
BE4				.831			
EM1	.748					0.930	0.744
EM2	.789						
EM3	.754						
EM4	.792						
EM5	.773						
EM6	.767						
EM7	.778						
EM8	.783						
EM9	.780						
EM10	.795						
EM11	.752						

The table produced above has the details for the factor loadings and convergent validity, the factor loading shown for all of the variables present in this study has the value of more than 0.7, it can be seen that all of the factors or the variables are reliable and are also eligible to be tested further with the purpose of analysis and further testing, the level of threshold is in a valid range and also has a authentic sequence as well. The table above shows the value of convergent validity that shows a value more than seventy percent and the value of AVE is also seen to be of a value more than fifty percent.

Discriminant validity

TABLE 4. Discriminant Validity

	BE	IP	BR	BC	EM
BE	0.969				
IP	0.639	0.971			
BR	0.601	0.589	0.897		
BC	0.622	0.603	0.592	0.967	
EM	0.691	0.655	0.726	0.700	0.862

The data present in the table above is of discriminant validity, this discriminant validity is a representation of the extent of the discrimination that is present between the different variables. The table is showing that all of the variables are in a position to discriminate from each other, all of the variables present in the data given are having a loading that differentiates from each other, the loadings are maximum at the end of each variable that is above the value of 0.80 as well. The data is valid for its discrimination and maximum loading values.

Confirmatory Factors Analysis and KMO

TABLE 5. Confirmatory Factors Analysis and KMO

CFA Indicators	CMIN/DF	GFI	IFI	CFI	RMSEA	KMO
Threshold Value	≤ 3	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08	0.6 – 1.0
Observed Value	2.980	0.873	0.970	0.969	0.071	0.931

The table produced above has different values of the KMO, RMSEA, CFI, IFI, GFI and DF. The values have standard values that must be achieved by the given data in order to reach the level of validity and authenticity. In the case of present data, the data has values that are exactly up to the standards set and so the data is present in the validity range as well making it authentic for further testing.
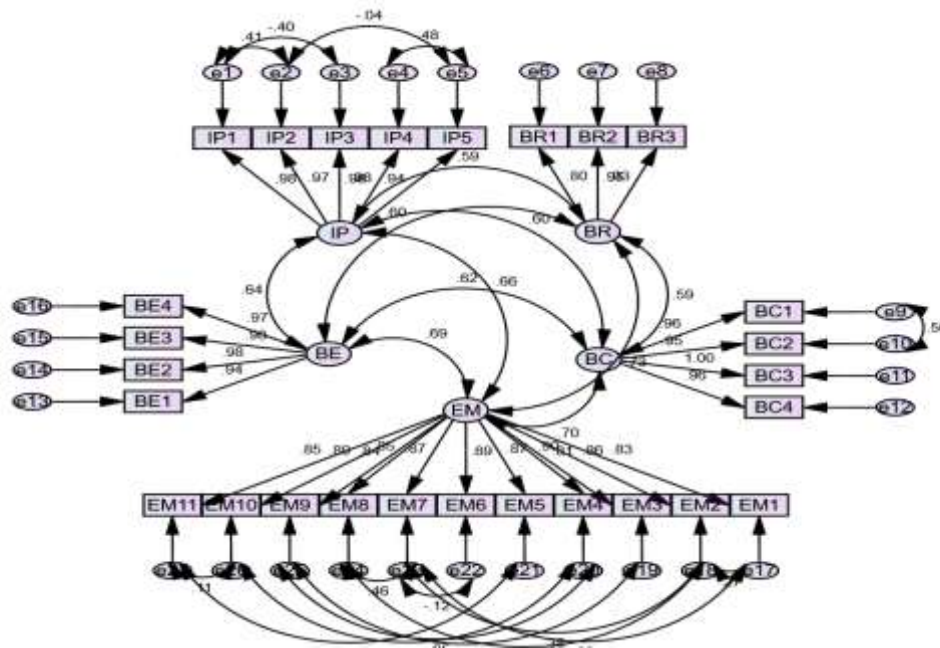

Figure 1: CFA

SEM

TABLE 6. Structural Equation Modeling

	Path		Estimate	S.E.	P	Decision
BrandEnd	<---	EnvMngAc	.665	.043	.000	Accepted
BrandCoB	<---	EnvMngAc	.692	.040	.000	Accepted
BrandAllg	<---	EnvMngAc	.683	.038	.000	Accepted
OrgInnPer	<---	EnvMngAc	.234	.073	.000	Accepted
OrgInnPer	<---	BrandEnd	.281	.045	.000	Accepted
OrgInnPer	<---	BrandCoB	.209	.048	.000	Accepted
OrgInnPer	<---	BrandAllg	.131	.051	.006	Accepted

The table produced above has the values of results of SEM, the table shows that "relation between EMA and OP is significant because the p-value of the results is less than 0.05. The mediating impact of BE between EMA and OP is also significant because its p-value is also less than 0.05. Mediating role of BCB between EMA and OP is significant as well according to the results. At the end the last meditating role of BA is also significant because its p-value is less than 0.05." The screenshot of SEM is given below:
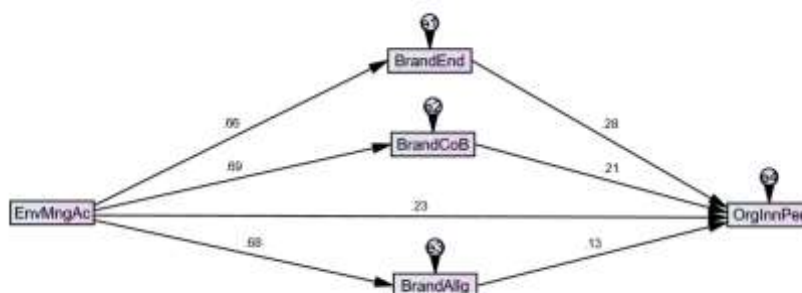

Figure 2: SEM

DISCUSSION AND CONCLUSIONS
DISCUSSION

The main objective of this study was to know the direct impact of environmental management accounting on organizational performance. The aim of this study was also to know about the important mediating impact of brand endorsement between environment management accounting and organizational performance. The mediating impact of brand consistent behavior between environmental management accounting and organizational performance and the mediating effect of brand alliance between the environmental management accounting and organizational performance was also the core purpose of this study to fulfil. This study offered some opinion which are mentioned in this section. The very first opinion was that "the EMA has significant impact on OP". This opinion got accepted based on the study of (Dirgeyasa & Ansari, 2015). The next opinion suggested by the study was that "the mediating impact of BE between EMA and OP is significant". This opinion was accepted as well based on the study of (Khadijah, Kamaluddin, & Salin, 2015). Third opinion suggested by the study was that "the mediating role of BCB between EMA and OP is also significant". Because its p-value is less than 0.05 and also based on the study of (Kis-Katos & Sparrow, 2015). This opinion got accepted. The next opinion offered was that "BA has a significant mediating role between EMA and OP". This opinion was accepted as well. The reason of its significance is less p-value than 0.05 and the study of (Plummer & Boyle, 2016).

CONCLUSION

The major aim of this study is to analyze the important impact of environmental management accounting on organizational performance through the mediating role of employee-based equity and its aspects such as brand endorsement, brand consistent behavior, and brand allegiance. The data has been collected from 399 individuals including both male and female and the result was 100%. The various tests have been applied to analyze the hypotheses of rejection or acceptance such as descriptive statistics, factor loading, and convergent validity, discriminant validity, confirmatory factors analysis and KMO, structural equation modeling. According to the results, the study has concluded that brand endorsement, brand consistent behavior, and brand allegiance have a positive impact on environmental management accounting. The environmental management accounting has increased job satisfaction, and motivation in the employees of pharmaceutical sectors of Indonesia. The organizational performance has a positive impact on environmental management accounting, as the employee-based brands' equity and its aspects have played a mediating role between them. The organization with environmental management accounting represents that organization that takes charge to protect the environmental laws of an organization. The organizational performance has a positive relationship with employee-based brands' equity and its aspects such as brand endorsement, brand consistent behavior, and brand allegiance. This relationship has increased the loyalty in employees and also made the strong brand equity of pharmaceutical firms of Indonesia. Therefore, the performance of pharmaceutical firms in Indonesia has been increased due to environmental management accounting, brand equity, and its aspects.

Policy Implications

This research has provided benefits to the pharmaceutical sectors of Indonesia through the mediating role of employee-based pharmaceutical brands' equity in Indonesia and its three aspects such as brand endorsement, brand consistent behavior, and brand allegiance. The variables of this research study have given benefits to the pharmaceutical sectors of Indonesia. According to this study, environmental management accounting has a positive direct effect on employee-based pharmaceutical brands' equity in Indonesia. It means that environmental management accounting plays a crucial role in increasing brand endorsement and brand loyalty. The environmental management accounting has increased the awareness of employees and it has increased the feeling of the act of equity therefore the job satisfaction has increased in the pharmaceutical firms of Indonesia. The important implication of this study is that the loyalty of employees to the pharmaceutical brands' equity in Indonesia has increased the performance of pharmaceutical sectors in Indonesia.

Limitations

Every research has some limitations and this research also has few limitations. The first limitation of this research is that the data has been collected from only pharmaceutical sectors of Indonesia, the future researches should collect data in a broader variety of countries and sectors so that the results would be more accurate. The second limitation is the lack of variables, the future researches should add more variables that would improve the performance of the pharmaceutical sectors of Indonesia. The last limitation of this study is the use of only three aspects of employee-based pharmaceutical brands' equity in Indonesia. Future research should add other aspects that would make up a broader concept of employee-based pharmaceutical brands' equity in Indonesia.

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