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The Journal of ARSYM (JARSYM) is a refereed bi-annual journal committed to publish undergraduate research papers of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka. The JARSYM publishes theoretical and empirical papers spanning all the major research fields in business studies and finance. The aim of the JARSYM is to facilitate and encourage undergraduates by providing a platform to impart and share knowledge in the form of high quality and unique research papers.

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- Publication in the Journal of ARSYM is based upon the editorial criteria cited and the evaluation of the reviewers (each manuscript will be sent two reviewers).
- Priority is given for novelty, originality, and to the extent of contribution that would make to the particular field.

The journal welcomes and publishes original articles, literature review articles and perspectives and book reviews describing original research in the fields of business studies and finance. The core focus areas of the journal include;

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Impact of Mobile Banking Service Quality of Commercial Banks on Customer Satisfaction (With Special Reference to Gampaha District, Sri Lanka)

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ABSTRACT

Mobile banking services have created a new, convenient and fast delivery channel for customers to enjoy banking services from anywhere, any time. Mobile devices have created a wide array of business opportunities through the expansion of wireless technology. Since Mobile banking is ubiquitous in nature, customers who use mobile banking experience a greater flexibility. However, it has been identified that, Sri Lankan banking customers are bit hesitant to perform their banking activities through mobile devices. Therefore, this study has been carried out with the objective of identifying the impact of mobile banking service quality of commercial banks on customer satisfaction with special reference to Gampaha district. Literature supported to identify the mobile banking service quality as the independent variable and usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs as the dimensions of independent variable on customer satisfaction. The study uses primary data which gathered from the banking customers in commercial banks. The data were collected through an online questionnaire and reliability analysis, descriptive statistics, correlation analysis and regression analysis were used to establish the reliability and analyze the collected data. This research study has revealed that, usefulness, ease of use, relative advantage, user's life style and current needs have a statistically significant impact on customer satisfaction and on the other hand, perception of risk has a statistically insignificant impact on customer satisfaction. Therefore, banks should customize their products and services according to the customer requirements in the process of mobile banking product development and it will be much more helpful to make a satisfactory and successful service for the banking customers.

Keywords: Customer Satisfaction, Mobile Banking, Perception of Risk

1. INTRODUCTION

1.1 Background of the Study

Due to the rapid development of the wireless technology, the number of mobile phone usage has proliferated in Sri Lanka. Hence, mobile phones have created a platform for business organizations to expand commercial transactions in a convenient manner. Further, it has created a wide array of business opportunities through the expansion of wireless technology and mobile banking plays a pivotal role in the banking and finance industry in Sri Lanka. Mobile banking can be defined as "a channel whereby the customer interacts with a bank via mobile device" (Barnes & Corbitt, 2003). Transformative models integrate unbanked populations into the formal financial sector (Mostafa, Reza, & Tanvir, 2010). Mobile banking is an application of mobile computing which provides customers with the support needed to be able to bank anywhere, anytime using a mobile handheld device and a mobile service (Ravichandran & Madana, 2016). Mobile banking offers anytime and anywhere access and customers have a greater flexibility to use mobile banking over the use of electronic banking. Mobile banking services provide time liberty, expediency and swiftness to banking customers. Mobile banking would be an astrictive communication way of providing banking services and mobile banking could contribute to the development of the financial sector through promotion of better financial services. Therefore, mobile banking plays a vital role in day-to-day life of banking customers.

According to Technology Acceptance Model (TAM), usefulness is considered as the degree to which using a particular system would enhance the individual's job performance (Nysveen, Pedersen, & Thorbjornsen, 2005). The relationship between perceived ease of use and their effects on a user's behavior have been examined and supported extensively in the IT/IS literature (Gahtani, 2001). Relative advantage also can be described as an innovation that provides greater service to customers when it is compared with its predecessors (Karayanni, 2003). Perceived risk was first introduced in marketing research as an external variable in the study of innovation diffusion and adoption contends that the speed of adoption is negatively related to the level of perceived risk (Frambach & Schillewaert, 1999). Once the innovation takes place, it helps to develop the life style of the users and it will be more if the adoption increases satisfaction. Compatibility with user's life style and current needs also considered as one of the main sources for theoretical framework, called Innovation Diffusion Theory (Rogers, 2003).

1.2 Problem Statement

Commercial banks in Sri Lanka strive to achieve the competitive position in the domestic market through building a strong relationship with customers by providing a novel service with good quality and higher security (Kahandawa & Wijayanayake, 2014). Therefore, banks should invest and replenish their information technology initiatives to gain the confidence and satisfaction that customer as aspires through mobile banking services. There have been a number of products introduced by Sri Lankan banks to encourage mobile banking. The main advantage of this service is that customer can engage in transactions and perform banking activities around the clock. Only 20% of banking customers use mobile banking services while there are 27.38 million of smart phone users in Sri Lanka(Ayoobkhan, 2018). This confirms that, Sri Lankan consumer still not rely on the use of banking services through mobile phones. The power of mobile banking shows the utilization of multiple mobile banking channels to understand what mobile tools will be needed to become the premium choice for all banking activities. This research study is focused on understanding the usage of mobile banking services by Sri Lankan banking customers especially on the field of services through focusing on customers' satisfaction to let customer feel secure and private from being monitored.

Therefore, this research study is trying to answer for the question of what is the impact of mobile banking service quality of commercial banks on customer satisfaction.

1.3 Objectives of the Study

The general objective of this study is to identify the impact of mobile banking service quality of commercial banks on customer satisfaction with special reference to Gampaha district, Sri Lanka. In addition, this study was carried out with specific objectives to identify the impact of usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs on customer satisfaction.

1.4 Significance of the Study

- Identifying the factors that cause to increase the customer satisfaction through mobile banking in commercial banks in Sri Lanka.
- This study will provide information for banks to enhance the satisfaction level of banking customers through mobile banking services.
- The findings of the research study will be helpful to use as a reference source for future researches who are interested to study the impact of mobile banking service quality of commercial banks on customer satisfaction

2. LITERATURE REVIEW

2.1 Technology Acceptance Model

Technology Acceptance Model (TAM) is introduced by (Davis, 1986) is one of the more widely used and accepted models in research which uses to explain the Information Technology (IT) and Information System (IS) acceptance and usage. Technology Acceptance Model (TAM) tries to establish a relationship and it also describe the intention of users and how users are influenced by a product or service. This theory emphasizes the importance of usefulness and ease of use in technology (Bagozzi, Warshaw, & Davis, 1992). TAM suggests that individual's acceptance and usage of a technology are determined by two key beliefs, perceived usefulness and ease of use (Davis, 1986).

2.2 Innovation Diffusion Theory

Innovation Diffusion Theory (IDT) was developed by (Rogers E. , Diffusion of Innovations, 1962). This theory is the most appropriate for investigation of the adoption of technology in higher education and educational environment (Medlin & Whitten, 2001), (Parisot, 1995). Innovation Diffusion Theory (IDT) describes that the adoption of an innovation by consumers is not a straight forward process (Bouwman, Carlsson, Castilo, & Waldon, 2007). In this theory, discuss the importance of understanding the role of barriers and benefits of mobile services as well as the role that functional differences of mobile service bundles play in the process of actual and future use of these bundles. When a new innovation comes in, it helps to develop the life style of the users and it will be more if the adoption increases satisfaction and it is also a fact that a progressive image could be created among the community using mobile banking services and they get self – respect and it will play a great role in adoption of the technology.

2.3 Customer Satisfaction

Customer satisfaction can be defined as a measurement that determines how satisfied customers are with a company's product, service and capabilities and customer satisfaction means a person's feeling of pleasure or disappointment, which resulted from comparing a product's perceived performance or outcome against his/her expectations (Kotler, 2000). Most researchers agree that satisfaction is an attitude or evaluation that is formed by the customer comparing their pre – purchase expectations of what they would receive from product to their subjective perception of the performance they actually did receive.

2.4 Mobile Banking Service Quality

The increased prevalence of mobile phones provides existing opportunities for the growth of mobile banking in Sri Lanka (Dandeniya, 2014). Mobile banking refers to the provision and use of banking and financial services through mobile telecommunication devices such as mobile phones or tablets (Goyal, 2012). Mobile banking allows customers to use mobile devices as another channel for their banking services. Most mobile banking offering are additive in that they provide a new delivery channel to existing bank customers (Mostafa S. , 2010).Mobile banking is considered to be one of the most value-added services in banking (Lee, et al., 2003). Facilities provided by mobile banking services have helped financial institutions to reduce traditional face to face banking transactions through automated services where ever possible.

2.5 Impact of Usefulness on Customer Satisfaction

Respondents' response on usefulness of mobile banking is shown evident that the respondents generally agreed that mobile banking enables them to accomplish their tasks more quickly and it is generally advantageous and makes it easier for them to carry out their tasks. (Ravichandran & Madana, 2016). Usefulness of mobile banking in improving performance or efficiency will positively impact attitude toward that application (Aboelmaged & Gebba, 2013). Perceived usefulness is a significant driver of customer satisfaction (Marinkovic & Kalinic, 2017). If consumers find it useful, (especially now having electronic banking already accessible) the higher the intension to adopt mobile banking services (Karjaluoto, et al., 2010).

2.6 Impact of Ease of Use on Customer Satisfaction

If there are user friendly mobile banking applications and basic skills regarding using application, consumers are more likely to adopt for mobile banking services (Kazi & Mannan, 2013). Ease of use is posited as influencing the adoption of mobile banking because of the higher complexity in using a small device to conduct banking transactions and if higher the ease of use of the mobile device for banking transactions, the higher the intention to adopt it or use it (Karjaluoto, Riquelme, & Rios, 2010). Perceived ease of using mobile banking directly affects the mobile banking adoption (Hanafizadeh, et al., 2014).

2.7 Impact of Relative Advantage on Customer Satisfaction

Greater the relative advantage of using mobile banking services, the more likely that mobile banking will be adopted (Hettiarachchi, 2014). Relative advantage had significant effect on consumer adoption for mobile banking services (Yunus, 2014). There is a positive impact of relative advantage on customer satisfaction on mobile banking services and banks face dual competitive pressure to provide service quality and administrative efficiency (Yu & Fang, 2009). There is a positive impact of relative advantage on customer satisfaction. Further, researcher found that, the antecedents of attitude toward mobile banking differ between potential and repeat customers (Lin, 2011).

2.8 Impact of Perception of Risk on Customer Satisfaction

There is a negative relationship between the perceived risk and the mobile banking adoption and they further found that, when the risk level is higher, the satisfaction may reduce as vice versa (Ayoobkhan, 2018). Perceived risk has a highly significant influence on consumers' adoption and attitude of mobile banking services (Kumari, 2015). There is a negative relationship between perceived risk and mobile banking app usage in banking customers of Gampaha district (Jayamanna, 2019). Perceived risk has a negative influence on intention to adopt mobile banking services among low- income sector in Pakistan (Kazi & Mannan, 2013).

2.9 Impact of User's Lifestyle and Current needs on Customer Satisfaction

Compatibility has a highly significant influence on consumers' adoption and attitude of mobile banking services. Adoption with life style was found to be the most significant antecedents, explaining the adoption of mobile banking (Kumari, 2015). Due to the cultural effect, the modern banking is not compatible with the life style of rural population of Pakistan though the population widely acknowledged its usefulness (Mazhar, et al., 2014). Compatibility (with life style and device) is the most significant driver of intentions to adopt mobile banking services in developed and developing countries (Shaikh & Karjaluoto, 2015).

3. METHODOLOGY

The quantitative method and deductive approaches were used to investigate the impact of mobile banking service quality of commercial banks on customer satisfaction. Primary data was gathered directly from respondents for this research study and the collected data were analyzed using SPSS version 20 tool. Previous literatures have been adopted to identify the independent variable as mobile banking service quality that affected on customer satisfaction and dimensions of the independent variable are usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs. Figure 1 shows the conceptual framework developed using the five independent factors.

Target population is comprised with respondents who are the banking customers of four leading commercial banks in Gampaha district. Researcher selected four commercial banks as Bank of Ceylon, People's Bank, Sampath Bank and Hatton National Bank by representing both private and public sector. Because these banks have introduced most of the mobile banking services to

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their customers (Kahandawa & Wijayanayake, 2014) and Sample of this research is 310 respondents from total population based on the Krejcie and Morgan table. Convenience sampling method was used to select the banking customers of four commercial banks. Purposive sampling used to gather data from the respondents who have better knowledge and experience related to mobile banking services which is suitable for the achievement of the research objective. Researcher used ten (10) months of time period to complete this research study.

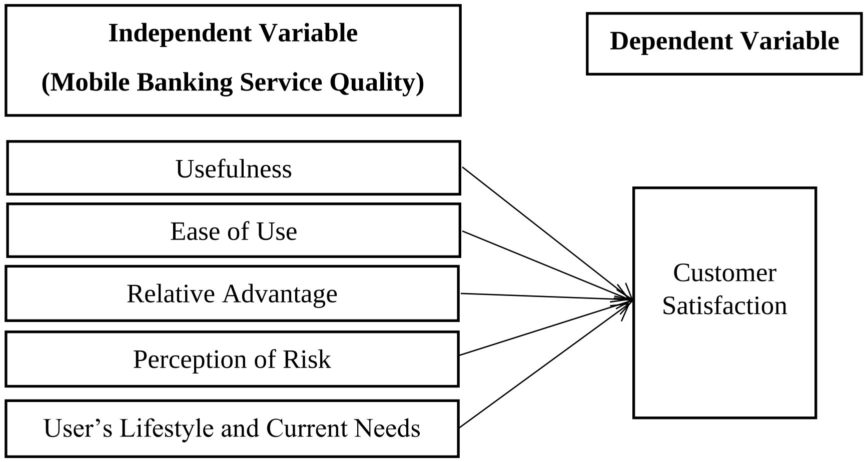

Figure 1: conceptual framework

Source: Researcher Constructed (2020)

The researcher used primary and secondary data to conduct this research. Primary data about the impact of mobile banking service quality of commercial banks on customer satisfaction has collected through online questionnaire and this method has helped to obtain first – hand information from the respondents. The questionnaire for this study consisted of total twenty-eight (28) questions that were developed based on independent and dependent variable. There were seven sections in the online questionnaire. Researcher analyzed data in terms of align with the objective of the study already proposed after the data gathering process. The secondary data was collected from the other research findings that have already investigated in relation to this study.

4. RESULTS AND DISCUSSION

Researcher used Statistical Package for Social Science (SPSS) version 20 tool for data analysis. Researcher analyzed reliability analysis, descriptive statistics, correlation analysis and regression analysis.

According to kurtosis value, except perception of risk, all other variables have positive kurtosis. It shows usefulness, ease of use, relative advantage, user's life style and current needs and customer satisfaction have longer tail distribution. But perception of risk shows a negative kurtosis value which is less than zero and it shows a right tail distribution. The Cronbach's Alpha values of usefulness, ease of use, relative advantage, perception of risk, user's life style and current needs and customer satisfaction on mobile banking service quality remained as 0.756, 0.838, 0.759, 0.936, 0.894 and 0.786. It means, according to the reliability analysis, Cronbach's Alpha value of all independent variables was higher than 0.7 and therefore, the questionnaire used by the researcher was a reliable one.

4.1 Examining Respondents' Profile

According to data analysis, out of 310 respondents 59% were male and 41% were female. Accordingly, the majority of the respondents were male. It means male respondents are using mobile banking services rather than female respondents. It can be noted that, 56.5% of the respondents were single and 43.5% were married.

The majority of the respondents were employed as 71.6% and rest represents business owners and students as 11.3% and 17.1% respectively. In fact, most of the respondents were employed respondents than students and business owners. Most of the respondents were in age between 21-30 years as 53.9% others were less than 20 years, 31 – 40 years, 41 – 50 years and more than 50 years as 3.2%, 24.2%, 16.8% and 1.9% respectively. In the age category the highest responses were coming from the age category of 21 – 30 years. A trend can be observed on using mobile banking services among the youth. Out of the respondents, 2.9% has a post – graduate degrees, 24.5% has a bachelor degree, 20.6% has some sort of a professional qualification, 14.8% has a diploma, 33.2% has passed A/L and 3.9% has passed O/L. The highest respondents were from the category of A/L qualification and the least is from the post – graduate qualification. It should be noted that, majority of mobile banking customers are interacting with the bank between 1-5 years as 56.8%. However, about 31% customers have less than 01-year interaction, about 10.3% customers have more than 05 years' interaction and about 1.9% customers have no interaction with the bank. Frequency can be categorized as daily, twice a week, once a week, once a month and no frequency and the percentages were 3.5%, 7.1%, 21%, 66.5% and 1.9% respectively. It should be noted that, most of the customers are using mobile banking services for once a month.

4.2 Descriptive Analysis and Correlation Analysis

Table 1: Descriptive Statistics, Correlations

Variable	Mean	Standard Deviation	Pearson Correlation	Significance Value (p value)
Usefulness	4.1148	0.59662	0.734	0.000
Ease of Use	4.1032	0.65195	0.721	0.000
Relative Advantage	3.7252	0.67393	0.553	0.000
Perception of Risk	3.4297	0.90716	0.154	0.007
User's Life Style and Current Needs	4.1639	0.70246	0.797	0.000

Source: SPSS data (2020)

According to the Table 1, the mean value of usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs were 4.118, 4.1032, 3.7252, 3.4297 and 4.1639 respectively. The standard deviation of usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs were 0.59662, 0.65195, 0.67393, 0.90716 and 0.70246 respectively. The lowest mean value was from perception of risk as 3.4297 and maximum mean value was from user's life style and current needs as 4.1639. Perception of risk variable was highly dispersing from the mean value and usefulness has the data set has been dispersed close to the mean value. Therefore, perception of risk has the highest standard deviation and usefulness has the lowest standard deviation.

Pearson correlation was used to identify the nature, strength of the relationship/impact between dependent and independent variables. Pearson correlation values of usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs were 0.734, 0.721, 0.553, 0.154 and 0.797 respectively at 0.01 significant level. Therefore, all independent variables have positive correlation with customer satisfaction on mobile banking service quality. Usefulness, ease of use, user's life style and current needs represent strong positive correlation towards customer satisfaction on mobile banking service quality. Further, relative advantage shows a moderate positive correlation and perception of risk shows a weak positive correlation towards customer satisfaction on mobile banking service quality.

According to correlation analysis the significance value of all independent variables was 0.000 and the significance value of perception of risk was 0.007. It means all independent variables (usefulness, ease of use, relative advantage, perception of risk, user's life style and current needs) were statistically significant variables because all p values were lower than 0.01 (At 0.01 significant level).

4.3 Regression Analysis

Table 2: Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.844[a]	.712	.708	.36443	1.899

a. Predictors: (Constant), Usefulness, Ease of Use, Relative Advantage, Perception of Risk, User's life style and current needs

b. Dependent Variable: Customer Satisfaction on Mobile Banking Service Quality

Source: SPSS data (2020)

In this research study, R value was 0.844 and R square (R^2) value was 0.712. It means that, 71.2% of customer satisfaction is explained by the particular dimensions of the independent variable such as usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs. The rest of 28.8% of customer satisfaction on mobile banking service quality is depended on the other variables other than variables that are not covered by the current research study. The adjusted R square value was 0.708. In this research study, Durbin – Watson value was 1.899. Therefore, there is no first order linear auto correlation between variables as it was in between $1.5<d<2$.

Based on Table 3, following model can be derived for the impact of mobile banking service quality of commercial banks on customer satisfaction.

$$CSMBS = 0.316 + 0.284(\mathrm{U}) + 0.135(\mathrm{EU}) + 0.136(\mathrm{RA}) - 0.047(\mathrm{PR}) + 0.444(\mathrm{ULC}) + \mu$$

Based on the results, usefulness has a positive impact on customer satisfaction as its coefficient was 0.284. Also ease of use has a positive impact on customer satisfaction and the coefficient value was 0.135. Relative advantage shows a positive impact towards customer satisfaction and the coefficient value was 0.136. According to the results, perception of risk shows a negative impact towards customer satisfaction and the coefficient value was -0.047. User's life style and current needs shows a positive impact on customer satisfaction and the coefficient value was 0.444.

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	.316	.162		1.956	.051
	Usefulness	.284	.056	.251	5.111	.000
	Ease of Use	.135	.054	.130	2.481	.014
	Relative Advantage	.136	.040	.136	3.348	.001
	Perception of Risk	-.047	.025	-.063	-1.857	.064
	User's Life style and Current needs	.444	.049	.462	9.106	.000

Source: SPSS data (2020)

The significance value of usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs were 0.000, 0.014, 0.001, 0.064 and 0.000 respectively. Based on the results, variables of usefulness, ease of use, relative advantage and user's life style and current needs were considered as statistically significant variables that affected to the customer satisfaction due to p values of these four variables were less than 5% significant level. Furthermore, usefulness was a statistically significant variable that affected on customer satisfaction and it has proved that, through the researches (Ayoobkhan, 2018), (Rathnayake, 2017), (Riquelme & Rios, 2010) and other previous researchers. Ease of use was a statistically significant variable that affected on customer satisfaction. This has proved from the previous researches (Aboelmaged & Gebba, 2013), (Yu & Fang, 2009), (Alsamydai, 2014) and another different previous researches. Relative advantage was a significant variable that affected towards customer satisfaction. This has proved that, based on some researches (Jayamanna, 2019), (Kumari, 2015) and other previous researches. User's life style and current needs was a significant variable that affected on customer satisfaction. It has mentioned by some previous researches (Wu & Wang, 2005), (Kumari, 2015), (Lin H.-F. , 2011) and other researches. Because p values of these four variables were less than 5% significant level. Perception of risk was considered as a statistically insignificant variable that affected on customer satisfaction. The reason was p value of this variable was 0.064 and it was higher than 5% significant level. It has proved through the previous researches (Alsamydai, 2014), (Aboelmaged & Gebba, 2013) and others.

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4.4 Testing of the Hypothesis

Table 4: Summary of Testing Hypothesis

Variable	Hypothesis	P Value	Relationship	Accept / Reject
Usefulness	H1: Usefulness of mobile banking services could have a positive impact on customer satisfaction.	0.000	Positive	Accepted
Ease of Use	H2: Ease of use of mobile phone for banking services will have a positive impact on customer satisfaction.	0.014	Positive	Accepted
Relative Advantage	H3: Relative advantage of mobile banking could have a positive impact on customer satisfaction.	0.001	Positive	Accepted
Perception of Risk	H4: A negative perception of risk of mobile banking should have a negative impact on customer satisfaction.	0.064	Negative	Rejected
User's Life style and Current needs	H5: User's lifestyle and current needs would have a positive impact on customer satisfaction.	0.000	Positive	Accepted

Source: SPSS data (2020)

5. CONCLUSION

Mobile communication has reached the grass root of the society as everybody could own a mobile device. Mobile banking has been identified as one of the alternative delivery channels in banking. However, the success of using mobile banking remains questionable especially in Sri Lankan setting. Therefore, this study has carried out with the main objective to identify the impact of mobile banking service quality of commercial banks on customer satisfaction with special reference to Gampaha district, Sri Lanka. This research study, used customer satisfaction as dependent variable and independents variable was mobile banking service quality. Researcher used usefulness, ease of use, relative advantage, perception of risk and user's life style and current needs as the dimensions of the independent variable. Then, data were gathered from 310 respondents (commercial banking customers) in Gampaha district and used an online questionnaire. and used reliability testing, frequency analysis, descriptive statistics, correlation analysis and regression analysis.

According to findings of correlation analysis, all the dimensions of independent variable show a positive relationship towards customer satisfaction and statistically significant variables on customer satisfaction at 1% significant level. Regression analysis was the main data analysis technique and through the regression analysis the researcher found that, usefulness, ease of use, relative advantage and user's life style and current needs were significant variables that positively affected on customer satisfaction at 5% significant level. On the other

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hand, perception of risk was an insignificant variable that negatively affected on customer satisfaction.

Researcher can recommend that, when banks are designing a mobile product, they should customize their products and services according to the customer requirements and consider usefulness, ease of use, relative advantage and user's life style and current needs except perception of risk. Then it will make the service successful and satisfactory. Because all other variables except perception of risk were significant and most affected variables for customer satisfaction on mobile banking service quality. This research study has focused on customers who are in urban areas only. It was a limitation of this study and therefore, future research could be carried out with a population of balance representation from both rural and urban communities. Further, researcher has focused only for customers who are in Domestic Licensed Commercial Banks. Therefore, future researchers have an opportunity to carry out researches on customer satisfaction for mobile banking service quality for above mentioned two banks' customers. Moreover, researcher has used only five dimensions of independent variable. But there are some other variables that future researchers can be used. They are need for interaction, perceived cost of use, trust and so on. Those can be presented as the suggestions for the future researchers.

REFERENCES

Aboelmaged, M., & Gebba, T. (2013). Mobile banking adoption: an examination of technology acceptance model and theory of planned behavior. *International Journal of Business Research and Development, 2*(1).

Ayoobkhan, A. (2018). Factors contributing to the adoption of mobile banking in Sri Lanka: Special reference to Sampath Bank in Ampara district. *International Journal of Latest Engineering and Management Research*.

Bagozzi, R., Warshaw, P., & Davis, F. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of applied social psychology, 22*(14), 1111-1132.

Barnes, S., & Corbitt, B. (2003). Mobile Banking: concepts and potential. *International Journal of mobile communications, 1*(3), 273-288.

Bouwman, H., Carlsson, C., Castilo, F., & Waldon, P. (2007). Barriers and drivers in the adoption of current and future mobile services in Finland. *Journal of Telematics and Informatics, 24*(2), 145-160.

Dandeniya, S. (2014). Expanding Financial Services Frontier and Mobile Banking in Sri Lanka. *26th Anniversary Convention 2014*, Commercial Bank of Ceylon PLC, 297-308.

Frambach, R., & Schillewaert, N. (1999). Organizational innovation adoption: A multi-level framework of determinants and opportunities for future research. *ISBM report, 29*(1), 1-40.

Gahtani, S. (2001). The applicability of TAM outside North America: An empirical test in the United Kingdom. *Information Resources Management Journal (IRMJ), 14*(3), 37-46.

Goyal, S. (2012). *Connections: an introduction to the economics of networks.* Princeton University Press.

Hanafizadeh, P., Behboudi, M., Koshksaray, A., & Tabar, M. (2014). Mobile-banking adoption by Iranian clients. *Telematics and Informatics, 31* (1), 62-78.

Hettiarachchi, H. (2014). Factors affecting to customer adoption of Internet Banking. *Kelaniya Journal of Management, 2*(2).

Jayamanna, W. (2019). Determinants of usage of mobile banking software application in Gampaha District. Faculty of Commerce & Management.

Kahandawa, K., & Wijayanayake, J. (2014). Impact of Mobile Banking Services on Customer Satisfaction: A Study on Sri Lankan State Commercial Bank. *International Journal of Computer and Information Technology, 3*.

Karayanni, D. (2003). Web-shoppers and non-shoppers: compatibility, relative advantage and demographics. *Journal of European Business Review*.

Karjaluoto, H., Riquelme, H., & Rios, R. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing.*

Kazi, A., & Mannan, M. (2013). Factors affecting adoption of mobile banking in Pakistan. International *Journal of Research in Business and Social Science, 2*(3), 54-61.

Kotler, P. (2000). *Principles of Marketing - A South Asian Perspective.*

Kumari, P. (2015). Customer adoption and attitudes in mobile banking in Sri Lanka. *International Journal of Economics and Management Engineering, 9*(12), 4355-4359.

Lee, M., McGoldrick, P., Keeling, K., & Doherty, J. (2003). Using ZMET to explore barriers to the adoption of 3G mobile banking services. *International Journal of Retail & Distribution Management.*

Lin, H. (2011). An empirical investigation of mobile banking adoption: The effect of innovation attributes and knowledge-based trust. *International Journal of Information Management, 31*(3), 252-260.

Mazhar, F., Rizwan, M., Fiaz, U., Ishrat, S., Razzaq, M., & Khan, T. (2014). An investigation of factors affecting usage and adoption of internet & mobile banking in Pakistan. *International Journal of Accounting and Financial Reporting, 4*(2), 478.

Medlin, B., & Whitten, D. (2001). A comparison of Internet and mail survey methodologies. *Journal of Quirk's Marketing Research Review*, *15*(7), 54-59.

Mostafa, S. (2010). Shape-dependent catalytic properties of Pt nanoparticles. *Journal of the American Chemical Society*, *132*(44), 15714-15719.

Mostafa, S., Reza, K., & Tanvir, A. (2010). A Multi-Platform Mobile Banking Framework for Bangladesh. Retrieved August 21,2014.

Nysveen, H., Pedersen, P., & Thorbjornsen, H. (2005). Intentions to use mobile services: Antecedents and cross-service comparisons. *Journal of the academy of marketing science*, *33*(3), 330-346.

Parisot, A. (1995). Technology and teaching: The adoption and diffusion of technological innovations by a community college faculty.

Ravichandran, D., & Madana, A. H. (2016). Factors Influencing Mobile Banking Adoption in Kurunegala District. *Journal of Information Systems & Information Technology (JISIT).*

Rogers, E. (1962). *Diffusion of Innovations*.

Rogers, J. (2003). *Adoption to mobile banking usage*

Shaikh, A., & Karjaluoto, H. (2015). Mobile banking adoption: A literature review. *Telematics and Informatics, 32*(1), 129-142.

Yu, T., & Fang, K. (2009). Measuring the post-adoption customer perception of mobile banking services. *Cyber Psychology and Behavior, 12*(1), 33-35

Financial Well-Being of Marine Fishermen: A Study in Mahawewa Fishing Zonal

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ABSTRACT

This study was intended to investigate how each investment method makes changes in the financial well-being of the fishermen, and personal factors will affect their decision-making process; hence their financial well-being is decided. Normally fishermen are considered poor in society. Fishers too work hard, obviously, they have been working for years, but their financial well-being remains the same over the years. In this study, "why fishermen mostly remain in the same financial position throughout their life was the problem to be answered. There were 2322 fishing families living in Mahawewa area, and there were 3196 fishermen engaging in fishing. One hundred fifty fishermen were selected from this area using the random sampling method. Primary data was collected, and survey method was utilized. This was quantitative research & positivist research philosophy was used. Hypotheses were developed as personal factors and investment methods as they have a positive relationship with financial well-being. Financial well-being of fishermen was measured using a Likert scale. According to the survey results, the age and the experience in fishery had a negative effect on the financial well-being of fishers. There was a positive relationship between the level of education and financial well-being of fishers, and there was a significant positive relationship of financial literacy of fishermen with financial well-being. Fishery income was the most important factor which has a great impact on the financial well-being of fishers. The correlation between investment in banks and financial well-being was not statistically significant. Survey results showed that investment in gold and land has a significant positive effect on the financial well-being of fishermen but which was not very much strong. Fishermen's most used investment method was the investment they made on their fishery instruments. Finally, survey results suggested that fishers have a greater tendency to invest in other small-scale activities which are available at their disposal.

Keywords: Financial Well-being, Marine Fishermen, Investment Methods

1. INTRODUCTION

Every individual like to have a prosperous life with a strong financial ability in order to fulfill their needs and wants. There won't be any person who likes their income to get declined and then to decline his or her wealth as a result of it. People like to increase their wealth all the time, but in an actual sense, it fluctuates to both up and down, or sometimes it remains the same. When the income of a person goes up, with that the purchasing ability of a person goes up and vice versa. Then, it leads to high consumption, high investment opportunities, high savings so on. If income declines, as a result, consumption declines. Both savings and investments also get decreased. This is a normal phenomenon any person faces. (Fatihudin et al., 2018)

This same story repeats with the fishermen as well. They too spend, invest and save money out of what they earn. Usually, every person tries and works hard to increase the wealth as time moves even though the income has fluctuated. Fishermen too work hard, obviously, they have been working for years, but their financial well-being of them remains the same over the years. There is not much improvement in current well-being, especially for the future. The cost of living out a family is getting increased as the prices of goods increase and also usually a family of a fisherman consists with four or five members or even more and all are fed by the householder who is always the father.

It is not enough just to earn more money if a person does not know how to use what they earn wisely. It is all about how much knowledge a person has gained from various sources to spend the money in ways that are profitable for him in the present and future so that he will have a better go. Financial literacy plays a huge role in answering this phenomenon. Financial literacy enables fishermen to have knowledge about the concepts of money and how to manage it wisely. It gives the knowledge to learn basic skills that are related to earning, spending, budgeting, saving, borrowing, and investing money in profitable ways so that they can face well with uncertain situations in the future. Further, it enables fishermen to become aware of personal financial issues and choices and to make informed financial decisions.

The ability to make profitable decisions does not come spontaneously. It requires some sort of knowledge on the subject matters and on other related things. All the knowledge possessed by a person and the experiences of that person will create a reasoning personality to deal with choices that will add benefits to the person. So, knowledge has a great power of deciding between choices. Fishermen need to have at least a basic knowledge on subject matters regarding financials which will lead them in making profitable decisions so as to decide better ways of investing the excess money. Basically, this knowledge will be given to them at schools, and there are no other occasions of collecting knowledge of subject matters. It is the education level of each person at school that will finally decide the financial knowledge of fishermen since soon after schooling; they start to deal with the sea. With that sole knowledge and the experience gathered, they make decisions on financial matters. So that, the financial knowledge given by the school matters a lot for them. Financial literacy can help fishermen to set goals and optimize their financial options. They often lack the skills or knowledge to make well-informed financial decisions due to the fact of education level. Most of the time, the women take over the responsibility of household cash management in unstable situations in the family using limited resources. It is due to the fact that usually women are little educated than men in these areas, and cash handling part is usually given to them who always deal with money in fishing activities. And also, women play a big role in a family and actively participate in financial decisions as well. But generally, they are also not very much knowledgeable enough to deal with financial instruments.

It is normally believed that as we grow older, every aspect of our lives should attain some sort of improvement. It is applicable to any area of our life. From a financial perspective, each individual should be in a strong position in order to live a balanced life to fulfill their needs and wants. If someone is financially poor, they may have to strive even to satisfy the basic needs of each person. The financial position of each person can be varied, and it is so. But it is each person's responsibility to earn enough money so that he/she may not die starvation. In fishing communities, there is no one who is financially very poor but is not well-established. There seems to be consistent growth in the financial position of fishing communities. One might have been engaging in fishing for a long period of time but may not have attained much prosperity in life. Always, the reason may not be not earning sufficient income but how it is used. "Why do fishermen mostly remain in the same financial position throughout their life?" is the main question to be investigated in this study.

Many researches have been conducted regarding the financial literacy of fishermen in other countries. In those studies, the financial literacy of fishermen has been found to be a significant factor in attaining financial prosperity. Researchers have explained how the education level and financial literacy play a vital role in the financial decisions of fishermen. In the Sri Lankan context, there are few researches have been conducted on the financial literacy of fishery communities and on the social welfare and social security of fishermen. There exists a gap in researches that has been conducted on the financial literacy of fishermen and factors affecting on the financial well-being of fishermen. In earlier researches, the investment methods of fishermen have not been very much considered as the main factor. This study aims to explain the relationship of personal factors together with investment methods with the financial well-being of marine fishermen living in Mahawewa fishing zonal.

1.1 Significance of the Study

Fishery communities, though they contribute much through their profession for the development of the country, have been a neglected party of the country at times and are considered to be poor, especially the fishermen in coastal areas. This study aims to find out how the investment methods and personal factors affect the financial well-being of fishermen since a problem arises that they mostly remain in the same financial position throughout their life. Fishing has been the sole employment of most of the fishers in Mahawewa coastal area, so that they are in need of finding answers to this financial poverty since it has been grafted with their whole life events.

People earn money in order to have a good life while fulfilling mainly the basic needs and other needs as well. It's all about how limited finance is controlled and invested rationally in order to have a good life with healthy financial stability. This research can be used as a means to understand the real factors which decide the financial position of fishermen and can be used to make better decisions considering the findings of this study. This aims in some way to make the fishermen aware of what is missing in their life for which they do not pay much attention to get rid of. And on the other hand, this study will help the government to take necessary actions on their side providing effective programs for fishermen in this area to educate them more on rational decision making and to make them aware about what they are lacking in them in order to make the life prosperous using the daily income. It is the responsibility of a government to increase the standard of living of the people through various means. Findings of this study can be referred to identify the weaknesses pertaining and to introduce effective programs to develop their financial knowledge and motivate the fishermen for their own benefit.

1.2 Research Questions

- What is the relationship between investment methods and the financial well-being of the fishermen, and how strong are they?
- How do the personal factors affect in financial decision-making of marine fishermen, and with that, how do they finally affect the financial well-being of fishermen?

2. LITERATURE REVIEW

2.1 Poverty in Fisheries

There exist two different interpretations of the relationship between poverty and fisheries. The first relates to the view that ‘‘they are poor because they are fishermen’’. This is known as the ‘‘**endemic poverty**’’ perception of poverty in fisheries in which it is felt that fishermen, whatever they try to do, will remain poor. The apparent correlation between fisheries and poverty has been highlighted by numerous observers. (Bailey, 1988) perfectly summarizes this commonly stated ‘‘reality’’ by noting that fishing communities are usually presented in the literature as ‘‘the poorest of the poor’’. This perception, which is still widely held among decision-makers and experts from international agencies, is based on two different logical arguments which, although derived initially from opposite assumptions, eventually join to suggest the same conclusion, namely that ‘‘fishery rhymes with poverty.’’

(Bene, 2003) describes in his article the financial status of fishermen, and all the findings sum up saying “they are fishermen because they are poor” and “they are poor because they are fishermen”. As Bene suggests, such a perspective has a circular logic that leads to fisheries being considered synonymous with poverty.

As per the evidence found in the study of (Bene et al., 2007) fishermen are not always poor not because of the lower level of income of the household but it can cause due to the unavailability of enough infrastructure facilities in fishing villages. So that, even to fulfill basic needs, a considerable amount of money has to be spent on them when those public facilities are not available at a lower cost. If so, the poverty measurement should be considered with all these factors because even if a fisherman earns an income that is above the poverty line income, a huge portion of it will be spent on the fulfillment of very basic things such as buying drinking water due to the saltiness of water available in the land that cannot be used to drink and also the traveling cost will be high when there are not enough market places to buy provisions at hand. If this is the case in fishing villages, real poverty may not be caused solely by the income earned by fishermen. But if the infrastructural facilities are available at no cost or lower cost, poverty is not affected by those factors.

In literature, there are various reasons found to say that why fishermen remain poor. At times it says that just being a fisherman is the cause for being poor. Fishermen fight with the sea and use the resource of the sea; mainly fish resource that has become the main profession of fishermen whereas there are other ways of earning money using the resources in the sea. The fish resource is considered to be limited, but it is regenerated over and over. But, if it is overexploited, then it becomes another problem not to get a good amount of catch at a time which leads to poverty again. So that overfishing of the resources creates further uneasiness among fishermen to live up their lives. Overexploitation can be done by fishermen living in the same area or outsiders who come in search of a catch of fish. It is happening mostly because of the use of prohibited fishing nets using for fishing which mostly damages the shelters of fish, corals, and fungus, etc.

(Samuelson, 2003) explains the relationship between income of a person and other factors related to income, saying; If the level of income, someone's income is higher, it will have a positive influence on the increase in consumption expenditure and savings in the future. If someone's savings are getting bigger, then they will always think about how the money saved is expected to get bigger in the future. Value added is based on the principle of maximizing value and minimizing risk to achieve life satisfaction. Attempted wealth should not decrease. Known in the revenue cycle, if productivity is low, then savings are also low. If savings are low, investment is also low. If the investment is low, the wealth (assets) owned is also low. Conversely, if productivity is high, savings are high, investment is also high, so will the direction of higher wealth. Samuelson's findings clearly state that the increase in income is directly affecting the well-being of the person since the surplus amount of money can be saved and can increase the wealth of that person. But always, the risk factor exists in savings.

The research was done in Sri Lanka on the fishermen in Batticalao district (Jeyarajah, 2016) says, Sri Lankan small scale fisheries sector plays a vital role in its economy. It makes a significant contribution by providing the means of livelihoods of coastal communities in Sri Lanka. However, many scholars (Amarasinhge, 2005; Wijerathna & Maldeniya, 2003; Lokuge & Munas, 2011) argue that the fishing sector is one of the most vulnerable communities in Sri Lankan society. It is obvious that the fishermen can earn a lot, but they face unpredictability and vulnerability of livelihood due to seasonality and the uncertainty of the catch. The fishing communities also face social exclusion associated with their livelihood and community. Government policies in the past were designed to create conditions for increasing fish production through the modernization of the fishing sector in Sri Lanka. Infrastructure development, subsidies, and loan facilities were included in the projects. However, even after the government efforts, a large number of small-scale fishing families continue to be poor in Sri Lanka.

2.2 Education

Jeyarajah, (2016) further stated that in his research that education always helps to obtain required skills for livelihoods which imparts knowledge about the different livelihood opportunities. The present study reveals that, out of sampled fisheries households, 13% of respondents had no education, 51.4% of respondents had primary level of education, 23.2% of respondents have completed middle level of education, 11.1% of respondents had secondary level of education and around 1% of respondents had an advanced level of education. The finding also reveals that the literacy rate of the respondents is 87% in the small-scale fisheries households in the study area. This has been done in the conditions of the Sri Lankan context, and hence the findings of this research are highly influential in this study.

2.3 Financial Literacy

Financial literacy is a set ability to read, analyze, understand, manage and communicate the financial terms and basic economic concepts that are used in personal financial decisions effectively. Some studies reported the impact of financial literacy on attitude towards saving, saving intention, and saving behavior.

Financial literacy enables fishermen to have knowledge of concepts of money and how to manage it wisely. The aim is to facilitate them to become more informed in financial decision-making, to become aware of personal financial issues and choices, and learn basic skills related to earning, spending, budgeting, saving, borrowing, and investing money. Financial literacy can help fishermen to set financial goals and optimize their financial options.

In the fishing sector, financial literacy is particularly relevant for people who are resource-poor and who operate at the margin and are vulnerable to persistent downward financial pressures. Fisherman family's women, in particular, often assume responsibility for household cash management under difficult and unstable circumstances and with few resources to fall back on. They often lack the skills or knowledge to make well-informed financial decisions. Financial literacy can increase their decision-making power and prepare them to cope with the financial demands of daily life. It can help them prepare ahead of time for life cycle needs and deal with unexpected emergencies without assuming unnecessary debt. Financial planning can help people to take advantage of new financial opportunities. For microfinance clients, financial literacy can help them choose wisely among a growing number of financial options and use microfinance services to their best advantage. With better knowledge of the range of financial services available, their costs, and the risks associated with their use, clients can decide which ones best meet their needs. Improved financial management skills and behavior can help reduce the risks of running a business and financing business activities with loans. For microfinance institutions, the improved ability of clients to manage debt can help keep repayment rates up and delinquency rates down. The involvement of Micro Finance Institutions in assessing the financial education needs of clients can help to understand financial management strategies of the poor, financial service gaps, and to know how microfinance products and services could be improved and expanded.

3. METHODOLOGY

Research methodology is the specific procedures or techniques used to identify, select, process and analyze information about a topic. This study was intended to identify the relationships of investment methods and personal factors towards the financial well-being of fishermen. There were eight independent variables taken against the dependent variable of financial well-being.

According to this study, the author has utilized the positivism philosophy because in positivism philosophy, the researcher is independent of the research, and the research is purely objective. Positivism depends on quantifiable observations, which finally leads to statistical analysis.

Qualitative and quantitative approaches are the two methods of conducting research. Quantitative research deals with numbers and numerical data, with statistics. It is expressed in numbers and presented in graphs and quantitative data test hypotheses based on assumptions. On the other hand, qualitative research deals with words and meanings. Quantitative research is expressed and explained in words. It mostly deals with concepts, thoughts, and experiences of subjects. This research is also dealing with numerical values and so is considered to be following a quantitative approach.

3.1 Conceptual Framework

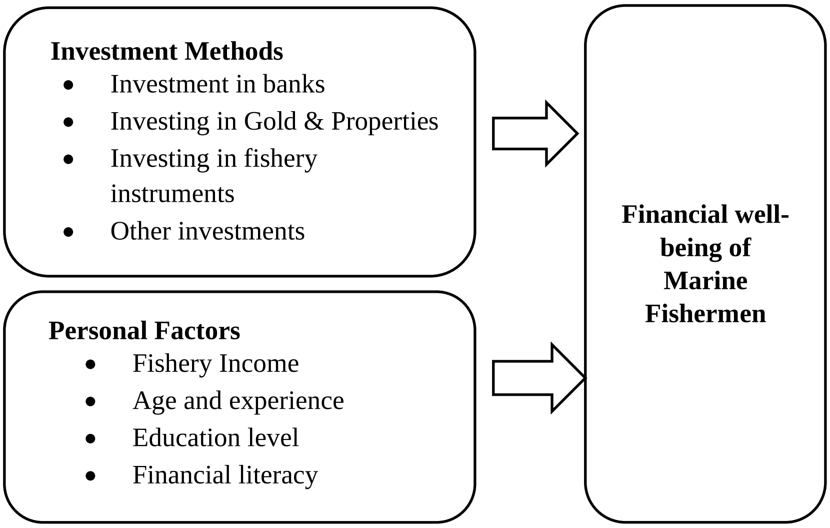

Figure 2: Conceptual Framework

Source: Researcher Constructed (2020)

3.2 Population & Sample

Population refers to the entire group of people, items, events, or things, etc., that the researcher expects to investigate. Fishermen who are living in the villages around Mahawewa coastal area were considered to be the population of this study. Out of all the villages, four villages were selected to collect the required data; Thoduwawa, Barudalpola, Kudamaduwella, and Ambakadawila. Out of all the fishermen living in these four villages representing Mahawewa fishing-zonal, 150 fishermen were selected as the sample of this study. These four villages are located open to the sea directly. Most of the male persons living in these villages are fishermen in their profession whose homes have been built very much closer to the sea. Here, in this study, fishermen of a smaller scale who are engaging in fishing with NMTC = non-mechanized traditional crafts; MTC = Mechanized traditional crafts; FRP = small mechanized crafts made of Fiber Reinforced Plastic (Wickramathilaka, 2009) are only taken for the study. Fishermen engaging in fishing with MDOC = Multi-Day Operating Crafts are not considered in this study. Fishing with multi-day operating crafts is not similar to ordinary fishing engaging with their own fishery equipment and crafts. Due to those prevailing differences, fishermen engaging in multi-day operating crafts have been removed from this study.

There are 2322 fishing families living in this area, and there are 3196 fishermen engaging in fishing. This total number of fishermen consists of both small-scale fishermen and multi-day operating crafts fishermen. There are not enough data gathered only on small-scale fishermen who are considered in this study due to the practical reason of fishermen who use both ways of fishing according to the situation. Therefore, 150 fishermen were selected in this study to represent the whole population of small-scale fishermen.

Fishermen are usually considered to be with a low level of education. So that, the best way to collect data is to go and discuss with them and clarify the questions and collect data directly from them in order to get the most relevant data. However, there was no previous research done in this fishing area. Taking into account these two factors, primary data had to be collected for the research. Since the study was to measure investment behavior and personal differences, there was a requirement for the most reliable data for this study. So that, to obtain the most relevant and reliable data for this study, primary data was more suitable to reach for the objectives of this study. Hard copies of questionnaires were distributed among fishermen, and the data was collected using the interview method personally in order to increase the accuracy of the data. Though it took some considerable time to collect data for the study to meet them personally, it was very much helpful to obtain the most reliable data, and the responding percentage was 100 percent.

3.3 Hypotheses

H1: Age and Experience of a fisherman have a significant positive relationship with financial well-being.

H2: Education Level of a fisherman has a significant positive relationship with financial well-being.

H3: Fishery Income of a fisherman has a significant positive relationship with financial well-being.

H4: Financial Literacy of a fisherman has a significant positive relationship with financial well-being.

H5: Saving in Banks or in Rural Institutes has a significant positive relationship with financial well-being.

H6: Investing in Gold and Lands has a significant positive relationship with financial well-being

H7: Investing in Fishery Instruments has a significant positive relationship with financial well-being.

H8: Using other Investment methods has a significant positive relationship with financial well-being

4. RESULTS AND DISCUSION

Following table shows the summary of descriptive and correlation results of each independent variable.

Table 01: Descriptive statistics

Variable	Mean	Median
Age (Yrs)	-	40 - 50
Education Level (Grade)	-	5 - 9
Fishery Income (Rs. 000')	-	25 – 40
Financial Literacy	4.12 *	-
Investment in banks	3.58 *	-
Investment in Gold & Lands	3.56 *	-
Investment in fishery	4.47 *	-
Other Investments	3.72 *	-
Financial well-being	3.14 *	-

*Measured using 1 to 5 Likert scale
Source: SPSS data

Table 02: Correlation results of independent variables

Variable	Correlation	Sig. value
Age	- 0.301	0.000**
Education	0.185	0.024*
Income	0.598	0.000**
Financial literacy	0.248	0.002**
Investment in Banks	- 0.021	0.797
Inv. in Gold & Lands	0.198	0.15*
Inv. in Fishery Instruments	0.292	0.000**
Other Investments	0.266	0.001**

* Statistically significant at $P < 0.05$ level
** Statistically significant at $P < 0.01$ level
Source: SPSS data

According to the survey results, the age and experience in the fishery have a negative relationship with financial well-being of fishermen. That canceled out the hypothesis built that age and experience have a positive relationship with financial well-being. Survey results provided evidence to say that there was a positive relationship between the level of education and the financial well-being of fishermen. Accordingly, the hypothesis could be accepted. Financial literacy has a greater impact on making better financial decisions. Survey results proved that there is a significant positive relationship between financial literacy of fishermen with financial well-being. Fishery income is the most important factor which has a great impact on the financial well-being of fishermen. Survey results proved that it has a significant positive relationship with financial well-being, which has the highest value of correlation coefficient. With regard to fishermen, the average investment in banks according to scale values in this research is 3.58, which indicates that fishermen tend to invest in banks averagely. According to the correlation analysis, the correlation between investment in banks and financial well-being is not statistically significant. That indicates that there is no relationship.

Survey results showed that investment in gold and land has a significant positive relationship with financial well-being of fishermen but which is not very much strong. According to the results of the survey, fishermen's most used investment method was the investment they made on their fishery instruments. It was proved through an average value of 4.47 in a 1 to 5 Likert scale used to measure investment made in fishery instruments. Correlations results showed that there was a significant relationship between these two variables.

Finally, survey results suggested that fishermen had a greater tendency to invest in other small ways of earning money that is available at their disposal rather than going for formal ways of investments. As per the results, other investments had a significant positive relationship with financial well-being of fishermen. Other highlighted this is that the amount of debts a family owes to other parties and the purpose of borrowing debts, and how they pay them out. For consumption purposes, they borrow money that will not finally earn anything but have to be paid with interest. That is where most of the fishermen are trapped and borrow some other money to pay them out. That is very much affected to their financial well-being.

5. CONCLUSION

This study identified a negative relationship between age and experience in the fishery and financial well-being. The reason is the fishermen's effective age. (Amarasinghe, 2005) mentioned about the effective age factor of fishermen in his research. When they are aging, they are not engaging in fishery daily. With regard to fishing communities, the education level has been at a low level. The majority of fishermen are at the secondary education level. Education becomes an important factor in controlling the finances they earn and how they spend money. Fishery income is the main income generation method of fishermen. They have been practicing to depend only on this profession. Further, fishermen do not pay much attention or are not very much attracted to banks as an investment opportunity. Many fishermen have their attitudes towards investment in banks at an average level. As fishermen have been practicing from the past, they invest huge amounts of money to buy new fishery instruments to earn more money using them. Therefore, many of them have no idea of investing money in something else because what they know very well is how to catch fish. Householders are attracted to earn money from self-interested activities. As an alternative income, most of the fishermen are investing in small type income generation ways apart from traditional fishing activities. This is not applicable during the whole year, and it is seasonal. One of the limitations of this study is that there are no separate types of fishermen who are engaging only in small-scale fishing. There are some fishermen who are solely engaging in multi-day fishing as well. The existence of different types of fishing methods has a different impact on fishermen. The knowledge of the fishermen totally depends on the education system available in the area they live. So that these fishermen's lifestyles, knowledge, education, financial literacy cannot be compared with fishermen who are living in another area, this is not applicable in the same way for other areas. Except for age and experience in fishing and investment made in banks, other factors had a positive impact on the financial well-being of fishermen.

The education system of this area should be more towards bringing forth rational people who are not only trying to look for white-color jobs but who have the ability to make the right decisions for their betterment. Understanding the issues fishermen face in their lives under the guidance of the Department of Fisheries and Aquatic Resources, the regional fisheries office has the responsibility of arranging awareness programs in a continuous basis to enhance the well-being of fishermen. Infrastructure facilities are mostly fulfilled, but not up to the maximum that most of the fishermen are not engaging in fishing in the off-season due to the unavailability of boat ferry facilities in this area. This has been a huge loss for their financial well-being due to the fact that they cannot engage in fishing during the rough season in the year with the unavailability of boat ferries in these areas. In this research impact of the debt, the factor has not been touched in deep. Therefore, debt can be a major factor to be considered in further researches. Mainly, the role of the fisherman (male person) was considered in this research. The contribution of the female party (housewife) is also having a greater impact in some families. In this research, financial well-being was totally measured by personal factors. Apart from personal factors, there are other external factors such as infrastructure facilities that will indirectly impact fishermen's well-being. In further researches, that can also be added.

REFERENCES

Amarasinghe, O. (2005). Social Welfare and Social Security in Sri Lankan Fisheries. *International Collective in Support of Fishworkers*.

Bailey, C. (1988). Employment, labour productivity and income in small-scale fisheries of South and Southeast Asia. Bangkok, Thailand: IPFC symposium.

Bene, C. (2003). When Fishery Rhymes with Poverty; A first step beyond the old paradigm on poverty in small-scale fisheries. *World Development, 31*(06), 949-975.

Bene, C., Macfadyen, G., & Allison, E. H. (2007). *Increasing the Contribution of Small-Scale Fisheries to Poverty Allevation and Food Security*. Food and Agriculture Organization.

Fatihudin, D., Hilisin, I., & Hidajat, S. (2018). Implementation of the Allocation of Income Portfolio Merchand and Fishermen in Financial Investments. *International Journal of Civil Engineering and Technology, 09*(11), 513-521.

Jeyarajah, S. (2016). Livelihood Security of Marine Small Scale Fisheries Households in Batticaloa District of Sri Lanka. *International Journal of Humanities and Social Science Invention, 05*(08), 09-16.

Lokuge, G., & Munas, M. (2011). *Survival of Small-Scale Fisheries in the Post War Context in Sri Lanka* (01 ed.). Netherland: Eburon Academic Publishers.

Samuelson, N. (2003). Economics.

Wickramathilaka, P. (2009). Social Capital as a way out of poverty: the case of small scale marine fishery in Hambantota district, Sri Lanka. The Norwegian College of Fishery Science University of Tromso, Norway & Nha Trang University, Vietnam.

Wijayarathna, B., & Maldeniya, R. (2003). The Role of Fisheries Sector in the Coastal Fishing Communities of Sri Lanka. *World Fish*.

The Impact of Human Resource Accounting on the Firm Performance; Evidence from Listed Companies in Sri Lanka

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ABSTRACT

The influence of Human Resource Accounting practices on corporate performance was the study's main concern. This study is based on secondary data gathered from annual reports of listed businesses on the Colombo Stock Exchange over two financial years, from 2019 to 2020, data was collected from 50 companies listed under 19 different sectors. Independent variable of the study was the human resource accounting practice which was measured through a Human Resource Accounting Disclosure Index (HRADI). Firm's financial performance and market performance were considered under firm performance. Financial performance was measured through Return On Assets (ROA), Return On Equity (ROE) and Earning Per Share (EPS) while the market value was measured through market value of the shares and Tobin's Q ratio. Statistical package E -Views 8 was used to analyses the data. Findings of this research revealed that there is a significant positive relationship between ROA and the Human Recourse Accounting Disclosure Index indicating that human resource accounting practices are positively impact on the firm financial performance. However, there is no relationship between human resource accounting practices and firm market performance. Findings of this study makes a significant contribution while providing empirical evidences to the human resource accounting literature which is limited in the Sri Lankan context.

Keywords: **Financial Performance, Human Resource Accounting Disclosure Index, Human Resource Accounting, Market Performance,**

1. INTRODUCTION

Human Resource Accounting (HRA) information of an organization is one of the important factors to decision-makers in an era of a knowledge-based economy. As a result, each organization takes a serious attempt to disclose its HRA information to inside and outside decision-makers (Micah et al., 2012). Organizational overall performance depended on the efficiency and effectiveness of the human capital. Accordingly, it is important to retain talented and skillful human assets in the organization. To retain talented employees in the organization, they have to spend on human resources. But without proper plan spending on human capital is worthless. Thus, Human Resource Accounting is important to identify information about the cost and value of the human resource.

There are some empirical findings on human resource accounting. Omodero et al. (2016) found that the positive effect of Personnel Benefit Costs on Profitability affirms that progressive growth in Human Resource development could have strong positive trade-off effects on the financial performance of firms. However, Chathurika & De Silva (2019) found that the overall financial performance and human resource accounting disclosure have a negative relationship and the reason may be the lower level of practicing human resource accounting. According to Chathurika & De Silva (2019) although there are much research studies in accounting filed in Sri Lanka, there is a huge research gap in human resource accounting field compared to the world. Therefore, the objective of this study is to identify the impact of human resource accounting on firms' financial and market performance of Sri Lankan listed companies. Human Resource Accounting Disclosure Index (HRADI) has been used to measure the human resource accounting disclosures. Findings of the study will help to enhance the knowledge of importance of the human resource accounting regarding firm's financial and market performance. Finally, it will lead to motivate organizations to active participation and involvement in this field of human resource accounting.

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Agency Theory

According to agency theory, one of the most important responsibilities of human resource accounting is to coordinate agents' remuneration with the needs of the principal. The principal owner employs the agent or manager to provide a service on behalf of the principal under a contract defining pay for accomplishing desired objectives. The agent was given work by the principal because the agent possesses specialized knowledge and abilities, and the principal expects the agent to execute in a way that maximizes stockholder wealth and satisfaction. On the other hand, management of other people's money cannot be expected to protect it with the same zeal as the owner. Then, if both partners are utility maximizers, there's a significant chance the agent will not always act in the principal's best interests. It is assumed that the agent is opportunistic and pursues personal interests that are unlikely to be identical to, and frequently incompatible with, those of the principal. When the interests, objectives, and risk preferences of agents and principals vary, the outcome is the so-called agency problem, as well as the necessary expenditures to solve it, which are referred to as agency costs. The agency dilemma arises because the principal and the agent have opposed goals and the principal is unable to assess if the agent has performed appropriately. Because the principal has imperfect data with which to evaluate the agent, there is asymmetric information in this scenario. In other words, the agent has far more information than the principal regarding the principal's attributes, judgments, and actions, making it easier for him to act in his interests at the expense of the investors (Vokic, 2016).

2.1.2. Concept of Human Resource Accounting

According to the American Accounting Association's Committee on Human Resource Accounting, Human Resource Accounting is nothing but "the process of identifying and measuring data related to human resource and communicating this information to interested parties". From this definition, we could recognize that HRA is not only involved in the measurement of data related to placement, training and development of employees but also involved in the evaluation of the financial condition of people in an organization (Cherian & Farouq, 2013).

Human Resource Accounting has three main roles; to provide organizations with information about the cost and value of human resources, to provide a framework to guide human resource decision making and to motivate decision-makers to adopt a human resources perspective (Bullen , 2010). The historical cost of human resources is the investment in human resources which has both Revenue (expense) and Capital (asset) components. This cost may be classified as Acquisition Cost; Training (Development) Cost; Welfare Cost; and Health and Safety Costs. Except that the capital employed efficiency has a significantly positive effect on the market value of firms, their empirical results failed to find any strong association between the three-value added efficiency components and the three dependent variables. Their empirical results, however, merit more research on the role of intellectual capital in emerging economies, because different technological advances across areas of emerging economies may have different IC and firms' market value implications for intellectual capital in creating firm value and enhancing financial performance (Chen et al., 2005).

2.2 Empirical Review

Maditinos et al. (2011) investigated how intellectual capital affects a company's market worth and financial performance using data of 96 Greek companies listed in the Athens Stock Exchange (ASE) for the period 2006 to 2008. Findings of the study confirms a statistically significant link between human capital efficiency and financial performance. (Maditinos et al., 2011). Khan (2021) investigated the iimpact of human resource accounting on organizations' financial performance in the context of SMEs based on SME firms in Saudi Arabia. Researcher has identified various elements of organizations' financial aspects, such as human capital efficiency, organization profitability, return on asset, and return on equity. Results has revealed that successful human resource accounting implementation and practices result in significant positive changes in financial performance of firms.

Michael (2013) comparatively analyzes the Human Resource Accounting Disclosure Practices in Nigerian Financial Service and Manufacturing companies. A human resource accounting disclosure index was developed. The study found that banking companies' human resource accounting disclosure index is higher than manufacturing companies, however the difference is not statistically significant. Furthermore, there is a positive relationship between human resource accounting disclosure and the size of the organization. Oladele et al. (2016) investigated the impact of human resource accounting disclosure on the financial performance of selected Nigerian listed companies. An index was used to measure the human resource accounting disclosure. Financial performance was proxies by company profitability, firm size, financial leverage, and industry type. Study's population consists of 188 manufacturing and non-manufacturing firms listed in the Nigerian Stock Exchange. Study suggested that listed companies adopt a culture of capitalizing and disclosing all human resource expenditures to increase their efficiency. Yetunde Sylvi et al. (2019) analyzed the influence of human resource accounting on the performance of Nigerian firms for the period 2012–2016. Results indicate that both gross employee costs and training and development costs have a significant positive impact on oil and gas company performance in Nigeria, although health and safety costs have no significant impact on company performance. This study concluded human resource accounting had a positive significant impact on firms' performance and as a result of this research, it was recommended that firms invest more in employee training and development and that a unified standard for identifying and measuring human capital assets be established.

3. METHODOLOGY

The study's main objective was to look into the impact of human resource accounting disclosure on a company's financial and market performance. Secondary data was gathered from the annual reports of the 50 companies listed on the Colombo Stock Exchange over two years' period from 2019 to 2020. An index was used to measure the level of human resource accounting disclosures which consists of 30 disclosure criteria. Each of these criteria are evaluated independently and assign them 1 and 0 based on whether it is disclosed or not. If given criteria disclosed successfully it received a score of 1 whereas if no information relating to particular criteria, the undisclosed criteria get value 0. Thereafter the index was calculated by the total score obtained by individual firms multiply by 100 divides by the total score obtainable (Michael, 2013). Return on the asset, return on equity, and earnings per share were used to assess financial performance. Tobin's Q ratio and Share Price were used to assess market performance. Descriptive analysis was performed to explain the variable by displaying the mean, median, minimum and maximum values, as well as the standard deviation of all dependent and independent variables. The influence of human resource accounting on firm performance was then explored using correlation and regression techniques. Using EVIEWS 8 statistical package and Microsoft Excel collected data had been analyzed.

3.2 Conceptual Framework

The conceptual framework demonstrates the connection between the research's primary variables. Human resource accounting was the independent variable and financial performance and market performance were the dependent variables. Financial performance was measured using Return on Asset (ROA), Return on Equity (ROE), and Earnings per Share (EPS), whereas market performance was examined using Tobin's Q and Share Price. Firm size is considered as the control variable. The conceptual framework is illustrated as follows;

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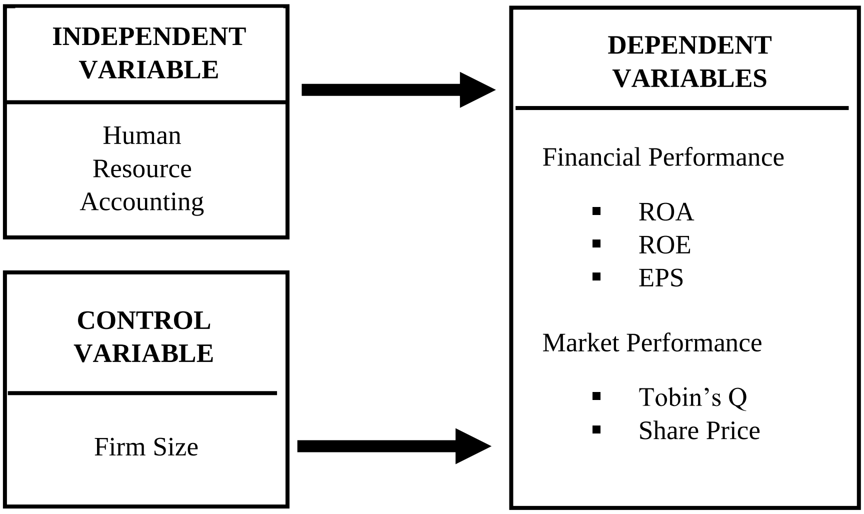

Figure 1: Conceptual Framework

3.4 Hypotheses Development

The hypotheses used for the study are as follows;

H_1: There is a significant relationship between Human Resource Accounting Disclosures and Return on Asset.

H_2: There is a significant relationship between Human Resource Accounting Disclosures and Return on Equity

H_3: There is a significant relationship between Human Resource Accounting Disclosures and Earnings per Share

H_4: There is a significant relationship between Human Resource Accounting Disclosures and Tobin's Q

H_5: There is a significant relationship between Human Resource Accounting Disclosures and Share Price.

3.5 Model development

Financial Performance $= \alpha + \beta_1$ HRADI $+ \beta_2$F SIZE $+ \varepsilon$

Market Value $= \alpha + \beta_1$ HRADI $+ \beta_2$F SIZE $+ \varepsilon$

α	=	Intercept
β	=	Regression Correlation
HRADI	=	Human Resource Accounting Disclosure Index
F SIZE	=	Firm Size
ε	=	Error Term

4. RESULTS AND DISCUSSION

The researcher primarily focuses on the impact of human resource accounting disclosures and firm's performance. Descriptive statistics, correlation analysis and regression analysis were performed to achieve the research objectives.

4.1 Descriptive Statistics

In descriptive statistics method assist describe and comprehend the characteristics of a certain data collection by providing summaries of the sample and data measurements. The mean, median are instances of averages, whereas standard deviation is an instance of variability metrics. Furthermore, this descriptive result demonstrates an overall picture of data and information.

Table 1: Descriptive statistic

	HRADI	EPS	ROA	ROE	Tobin's Q	Share price
Mean	0.653	27.670	0.008	0.018	1.444	439.780
Median	0.667	3.920	0.022	0.074	0.662	31.700
Maximum	0.933	999.170	0.243	0.629	18.509	14900.000
Minimum	0.300	-278.630	-1.693	-2.145	-0.068	1.800
Std. Dev.	0.131	125.230	0.186	0.364	2.942	2096.427

The descriptive statistics of collected data was presented in table 1. Human resource accounting index has a 30 percent minimum and a 93 percent maximum. Furthermore, the minimum figure denotes the lowest level of companies who have disclosed human resource information in their annual reports. The maximum value is the greatest amount of human resource accounting data that the company has disclosed. It means that the maximum disclosure value among the 50 companies in the sample is 93 percent. And it shows the average amount of human resource information 66%.

When considering other variables which can be identified as dependent variables has provided an overall picture of the company's data. In EPS, it shows, the mean value of 27.668. The standard deviation is 125.229, according to the data. The minimum value of -278.634 is the lowest EPS recorded within the sample used in this study, while the maximum value of 999.170 represents the highest value among the organizations. Maximum EPS can be determined among the sample companies as the highest income per share. Furthermore, the lowest EPS shows the EPS' lowest value. Based on the average amount of EPS provided by all companies, which is based on statistical data, the average amount of EPS is 3.92.

ROA can be identified as the second main dependent variable of this study. It shows, the mean value of 0.008. The standard deviation of 0.186 and The minimum value of -1.693 denotes the lowest ROA recorded within the sample used in this study, while the maximum value of 0.243 indicates the highest value among the firms. Maximum ROA can be determined among the sample companies with a high return on assets. Furthermore, the smallest amount indicates the ROA's minimum value. Based on the average amount of ROA provided by all companies, which is based on statistical data, the average amount of ROA is 0.022.

The third dependent variable used to evaluate financial success in this study is ROE, which has a mean value of 0.018. The standard deviation of this variable is 0.364. This variable has a maximum value of 0.629. It means that the maximum Return on Equity among out of 50 companies is 0.629. And a minimum value of -2.145, which is a negative number. The average ROE is 0.074.

Tobin's Q, which has a mean value of 1.444, is another key dependent variable used in this study to determine market success. The standard deviation of this variable is 2.942. This variable's average is 0.662. This variable has a maximum value of 18.508 and a minimum value of -0.068, which is a negative number.

The fifth one among the dependent variables is share price. It utilized in this study to assess market success is share price, which has a mean value of 439.780. The value of this variable's standard deviation is 2096.427. It contains an average value of 31.7000. The greatest value stated for this variable is 14900.00, and the minimum value stated for this variable is 1.800.

5.2 Correlation Analysis

Correlation Analysis is a statistical tool for determining whether or not two variables/datasets have a link and how strong that relationship is. In the context of market research, correlation analysis is used to examine quantitative data collected through research methods such as surveys to determine whether there are any noteworthy links, patterns, or trends between the two. Correlation analysis is a technique for detecting trends in data sets. (Flexmr, 2019).

Table 2: Correlation Analysis

	EPS	ROA	ROE	Tobin's Q	share price	HRADI
EPS	1.000					
ROA	0.146	1.000				
ROE	0.080	0.153	1.000			
Tobin's Q	-0.034	0.108	0.053	1.000		
Share price	0.136	0.019	0.026	0.102	1.000	
HRADI	0.085	0.217	0.069	-0.157	-0.199	1.000

Table 2 represented that, the strength of the relationship between the dependent and independent variables. In this study, HRADI was an independent variable and other variables which are known as EPS, ROA, ROE, Tobin's Q and share price were dependent variables. Here HRADI and EPS represent 0.084 coefficient of correlation and it can be identified as a very weak positive relationship between HRADI and EPS. The value of the correlation varies between +1 and -1 in terms of the strength of the relationship. A value of 1 show that the two variables are perfectly related. There EPS & HRADI have a value less than 1. Because of that, it indicates a weak relationship. Furthermore, ROA represents a 0.217 coefficient of correlation. It has shown a weak positive correlation between HRADI and ROA. Whenever a variable rise, another one generally increases as well, vice versa but in a shaky or unstable way. And also, ROE represents a 0.069 coefficient of correlation and it also can be identified as a very weak positive relationship between HRADI and ROE. Moreover, Tobin's Q ratio and share price represented -0.157, -0.199 correlation values respectively and both values had shown a very weak negative relationship between Share price, Tobin's Q HRADI. Because of that relationship between two variables in which one variable increases as the other decreases, and vice versa. But in a shaky or unstable way.

5.3 Regression Analysis

Regression analysis is a statistical method for determining the relationship between variables that have a cause and effect relationship. The primary goal of regression analysis is to examine the relationship between a dependent variable and one independent variable and to create a linear relationship equation between them. Because it not only but also explains the trend and strength of a link, but also indicates the relationship's accidental effect (Uyanic & Guler, 2013) In regression analysis, it shows a statistical relationship between independent and dependent variables

5.3.1 Earning Per Share (EPS)

Table 3: Dependent variable EPS

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-408.356	133.148	-3.067	0.003
HRADI	44.995	92.262	0.488	0.627
F_SIZE	17.260	5.328	3.239	0.002
R-squared	0.104	F-statistic		5.634
Adjusted R-squared	0.086	Prob(F-statistic)		0.005

EPS = - 408.356 + 44.995 HRADI + 17.260 FSIZE + ε

According to Table 3 indicates that The EPS has a t-statistic of 0.488, which is lower than 2, and a probability of 0.627, which is more than 0.05. This suggests that there is no significant relationship between human resource accounting disclosure and EPS. Furthermore, a positive t-statistic indicates that there is a positive association When HRADI increase ROE also increase and vice versa. Furthermore, when considering firm size has shown a 3.239 t- statistic value and it was greater than 2 and probability of 0.002, which is lower than 0.05. This suggests that there is a significant relationship between firm size and EPS. Furthermore, a positive t-statistic indicates that there is a positive association; when FSIZE rises, so does EPS, and vice versa.

R squared value represents the explanatory power of independent variables and dependent variables. In above table has shown, EPS change by 10% as a result of HRADI.

5.3.2 Return on Assets (ROA)

Table 4: Dependent variable ROA

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.447	0.202	-2.210	0.030
HRADI	0.284	0.140	2.029	0.045
F_SIZE	0.284	0.008	1.412	0.161
R-squared	0.066	F-statistic		3.446
Adjusted R-squared	0.047	Prob(F-statistic)		0.036

ROA = -0.447 + 0.284 HRADI + 0.284 FSIZE + ε

Table 4 indicates that the dependent variable which can be identified as ROA describes 2.029 of t- statistic value and it was greater than 2 and, probability 0.045, which is lower than 0.05. This suggests that there is a significant relationship between human resource accounting disclosure and ROA. Because it was significant at probability value (0.05). Furthermore, a positive t-statistic indicates that there is a positive association; when human resource accounting disclosure rises, so does ROA, and vice versa. Furthermore, when considering firm size has shown a 1.412 t- statistic value and it was lower than 2 and probability of 0.161, which is greater than 0.05. This suggests that there is no significant relationship between firm size and ROA. Furthermore, a positive t-statistic indicates that there is a positive association; when FSIZE increase ROA value also increase vice versa. This is the only significant variable that had been a positive relationship between index and ROA, among other dependent variables.

R squared value represents the explanatory power of independent variables and dependent variables. In above table has shown, ROA changes by 6% as a result of index.

5.3.3 Return on Equity (ROE)

Table 5: Dependent variable ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.064	0.408	-0.156	0.877
HRADI	-0.064	0.283	0.686	0.494
F_SIZE	-0.002	0.016	-0.118	0.907
R-squared	0.005	F-statistic		0.236
Adjusted R-squared	-0.016	Prob(F-statistic)		0.790

ROE = -0.064 - 0.064 HRADI - 0.002 FSIZE + ε

According to the above table 5 indicates that The ROE has a t-statistic of 0.686, which is lower than 2, and a probability of 0.494, which is more than 0.05. This suggests that there is no significant relationship between human resource accounting disclosure and ROE. Furthermore, a positive t-statistic indicates that there is a positive association; when HRADI rises, so does ROE, and vice versa. Furthermore, when considering firm size has shown -0.118 t- statistic value and it was lower than 2 and probability of 0.907, which is greater than 0.05. This suggests that there is no significant relationship between firm size and ROE. Furthermore, a negative t-statistic indicates that there is a negative association; when FSIZE increase, EPS decrease vice versa.

R squared value represents the explanatory power of independent variables and dependent variables. In above table has shown, ROE changes by 5% as a result of HRADI.

5.3.4 Share Price

Table 6 indicates that the dependent variable which can be identified as Share Price describes -1.862 of t- statistic value and it was lower than 2 and, probability 0.066 which is greater than 0.05. This suggests that there is no significant relationship between human resource accounting disclosure and Share price. Because it was not significant at p-value (0.05). Furthermore, a negative t-statistic indicates that there is a negative association; when HRADI rises, so does not Share Price, and vice versa. Furthermore, when considering firm size has shown a - 1.206 t- statistic value and it was lower than 2 and probability of 0.231, which is greater than 0.05. This suggests that there is no significant relationship between firm size and Share price. Furthermore, a negative t-statistic indicates that there is a negative association; when FSIZE increase, Share price decrease vice versa.

Table 6: Dependent variable Share Price

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4974.324	2290.483	2.172	0.032
HRADI	-2954.637	1587.144	-1.862	0.066
F_SIZE	-110.537	91.655	-1.206	0.231
R-squared	0.0540	F-statistic		2.767
Adjusted R-squared	0.0345	Prob(F-statistic)		0.068

Share Price = 4974.324 - 2954.637 HRADI - 110.537 FSIZE + ε

R squared value represents the explanatory power of independent variables and dependent variables. In above table has shown, Share Price change by 5% as a result of HRADI.

5.3.5 Tobin's Q ratio

Table 7: Dependent variable Tobin's Q

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.572	3.254	0.483	0.630
HRADI	-3.720	2.255	-1.650	0.102
F_SIZE	0.098	0.130	0.750	0.455
R-squared	0.030	F-statistic		1.516
Adjusted R-squared	0.010	Prob(F-statistic)		0.225

Tobin's Q = 1.572 -3.720 HRADI + 0.098 FSIZE + ε

Table 7 indicates that the dependent variable which can be identified as Tobin's Q Ratio describes -1.650 of t- statistic value and it was lower than 2 and, probability 0.102 which is greater than 0.05. This suggests that there is no significant relationship between human resource accounting disclosure and Tobin's Q Ratio. Because it is not significant at p-value (0.05). Furthermore, a negative t-statistic indicates that there is a negative association; when HRADI rises, so does not Tobin's Q and vice versa. Furthermore, when considering firm size, has shown 0.750 t- statistic value and it was lower than 2 and probability of 0.455, which is greater than 0.05. This suggests that there is no significant relationship between firm size and Tobin's Q. Furthermore, a positive t-statistic indicates that there is a positive association; when FSIZE rises, so does Tobin's Q, and vice versa. R squared value represents the explanatory power of independent variables and dependent variables. In above table has shown, Tobin's Q changes by 3% as a result of HRADI.

6. CONCLUSION

The objective of the present study was to look into the impact of Human Resource Disclosures procedures on a company's performance. The response to this issue is that overall Human Recourse Accounting Disclosures and financial performance have a significant positive relationship. Because the ROA and the Human Recourse Accounting Disclosure Index have a strong positive relationship. As a result, Human Recourse Accounting Disclosures have an impact on the firm's financial performance. However, there is not any significant relationship between HRA Disclosures and market value. As a limitation this study had been used only 50 companies were listed in the CSE. If more data is acquired from the CSE's listed companies, generalizability of findings will increase. In addition, just two years were chosen for data gathering. If the data collection is done over a longer period to ensure that enough data is acquired to accurately determine the connection between variables used in this study.

REFERENCES

Chathurika, H. L. D. J., & De Silva, R. T. V. (2019). Impact of Expenditure on Human Capital and Human Capital Accounting On Firms' Financial Performance in Sri Lanka. *Asian Journal of Multidisciplinary Studies*, *7*, 2.

Chen, M. C., Cheng, S. J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of intellectual capital*.

Dhar, B. K., Mutalib, M., & Sobhani, F. A. (2017). Investigating the Impact of Human Resource Accounting Practice on Organizational Performance. In *International Islamic Social Economic Conference, Universiti Sains Islam Malaysia, Malaysia*

Khan, S. (2021). Impact of human resource accounting on organizations' financial performance in the context of SMEs. *Accounting*, *7*(3), 621-628.

Maditinos, D., Chatzoudes, D., Tsairidis, C., & Theriou, G. (2011). The impact of intellectual capital on firms' market value and financial performance. *Journal of intellectual capital*.

Micah, L. C., Ofurum, C. O., & Ihendinihu, J. U. (2012). Firms financial performance and human resource accounting disclosure in Nigeria. *International Journal of Business and Management*, *7*(14), 67.

Omodero, C. O., Alpheaus, O. E., & Ihendinihu, J. U. (2016). Human resource costs and financial performance: evidence from selected listed firms in Nigeria. *International Journal of Interdisciplinary Research Methods*, *3*(4), 14-27.

Sylvia, Y., Ajike, M., & Olaitan, T. (2019). The impact of Human Resource Accounting (HRA) on the Performance of Nigerian firms. *AKINTARO, Abel Abiodun Ph. D*, 251.

Michael, O. (2013). Comparative analyses of human resource accounting disclosure practices in Nigerian financial service and manufacturing companies. *IOSR Journal of Humanities and Social Science*, *16*(1), 20-26.

Vokić, N. P. Looking at HRM through the lens of agency theory–are suboptimal HRM practices a consequence of moral hazard?.

Cherian, J., & Farouq, S. (2013). A review of human resource accounting and organizational performance. *International Journal of Economics and Finance*, *5*(8), 74-83.

Soiferman, L. K. (2010). Compare and Contrast Inductive and Deductive Research Approaches. *Online Submission*.

Uyanık, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia-Social and Behavioral Sciences*, *106*, 234-240.

Determinants of Customers' Attitudes towards Credit Card Usage: Special Reference to Middle Level Employees in Sri Lanka

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ABSTRACT

The main aim of this study was to identify the determinants of attitude towards credit card usage of salaried employees in Sri Lanka. Although many empirical researches are found regarding credit card usage of individuals in many other countries, in Sri Lankan context it is evident that lack of research works have been carried out on investigating the attitude of individuals of using a credit card for their spending purposes. Therefore, to investigate the factors affecting the customers attitude towards usage of credit cards, the study collected primary data from 320 middle level salaried employees in Sri Lanka by delivering a structured questionnaire. The sample was collected based on the convenient sampling method. Perceived usefulness, financial knowledge and social influence were identified as the independent variables and credit card usage was considered as the dependent variable of the research model. Accordingly, three hypotheses were tested using correlation test regression analysis to investigate the significance of the relationship between the identified variables. Based on the analysis it was revealed that perceived usefulness, customer's financial knowledge shows a significant positive relationship with the dependent variable "Credit Card Usage" of middle level employees in Sri Lanka. The results of the study would be beneficial to Banks and other Credit Card issuing institutions when making strategic decisions related to the development and promotion of the product

Keywords: Credit Card Usage, Customer Attitude, Perceived Usefulness, Financial Knowledge

1. INTRODUCTION

Today's fast- paced world is increasingly characterized by technology-facilitated transactions. The world is moving to a cashless society. People tend to do many transactions using online platforms rather than visiting a physical store to fulfill their needs. In this kind of situation credit cards play a vital role as the mode of payment when performing the transactions. A credit card can be identified as a rectangular plastic card offered by a bank or other financial institution which lets the customer borrow funds from a pre- approved limit agreed with the issuer to pay for the purchases. Based on the customer's credit history and credit score, the bank/ credit card issuer is deciding the credit limit which can be offered to the particular customer. The credit card is considered as a competitive banking product that enhances the financial transactions of the bank and enhances the financial position of the bank (Ismail, Amin, Shayeri &

Hashmi, 2014). The use of credit cards is very much important to the people who are having the problem of high income- consumption gap. In Sri Lanka most of the people fall into middle income earners. According to the World Bank's new country classification by income level, Sri Lanka is in the category of Upper-middle income country based on per capita income. So the middle-income earners tend to purchase credit cards to fill the income- consumption gap. Nowadays not only Sri Lanka but also the whole world is suffering from the corona virus and the COVID pandemic. Since it is spread through droplets of infected persons to healthy persons directly or surfaces. And paper money is a good media for the virus to be spread. So nowadays people tend to avoid paper cash and use much of e- cash. Previously people visited the market place and bought what they wanted and paid for them. But during the pandemic situation that occurs after 2020 it is much difficult to visit the market place. Therefore, people were attracted to online shopping platforms to buy their needs, staying at home. As the payment method people have to use different types of bank cards (Hashem, 2020).

In earlier days only the elite category of people such as Businessmen & professionals had the opportunity to carry a credit card on them as having a credit card was concerned as a prestige which could obtain for a person who earns a high income for a month. But within the last few years the commercial banking sector gradually broke these scenarios in the society by broadening their target customers. Most of the banks have relaxed many conditions on purchasing a credit card and it has paved an opportunity even for a person who earns an average income of 25000 or above to hold a card designed according to his income level. According to the latest report of the Central Bank of Sri Lanka (CBSL) on credit card issued by Licensed Commercial Banks (LCBs), the number of active credit cards in the country increased to nearly 1,884,341 in September 2020 from 1,870,827 in August 2020. Though there is an increase of active credit cards, most recently the total outstanding balance of all credit cards has fallen down in September 2020 to Rs.mn 117,534 from Rs.mn 118,100 in August 2020. It is a huge decrease of Rs.mn 566 (Payments bulletin, 2020)

It is evident from the figures that Commercial banks both state and private, have identified the potential of offering credit cards to the increasing number of salaried employees who have recently entered the job market of the country. Banks have introduced affordable offers along with attractive benefits targeting different categories of income earners in the country. In this kind of a context a clear need arises for the credit card providers and associated authorities to identify the factors that influence the usage of credit cards by their target customers. Though Several research studies have been undertaken in local and foreign context to examine consumer attitudes towards credit card usage among employees, college students, university academics, professionals and household individuals (Ismail et al., 2014; Ahmed, 2020; Sriyalatha,2016: Perera, 2020), researcher identified a vacuum in the existing literature as few studies have been carried out targeting the employees in Sri Lanka who are earning a middle level income (Rs 30,000-Rs 100,000) and do not belong to the category of professionals or high income earners. To infuse the gap, this study aims to investigate the determinants affecting the credit card usage specifically concentrating the middle level income earners of Sri Lanka.

2. LITERATURE REVIEW

2.1 Usage of Credit Cards

Credit cards are a major tool for the purchases and the financing of customers. And disposable income increased faster than credit card debt increases concern among policy makers. Increasing the debt on the credit for the recovery of consumer spending is generally considered as a factor for economic stimulus. The introduction of credit and debit cards has encouraged consumers to maximize consumer decision-making by providing a secure and quick access to all funds by depositing a loan or loan. Vendors benefit from having less cash on hand and using checks in the system as they have access to a larger pool of customers with guaranteed payments. Cards also play an important role in e-commerce due to their inherent efficiencies. It is clear that credit cards play an important role in an economy. In Moody's Report 2016, this process has been discussed. They introduced the economic cycle explains the process of economic growth continued to be funded by credit cards. This demonstrates that the increase in consumption due to higher output due to increased use of credit cards and finally it facilitates a reduction in the unemployment employment economy. However, economists threaten those high levels of debt could limit spending in the future and ultimately slow down economic growth (Moody's Analytics, 2016).

Much of previous research on the use of credit cards has focused on the difference between credit cards and other forms of payment for consumer spending. A common finding from this research is that using credit cards when deciding to buy can cost more than cash or checks (Feinberg, 1986; Hirschman, 1979; Rick et al., 2008). Brito and Hartley (1995) Show that credit card liquidation services provide creditors with the opportunity to save money and avoid costs. Furthermore, they found that because of the low transaction cost, credit cards are more attractive than bank loans. To take a loan from a financial institution people have to bear a comparably high effort and more time. Because of this convenience many credit card holders are willing to pay high interest on outstanding credit card balances. Due to the secure and unrestricted nature of credit cards, creditors are more likely to default on credit cards than other secured loans such as home loans, car loans and installment loans. In other words, since no collateral can be withdrawn from the card issuer, a loan repayment from a credit card cannot be made after default or bankruptcy. As a result, banks eliminate this risk by charging high interest rates and service charges for credit loans, making it more expensive for consumers to take out unsecured loans than secured loans. Many employees have gone bankrupt due to high credit card costs and the inability to repay loans early in their service life (Ismail et al, 2014). People are facing economic and financial problems and they have to overcome those financial burdens within a limited time frame, as a temporary tool for solving those problems Sri Lankans may use credit cards (Velananda, 2020). Consumers use credit cards as a means of payment and choose to pay interest on the unpaid balance. When customers use credit as a credit currency, credit cards compete with bank loans and other forms of financing. As a result, incremental borrowing accounts for a significant and growing share of consumer debt.

The literature recognizes the importance beyond the use of credit cards as a means of enhancing purchasing power or as a source of lifestyle-enhancing technology. For example, working and middle-class people with credit cards can have a level of participation in the contemporary consumer culture, which is different than what is possible without it. However, credit and bankruptcy reports underscore the importance of credit cards for the economy, as over-reliance on credit cards cause financial difficulties for creditors and many have a monthly unpaid balance (Wickramasinghe & Gurugamage, 2012).

2.2 Perceived Usefulness

Perceived usefulness can be derived from the concept of innovation expansion, which consists of two distinct components, short-term usefulness and long-term usefulness. It is defined as the extent to which users believe that using the system will enhance their learning abilities (Davis, 1989). Outcomes can be measured in terms of learning efficiency and effectiveness. TAM assumes that the perceived usefulness has a direct impact on the idea of using such systems in the future. The perceived ease of use and perceived usefulness is influencing the use of specific information systems (Pebe et al, 2012, Safakli, 2007). Sari and Rofaida (2011) showed that there was a positive attitude towards credit card use among all respondents, and that a positive attitude towards credit card use contributed the most to accepted use. Further study showed that using a credit card was a serious goal, and its ultimate goal was to spend money on general spending with a credit card. In addition, the researchers found that because respondents use credit cards wisely, using credit cards provides support and does not cause financial problems in the future. Credit cards are valued for non-cash payments and personal consumer loans (Chahal et al., 2014). Customers prefer to make more credit due to the uncertainty when carrying cash and for offering discounts or cash by famous brands (Dali et al., 2015). People use credit cards as it provides a long grace period. They can even withdraw money through credit cards as needed (Chahal et al., 2014). As a result, consumers are more likely to use credit cards on a daily basis as they appreciate their performance (Trinh et al., 2020).

Sriyalatha (2016) in her study identified that the most influential variable on attitude towards credit card usage is card used intention followed by perceived usefulness and availability of information. This is consistent with studies by Yahaya and Haji-Othman (2014) and Maya & Rofi (2011) that perceived ease of use and perceived usefulness of a credit card influences attitude towards usage of credit cards.

2.3 Social Influence

Social influence is the level at which a consumer understands that important people believe that a person should or should not follow a certain pattern of behavior (Ajzen, 1991, Venkatesh et al., 2003). Credit card features cannot be monitored and evaluated by customers, and their friends and colleagues often find it difficult to use and talk to them (Qureshi et al., 2018). Amin (2013)

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argued that consumers tend to adopt and imitate the financial attitudes and behaviors of family members. In addition, media designed specifically to reach a large audience or audience has contributed to raising consumer awareness about credit cards. Empirical evidence suggests that the perspective of social groups can improve one's expected credit card usage (Ali et al., 2017, Amin, 2013, Nguyen and Cassidy, 2018, Trinh and Vuong, 2017, Varaprasad et al., 2013). However, Leong et al. (2013) suggested that social impact only indirectly affects the expected use of credit cards through perceived usefulness and perceived ease of use. In the research study which done by Hoang Nam Trinh, Hong Ha Tran, Duc Hoang Quan Vuong (2020) they found in their results of structural equation modeling reveal that consumers' perceived risk, perceived usefulness, social influence, and perceived ease of use are significantly determined by their desire to use a credit card.

Sari and Rofaida (2011) defined Attitude is the amount of affection a person feels for accepting or rejecting any behavior measured with a two-pointer action scale on the scale of evaluation (example: good or bad, agree or refuse). They also stated that the subjective norm consists of two types of influences, interpersonal and external. Interpersonal influence is the influence of adoptive friends, family members, assistants, supervisors, and experienced individuals. External influence, on the other hand, is the influence of external media reports, special expert opinion, and other non-personal information considered by individuals in their conduct. Lujain, Gattan and Faleel (2021) indicate that the credit card holders are influenced by their emotions, in other words the positive emotional feelings towards credit usage motivate higher number of credit card purchases and increase credit card balances. Family influence is also considered as a factor influencing credit card usage. The main medium of learning to use credit effectively and the main source of financial knowledge are family influence and personal experience (Hilgert & Hogarth 2003). Parents, schools, peers, and the media are all part of learning and socializing from a teen's birth to adulthood (Mansfield et al. 2003). All of these factors affect a young person's debt awareness or awareness of the pros and cons of credit cards. Parents, schools, peers, and the media also play a role in influencing the consumer behavior of young adults. Among them, parents are the most influencing factor on teenager's credit card use behavior (Ismail et al. 2011).

2.4 Financial knowledge

As the findings of Ismail et al (2014), knowledge is an important factor that should be considered by banks offering credit cards. Further, the personal financial knowledge of the customer is a very important component in making decisions of the customer. For example, knowledge of credit card use may be useful in promoting personal finance education among high school and college students (Robb and Sharpe 2009). College students generally do not seem to have much knowledge of financial issues. However, they still seem to be the most effective credit card users. Thus, these findings raise the question of whether personal financial knowledge has an impact on consumer financial decision-making (Ismail et al, 2014). There are a number of methods that can be used to improve customer knowledge about credit card usage. For instance, banks can publish the latest information about credit cards, which should help to elevate consumer knowledge and, thus, improve attitudes towards credit card usage. Various credit card issuers have set up extensive advertising campaigns using local media to compete fiercely and increase credit card usage. In addition, advertising through various media platforms such as television, radio, magazines and newspapers - as a means of targeting high-income professionals and white-collar workers and making them active cardholders (Ismail et al, 2014). Perera (2020) identified that there is a significant relationship among the category of financial literacy and the credit card usage. Further, in this research the researcher had concluded that there is a difference between credit card usages on financial literacy rate and, credit card users significantly have a high level of financial literacy rate. Perera (2016), in his study has mentioned that in the previous literature in many countries, financial literacy rate is a considerable factor among other factors which affect the usage of credit cards. Ahmed (2020) has studied that there is a significant relationship between consumers' behavior and their attitude toward the use of credit cards. It is also revealed that the majority of the consumers would prefer to use credit cards in their daily life to carry out a range of financial transactions.

Wickramasinghe and Gurugamage (2012) in their study found a significant link between the level of education and knowledge of complementary/ competitive credit card systems. In particular, highly educated users are more knowledgeable about complementary/ competitive credit card systems, and knowledge of complementary/ competitive credit card systems is positively linked to the use of credit cards for ease of transaction. Further credit card usage was found to be inversely related to credit risk knowledge and ease of transaction.

3. METHODOLOGY

Based on the theories and the review of literature, the researcher has developed a conceptual framework to find out the attitudes of credit card holders towards the credit card usage. The attitude dimensions, which are perceived usefulness, financial knowledge and social influence, are stated as independent variables and credit card usage assumed as the dependent variable.

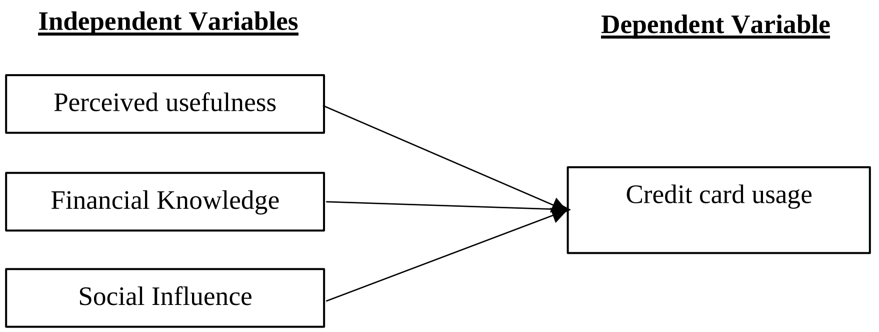

Figure 1: Conceptual Framework

Source: Researcher Constructed (2021)

3.1 Hypothesis

H1: There is a significant positive impact of perceived usefulness on credit card usage

H2: There is a significant positive impact of customer's financial knowledge on credit card usage

H3: There is a significant positive impact of social influence on credit card usage

Out of the two types of approaches to research: Inductive and deductive (Saunders, Lewis and Thornhill, 2009), This study is involved with the deductive approach and has derived hypotheses based upon the conceptual framework which is based on literature. Further, the researcher has generalized the findings which have been achieved. In this research the researcher mainly uses primary data gathered by a sample of credit card users through a Google form of questionnaire which is developed to obtain information regarding the customer attitudes towards credit card usage. According to Alison Wolf (2016) the primary data is in the sense; new information collected directly from people you know specifically for your needs.

All the primary data was obtained from middle level salaried employees who are currently using credit cards for their spending purposes. In this research self-administered questionnaires and Google forms are used. This type of questionnaire is completed by the respondents on their own without an interview. It is a firsthand experience where information is developed and gathered by researchers. The questionnaire was selected as the data collection strategy due to several reasons. Thus, questionnaire was the possible method to collect reliable information while informing the respondents that they cannot be identified from the information they provide. Through the questionnaire's respondents were asked to denote their attitudes towards credit card usage in different parameters on a five-point rating scale. Particularly all respondents filled the questionnaire based on their opinion. The structured questionnaire used by the researcher for data collection of this study includes both self-constructed questions as well as questions which were referred and developed by authors of similar researchers.

Population of a study represents a large collection of individuals or objects which have similar characteristics. According to the Central Bank of Sri Lanka in 2020 the total number of active credit cards prevailing is 1,884,341 in number. Due to the large number in the populations, time constraint and complexity issues, researchers decided to collect data based on the convenient sampling by reaching a target of 400 middle level employees as the sample of the study. Out of the 400 questionnaires delivered, the researcher could obtain 320 responses during the time frame.

The regression analysis is the one of statistical methods that is used to estimate the relationship between variables. It is used to find out how the typical value of a dependent variable changes when any one of the independent variables is varied. The Simple purpose of this method is usually to predict the value of one variable corresponding to the given value of another variable.

Accordingly, the following regression model is formulated.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U_i$$

Where,

Y	= Credit Card Usage
B_0	= Constant Term
B_1, B_2, B_3	= Coefficient of Variables
$X_{1\ s}$	= Perceived Usefulness
X_2	= Financial Knowledge
X_3	= Social Influence
Ui	= Error Term

4. FINDINGS AND DISCUSSION

4.1 Demographic Profile

From the study findings, the majority of the respondents (56.9%) were female and others (43.1%) were male. The majority of the respondents (46.9%) were employed in the private sector, 30% of respondents employed in the public sector and the rest 23.1% were self- employed. The majority of the respondents (48.1%) were in the age range of 20-30, 42.5% of respondents were 31-50, and 6.9% were above 50 and the rest 2.5% were below 20. The majority of the respondents (45%) were degree holders, 21.9% of respondents had the O/L & A/L qualifications. Respondents who process diplomas and postgraduate degrees recorded an equal percentage of 15% and the rest 3.1% hold others' educational status. An equal percentage of 32.5% were taken by the respondents who had a monthly income in the range of Rs. 30,000- Rs. 50,000 and Rs. 50,000- Rs. 100,000. 18.8% of respondents were below Rs. 30,000 and 16.3% were above Rs. 100,000.

Based on the correlation analysis it was found that there is a significant positive relationship between perceived usefulness, customer knowledge and credit card usage. The coefficient values were recorded as +0.407, +0.543 respectively. The P values appeared as 0.000 which is less than 0.05 proving a significant positive relationship between the variables. Therefore, the results supported the acceptance of hypotheses H1 & H2.

However, in between social influence and credit card usage the Pearson correlation was recorded as +0.083 with an associated P value of 0.140 which is greater than 0.05. Therefore, the hypothesis H3 has to be rejected as it does not indicate a significant relationship between social influence and usage of credit cards. To test the hypothesis further the researcher employed a regression analysis and the results were stated in Table 1.

From studying the Table 1, it can be explained how much deviation occurs in a dependent variable when shifting one unit of independent variable. As per the above data coefficient between intention to use and credit card usage is +0.051 at (0.000) 5% significance level. It implies that one unit of change in intention to use will affect the increase in credit card usage by 0.051.

Table 1: Multiple Regression Analysis

	R	R square		Beta	Significance
Multiple regression	.578	.334	(Constant)	1.2	.000
			Perceived Usefulness	.051	.000
			Financial Knowledge	.357	.000
			Social Influence	-.027.	.0542

Source: Researcher constructed (2021)

The coefficient between customer knowledge and credit card usage is +0.357 and it is statistically significant (0.000) at 5% significance level. It implies that one unit of change in customer knowledge will affect the increase in credit card usage by 0.357. The coefficient of Social Influence is recorded as -0.027 for credit card usage. Yet, at 5% level of significance it cannot be identified as a significant variable since the p value is greater than 0.05.

So then according to the above results the regression model can be derived as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2$$

$$Y = 1.2 + 0.051X_1 + 0.357X_2$$

Where,

Y = credit card usage
X1 = Perceived usefulness
X2 = Financial knowledge

Based on the results presented in table one it can be identified that the variables "Perceived Usefulness" and "Financial knowledge" show a positive significant relationship with the dependent variable "Credit Card Usage". The Hypothesis H1 & H2 are accepted at a 5% level of significance hence the p value is recorded as .000 for both coefficients.

Table 2: Results of the Hypothesis Testing

Hypothesis	Description	Result
H1	There is a significant positive impact of perceived usefulness on credit card usage	Accepted
H2	There is a significant positive impact of customer's financial knowledge on credit card usage	Accepted
H3	There is a significant positive impact of social influence on credit card usage	Rejected

Source: Researcher constructed (2021)

However, the variable social influence does not show a significant relationship with the credit card usage as it has a p value exceeding 0.05 proving the hypothesis is rejected. Therefore, the researcher concludes that the two dimensions namely ``Perceived Usefulness" and "Financial knowledge" which were used to reflect attitude towards credit cards are proven to have a significant positive relationship with the usage of credit cards of middle level employees in Sri Lanka.

5. CONCLUSION

The main objective of this study was to identify the determinants of attitude towards credit card usage of middle level employees in Sri Lanka. To achieve the objective, a regression analysis was employed to find the relationship between the identified independent and dependent variables. According to the findings of the study it can be concluded that there is a significant positive impact from perceived usefulness and customer knowledge to the credit card usage of middle level income earners in Sri Lanka. This result is in line with the similar study carried by Sriyalatha (2016), Yahaya and Haji-Othman (2014) and Maya and Rofi (2011) which revealed that perceived usefulness of a credit card influences attitude towards usage of credit cards. According to the study it was revealed that social influence does not significantly affect the usage of credit cards. It reflects those opinions of other individuals regarding risk and cost factors would influence the attitude of limiting the usage of credit card of the individuals. However, the researcher suggests further investigation on the same factor since the results are in contrast with the findings of similar studies carried out for different categories of individuals. (Ali et al., 2017, Amin, 2013, Nguyen and Cassidy, 2018, Trinh and Vuong, 2017, Varaprasad et al., 2013). According to the findings of the study the customer's financial knowledge is the highest influencing factor to the credit card usage. Financial knowledge is an important factor that should be considered by banks when offering credit cards. A number of methods can be used to improve consumer knowledge about credit card usage. Banks can publish the latest information on credit cards, which can help improve customer knowledge and improve attitudes towards usage of credit cards. By understanding that perceived usefulness affects the credit card usage behavior, Banks can decide their credit card facilities and policies in a way that cardholders receive the ability of using their card on more occasions to fulfill their needs.

The study recommends future researchers to extend the analysis by incorporating more dimensions to test the attitude of cardholders who belong to different categories in terms of the level of income and other demographic factors. The sample size in this study was confined to 320 middle level income earning cardholders. Therefore, it is recommended to carry out further research by increasing the size of the sample to identify factors that were left unexplored due to the limitations of the study.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, *50*(2), 179-211.

Ali, M., Raza, S. A., & Puah, C. H. (2017). Factors affecting to select Islamic credit cards in Pakistan: the TRA model. *Journal of Islamic Marketing*.

Amin, H. (2013). Factors influencing Malaysian bank customers to choose Islamic credit cards: empirical evidence from the TRA model. *Journal of Islamic Marketing*.

Atienza, R. P. (2014). Credit card usage pattern in Ozamiz City, Philippines. *Journal of Multidisciplinary Studies*, *3*(1).

Brito, D. L., & Hartley, P. R. (1995). Consumer rationality and credit cards. *Journal of Political Economy*, *103*(2), 400-433.

Chahal, H., Sahi, G. K., & Rani, A. (2014). Moderating role of perceived risk in credit card usage and experience link. *Journal of Indian Business Research*.

Dali, N. R. S. M., Yousafzai, S., & Hamid, H. A. (2015). Credit cards preferences of Islamic and conventional credit card. *Journal of Islamic Marketing*,*6*(1).

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.

Farah, J. M. S., Haji-Othman, Y., & Omer, M. M. (2017). The Influence of Perceived Usefulness, Perceived Ease of Use, and Perceived of Trust on Customers' Acceptance to Use Islamic Credit Cards. *International Journal of Novel Research in Marketing Management and Economics*,*4*(1),24-32.

Feinberg, R. A. (1986). Credit cards as spending facilitating stimuli: A conditioning interpretation. *Journal of Consumer Research*, *13(*3), 348–356. https://doi.org/10.1086/209074

Gattan, L., & Faleel, J. (2021). The factors affecting the consumer's usage of credit cards in the kingdom of Saudi Arabia. *Palarch's Journal of Archaeology of Egypt / Egyptology*, *18*(13), 433-442.

Guriting, P., & Ndubisi, N. O. (2006). Borneo online banking: evaluating customer perceptions and behavioural intention. *Manage. Res. News*. *29* (1/2), 6-15.

Hashem, T. N. (2020). Examining the influence of covid 19 pandemic in changing customers' orientation towards e-shopping. *Modern Applied Science*, *14*(8), 59-76.

Hirschman, E. C. (1979), Differences in Consumer Purchase Behavior by Credit Card Payment System, *Journal of Consumer Research*, 6(1), 58-66.

Ismail, S., Amin, H., Shayeri, S. F., & Hasim, N. (2014). Determinants of attitudes towards credit card usage. *Journal Pengurusan 41*, 145-154.

Lee, J., & Kwon, J. (2002). Consumers' Use of Credit Cards: Store Credit Card Usage as an Alternative Payment and Financing Medium. *The journal of consumer affairs*,*36*(2),239-262.

Leong, L. Y., Hew, T. S., Tan, G. W. H., & Ooi, K. B. (2013). Predicting the determinants of the NFC-enabled mobile credit card acceptance: A neural networks approach. *Expert Systems with Applications*, *40*(14), 5604-5620.

Martins, C., Oliveira, T., & Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, *34*(1), 1-13.

Maya, S., & Rofi, R. (2011). Factors affecting the behavior of university community to use credit card. *International Research Journal of Business Studies*, *4*(3), 217-228.

Moody's Analytics. (February 2016). The impact of electronic payments on economic growth, Economic & consumer credit analytics. [Online]Available:https://usa.visa.com/dam/VCOM/download/visa-everywhere/globalimpact/impact-of-electronic-payments-on economic-growth.pdf

Nguyen, O. D. Y., & Cassidy, J. F. (2018). Consumer intention and credit card adoption in Vietnam. *Asia Pacific Journal of Marketing and Logistics*,*30*(4),779-796.

Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students 1. *Journal of applied social psychology*, *36*(6), 1395-1413.

Payments Bulletin, Payments and Settlement Department, Central bank of Sri Lanka. www.cbsl.gov.lk

Pebe, M., Eze, U. C., Yeow, J. A., & Lim, K. P. (2012). Credit card use patterns among working adult in Batswana. *International Journal on Social Science Economics & Art*, *2*(2), 81-88.

Perera, P. G. T. N. (2020). Financial Literacy and credit card usage: with special reference to Wewala West GN division, Sri Lanka.

Pinto, M. B., Parente, D. H., & Mansfield, P. M. (2005). Information learned from socialization agents: Its relationship to credit card use. *Family and Consumer Sciences Research Journal*, *33*(4), 357-367.

Quan, V. D., & Nam, T. H. (2017). Perceived Risk and the Intention to use Credit Cards. *International Research Journal of Finance and Economics*.

Qureshi, J. A., Rehman, S., & Qureshi, M. A. (2018). Consumers' attitude towards usage of debit and credit cards: evidences from the digital economy of Pakistan. *International Journal of Economics and Financial Issues*, *8*(5), 220-228.

Rogers, E. M. (1962) Diffusion of Innovations (1st ed.): Free Press, New York, NY.

Rogers, E. M. (1983) Diffusion of Innovations (4th ed.): The Free Press, New York, NY.

Safakli, O. V. (2007). Motivating factors of credit card usage and ownership: evidence from Northern Cyprus. *Investment Management and Financial Innovations*, (4, Iss. 4), 133-143.

Sari, M., & Rofaida, R. (2015). Factors affecting the behavior of university community to use credit card. *International Research Journal of Business Studies*, *4*(3).

Sripalawat, J., Thongmak, M., & Ngramyarn, A. (2011). M-banking in metropolitan Bangkok and a comparison with other countries. *Journal of computer information systems*, *51*(3), 67-76.

Sriyalatha, M. A. K. (2016). Determinants of customers' attitude towards credit card usage: lessons learned from academics in Sri Lanka.

Tan, G. W. H., Ooi, K. B., Chong, S. C., & Hew, T. S. (2014). NFC mobile credit card: the next frontier of mobile payment? *Telematics and Informatics*, *31*(2), 292-307.

Trinh, H. N., Tran, H. H., & Vuong, D. H. Q. (2020). Determinants of consumers' intention to use credit card: a perspective of multifaceted perceived risk. *Asian Journal of Economics and Banking*,*4*(3).

Trinh, H.N. & Vuong, D.H.Q. (2017), Developing credit card market from Vietnamese consumers' perspective. *Journal of Science Ho Chi Minh City Open University*,*21*(1),61-75.

Tseng, S. (2016), Bringing enjoy shopping by using credit cards: the antecedents of internal beliefs. *Journal of Economics and Economic Education Research*, *17*(16).

Varaprasad, G., Chandran, K. S., Sridharan, R., & Unnithan, A. B. (2013). An empirical investigation on credit card adoption in India. *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)*, *4*(1), 13-29.

Velananda, Y. L. (2020). Factors Influencing the Use of Credit Cards Usage among Sri Lankan Working Adults. *Asian Journal of Economics, Finance and Management*, 10-16.

Venkatesh, A., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, *24*(1): 115-139.

Venkatesh, V. (2000). Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Info. Syst. Res. 4*(4),342-365.

Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: development and test. *Decis. Sci*. *27*(3), 451- 481.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

ISSN: 2756-9373

Wang, Y., Wang, Y., Lin, H., & Tang, T. (2003). Determinants of user acceptance of internet banking: an empirical study. *Int. J. Service. Ind. Manage*. *14*(5), 501-519.

Wickramasinghe, V., & Gurugamage, A. (2012). Effects of social demographic attributes, knowledge about credit cards and perceived lifestyle outcomes on credit card usage. *International Journal of Consumer Studies*, *36*(1), 80-89.

Yahaya, S., & Haji-Othman, Y. (2014). Determinants of attitude of customers towards usage of Islamic credit card: A Study of Graduate students of Kolej Universitiy Insaniah. *European Journal of Business and Management*, *6*(32), 145-152.

Effects of Ownership Concentration on Corporate Performance: Sri Lankan Evidence

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ABSTRACT

This study will examine the effects of ownership concentration on corporate performance based on the listed entities in Sri Lanka. As the research philosophy of the current study is positivistic paradigm, quantitative research approach was selected. For this empirical study, population represents the listed entities in Colombo Stock Exchange representing nineteen Global Industry Classification Standard (GICS) industry groups. As the sample, 100 publicly listed companies were selected for a period starting from 2015/2016 to 2019/2020. Data were collected through the annual reports of the companies. OLS regression analysis shows that ownership concentration has a significant impact on the corporate performance measured by ROA. However, the results of the panel regression did not indicate any significant relationship between the ownership concentrations and firm performance. Through this study it helps potential investors, current decision makers to have a good understanding how the ownership of the companies affects the performance of the business in positive and negative ways. As further recommendation future researchers can widen the range of companies they are going to select as well they can consider ownership identities prevailing with in the Sri Lankan companies. In addition, potential researchers have the opportunity of considering the companies beyond the CSE listed companies while bringing more reliability to the studies by not only relying on the secondary data sources. Especially when it comes to private limited companies' different ownership types can be identified. It will be a new dimension for the current literature as well.

Keywords: Corporate Performance, Ownership Concentration, Colombo Stock Exchange

1. INTRODUCTION

Corporate performance is critical for any business entity. Because of the strong rivalry, businesses must retain competitive advantages by achieving consistent financial growth in order to flourish in the market. Performance of a business entity can be influenced by both internal factors as well as external factors. Amongst ownership structure is identified as a major concern. Corporate financial performance substantially connects to their ownership structure throughout the time, as it provides money through owner's equity (Lawal, et al., 2018). To that end, it is necessary to analyze how different kinds of ownership structures impact the company's profitability and growth. Ownership structures have two implications following structure of the ownership which is defined as share percentage of state, institutional, domestic individual shareholders and the other implication is the share percentage of top shareholder, top two, three or five shareholders (Dayarathne & Kumari, 2020; Claessens & Djankov, 1999).

According to previous studies, ownership concentration can be recognized as a variable that can impact business performance while also serving as a great corporate governance instrument for decreasing agency conflicts. Consequently, the purpose of this research is to examine the impact of ownership concentration on the corporate performance of listed firms in Sri Lanka addressing the research question of “How does the ownership concentration of affect corporate performances of listed entities in Colombo Stock Exchange?”

According to Holdernsee (2003), it has not been conclusively established whether the influence of shareholders on business performance is good or bad. As large block shareholders have some incentives and resources to monitor managerial actions and choices, the degree of concentration of ownership increases the firm's efficiency. Concentrated owners with significant shareholdings in the firm's ownership structure, provide an effective control mechanism via which management conduct can be watched and regulated, and as a result, the firm's performance changes (Waheed & Malik, 2019). And also, they are in a position to grab substantial amount out of the improvement of the firm performance as well (Abdelmohsen & Gehan, 2013). Dispersed ownership lacks the ability and motivation to resolve management agency issues. Market controls are the major regulating factors that hold managers in check in jurisdictions with dispersed ownership, where principals are generally both reluctant and unable to act as effective monitors (Madhani, 2016).

According to the prior studies, the effects of ownership concentration can be described through two offsetting effects namely monitoring/substitution effect and exploration effect. The monitoring effect is used to predict the favorable effect of ownership concentration on performance. On the other side, the expropriation effect is used to anticipate the negative effect of ownership concentration on performance (Villegas et al., 2018). Concentrated ownership, according to this line of research, may make it easier for controlling shareholders to extract private benefits at the expense of minority shareholders' wealth increasing the expropriation effect and, as a result, damaging performance (Filatotchev et al., 2013; Wang & Shailer, 2015).

Since there is a separation of ownership in listed entities, it is quite evident that when there is a diffused ownership concentration, management of the business receive significant control on their hands (Berle and Means, 1932). The shift of firm control from individual shareholders (owners) to managers (agents) in listed businesses results from the dispersion of ownership (Madhani, 2016). By having more power vested with the mangers of the business, managers may tend to focus more on their own interests rather than the interest of shareholders of the company. As a result, mangers are not going to fully utilize the investments or resources of the shareholders with the objective of maximize the shareholder wealth. Managers' self-interest drives them to mismanage company assets, such as pursuing excessively risky investment initiatives at the expense of capital providers (Pillai & Malkawi, 2018).

This paper is organized into six sections. Section one is about problem identification; Section 2 is on prior literature of the study. The next session summarizes methodology employed in this empirical study.Section 4 interprets the results and discussion of the study. Section 5 describes the conclusions of the study consisting with the future recommendations.

2. LITERATURE REVIEW

The effect of ownership concentration and firm performance is found mixed. In the previous two decades, the relationship between ownership concentration and company profitability has caused considerable worry among corporate investors, leading a substantial examination in the wider scope of modern finance among various participants (Madhani, 2016). Generally speaking, studies on this area of research could be divided into two main groups depending on their approach to ownership structure: the first group describes about the relevance of the concentration of shares for main shareholders (Abdelmohsen & Mousa, 2013; Murtaza, et al., 2020). The second group considers the relevance of the type of investors (Dayarathne & Kumari, 2020).

2.1 Theoretical Background

Corporate Governance

There is no single definition of corporate governance rather, it could be seen from various angles. However, it is widely acknowledged under these definitions that safeguarding a business entity's financial health is critical. (Ajward et al., 2016). Sheifier & Vishny (1986) define corporate governance as the" ways in which suppliers of finance to companies assure themselves of getting a return on their investment". The corporate governance system is regarded as a key component in regulating and monitoring the firm's activities in a good and better manner (Aslam et al., 2019). Corporate governance mechanisms provide assurance that people who invest their capital can receive returns on this capital (Lepore et al., 2017).

Agency Theory

The history of the agency problem may be traced back to the period when human civilization performed commerce and attempted to maximize their interests. Adam Smith was maybe the first author to suggest the possibility of an agency issue, and this has been a driving element for economists to nurture features of agency theory ever since. Smith predicted in his book The Wealth of Nations that if an organization is governed by a person or group of people who are not the true owners, they may not work for the best interests of the organization (Panda & Leepsa, 2017). Agency model is considered as one of the oldest theories in the literature of the management and economics (Daily, Dalton, and Rajagopalan, 2003; Wasserman, 2006). The idea describes the connection between principals, such as shareholders, and agents, such as top management at a company. (Lawal et al., 2018). But in practice, when one party is expected to act in the best interests of the other, a conflict of interest might be occurring, which is known as an agency problem. When identifying the impact of ownership structure on firm's financial performance, agency theory takes an important place because the conflict of interest between owners and managers can directly affect the firm's financial performance (Dayarathne & Kumari, 2020).

2.2 Empirical studies

Ownership Concentration

Ownership concentration is an important internal corporate governance element where principals can inspect and oversee the operations of the company to safeguard their investment, because it affects the authority and control between management and the ownership concentration is an important internal mechanism of corporate governance. (Madhani, 2016). As suggested by agency theory, "ownership concentration is a key corporate governance mechanism that helps to limit agency problems arising from the separation of ownership and control" (Sheifier & Vishny, 1986). It is identified as an essential element of corporate governance mechanisms to reduce agency issues (Aguir et al., 2020).

Asses the level of ownership concentration

Ownership concentration has been assed using different methods in prior studies. One of the initial studies conducted on Ownership Concentration and Corporate Performance in the Czech Republic (Claessens & Djankov, 1999) used share of equity held by the top five investors (T5) and a logistic transformation of this share (L5), defined as log {T5/[100-T5]}, as the indicators for ownership concentration. One of the latest researchers carried out in Sri Lankan context on the relationship between ownership structure and firm's financial performance: A case study on listed companies in Sri Lanka by (Dayarathne & Kumari, 2020) have used the percentage of sum of shares controlled by each of the top 5 shareholders in measuring the ownership concentration.

Corporate performance

Corporate performance is the key element of any kind of business where it shows the results of the relevant company whether they have operated effectively or not. "Financial performance measures and indicate whether a company's strategy implementation and execution contribute to increased profitability" (Pathirawasam & Wickremasinghe, 2012). Financial performance becomes highly important in satisfying a business's financial responsibilities to keep the entity operating after the firm is recognized as a going concern. (Gabriel and Osazuwa, 2020).

Asses the level of corporate performance

One of the initial studies carried out by Claessens and Djankov (1999) have used labor productivity and profitability as indicators of corporate performance. In most of the studies most of the researchers have used return on assets (ROA) and return on equity (ROE) as the measurements of the firm performance. (Waheed & Malik, 2019; Machek & Kubíček, 2018). Some studies have used Tobin's Q in measuring the company profitability (Ejokehum & Osazuwa, 2020.

The initial studies carried out in 1932 by Berle, A., and Means, G. on the topic of The Modern Corporation and Private Property, stated that the dispersion of ownership leads to the decline of firm performance. One of the empirical studies conducted on the topic of "The Role of Ownership Concentration and Dividend Policy on Firm Performance: Evidence from an Emerging Market of Pakistan" (Aguir, et al., 2020) have identified a significant positive relationship between ownership concentration and corporate performance after employing panel data analysis. For their analysis they have used 42 chemical firms listed in the chemical sector, in Pakistan for the time span of 2012 to 2017.

Investigation conducted to examine the link between corporate governance and company performance using data from 180 Malaysian listed firms from 2013 to 2017 (Al-Sayani, et al., 2020) and according to their results showed that ownership concentration plays a positive role for the performance of the firm in Malaysian market. Prior research which investigated the effect of ownership concentration on financial performance of manufacturing firms in Nigeria have found a positive relationship between ownership concentration and firm performance (Ajao, et al., 2020).

Waheeb and Malik (2019) carried out research on the topic of Board characteristics, ownership concentration and firms' performance based on panel of 309non-financial sector firms listed on Pakistan Stock Exchange (PSX) from 2005 to 2016. The results of the study indicated that higher ownership concentration overcomes agency problems in the firm which results in better performance.

Using 276 firm-year observations comprising of 69 companies across 8 different sectors over the sample period of 2012, 2013, 2014 and 2015 Talab et al (2018) have conducted research to investigate the effect of corporate governance mechanisms on firm performance of listed companies in Iraqi Stock Exchange (ISX). The empirical results suggest that government shares ownership and local institutional ownership significantly improve firm performance while private shares ownership and foreign ownership have no significant effect on Iraqi firm performance.

The research paper which was investigated the relationship between ownership concentration and financial performance of companies in Singapore and Vietnam investigated in a dynamic framework (Nguyen & Evans, 2017) have concluded that ownership concentration has a positive and significant effect on performance in firms operating in markets where the ownership structure is highly-concentrated.

Al-Matari and Al_Arussi (2016) studied the impact of business performance on ownership structure features in Oman. The study discovered a positive and substantial relationship between ownership concentration, government ownership, and business performance using multiple regression analysis on a sample of 81 enterprises from 2012 to 2014.

Abdelmohsen and Gehan, (2013) examined the impact of ownership concentration and identity on company performance using a sample of 99 of the most active publicly traded businesses on the Egyptian Exchange (EGX). Their research elaborated that there is a significant impact of ownership concentration on the firm performance.

The study examines the effects of ownership concentration and managerial ownership on the profitability and the value of non-financial firms listed on the Istanbul Stock Exchange (ISE) in the context of an emerging market (Gumus & Mandac, 2010) have found a positive relationship between ownership concentration and firm performance.

The examination which has been done to evaluate the impact of ownership concentration on firm performance based on the sample of 70 non – financial companies which shares are traded on the Belgrade Stock Exchange conducted for the period of 2015-2017 (Vasilić, 2018) showed a negative association between the two variables. The study has found that ownership concentration greater than 55% will make a negative effect on firm performance measured by ROE and ROA.

Yasser & Al Mamun, 2015 have conducted an examination on the topic of Effects of ownership concentration on firm performance employing the data of 100 listed companies in Karacchi Stock Exchange during the period of 2007-2011. As their final finding they have able to discover a negative impact on between ownership concentration and the accounting-based performance, market-based performance measures and economic profit, in general.

The research article carried out by (Machek & Kubíček, 2018) which researched the relationship between ownership concentration and performance in Czech Republic using a sample of 34,284 companies and their financial data in the period of 20017-2015. The research indicated an inverted U-shaped relationship between the Herfindahl index and profitability while controlling for firm size, capital structure, and industry affiliation. Through their study they were no evidences found that there is liner relationship between ownership concentration and firm performance.

Current Situation in Sri Lanka

Dayarathne and Kumari (2020) examined the link between ownership structure and financial performance and examined the influence on financial performance of Colombo Stock Exchange-list businesses of ownership structure. Based on the availability of information, three sectors were chosen as the population and 24 firms were chosen as the sample based on ownership diversity. The data was collected between 2015 and 2019. Diversified Holdings, Telecommunications, and Healthcare were chosen for this analysis because they have the highest foreign and domestic shares. The researcher utilized five variables in this study: one dependent variable (financial performance as assessed by ROA) and four independent variables (institutional ownership, foreign ownership, individual ownership, and ownership concentration). According to the study's findings, institutional ownership and foreign ownership are strongly and favorably connected with financial performance, but individual ownership and ownership concentration are significantly and negatively correlated with financial performance. Furthermore, ownership concentration has a significant impact on a company's financial success, whereas ownership identity has no influence. One of the studies conducted in Sri Lanka with the intention of investigating the relationship between ownership structure and financial performance of listed beverage food and tobacco companies for the period of 2010-2015. Balagobei and Velnampy, (2017) have abled to identify that ownership concentration and foreign ownership structure are positively correlated with financial performance of listed beverage food and tobacco companies while institutional ownership structure isn’t significantly correlated with financial performance.

Manawaduge and De Zoysa (2013) used pooled data to assess performance with accounting and market-based indicators and found a substantial positive link between ownership concentration and accounting performance metrics. However, the study revealed that employing market-based performance metrics had no meaningful influence. Four different measures of performance: return on assets (ROA), return on equity (ROE), Tobin Q (TQ) and market-to-book-value ratio (MBR) have been used. Ownership concentration (OC) is measured using four variables: (1) the percentage of shares held by first three-largest shareholders (SH3); (2) the percentage of shares held by first five-largest shareholders (SH5); (3) the percentage of shares held by first ten-largest shareholders (SH10); and (4) the Herfindahl Index (HERF). The HERF index, which is the sum of squared percentage of shares controlled by each of the top-five shareholders. Pathirawasam & Wickremasinghe (2012) have conducted a study with the intention of determining the impact of ownership concentration and the other endogenous factors on the financial performance of companies listed in the Colombo Stock Exchange. The findings identified through this study is that the ownership concentration within these listed companies does not have a statistically significant positive relationship with the ROA.

3. METHODOLOGY

This section covers the research methodology of this study, the selected sample and how data was collected, the conceptual framework and operationalization of the variables and measurements.

3.1 Research Approach

This empirical study aims at identifying the effect of ownership concentration on the corporate performance of the listed entities in the CSE. Through this it defines what sort of relationship prevailing between these two variables including ownership concentration and firm performance.

Population

For this empirical study population represents the listed entities in Colombo Stock Exchange representing 19 Global Industry Classification Standard (GICS) industry groups. Currently there are 302 companies representing 19 GICS industry groups as at 6th of August 2021.From the population the companies listed under the sectors of banking, finance and insurance have been excluded the due to different regulations imposed and complexity in financial reporting. And also, the companies which are listed during the review period 2016 -2020 have been removed due to limitation of information.

Sampling and Sampling procedures

The sample of this study is consisted with 100 publicly traded firms identified using stratified sampling technique, excluding the sectors banks, diversifies financials and insurance from a total of 302 companies representing 19 Global Industry Classification Standard (GICS) sector groupings listed in Colombo Stock Exchange (CSE) as of August 6, 2021. When selecting the sample companies which are listed during the review period 2016 to 2020 have been excluded. A sample of one hundred firms were purposively selected based on data accessibility and the requisite information for the period under study.

Data Sources

This study utilized cross sectional data from secondary sources. This entailed extraction of data from the annual reports and financial statements of the firms listed at the Colombo Stock Exchange for the study period. (Table 1). Table 1 brings out the distribution of sample companies representing 19 different sectors excluding the banking, insurance and finance companies.

Table 1: Variable Definitions and Measurements

Variable	Definition	Literature
Independent Variable		
Ownership Concentration	Accumulated percentage of shares owned by the major five shareholders of the company	Dayarathne & Kumari (2020), Claessens & Djankov (1999), Aguir, et al. (2020)
Dependent Variables		
Return on Assets	$ROE = \frac{EBIT}{Total\ Assets}$	Yasser & Al Mamun (2015), Leopre et al. (2017), Gaur et al. (2015), Aguir, et al. (2020)
Return on Equity	$ROE = \frac{EBIT}{Total\ Equity}$	
Control Variables		
Firm Size	Natural Logarithm of Total Assets	Aguir, et al., (2020), Machek & Kubíček (2018), Abdelmohsen & Gehan (2013)
Firm Leverage	$\frac{Total\ Assets}{Total\ Liabilities}$	
Firm Liquidity	$\frac{Firm\ current\ assets}{Firm\ current\ liabilities}$	

Source: Researcher constructed (2021)

Research Model specification

Following the previous studies regression analysis is going to be used in developing the research model. In measuring the corporate performance, ROA and ROE have been used. Ownership concentration was used as the study's sole independent variable which is measured through the accumulated shareholding percentage of the top five shareholders of the particular company while variables include financial leverage (FLIVER), liquidity (LIQUI), and firm size (FSIZE). The regression models that were utilized in this empirical investigation are as follows.

$$ROA = \beta_0 + \beta_1 CON5 + \beta_2 FSIZE + \beta_3 FLIVER + \beta_4 LIQUI + \varepsilon \quad (1)$$

$$ROE = \beta_0 + \beta_1 CON5 + \beta_2 FSIZE + \beta_3 FLIVER + \beta_4 LIQUI + \varepsilon \quad (2)$$

CON5 = Aggregated Shareholding percentage of top five shareholders of the business entity
FSIZE = Firm Size
FLIVER = Firm Leverage
LIQUI = Liquidity

Only one hypothesis has been established based on the main variable, and it is as follows.

H1: There is a significant relationship between ownership concentration and firm's financial performance.

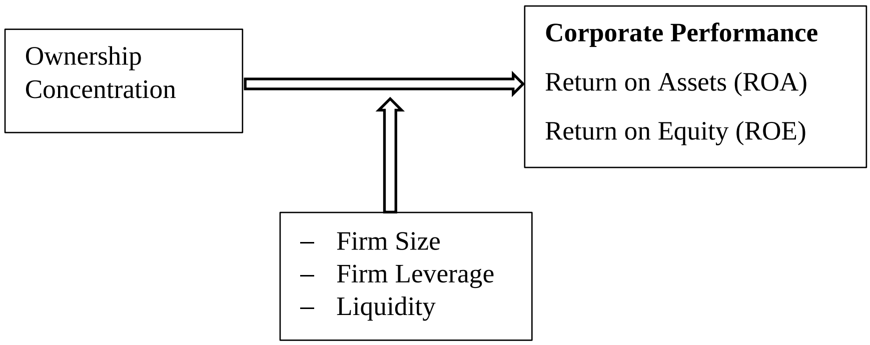

Figure 1: Conceptual Framework
Source: Researcher constructed (2021)

Methods

After collection of data, it was cleaned before analysis. Accurate and authentic data was used. The clustered data will be assessed through IBM Statistical Package of Social Sciences (SPSS 26). Before analyzing the data for the study, the data will be explained through the descriptive statistics and inferential statistics.

Objective 1: To assess how ownership concentration effects impact on the corporate performance of the companies listed in Colombo Stock Exchange.

With the objective of measuring the ownership concentration indicators and performance indicators Descriptive statistics will be used and they will be mainly depending on mean, median, standard deviation and variance.

For examine the effects of ownership concentration on corporate performance - OLS Regression Analysis and Pearson Correlation going to be used. The strength of the link between dependent (ROA and ROE) and independent variables was examined using the Pearson correlation.

4. RESULTS AND DISCUSSIONS

This section describes the main data results, as well as the conclusions drawn from the findings emphasized by the various analysis techniques, attempting to determine whether there is a meaningful link between these two variables.

4.1. Descriptive statistics

This section concentrates on the general description of the features of research variables including the Mean, standard deviation (Std. Dev), Skewness and Kurtosis. Table 1 provides descriptive statistics of dependent variables, control variables and independent variable.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Skewness	Kurtosis
Ownership Concentration	500	0.552	0.947	0.795	-0.654	-0.615
Return On Assets	500	-0.074	0.161	0.039	0.111	-0.374
Return on Equity	500	-0.185	0.353	0.071	0.0321	0.303
Financial Leverage	500	0.083	0.843	0.461	-0.076	-0.892
Liquidity	500	0.224	2.466	1.055	0.791	-0.537
Firm Size	500	13.956	24.405	19.293	-0.074	-1.486

Source: Researcher constructed (2021)

Definitions of these variables are indicated in Table 1. According to the descriptive statistics the average value of the independent variable is 79.50%. It indicates that the ownership of the selected 100 companies have been concentrated within few individuals. The literature of this study is supported by showing that the ownership concentration is highly concentrated in Sri Lankan entities with controlling power having with the few shareholders (Samarakoon, 1999; Kulathunga et al., 2017).

Through the output of the descriptive statistics indicates that average ROA and ROE that a company is having following 0.039 and 0.071. The variables, occupancy Rate, ROA and ROE show no major difference between mean and median values indicating the absence of major outliers.

4.2. Correlation analysis

Table 3 displays Pearson's matrix correlation coefficients. The bivariate correlation of Pearson demonstrates the strength and direction of the link between two variables. There are a variety of significant correlations between dependents (ROA and ROE), and one independent variable of this research Ownership concentration

For instance, Table 3 reveals that there are no any significant relationship between Ownership Concentration (CON5) and corporate performance when it measured through the return on assets while in the same way there is no any significant association between the ownership concentration and performance when it calculated based on the Return on Equity (ROE).But both of these dependent variables are having positive relationship with the ownership concentration even though they are not significant either in 0.01 or 0.05 levels. This means that when the ownership is concentrated, the financial performance of an organization is difficult to improve. This is in line with the agency theory, which suggests that concentrated ownership may cause to raise agency costs within an organization.

Table 3: Correlation Analysis

Variables	Return on Assets	Return on Equity	Ownership Concentration	Financial Leverage	Liquidity	Firm Size
Return on Assets	1					
Return on Equity	0.862	1				
Ownership Concentration	0.066	0.059	1			
Financial Leverage	-0.316**	-0.081	0.059	1		
Liquidity	-0.470**	-0.295**	0.052	0.513	1	
Firm Size	-.104**	-0.117**	0.078	-0.014	0.02	1

*p<0.05, ** p<0.01
Source: Researcher constructed (2021)

4.3. Regression analysis

A multiple regression analysis is conducted so as to test relationship among variables (independent) on performance of companies listed at the CSE. The regression analysis done through model 01, adjusted R^2 found to be 0.249 while for model 02 resulted as 0.112. It is inferring that CON5, FLIVER, LIQUI and FSIZE explained only 24.9% and 11.2% of the performance of companies respectively. Further regression model test was found to be significant which less than 0.05 level since p-values of the two models following are 0.000.

Table 4: OLS Multivariate Regression Analysis

Model	(1) Coefficient*** (Standard error)	(2) Coefficient (Standard error)
Ownership Concentration	0.055**	.089
Leverage	-0.031	0.05
Liquidity	-0.035**	-0.059**
Firm Size	-0.002**	-0.005**
F -Value	40.993	15.593
R^2	0.249	0.112
Sig. of F value	0.000	0.000
Observations	500	500
Groups	100	100

p<0.05, ** *p*<0.01
Source: Researcher constructed (2021)

Table 4 implies that all the variables of the model 01 has a significant impact on the corporate performance when it is measured by the return on assets (ROA), 0.055 (p<0.01), while under model 02 also there is a systematic relationship between CON5 and ROE either in 0.05 or 0.01 level. But there is a positive relationship between these two variables.

The established model 01 for the study was

$Y = 0.087+0.055X_1 + -0.0.35X_3+ -0.002X_4$

Only significant coefficient has been considered in developing the model.

Y = Return on assets (ROA)
X_1 = Ownership Concentration (CON5)
X_3 = Liquidity
X_4 = Firm Size

If all other variables are maintained constant, the performance of firms listed on the CSE will be 0.087. According to the table, all of the model 01 variables have a substantial influence on business performance as evaluated by return on assets (ROA). Financial leverage, company size, and liquidity all have a substantial influence (p0.01) on the return on assets, however they are also weak correlations.

The established model 2 for the study was;

$Y = 0.129+ -0.0.59X_3+ -0.005X_4$

Only significant coefficient has been considered in developing the model.

Y = Return on assets (ROA)
X_3 = Liquidity
X_4 = Firm Size

The results reveal that performance of companies listed at the CSE will be 0.129 if all other factors are held constant.

4.4. Panel regression analysis

As an additional analysis, in order to examine the relationship between the CON5 and Firm Performance, the panel regression also carried out on the corporate performance with the Hausman test, which is used to choose between fixed effect and random effect model.

The panel regression for the model 01 implies that the independent variable does not have a significant systematic association with the corporate performance when it is measured by the dependent variable, ROA. Even though previous regression analysis results shown a systematic relationship between CON5 and ROE this panel data analysis has not shown the same output. In contrast it resulted a weak relationship between CON5 and ROE.

Results of this does not support the Hypothesis (H1), of the current study which is, *H1: There is a significant relationship between ownership concentration and firm's financial performance.* Considering the panel regression for the model 02 it implies the same results as for model 01 there is no significant association with in the ownership concentration and firm performance when it quantified by the ROE.

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Table 5: Panel regression analysis

Model	**(1)** Coefficient (Standard error)	**(2)** Coefficient (Standard error)
Ownership Concentration	-0.014	-0.023
Leverage	0885*	-0.044
Liquidity	-.0218**	-.0418**
Firm Size	0227**	-.0510**
F -Value	19.27	7.71
R^2	0.0712	0.0294
Sig. of F value	0.000	0.000
Observations	500	500
Groups	100	100

5. CONCLUSION

This chapter discuss the important data results, conclusions taken from the findings highlighted generated from the different analytical techniques. Further through this chapter it implies out the how well this study has contributed to the current literature and to the different decision makers as well. Concluding this chapter and thesis it brings out the limitation of the current review and recommendations for potential researchers to have more look into.

5.1. Main findings and conclusions

Through the results of the descriptive statistics, it is observed that the average shareholding percentage that top five shareholder possess with is 79.50%. It concluded that the ownerships of the selected companies have been concentrated into the top five shareholders of the company giving more power and ability to influence the management activities. For examining the association between the said variables correlation analysis ,OLS regression analysis and panel data analysis have been performed .OLS regression which is performed for the model 01 has supported the hypothesis H1 indicating that there is a significant relationship between the ownership concentration and firm performance .However either in panel data regression carried out for two models of the study indicated a significant association between the ownership concentration it only showed a negative weak relationship between the ownership concentration and firm performance. Based on the findings of the study it seems that there is no any significant relationship between the ownership concentration and firm performance either it is measured based on ROA or ROE. Therefor it is safe to assume that there is a mixed results coming out since the analysis does not make a conclusive finding on the ownership concentration and firm performance.

Corporate administration is a significant component in the field of finance. Ownership concentration can be defined as the most significant number of block holders (Murtaza & Azam, 2019). Through the literature and other information, we can have the idea that ownership concentration has been considered as a great corporate governance mechanism as it guides the business to solve agency problems arising between the management and the shareholders who invest in the company. Performance of business is a vital element for the shareholders of the company. It directly affects the return for their investment. Through this study it helps potential investors, current decision makers to have a good understanding how the ownership of the companies affects the performance of the business in positive and negative ways. Further the indicated findings have contributed to the current literature by generating updated results on the association between the ownership concentration and firm performance from an Asian Country like Sri Lanka, especially in Sri Lankan context there is a high ownership concentration can be identified. And also, the current empirical study has been covered more industries than prior studies conducted by focusing in more listed entities repressing all the industries available in the CSE**.**

5.2. Limitations and Future Research Directions

Limitations of this research include not considering ownership identities or kinds as metrics of ownership concentration, restricting the sample to 100 firms, and not collecting data from companies classified under banking, insurance, and finance.

Future researchers can refer ownership identities in measuring ownership concentration and also, they can expand the scope without limiting to CSE companies by considering ownership structures of non-listed companies as well.

REFERENCES

Ajao, Gabriel, M., Ejokehuma, & Osazuwa, J. (2020). Ownership concentration and financial performance of manufacturing firms in Nigeria.

Al-Sayani, Y. M., Al-Matari, E. M., & Abdulwahab, A. (2020). The effect of corporate governance determinants on firm performance: Malaysia listed companies. *PalArch's Journal of Archaeology of Egypt/Egyptology, 17.11 (2020)*, 61-83.

Aslam, E., Harona, R., & Tahir, M. N. (2019). How director remuneration impacts firm performance: An empirical analysis of executive director remuneration in Pakistan. *Borsa Istanbul Review, 19(2)*, 189-196.

Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate performance in the Czech Republic. *Journal of Comparative Economics*, *27*(3), 498-513.

Dayarathne, B., & Kumari, J. (2020). Ownership structure and firm's financial performance: Sri Lankan evidence. *Journal of Management Matters, 7*, 6778

Gumus, G., & Mandac, P. (2010). "Ownership concentration, managerial ownership and firm performance: *South East European Journal of Economics and Business, 5.1*, 57-66.

Lepore, L., Paolone, F., Pisano, S., & Alvino, F. (2017). A cross-country comparison of the relationship between ownership concentration and firm performance: does judicial system efficiency matter? *The International Journal of Business in Society, 17*(2), 321-340.

Lawal, O. D., Agbi, E. S., & Mustapha, L. (2018). Effect of ownership structure on financial performance of listed insurance firms in nigeria. *Journal of Accounting, Finance and Auditing Studies, 4/3* (2018) 123-148.

Murtaza, S., & Azam, I. (2019). The relationship between ownership structure and capital structure: evidence from chemical sector of Pakistan. *SEISENSE Journal of Management, 2*(4), 51-64.

Machek, O., & Kubíček, A. (2018). The relationship between ownership concentration and performance in Czech Republic. *Journal of International Studies, 11*(1).

Pathirawasam, C., & Wickremasinghe, G. (2012). Ownership concentration and financial performance: the case of Sri Lankan listed companies. *Corporate Ownership and Control*, *9*(4), 170-177.

S. M., Ahmad Noor-Ud-Din, Aguir, A., & Batool, S. (2020). The role of ownership concentration and the role of ownership concentration and from an emerging market of Pakistan. *Journal of Management, 3*(2).

Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy, 94*(3), 461-488**.**

Vasilić, N. (2018). Ownership concentration impact on financial performance: Evidence from Serbia.". *Contemporary Issues in Economics, Business and Management*, 111-120.

Investigating the Impact of Brand Equity on Purchasing Decisions of Laptop Computers among Undergraduates of State Universities in Sri Lanka

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ABSTRACT

Today consumers are trying to purchase brands rather than products. Hence marketers need to figure out what the customers' buying criteria are and how they make choices based on them. The researcher has identified the need for further investigation of brand equity as the best concept which gains more insight into this theory and the researcher has selected the laptop market in Sri Lanka and Government undergraduates as respondents. In recent years, researchers have investigated a variety of approaches but this study was carried out to find the different dimensions of brand equity and to investigate the impact of brand equity on purchasing decisions of Undergraduates of government universities in Sri Lanka for laptop computers. To achieve four key objectives and researcher developed four questions that could be solved using the data collected from the research and achieve the above-mentioned objectives. In this descriptive research, study data were collected from a simple random sample of 383 respondents who were undergraduates of 13 government universities in Sri Lanka. The researcher has developed a structured questionnaire consisting of 6 demographic-related questions and 27 questions with 5 points Likert Scale. Data were analyzed through the SPSS software package and it included descriptive analysis, Correlation, and Regression analysis was done to find out the impact of the variables. According to the data analysis, the major findings indicate that there were positive impact brand equity variables on purchasing decisions of undergraduates. Among them, perceived quality was the highest impacted variable. Then brand awareness was the second impacted variable on the purchase decision. The second least variable was brand association and brand loyalty were the least impacted variable on laptop purchase decisions of university undergraduates. There are major implications for this research study. There were implications on brand equity theory. It provides new insights into the understanding of the impact of brand equity on government university undergraduates purchase decisions. There were implications for marketers to develop future marketing mixes. There were implications on Governments when facilitating loan facilities to undergraduates and finally there were implications on undergraduates who are willing to purchase a laptop in the future.

Keywords: Brand Equity, Government Undergraduates Sri Lanka, Laptop Brands, Purchase Decision

1. INTRODUCTION

1.1 Background of the Study

As a result of technological development, various kinds of technological devices have emerged in the modern market. Among those devices, a computer has become the greatest and most excellent product in Information Communication Technology (ICT). The computer also developed as various kinds of devices. Among them, the laptop computer has bought an outstanding change in various sectors. According to (Tania, 2012) having a laptop, nowadays has become an essential need than a luxury. Therefore, a laptop has become an essential thing in people's lives. When going through the Sri Lankan laptop industry there are so many brands are available within the market that is owned by foreign countries. When considering about Sri Lankan computer industry and usage of desktop computers and laptop computers. According to (statistics, 2019) which is published by the department of census and statistics in 2019 at least one computer is available in 22.0% of households in Sri Lanka. That means one out of every five households owns either a desktop or a laptop computer. Among them, 14% are using laptop computers. When considering leading laptop brands in the Sri Lankan laptop computer industry. Acer, Dell, hp, Lenovo, Asus are famous brands for laptop computers, Therefore the laptop market is a competitive industry in Sri Lankan market. According to Gunawardena (2015), Companies have established a positive brand image among their customers by using a specific feature that none of their rivals provide. Companies attempting to reach their target market through bombastic mere ads construct a hypothetical environment that fails to meet the needs of consumers. That's why a company needs to create brand equity. That was mentioned in (Aaker, 1991) as the power of brand names is not restricted to consumer markets. Measuring brand equity is very important to every business organization. Because brand equity is defined as intangible assets to the brand name. There are so many researches that have been done based on brand equity concepts. But there is no comprehensive past research to test brand equity on laptops based on the Indian market but there is no one based on the Sri Lankan market. And due to COVID-19 Sri Lankan, higher education shifted to an online platform. Therefore, undergraduates have to buy laptop computers immediately. Hence 90% can access online education and 55% of undergraduates use laptop computers after this pandemic situation. Because of the above reasons and evidence government university undergraduates are the most suitable groups to investigate the impact of brand equity on their laptop purchasing decisions. But there have not any comprehensive researches are done to find out the impact of brand equity on laptop purchase decisions of university undergraduates in Sri Lanka. And also, there has been no research to measure the impact between brand equity and purchase decisions on laptop computers in Sri Lanka.

1.2 Research Questions

- Does brand loyalty effect on the purchase decisions of Sri Lankan government university undergraduates for laptop computers?
- Does brand awareness effect on the purchase decisions of Sri Lankan government university undergraduates for laptop computers?
- Does brand association effect on the purchase decisions of Sri Lankan government university undergraduates for laptop computers?
- Does perceived quality effect on the purchase decisions of Sri Lankan government university undergraduates for laptop computers?

1.3 Research Objectives

- To study the impact of brand loyalty on purchasing decisions of Sri Lankan government university undergraduates for laptop computers.
- To evaluate the impact of brand awareness on purchasing decisions of Sri Lankan government university undergraduates for laptop computers.
- To evaluate the impact of brand association on purchasing decisions of Sri Lankan government university undergraduates for laptop computers.
- To measure the impact of perceived quality on purchasing decisions of Sri Lankan government university undergraduates for laptop computers.

1.4 Significance of the study

The outcome of the research is important to several parties, mainly marketing professionals, especially in the Sri Lankan laptop industry to understand the target consumer whether brand equity affects their purchasing decision. It can be identifying the contribution of the brand to influence the undergraduates' purchasing decisions and marketers can be identified their brand loyalty, awareness, and perceived quality level of undergraduates. By identifying, these details marketers can improve and develop further marketing mix in accordance with it. And also, will provide information on how to develop a suitable marketing strategy to gain profits. This research helps to contribute more to the theory of brand equity. Because various studies are still discussing the relationship between the dimensions of brand equity, no conclusive decision has been reached. Therefore, this research study helps to give more insight into the effect of brand equity on the laptop purchasing decision in Sri Lankan university undergraduates. This research also helps the government to identify the specific brand which is the most preferred by undergraduates and it will be useful when granting loan facilities to the students. By referring to this research study undergraduates can get an idea about different purchasing decisions. And they can identify the most suitable laptop brands. Then they can easily decide the most suitable brand to buy.

1.5 Scope of the study

This research is conducted to investigate the impact of brand equity on purchasing decisions of Sri Lankan government university undergraduates for laptop computers. So, this research is mainly focused on government university students in Sri Lanka. They represent different universities and different degree programs. This research focuses on all of the undergraduates who are following different degree programs in different government universities in Sri Lanka.

2. LITERATURE REVIEW

2.1 Purchasing decisions

According to (Syahrivar & Ichlas, 2018) the mechanism by which consumers choose which brand to buy is known as the purchasing decision.

2.2 Consumer behavior

According to Wang & Hariandja (2016), the purchase decision of a customer is a form of consumer behavior. Consumer behavior is the process and actions people participate in when searching, selecting, buying, using, evaluating, and disposing of products and services to fulfill their needs and wants. According to Perera & Dissanayake (2013), consumer behavior includes not only buying but also the thoughts and feelings people have and the actions they take. It also includes environmental effects such as other customers' comments, advertising, product appearances and packing, and consumers' physical actions.

2.3 Consumer decision making

Consumer decision making is to make the best possible decision and another goal is to have (the freedom of) many alternatives from which to choose (Hawkins, 2016). According to Emami (2018) the type of goods and their characteristics, pricing and payment procedures, delivery options, and promotional and motivating strategies all influence the customer's decision.

2.4 Buyer Decision Process

According to Adam & Akber (2016) when a customer purchases something or makes a purchase decision, he or she goes through a process known as the consumer purchasing process. They are the introduction of needs, information search, alternative evaluation, purchasing decisions, and post-purchase behavior.

2.5 Brand

According to Sasmita & Suki (2015) brand is a company's most valuable asset, and it has widely known as an important factor in customer preference, serving as a guide for customers to define product differentiation and uniqueness. According to (Emami, 2018) a brand is defined as an organization's current and future identity.

2.6 Brand Equity

Firstly, David Aaker examines brand equity. Brand equity was identified as intangible assets to the brand name. Brand equity plays an important role in boosting the performance of a company or any business (Akhtar, Qurat-Ul-Ain, Siddiqi, Ashraf, & Latif, 2016). According to Hawkins (2016), brand equity is the value consumers assign to a brand above and beyond the functional characteristics of the product. The term equity implies economic value. Since customers' experiences, emotions, and what they learn about the brand over time are important to the definition of brand equity, it covers a broad spectrum (Moradi & Zarei, 2011). For this research, brand equity is considered as four interrelated components namely, Brand Loyalty, Brand awareness, brand association, perceived quality. Many researchers have done studies in this area (Shah, 2012) was conducted research based on the Indian laptop market to determine factors influencing brand equity towards laptop brands. (Sasmita & Suki, 2015) also done research based on young consumers' insights on brand equity. The author Gunawardane, (2015) researched to find the impact of brand equity on purchasing decisions on Mobile telecommunication services of Sri Lanka. The laptop industry is very competitive, and undergraduates are one of the main consumer segments. Numerous studies are still discussing the relationship between the dimensions of brand equity, and no conclusive decision has been reached (Khan, Rahmani, Hoe, & Chen, 2015). Hence this research study was constructed to fill the gap and give more insight into the brand equity theory. The theoretical framework has been formed according to Aaker's brand equity model. There are four interrelated independent variables namely, brand loyalty, brand awareness, brand association, perceived quality, and purchase decision is the dependent variable for the theoretical framework of the study. Past research studies found that all four brand equity variables strongly have an impact on consumer purchase decisions (Adam & Akber, 2016). Hence conceptual framework was developed by assuming a positive relationship.

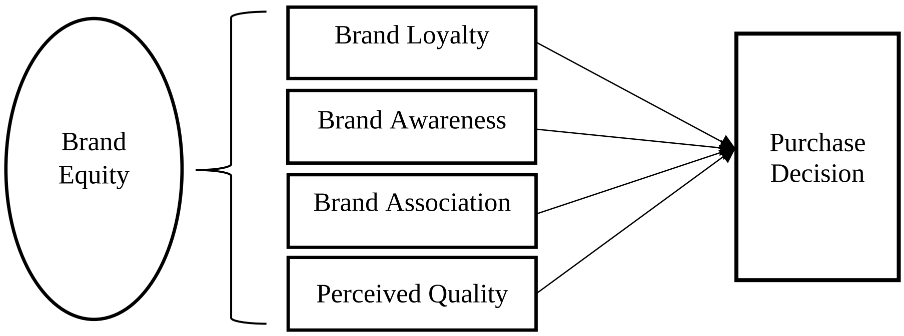

Figure 1. Research Model

3. METHODOLOGY

This research can be identified as descriptive research. Because the researcher is measured the impact of these variables of brand equity and purchase decision. So, this research is included a descriptive research design. Because to conduct this research need clear information with preplanned and structured. Because of that, this research study is used structured questionnaires in which response options have been predetermined. And the reason to select this descriptive research design is that this study is conducted to take a superior-conclusion of a specific problem that is highly affected on a particular party.

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Table 1: Operationalization of variables

Concept	Variables	Source	No	Indicators	Measure
Brand Equity	Brand Loyalty	(Gunawardane, 2015)	01 02 03 04	*Recommend to others *Motivate to purchase alternative packages *Usage Rate *Motivation to Switch	5-point Likert Scale
	Brand Awareness	(Gunawardane, 2015)	05 06 07 08 09	*Recall Power *Point of Difference *Knowledge about the Brand *Position of choice set *Recall of competitive Brands	5-point Likert Scale
	Brand Association	(Gunawardane, 2015)	10 11 12 13	*Closeness to life *Social image *Personality feelings *Sing Value or recognition	5-point Likert Scale
	Perceived Quality	(Gunawardane, 2015)	14 15 16 17 18	*Product Performance *Value added features *Service Quality *Quality perception *Innovation	5-point Likert Scale
Purchase Decision		(Brata, Husani, & Ali, 2017)	19 20 21 22 23	*Need Recognition * Information search *Evaluation of Alternatives * Purchase Decision *Post purchase decision	5-point Likert Scale
		(Adam & Akber, 2016)	24 25 26 27	*Consideration of Brand Loyalty factors when purchasing *Consideration of Brand Awareness factors when purchasing *Consideration of Brand Association factors when purchasing *Consideration of Perceived Quality factors when purchasing	5-point Likert Scale

The theoretical framework has been formed according to Aaker's brand equity model. There are four interrelated independent variables namely, brand loyalty, brand awareness, brand association, perceived quality, and purchase decision is the dependent variable for the theoretical framework of the study. Past research studies found that all four brand equity variables strongly have an impact on consumer purchase decisions (Adam & Akber, 2016). Hence conceptual framework was developed by assuming a positive relationship. Sri Lankan university undergraduates are the population for this research study. As Sri Lankan universities researcher is considered 13 government universities which are consisted of various faculties. Starting 2015/2016 academic year to 2018/2019 all four-year undergraduates are considered for this research study.

Government university undergraduates consider as the population for this study approximately 117,122 (UGC statistics). A researcher uses sampling as a technique (process or instrument) to systematically select a smaller number of representative items or individuals (a subset) from a predefined population to serve as subjects (data source) for observation or experimentation based on the study's objectives (Sharma, 2017). Out of the population, 383 were selected as a sample according to Krejcie & Morgan table. A random sampling technique was employed to select the sample from the population. According to (Akhtar, Ashraf, Latif, Ain, & Siddiqi, 2016) “we have used random sampling technique which depicts the exact number of populations.”

A questionnaire is developed to gather primary data from the sample. The questionnaire is developed based on the indicators under the independent and dependent variables of the conceptual framework to test the relationship between brand equity and buying decisions. The first part of the questionnaire includes the demographic characteristics of the sample. And second part consists of questions with five-point Likert scales ranging from 1 (strongly disagree) to 5 (Strongly Agree) which are generated with the intention of collecting data regarding the independent variables and dependent variables considered in the research. Table 1 demonstrates the operationalization of variables.

4. RESULTS AND DISCUSSION

The researcher has used regressions analysis is to identify the impact among independent and dependent variables. The data would be presented by using the Tabular formats and Graphical methods to provide a clear understanding of the data that is gathered and analyzed in a precise manner. The frequency tests are carried out for each demographic, independent, and dependent variable. The data is analyzed based on the SPSS and MS Excel software packages.

This research study has consisted of four interrelated independent variables. Namely, brand loyalty, brand awareness, brand association, and perceived quality. Pearson correlation analysis is conducted to analyze the relationships between each independent variable and the dependent variable.

The Cronbach's alpha values of brand loyalty, brand awareness, brand association, perceived quality, purchase decision was 0.872, 0.750, 0.855, 0.921, 0.948 respectively. All variables were greater than 0.7 (Nunnally, 1978). Hence all variables were with internal consistency and all variables were reliable to conduct this research study without dropping any question. According to table 1, all the Pearson correlation values have consisted of a positive sign. And all four variables were close to one hence there is a very high positive relationship with the purchase decision. The highest relationship was between purchase decisions and perceived quality. In contrast brand loyalty and brand awareness have a second and third high relationship. And least relationship with brand association.

The mean value of all variables was greater than 4. According to descriptive statistics mean value of all individual factors and purchase decisions are represented positive responses. They consist of a mean value around the Likert scale of 4 and they represent agree on level nature of responses.

Table 2: Descriptive statistic & correlations

Variable	Mean	Std. Dev.	Pearson Correlation	Sig. values
Brand Loyalty	4.95	0.154	0.845	0.000
Brand Awareness	4.35	0.608	0.807	0.000
Brand Association	4.26	0.653	0.703	0.000
Perceived Quality	4.56	0.399	0.875	0.000

Source: Researcher constructed 2021

4.1 Multiple regression Analysis

Table 3: Regression analysis

Variable	B	Sig.	Hypotheses	Hypotheses acceptance or rejection
(Constant)	.035	.755		
Brand Loyalty	.111	.000	H1 - There is a significant impact on Brand Loyalty and government university student's purchase decisions for laptop computers	Accept
Brand Awareness	.203	.000	H2 - There is a significant impact on Brand Awareness and government university student's purchase decisions for laptop computers	Accept
Brand Association	.160	.000	H3 - There is a significant impact on Brand Association and government university student's purchase decisions for laptop computers	Accept
Perceived Quality	.545	.000	H4 - There is a significant impact on Perceived Quality and government university student's purchase decisions for laptop computers	Accept

Source: Researcher constructed 2021

According to statistics researchers can derive multiple regression equations for the study as,

$$Y = 35 + 0.111X_1 + 0.203X_2 + 0.160X_3 + 0.545X_4 + e$$

The above equation shows how to impact brand equity on the purchase decision. Brand equity has consisted of four interrelated components namely brand loyalty, brand awareness, brand association, and perceived quality.

Y = Purchase Decision
X_1 = Brand Loyalty
X_2 = Brand Awareness
X_3 = Brand Association
X_4 = Perceived Quality

According to the multiple regression model most powerful brand equity variable is perceived quality. When Perceived quality is varied by 1% purchase decisions also changed by 5.45%. After that brand awareness is the most affected variable to the purchase decision. When brand awareness is varied by 1% purchase decision is changed by 2.03%. After that brand association is the most affected variable to the purchase decision. When the brand association is varied by 1% purchase decision also changed by 1.60%. Brand loyalty is affected least by the purchase decision. When brand loyalty is changed by 1% purchased decisions also changed by 1.11%.

Undergraduates are more considerate and more impact their purchase decision from the quality of the product. They are analyses and take buying decisions considering perceived quality factors.

Perceived quality dimensions indicate that on average most of the respondents have agreed on a level that they considered product performance, value-added features of the brand, service quality, overall quality, innovations. Hence undergraduates are considered the quality of laptop brand. Hence to influence undergraduates purchase decisions want to consider quality, improve the quality as expected them.

Brand awareness dimension was the second most affected variable for an undergraduates purchase decision. Undergraduates are influenced more by awareness than other factors. The reason is undergraduates are tended to buy an aware product and they consider quality from that aware product. So, it is important to conduct awareness programs for aware undergraduates. The brand association was the third affected variable among brand equity variables. It can conclude that consideration of brand association factors when undergraduates get purchase decision is not much like perceived quality and brand awareness. Hence undergraduates are not much considered about social class, social image when purchasing a laptop. They were mainly given attention to the quality and awareness.

Brand loyalty was the least impact variable on the purchase decision of undergraduates. Hence undergraduates are not dependent on loyal brands that much. If the undergraduate is aware of the quality product, then if it is matched with their personality feelings undergraduates are take buying decisions and do not consider much about whether the particular product is the loyal brand to them or not.

Multiple regression analysis was carried out to determine the significant factors influencing a purchase decision. In other words, to estimate the impact of independent variables on the dependent variable. Further, a hypotheses test was carried out. All four hypotheses were failed to reject. Hence this research study is given a new contribution to the brand equity theory. Hence this research study is filled the knowledge gap and fulfills all objectives, and solves all research questions of this research study.

4.2 Implications of the study

The research has implications for marketing professionals. Since the study shows the linkages between various elements of brand equity and

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undergraduates laptop purchase decisions, it helps laptop brand marketers to better understand how the government university students consider brand loyalty, brand awareness, brand association & brand perceived quality attached with laptop brand names, when making their purchase decisions. Marketers can build the most successful marketing mix which helps their marketing strategy. The findings of the research revealed that the majority of university undergraduates are having a high level of brand loyalty, brand awareness, brand association & a high level of brand perceived quality regarding laptop brands. So, based on those findings the marketer can see their strengths and weaknesses in their use of brand equity and can improve their performance accordingly. Through hypotheses testing the research also revealed that each element of brand equity has a significant degree of relationship with the undergraduates purchase decision. So, domestic marketers can adapt this knowledge to their marketing plan and activities to satisfy customers and provide the offerings based on the factual consumers' needs. Firms can increase sales by offering the right brand features; qualities that customers expect to stimulate the purchase decision. This research has important implications for brand equity theory. The framework provides new insights into the understanding of the impact of brand equity on government university undergraduates purchase decisions. It explains the role of brand loyalty, brand awareness, brand association & perceived quality when undergraduates make their purchasing decisions regarding laptop purchase. According to the findings of the research, university undergraduates highly consider factors related to perceived quality towards laptop purchase when making their purchase decisions.

This research has implications for Government to identify what are the most preferable laptop brand of undergraduates then it can help the government when they provide loan facilities to undergraduates. 36% of respondents were preferred the Dell laptop brand. And hp brand is preferred by 34.7%. The third highest preference is Acer it was about 17%. These were the main preferred brands of undergraduates. And they are mostly considered about quality of the product. Hence government can identify the quality most preferred brand to the undergraduates. This research has implications for undergraduates who are willing to purchase a laptop for the purpose of study they can get an idea most used laptop brands among undergraduates. And they can get an idea about the most influenced brand equity factors among undergraduates and they can buy the most suitable laptop brand. Further, based on those findings there are a lot of implications for laptop brand marketers. Hence, they can pay more attention towards implementing the following activities. Further, improve the quality of the laptop brand to create loyal customers towards their brands. Using effective promotional tools to create strong brand awareness within customers' minds. Offering laptops with a proper level of quality, functional quality, innovations, and after-sales services. According to the findings of the study, "Perceived Quality" was the most influential factor on government university undergraduates' purchases decision among other elements of brand equity. Based on this knowledge organization can carefully plan to allocate budget over quality improvement activities like improving quality of the features, providing value-added features with the laptop, improving aftercare or customer service, introducing more technologically innovative products to undergraduates then priority to the more influencing brand equity elements on purchase decision results to attract and retain them and loyal to the laptop brand. The second most impactful variable was brand awareness. Hence marketers can conduct awareness programs to improve knowledge of the product and to memorize their brand name on customers' minds. Finally, from all of the findings of this study, the laptop brand marketers can identify that brand equity has an impact on undergraduates purchase decisions. So based on that knowledge, the companies can better plan out their branding activities in the future.

4.3 Limitations and suggestions

This study is mainly focused on Government university undergraduates. Other than government university undergraduates several parties are suitable like private university students, several professionals which are heavily used laptops for different purposes. It is better to focus on generations. Focusing on generations can collect more data from a large population. More diversity would be able to get a more rounded viewpoint and a better understanding of youth's perception towards how to impact brand equity on their purchase decisions. Most of the randomly sampled people were female due to a higher ratio of enrolled female students in government universities. Higher male participation would be able to get a more well-rounded review of how people get a laptop purchase decision. It would be ideal to address more time and resources to get a larger sample size and widen the geographical coverage to get more accurate and representative answers. The current study focuses on the laptop industry in Sri Lanka however, it might be applied to other industries as well. Like smartphone industry, vehicle industry, Television industry, cosmetics products industry, clothing industry So, it will make the research more generalizable. Future researchers can be able to apply these areas and generate more insight into the brand equity theory and to the industry. Current research only analyzes the impact of brand equity factors on purchasing decisions of the research problem and it could be further analyzed by using moderating factors like demographic features of the respondents such as gender, age, and income. There are various factors which are affecting to purchase decisions other than brand equity like price, place, promotion. By using such kinds of factors future researchers can be able to give more insight into the theory. Qualitative research performed under the same research area would lead to more in-depth findings and outcomes.

5. CONCLUSION

This research has important implications for brand equity theory. The framework provides new insights into the understanding of the impact of brand equity on government university undergraduates' purchase decisions. Brand equity was positively impacted on undergraduates purchasing decisions for laptop computers. Undergraduates are more considerate and more impact their purchase decision from the quality of the product. Marketers can carefully plan to allocate budget over quality improvement activities like improving quality of the features, providing value-added features with the laptop, improving aftercare or customer service, introducing more technologically innovative products to undergraduates then priority to the more influencing brand equity elements on purchase decision results to attract and retain them and loyal to the laptop brand. The second most impactful variable was brand awareness. Hence marketers can conduct awareness programs to improve knowledge of the product and to memorize their brand name on customers' minds. The reason is undergraduates are tended to buy an aware product and they consider quality from that aware product. The brand association was the third affected variable among brand equity variables. It can conclude that consideration of brand association factors when undergraduates get purchase decision is not much like perceived quality and brand awareness. Hence undergraduates are not much considered about social class, social image when purchasing a laptop. They were mainly given attention to the quality and awareness. Undergraduates are not dependent on loyal brands that much. If the undergraduate is aware of the quality product, then if it is matched with their personality feelings undergraduates are take buying decisions and do not consider much about whether the particular product is the loyal brand to them or not.

This research has implications for Government to identify what are the most preferable laptop brand of undergraduates then it can help the government when they provide loan facilities to undergraduates. This research has implications for undergraduates who are willing to purchase a laptop for the purpose of the study. However, future researchers can still look at different aspects surrounding this area like customer loyalty and brand equity to give it a broader body of knowledge. It would be ideal to address more time and resources to get a larger sample size and widen the geographical coverage to get more accurate and representative answers. And also, it would be more apprehensive to conduct both qualitative and quantitative research methods, which can get more insight into the topic. Moreover, in this research, some demographic factors such as gender, age, income level were explored.

REFERENCES

Aaker, D. A. (1991). Managing Brand Equity, Capitalizing on the Value of a Brand Name. New York London Toronto Sydney: The Free Press.

Adam, M. A., & Akber, S. N. (2016). The Impact of Brand Equity on Consumer Purchase Decision of Cell Phones. *European Journal of Business and Innovation Research*, 60-133.

Adam, M. A., & Akber, S. N. (2016). The impact of brand equity on consumer purchase decision of cell phones. *European Journal of Business and Innovation Research,* 60-133.

Akhtar, N., Ashraf, A., Latif, M., Ain, Q. U., & Siddiqi, U. I. (2016). Impact of a Brand Equity on Consumer Purchase Decision in L'Oreal Skincare Products. *International Review of Management and Business Researc*h, 808-816.

Akhtar, N., Qurat-Ul-Ain, Siddiqi, U. I., Ashraf, A., & Latif, M. (2016). Impact of a Brand Equity on Consumer Purchase Decision in L'Oreal Skincare

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Products. I*nternational Review of Management and Business Research,* 808-816.

Brata, B. H., Husani, S., & Ali, H. (2017). The Influence of Quality Products, Price, Promotion, and Location to Product Purchase Decision on Nitchi At PT. Jaya Swarasa Agung in Central Jakarta. *Saudi Journal of Business and Management Studies.*

Buil, I., & Martı´nez, E. (2013). The influence of brand equity on consumer responses. *Journal of Consumer Marketing*, 62-74.

Emami, A. (2018). Factors Influencing Brand Equity: A Case Study of Dairy Industry. *Journal of Hotel & Business Management.*

Gautam, D. K., & Shrestha, S. K. (2018). Impact of Brand Equity on Purchase Intention of Smart Phones. *Asia-Pacific Journal of Busines*, 1-18.

Gunawardane, N. R. (2015). Impact of Brand Equity towards Purchasing Desition: A Situation on Mobile. *Journal of Marketing Management,* 100-117.

Gunawardane, N. R. (2015). Impact of Brand Equity towards Purchasing Desition: A Situation on Mobile. *Journal of Marketing Management,* 100-117.

Hawkins, M. (2016). Consumer Behavior Building Marketing Strategy. McGraw-Hill Education.

Khan, N., Rahmani, S. H., Hoe, H. Y., & Chen, T. B. (2015). Causal Relationships among Dimensions of Consumer-Based Brand Equity and Purchase Intention: Fashion Industry. *International Journal of Business and Management*, 172-181.

Khan, N., Rahmani, S. H., Hoe, H. Y., & Chen, T. B. (2015). Causal Relationships Among Dimensions of Consumer-Based Brand Equity and Purchase Intention: Fashion Industry. *International Journal of Business and Management*, 172-181.

Moradi, H., & Zarei, A. (2011). The Impact of Brand Equity on Purchase Intention and Brand Preference-the. *Australian Journal of Basic and Applied Sciences,* 539-545.

Nunnally, J. C. (1978). *Sychometric theory* (2nd ed.). New York: McGraw-Hill.

Perera, W. L., & Dissanayake, D. M. (2013). The impact of brand awareness, brand association and brand perceived quality on female consumers' purchase decision of foreign makeup products. International Conference on Business & Information.

Sasmita, J., & Suki, N. M. (2015). Young consumers' insights on brand equity Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail &*, 276-292.

Sasmita, J., & Suki, N. M. (2015). Young Consumers' Insights on Brand Equity Effects of Brand Association, Brand Loyalty, Brand Awareness, and Brand Image. *International Journal of Retail & Distribution Management*, 276-292.

Shah, R. B. (2012). An empirical study on factors influencing brand equity towards. *International Journal of Advanced Research in*, 50-66.

Shah, R. B. (2012). An Empirical Study on Factors Influencing Brand Equity Towards Laptop Brands. *International Journal of Advanced Research in Management and Social Sciences*, 50-66.

Shah, R. B. (2012). An empirical study on factors influencing brand equity towards laptop brands: sem approach. *International Journal of Advanced Research in Management and Social Sciences.*

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research* , 749-752.

statistics, C. L. (2019). Computer Literacy statistics. Department of census and statistics.

Syahrivar, J., & Ichlas, A. M. (2018). The impact of electronic word of mouth (e-wom) on brand equity of imported shoes: does a good online brand equity result in high customers' involvements in purchasing decisions? T*he Asian Journal of Technology Management*, 57-69.

Tania, S. (2012). Factors Influencing Teachers' Laptop Purchases. ULAB *Journal Of Science And Engineering*, 12-17.

Wang, F., & Hariandja, E. S. (2016). The influence of brand ambassador on brand image and consumer purchasing decision: a case of Tous Les Jours in Indonesia. Conference: International Conference on Entrepreneurship.

Factors affecting the online purchasing intention of mobile phone accessories of millennials in Kurunegala District

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ABSTRACT

Internet usage worldwide has grown up drastically due to the advancement of technology and internet penetration. Due to this rapid increment of internet access and adaptation, the number of digital buyers keeps climbing worldwide. This common phenomenon is happening in Sri Lanka too since several years. Therefore, this study was designed to analyze the factors affecting the online purchasing intention of mobile phone accessories of Millennials (those born between 1980 and 2000) in Kurunegala district. Although there are many studies regarding the factors affecting online purchasing intention of mobile phones and online shopping behavior, it is unclear what factors affect the online purchasing intention of Mobile Phone Accessories (MPA) in the Sri Lankan market. Most manufacturers and marketers are expecting new ideas to capture the growing market. The present study uses five main factors: Trust, Perceived Ease of Use, Perceived Usefulness, Perceived Enjoyment, and Subjective norm to measure the independent variable. The study population was the millennials in Kurunegala district, and the sample has been picked up from the convenient sampling method as 384. Primary data was collected through a self-structured questionnaire with 7- point Likert Scale. The data were analyzed through SPSS 20v Software. For analysis, descriptive statistics, regression model, and correlation were used. The conclusion derived that all five variables positively impact online purchasing intention. However, the results will be impactful for the businessman and e-retailers in the Mobile Phone Accessories market to understand the key factors to boost their online sales by understanding millennials' behavior.

Keywords: Millennials, Mobile Phone Accessories, Online Purchasing Intention, Sri Lanka

1. INTRODUCTION

1.1 Background of the Study

The emergence of internet technologies, it greatly affects consumers' daily activities. And many offline activities have now changed into online environments. As internet access and adaptation are rapidly increasing around the globe, the number of digital buyers worldwide keeps climbing every year. In 2019, an estimated 1.92 billion people purchased goods or services online (Statista Research Department, 2020). When considering the global digital data in 2020, it can be noted that, compared to 2019, social media users have grown by 5% and overall internet penetration by 59% (Datareportal.com). In the Sri

Lankan context, there were 10.10 million internet users in January 2020. The number of internet users in Sri Lanka increased by 399 thousand (+4.1%) between 2019 and 2020 (Digital 2020).

As people live in a period of high digitalization, the application of highly digitized technological devices in our daily lives is rising rapidly. Mobile phone accessories are as important as a mobile phone in day-to-day life for people worldwide. Simply, mobile phone accessories are the hardware that assists in increasing the mobile phone's performance or outlook. Protective cases, Rapid phone chargers, Stands, External batteries, selfie sticks, Wireless Bluetooth headphones are such kinds of accessories that are commonly used. Mobile phones can be used even as multipurpose devices by adding proper accessories. They are used for customization or a hip look for the phone and help make mobile phones much easier. Sometimes these accessories are highly useful while traveling or even in day-to-day life of the users. For instance, a strong mobile phone case will protect the phone from daily wear and tear.

Online purchase intention plays a vital role in online consumer behavior. Online purchase intention tends to have a positive relationship with the actual online purchase behavior (Lim *et al*., 2016). Thus, the stronger the online purchase intention of an individual, the more likely s/he is to perform the online purchase behavior. Accordingly, we have focused on investigating the factors that influence consumer intention to purchase online as a determinant of actual behavior. E-commerce, online purchase intention can be defined as a situation when a person desires to buy a product or service through a website (Liat, 2014). In the research in line with Pavlou (2003), online purchase intention is understood as the degree to which a consumer is willing to buy a product through an online store.

1.2 Problem Statement

The heavy increase of internet usage rate has dramatically impacted people's lifestyles. As a result, it has resulted on the usage of fashionable mobile phone accessories among the millennials. Therefore, mobile phone accessories seem to be an essential commodity within the current generation. Nowadays, due to the rapid urbanization, higher inclination towards social-networking sites, and growing demand for fashionable mobile accessories, we can see a higher demand for mobile phones and accessories among the younger generation. Therefore, mobile phone accessories seem to be an important commodity within the current generation. A good number of scholars have already conducted quality research regarding the factors affecting online purchasing intention in the global and Sri Lanka context. They have been mostly focused on online shopping behavior and purchasing intention on mobile phones. Previous studies in this area have identified various factors that affect the customer’s choice to purchase a product from an e-commerce or traditional store. But it is still unclear what factors can influence the purchase intentions of mobile phone accessories buyers, when this purchase is conducted in an online shopping environment. Therefore, this study attempted to address this research gap.

Although many studies are exploring the factors affecting online purchasing intention of mobile phones and online shopping behavior, it is unclear what factors affect the online purchasing intention of MPA in the Sri Lankan market. The pilot survey used 50 sample of youngers shows that most of them purchase mobile phone accessories through online purchases. According to the pilot test, 98% of them have been responded and among them 67.3%, would like to purchase mobile phone accessories online. According to the data revealed by the Department of Census and Statistics Sri Lanka-2019, millennials have the highest digital literacy rate among people between age between 5 - 60 years. The department identifies a digital literate person as if she/he could use a computer, laptop, tablet or smartphone on his/her own. So here, this problem of identifying the factors affecting the online purchasing intention of Mobile Phone Accessories (MPA) is discussed along with the Sri Lankan millennials who have been identified as the most digitally literate people.

1.3 Research Objectives

- To examine the impact of perceived ease of use on online purchasing intention of mobile phones accessories.
- To examine the impact of trust on online purchasing intention of mobile phones accessories.
- To examine the impact of perceived usefulness on online purchasing intention of mobile phones accessories.
- To examine the impact of perceived enjoyment on online purchasing intention of mobile phones accessories.
- To examine the impact of subjective norm on online purchasing intention of mobile phones accessories.

1.4 Research Questions

- Is there an impact of perceived ease of use on online purchasing intention of mobile phones accessories?
- Is there an impact of trust on online purchasing intention of mobile phones accessories?
- Is there an impact of perceived usefulness on online purchasing intention of mobile phones accessories?
- Is there an impact of perceived enjoyment on online purchasing intention of mobile phones accessories?
- Is there an impact of subjective norm on online purchasing intention of mobile phones accessories?

2. LITERATURE REVIEW

2.1 Online platforms

Online platforms play a major role in social and economic life. Online platforms lead to accessed websites in the world with search engines, social media, and e-commerce as the most visited types of platforms. The growth and importance of online platforms have been widely recognized. Therefore, lots of companies have transformed or expanded their businesses from traditional physical stores to online stores (e.g., E-Commerce websites) to focus on transactions of commodities or services through electronic systems such as the Internet and other computer networks (Gondwe, 2010).In Sri Lanka, online platforms and marketplaces also play a vital role in the development of the E-Commerce industry in Sri Lanka. According to the resources by DATAREPORTAL-2020, the E-Commerce in Sri Lanka is also growing with a good amount of rate by year 2021 as the internet penetration rate is 47% now. Most popular online selling platforms and marketplaces in Sri Lanka are Daraz, ikman, Patpat, Kapruka, Takas, Glomark, Wasi etc.

2.2 Mobile Phone Accessories Market

The mobile phone is an electronic communication device that the users use for companionship and tele sociability (Kopomaa, 2000). It is a device that links an individual with social networks oksman (2010) and provide a mechanism to get connected, a plaything to fun, a means for entertainment, a device for surfing the web, a reliever to tedious life, and a device to keep the people busy (Uddin, Xu, & Azim, 2015). Mobile phone accessories are important as mobile phones. According to Global Mobile Phone Accessories Market Research 2020, The Global Mobile Phone Accessories market size valued to USD 228 .57 billion in 2019, is predicted to reach USD 328.69 billion by 2030 with a CAGR of 3.30% From 2000 – 2030. However, the global mobile phone accessories market can be categorized in figure 1.

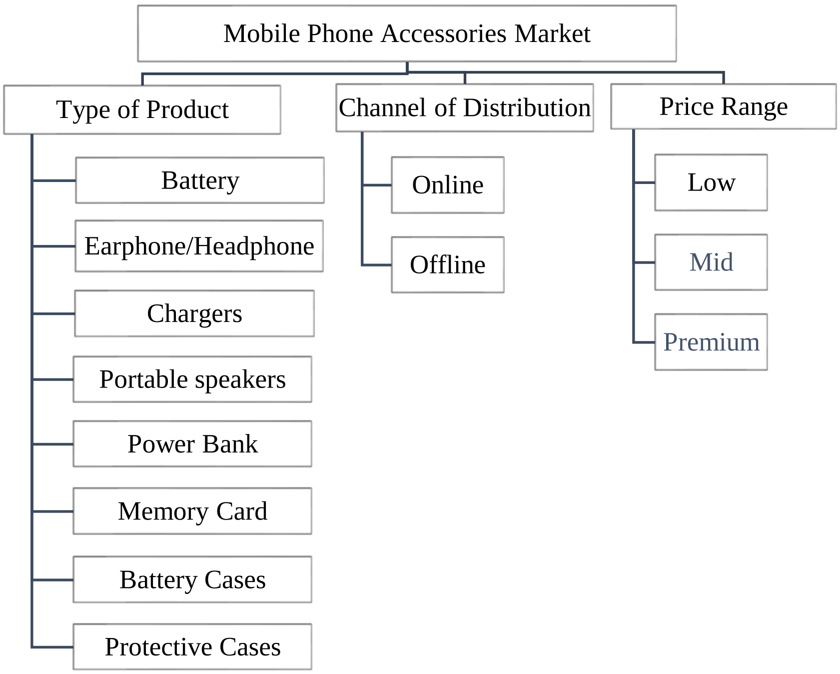

Figure 1: Mobile Phone Accessory Market

Source: Shah et al (2012)

Mostly popular accessories can be identified as follows,

1. Power Bank - It is a portable changer-based gadget that is used for charging electronic gadgets such as mobiles, tables, Cameras & even laptops. It is mostly used in travelling purpose.
2. Cases - These are mobile covers that are used for capturing Photos and radios. And these cases protect the mobile from scratches, spots, breaks etc. And also, it helps a person to hold the mobile effectively when capturing images & shoot videos etc. The protective cases give the safety for the mobile.
3. Headphones - These are used for listing to music. At the beginning headphones are given along with the mobile phone. But now people can buy them separately when they are needed. These are now available in both wired & wireless forms.
4. Chargers & Batteries - Battery is the life source of the phone Batteries are paired with charges Batteries do runout & chargers make sure that batteries are ready for usage
5. Screen Protectors - This is very important accessory because no matter what phone you have, the display will get scratched after a point of time. Thus, it's best to apply a screen protector on your devices display.

2.3 Online purchasing intention

Purchase intention can be defined as a condition between the customer and the seller when the customer is ready to make a deal with the seller. The purchase intention process starts with product evaluation. To evaluate, individuals use their current knowledge experience and external information (Bukhari, 2013) Purchase intention is a kind of decision-making that studies the reason to buy a particular brand by the consumer as stated by Shah et al (2012). Therefore, this is about what a person may think about purchasing a specific product or service. The reason why attitudes and purchase intention are studied in most of the research done so far is that it is harder to measure the actual buying behavior. People may act in different ways depending on their situations from time to time.

2.4 Theories and models related to online purchasing intention

2.4.1 Theory of Reasoned Action (TRA)

According to Ajzen and Fishben (2000), the ultimate goal of the (TRA) is to predict and understand a person's behavior. But before that can happen, it is necessary to examine the determinants of the behavior in question. The TRA stipulates that a person's intention of performing a behavior is a direct determinant of them performing the behavior. In addition, a person's intention is a direct determinant of their attitude toward performing the behavior and their subjective norm. The term attitude toward the behavior simply refers to a person's negative or positive evaluation of performing the behavior. Subjective norm refers to a person's perception of the social pressures accompanied by the decision to perform or not perform the behavior. Furthermore, a person's beliefs are direct determinants of their attitude toward the behavior and their subjective norm. However, the TRA only applies to behaviors under complete volitional control. That is behaviors that can be easily performed or performed on a voluntary basis.

2.4.2 Theory of Planned Behavior

Ajzen developed the Theory of Planned Behavior (TPB), as an extension of the TRA to improve the model's predicting power and better explain human intentions and behavior. As an extension of the TRA, the TPB still contains all the components from the TRA, but it incorporates two elements that were lacking in the TRA: control beliefs and perceived behavioral control (PBC).

2.5 Factors Affecting Online purchasing intention

In online purchasing, many research studies have been done to explore the factors that affect online purchasing intention. Chiu et al. (2005) proposed a gender-based model for online purchasing intention. Here, the factors, namely personal innovativeness, perceived usefulness on attitude, personal awareness of security, and perceived ease of buying online, were discussed. According to the study conducted by Kim et al. (2008) regarding a trust-based decision-making process that a consumer uses when making online purchasing, trust and perceived risk are 02 factors that substantially impact purchasing decisions. A study conducted by Cheema (2018) Online purchasing intention with the help of extended technology acceptance model Davis (1989) stated that pe and PEOU Significantly influence Online purchasing intention. While there is no big significant relationship between Perceived usefulness on online purchasing intention.

2.5.1 Trust

Trust can be considered a major construct that influences consumer behavior, especially in an e-commerce environment where uncertainty & risk are experienced frequently (Gefe & Straub, 2000) (Jarvenpaa & Tractinsky, 1999). Trust has been defined in different perspectives by different authors. Droege, Anderson and Bowler (2003) define trust as the feeling of trusting belief. According to Yoon (2002), Mayer Davis (1999), trust is an attitude regarding another person (e.g. Feeling between Trustor & trustee). Ganguly, Dash and Cyr (2010) defined trust as the Perceived integrity and benevolence of the online store according to the view of the customer. Therefore, it can be identified as the important factor to online purchasing because when the customer does not trust the seller and his web site, there may not be a purchase. The observation done by Jarvenpaa and Tractinsky (1999) demonstrated a direct relationship between trust and purchase intention. Similarly, trust has been identified as a helpful tool in accepting online business (Gefen, 2000). Wang (2000) is another author who has shown this relationship and the state. thus, the positive attitude on trust, leads the consumer to shop online. Although most of the studies reveal a positive relationship, Raman P (2019) explored the understanding of female consumers' intention to shop online. It showed that trust does not directly affect the decision to engage in online buying but indirectly affects it through attitude.

2.5.2 Perceived Ease of use (PEOU)

Ease of use represents the scope to which a system can be used with a minimum level of effort by its user Davis (1989). It's associated with easy learning, unproblematic and convenient use, flexibility and less complexity (Davis, Bagozzi, & Warshaw, 1989). In other words, PEOU is associated with the website's user friendliness. If online purchasing makes hassles to the user (e.g.: Long downloading times, poorly designed forms), he would prefer to purchase through conventional channels other than online.

PEOU is estimated to have a positive effect on purpose intention. When the customers find that the connection with an online shopping website is easy & it is easy to search for products and pay online, they prefer to shop with that website (Barkhi & Wallace, 2007). Another study conducted by Rahmiati (2017) showed that the perceived ease of use has a positive & significant effect on student attitude toward digital library usage. Consumer’s attitude positively affects consumers' intention to buy online. In that sense, Uentario et al. (2017) demonstrated that PEOU has an appositive and significant effect on consumer’s attitude. So, it will reveal that PEOU positively affects online purchasing intention of internet shoppers. Moreover, Putro and Haryano (2015) have shown that a positive significant between perceived risk on consumer attitudes & the desire to buy.

2.5.3 Perceived Usefulness (PU)

PU is considered the utilitarian factor affecting online shopping. According to TAM Davis (1989) customers tend to use online websites, which significantly affects their performance. Most previous studies used the term PU which refers to the advantages associated with online shopping experience such as convenience, price comparison, enjoyment & enhanced customer- retailer relationship (Martin, Mortimer, & Andrews, 2015). Davis (1989) stated that PU could be considered the useful factor affecting online shopping.

Literature confirmed that there is a significant relationship between PU & purchase intention. One source of study that supports the above finding is the observation by (Koufaris, 2002). According to his study, it demonstrated that there is a significant relationship between PU and online purchasing intention by examining the online consumer’s intention to make an unplanned purchase through e-commerce. Another research by Zhoul et al. (2007) showed that PU is the customer’s probability that shopping online would increase his/her efficiency, positively affecting the entire purchase process. Moreover, Dosh and saji (2006) asserted a positive influence of PU on online purchasing intention.

2.5.4 Perceived Enjoyment (PE)

In the context of online shopping, PE can be defined as the consumer’s perception that by shopping online, he/she will have a fun. Several authors in their studies have defined the factor PE. According to David et al (1992), it can be defined as “the degree to which, the activity of using the computer is perceived to be enjoyable in its own, away from any performance side effect that may be expected. Beatty & Fewel (1998) stated that PE is the pleasure or charm a person receives from the shopping procedure. Venkatesh (2000) defined PE in a more extended way and expressed the extent to which the activity of using a particular system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from use.

The researchers' Burke (1998); Jarvenpa & Todd (1997) found that convenience to be the prime factor in engaging in internet retailing also suggested a great deal of satisfaction derived from online purchasing. According to Thong et al. (2006), enjoyment significantly affects shopping. Thus, Carr et al. (2001) suggest that the more enjoyable the online shopping process at a particular website, the more likely consumers will purchase on that website. Therefore, PE is greatly affecting one's online purchasing intention.

2.5.5 Subjective Norm (SN)

This can be identified as another factor effect on consumer's online purchasing intention. 1t plays a vital role in decision making (Pudaruth & Busviah, 2018). Subjective norm intended to measure the social influence on a person's behavior (e.g.: family members expectations) (Ha, 1998). It can be referred as the consumer perception and influence of others such as peers, friends, family media & authority figures. According to Ajzen, (1991), SN can be defined as the perceived social pressure to perform or not to perform the behavior. Similarly, Ajzen and Driver (1980) pointed out that, SN as it is considered to be the perceived pressure imposed by others such as neighbors, friends, peers who perform the behavior of interest, and such action have either directly or indirectly influenced so respondent's behavior.

Previous research has proved that SN significantly impactsurchase (Al-Maghrabi, Dennis, Halliday, & Bin Ali, 2011). Azjen (1991) stated that normative beliefs are viewed as determine subjective norm. As a result, social normative could be of high importance to a consumer when considering an online buying (Hansen, 2008). Moreover, Khalil and Michael (2008) Said that friends, family members and colleagues as Subjective Norm have a positive influence on individuals to buy online. It also proven from Saponat (2012) that SN have significantly toward the intention of using e-commerce, but in minor influence compared to other variables.

3. METHODOLOGY

This is a quantitative study which processed by collecting and analyzing numerical data. Further, this study is based on a deductive approach, which tests hypotheses developed from existing theories. The target population of this study was the millennials who are purchasing mobile phone accessories through online platforms. Millennials refer to those who have born between 1985-2002 (Stephanie & Carri, 2018). Accordingly, the researcher has selected the millennials who live in the Kurunegala district. Approximately 244,294 millennials in the Kurunegala district by 2019 (Department of Census and Statistics 2019). The sample is selected based on convenient sampling techniques, and the sample size was 384 (Krejcie & Morgan, 1970). The researcher used a self-administered questionnaire as the primary data collection method. The questionnaire was measured using a seven-point Likert scale. Questionnaires were distributed to the respondents as Google forms and

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collected through social media, and the response rate was 91% of the total sample. Demographic variables were analyzed through descriptive statistical techniques and the impact of variables was analyzed using correlation and multiple regression analysis.

3.1 Conceptual Framework

The conceptual framework representing the relationship among independent and dependent variables can be shown below.

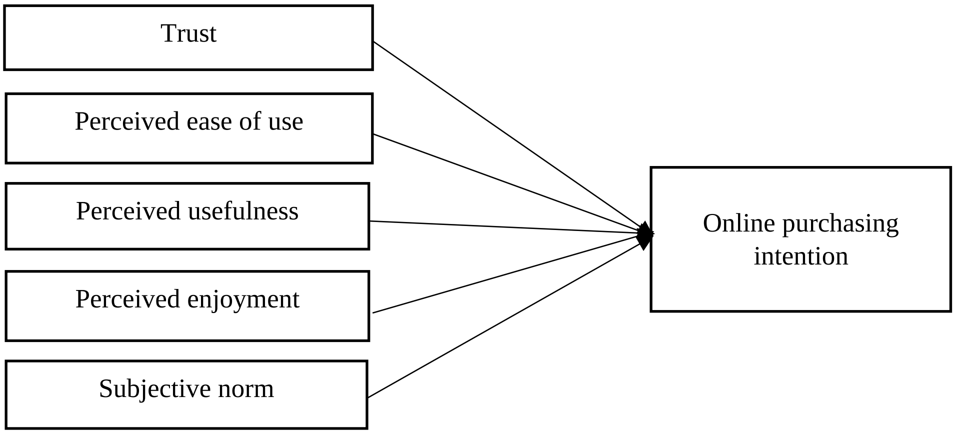

Figure 3: Conceptual Framework

3.2 Hypothesis

H_1: There is a positive impact of Trust on online purchasing Intention of mobile phone accessories.

H_2: There is a positive impact of PEOU on online purchasing intention of mobile phone accessories

H_3: There is a positive impact of PU on online purchasing intention of mobile phone accessories.

H_4: There is a positive impact of PE on online purchasing intention of mobile phone accessories.

H_5: There is a positive impact of SN on online purchasing intention of mobile phone accessories.

4. RESULTS AND DISCUSSION

4.1 Reliability analysis

Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. According to Table 1, we could observe that the Cronbach's Alpha related to all the variables considered are greater than and approximately closer to 0.7. Therefore, the study completes the reliability of the variables identified by the survey for further analysis.

The descriptive statistics, the seven-point Likert scale, the mean value are considered 7. Standard deviation represents how much the dispersion from the mean of the data. Accordingly, all the variables impact on online purchasing intention.

Table 1: Reliability analysis

Variable	No. of items	Cronbach's Alpha Value
Trust	9	.903
Perceived ease of use	6	.827
Perceived usefulness	4	.855
Perceived enjoyment	3	.779
Subjective norm	4	.830
Online purchasing intention	4	.853

Source: SPSS data (2020)

4.2 Correlation analysis

The main purpose of the correlation analysis is discovering whether there is a relationship between variables and find out the direction of the relationship. Results of the correlation analysis can be demonstrated as below.

Table 2: Correlation analysis

Variable	correlation	significant
Trust	.889	.000
Perceived ease of use	.876	.000
Perceived usefulness	.880	.000
Perceived enjoyment	.872	.000
Subjective norm	.887	.000

Source: SPSS data (2020)

According to Table 2, the correlation between all independent and dependent variables is significant ($p < 0.05$). Therefore, it can be concluded that there is a significant relationship between each pair of independent and dependent variables.

4.3 Multiple regression analysis

Multiple regression analysis was carried out to examine the extent to which online purchasing intention (dependent variable) is affected by each independent variable. The results are as below.

Table 3: Multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921[a]	.849	.847	.27804

a. Predictors: (Constant), SN, PE, PU, PEOU, Trust

Source: SPSS data (2020)

According to the table, R square of the model is obtained .849; therefore, 84.7 % of the dependent variable can be explained from the independent variables Trust, PEOU, PU, PE and SN.

The regression model can be developed as below.

$$Y_{PI} = -0.047 + 0.252X_{Trust} + 0.166X_{PEOU} + 0.153X_{PU} + 0.159X_{PE} + 0.233X_{SN}$$

Therefore, the most influential factor can be identified as the trust factor with the highest coefficient.

Table 4: Hypothesis Values

Variable	B coefficient	P value	Decision
Trust	0.252	0.000	Accepted
Perceived ease of use	0.166	0.004	Accepted
Perceived usefulness	0.153	0.011	Accepted
Perceived enjoyment	0.159	0.004	Accepted
Subjective norm	0.233	0.000	Accepted
Online purchasing intention	-0.047	0.751	Accepted

Source: SPSS data (2020)

Significance values of the constant and the independent variables were less than 0.05, indicating that indicators were significant. The regression values indicate that the most influential factor is the Trust when purchasing MPA through online platforms. According to the analysis of inferential statistics, it could prove that the researcher's five main hypotheses can be accepted. That means the five main selected factors Trust, PEOU, PU, PE and SN, significantly impact on the online purchasing intention of MPA. Those factors are positively affected with the online purchasing intention among generation Y

5. CONCLUSION

This study was conducted to investigate the factors affecting online purchasing intention of MPA among the millennials. According to the analysis of inferential statistics, it could prove that the five main hypotheses developed by the researcher can be accepted. That means the five main selected factors Trust, PEOU, PU, PE and SN, significantly impact on the online purchasing intention of Mobile Phone Accessories (MPA). Those factors are positively affected with the online purchasing intention of millennials. Further, these findings can achieve the five main objectives of the study. As per the trust factor, several studies demonstrated the positive impact of Trust on online purchasing intention. The observation done by Jarvenpaa and Tractinsky (1999) demonstrated a direct relationship between trust & purchase intention. Similarly, trust has been identified as a helpful tool in accepting online business (Gefen, 2000). Therefore, the results of this study align with the previous studies regarding the positive impact of Trust on online purchasing intention of MPA. Empirical evidence highlighted a strong impact between PEOU and online purchase intention. Study conducted by Rahmiati (2017) showed that the perceived ease of use has a positive & significant effect on student attitude toward digital library usage. However, the results of the study prove the existing literature regarding the relationship between these two variables.

The positive impact of PU on online purchasing intention have also been proven by many prior researches. Davis (1989) said that PU can be considered the useful factor affecting online shopping. According to the study of (Koufaris, 2002), it demonstrated that there is a significant relationship between PU and online purchasing intention. According to Thong et al (2006), enjoyment has a significant effect on shopping. Thus, Carr et al (2001) suggest that, the more enjoyable the online shopping process, at a particular website, the more likely consumers will purchase on that website. This study also proves this relationship as the analysis revealed that there is a positive impact between variables. According to the previous studies of Ajzen and Driver (1980) define SN as it is considered to be the perceived pressure imposed by others such as neighbors' friends, peers. who perform the behavior of interest and such action have directly or indirectly influenced the respondent's behavior? This study align with this literature as the hypothesis are significant.

However, this study consists of several limitations; mainly, this study covers only a small geographic area and considers only five variables effect on online purchasing intention. Therefore, future studies can include several improvements in the study by adding more districts to the study. However, this study provides important insights for the academicians and the marketers and marketing researchers. Further, the researcher provides some recommendations to the potential e-commerce marketers to invest more in building trust among customers by sharing positive reviews and testimonials, co-operating with other websites, Facebook and blogger writers to advertise on website, creating an attractive web design, including easier ordering and payment methods and so on.

REFERENCES

Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European review of social psychology*, 11(1), 1-33.

Al-Maghrabi, T., Dennis, C., Halliday, S., & Bin Ali, A. (2011). Determinants of customer continuance intention of online shopping. *Int. J. Bus. Sci. Appl. Management.*

Barkhi, R., & Wallace, L. (2007). The impact of personality type on purchasing decision in virtual stores. *Information Technology Management, 8*(4), 313-330.

Bukhari, F. A., Rizwan, M., Liaquat, K., Ashraf, R., Ali, S. M., Azeem, S. R., & Ali, M. A. (2013). An investigation of customers to explain the purchase intentions for expensive mobile phone. Journal of Basic and Applied Scientific Research, 3(11), 87-96.

Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*, 319–340.

Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, *35*(8), 932-1003.

Gefe, D., & Straub, D. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the association for Information Systems, 1*(1). Retrieved from https://doi.org/10.17705/1jais.00008

Gefen, D. (2000). E-commerce: the role of familiarity and trust. *Omega*, *28*(6), 725-737. Retrieved from https://doi.org/10.1016/S0305-0483(00)00021-9

Gondwe, E. (2010). *Electronic commerce: trading goods and services online.* Retrieved July 2019, from http://www.webdevelopmentcareer.com/html/e-commerce-electronic-commerce.html

Ha, C.L. (1998). The theory of reasoned action applied to brand loyalty. *Journal of Product and Brand Management, 7*(1), 51-61.

Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, 128–137. Retrieved from http://dx.doi.org/10.1111/j.1470-6431.2007.00655.x

Jarvenpaa, S., & Tractinsky, N. (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer Mediated Communication*. Retrieved from http://dx.doi.oorg/10.1111/j.1083-6101.1999.tb00337.X

Kopomaa, T. (2000). City in Your Pocket. *Birth of the Mobile Information Society Helsinki: Gaudeamus.*

Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information systems research, 13*(2), 205-223. Retrieved from https://doi.org/10.1287/isre.13.2.205.83

Krejcie, R., & Morgan, D. (1970). Determining the Sample size for Research Activities. Educational and Psychological measurement.

Liat, C. (2014). Factors Influencing Consumers' Online Purchase Intention: A Study among University Students in Malaysia. *2*(8).

Martin, J., Mortimer, G., & Andrews, L. (2015). Re-examining online customer experience to include purchase frequency and perceived risk. *Journal of Retailing and Consumer Services*, *25*, 81–95.

Oxera. (2015). Benefits of online platforms .

Pudaruth, S., & Busviah, D. (2018). Developing and Testing a Pioneer Model for Online Shopping Behavior for Natural Flowers. *Evidence from Mauritius. Studies in Business and Economics*, *13*(1), 128-147.

Shah, H., Aziz, A., Jaffari, A., Waris, S., Ejaz, W., Fatima, M., & Sherazi, K. (2012). The Impact of Brands on Consumer Purchase Intentions. *Asian Journal of Business Management*, *4*(2), 105–110.

Stephanie, N. A., & Carri, T. R. (2018). Millennials' green consumption behaviour; Exploring the role of social media. *Martha and Spencer Love School of Business*.

Uddin, M., Xu, H., & Azim, M. (2015). Factors affecting mobile handset (MH) buying Decision. *An empirical study. International Journal of Management and Business Research, 5*(3), 225-236.

The impact of financial performance and condition on the share price: Evidence from Food, Beverage & Tobacco companies listed in Sri Lanka

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ABSTRACT

To make accurate investment decisions, investors need more relevant information. The share price is one of the major indicators that every investor looks in. It can find out many studies performed to examine the factors as well as some approaches to analyze the behavior of share prices. Fundamental analysis is one approach that is developed with the assumption that the financial performance of the company can be used to measure the value of a stock. Therefore, this study has been carried out with the purpose to determine the impact of financial performance and condition on the share price. The financial performance and condition of a company are expressed in the form of ratios including profitability, activity, liquidity, and leverage. The sample was selected using the simple random sampling technique and this study comprises 15 Food, Beverage, and Tobacco companies listed in the Colombo Stock Exchange throughout 2015/16 to 2019/20. The independent variables are return on equity, return on assets, total assets turnover, inventory turnover, current ratio, quick ratio, debt ratio, debt-equity ratio where the dependent variable is share price. Furthermore, data has been analyzed using descriptive analysis, correlation analysis, and regression analysis. Both profitability ratios and activity ratios significantly correlated with the share price at a 0.99 level of confidence indicating that there is a significant relationship between financial performance and share price. At 0.05 level of significance, the results showed that only activity ratios significantly affect the share price. Since the model explains 52.7% variations in share price, investors can rely on this financial performance and condition indicators when making their investment decisions on the Food, Beverage, and Tobacco sector of the Colombo Stock Exchange.

Keywords: Activity Ratios, Leverage Ratios, Liquidity Ratios, Profitability Ratios, Share Price

1. INTRODUCTION

Shares are the units of equity where publicly traded companies used to finance themselves. The initial share price that is determined through the Initial Public Offering (IPO) by a book-runner has fluctuated and this can be notified by observing the performance of share prices at the end of the trading day. Further investors favor clarifying the reasons for these price fluctuations as they seek to obtain a higher rate of return for their stock investments. But there is no perfect formula or system to detect the movements of stock prices. Therefore, this creates a necessity to examine the factors that affect the share price. There are many empirical studies conducted to identify the factors affecting the share price. Subing et al. (2017) categorized these factors broadly into external and internal. External factors are macro-economic factors such as inflation, interest rates, economic growth, government rules, market conditions, technological factors, environmental circumstances, and these factors are abbreviated as PESTLE. Internal factors include the performance of the company, change in the board of directors, dividends, creation of new assets, the appointment of new management, etc. Many empirical studies proved that the price of share rise with better company performance and decreases when the company is unable to achieve their expectations. Financial performance is a general measure of a firm's overall financial health over a specified period where the financial condition is in the sensing ability of an organization to timely meet its financial obligations. Financial ratios are the simple and oldest that indicate firm performance and condition (Puspitaningtyas, 2017).

When making decisions on investing in the stock market, the price of shares is crucial because investors' decisions change due to the changes in share price. For initial stock analysis, it can be used either fundamental analysis or technical analysis. The firm's financial performance and condition are indicated through four major ratios including, profitability, activity, liquidity, and leverage ratios (Pandey, 2015) and this material information disclose through the publication of annual reports. Although it could found many studies conducted in other countries they did not consider all the four types of ratios and most of them focused on Return on Assets (ROA), Earnings per Share (EPS), dividend payout ratio, Price Earning (PE), Return on Equity (ROE), dividend policy concerning many sectors like banking (Bansal, 2014), service firms (Ferrer & Tang, 2016) and pharmaceutical companies (Asmirantho & Somantri, 2017). As well as in Sri Lankan context is tested factors effect on share price by considering some ratios on some sectors for examples EPS, net assets per share, ROE, and PE ratio on the share price of manufacturing companies (Vijitha & Nimalathasan, 2014), effect of debt-equity ratio on the performance of share price of food, beverage & tobacco companies (Subramaniam & Anandasayanan, 2018). With the identification of these contextual and methodological gaps, the researcher will address the problem of the effect of financial performance and condition on share price concerning the selected food, beverage, and tobacco companies listed in the Colombo Stock Exchange (CSE).

The general objective of the study is to examine whether there is a significant impact of financial performance and condition on the share price of the companies which is listed in CSE under the Food, Beverage & Tobacco sector. Further, the specific objectives of the study are presented below;

1. To identify whether there is an impact of profitability ratios on the share price of the listed Food, Beverage & Tobacco companies.
2. To explore whether there is an impact of activity ratios on the share price of the listed Food, Beverage & Tobacco companies.
3. To recognize whether there is an impact of liquidity ratios on the share price of the listed Food, Beverage & Tobacco companies.

4. To identify whether there is an impact of leverage ratios on the share price of the listed Food, Beverage & Tobacco companies.

The main research question of the study is, what is the impact of financial performance and condition on the share price of Food, Beverage & Tobacco companies in Sri Lanka? Following are the other research questions, which are addressed by the study;

1. Is there any impact of profitability ratios on share prices of listed Food, Beverage & Tobacco companies?
2. What is the impact of activity ratios on share prices of listed Food, Beverage & Tobacco companies?
3. Is there any impact of liquidity ratios on share prices of listed Food, Beverage & Tobacco companies?
4. What is the impact of leverage ratios on share prices of listed Food, Beverage & Tobacco companies?

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Signaling Theory

Ross in 1977 redeveloped this theory to explain voluntary disclosures made in corporate reporting. The main way that organizations used to release their information is an annual report and this is a signal especially for the investors and they rely on this information like firms' financial position, share price to find out better companies to make their investments. Investors need relevant and reliable information as an analytical tool in making investment decisions. If published reports contain positive details, then the trend of the market will affect positively.

2.1.2 Agency Theory

Stephen Ross & Barry Mitnick introduced this theory in 1973 which stated that management of a firm who considered as agents of the investors are required to act in the best interest of the investors who are treated as principals. Therefore, management should make efforts, as well as shareholders, should promote management to improve the company's financial performance and condition which can be presented in financial ratios.

2.1.3 Efficient Market Hypotheses

This theory was declared by Eugene Fama in 1970 and he stated efficient capital market as a market in which price always fully reflects available information and competition will cause the full effects of new information on intrinsic values to be reflected instantaneously in actual prices. Market efficiency is defined at three levels,

Weak form: This asserts that the price of financial assets reflects all information contained in the past price and technical analysis is the most relevant method.

Semi strong form: Stock prices reflect all publicly available information; fundamental analysis is the most relevant method.

Strong form: Stock prices reflect in addition to information on past prices and publicly available information, inside information.

Some researchers found that CSE no in the form of weak (Fernando & Gunasekara, 2018).

2.2 Empirical Review in the International Context

Al Qaisi *et al.* (2016) did an examination to find out what were the factors that affect for stock prices of listed insurance companies in the Amman stock exchange. They used ROA, ROE, debt ratio, company's size, and company's age on insurance companies' stock price. The results proved that other than ROE all other four independent variables affected the share price.

Ferrer and Tang (2016) did an investigation to study the impact of financial ratios and business combinations on stock prices of the service firms in the Philippines. The study covered mergers and acquisitions, liquidity, activity, profitability, and market performance ratios. . The results of the study indicated that ROA, asset turnover, PER, and dividend payout ratio made a significant impact on the share price. As well as the results proved that business combinations did not have a significant impact on the share price. That means strategies developed for mergers and acquisitions can be used for any other purpose other than improving the stock prices of the companies.

The study which was aimed at finding the effect of financial ratios on price to book value has done by Lebo and Tasik (2017). As independent variables, they had used ROA, CR, and debt to asset ratio on share price to book value. Although the study found a positive relationship among independent and dependent variables, ROA showed a significant impact on the price to book value and the other two variables were not make any significant effect on the price to book value.

Ahsan (2020) did an investigation to study the influence of corporate internal and external factors on BUMN share price. This study was carried out during the period of Covid and it showed a huge negative impact on the economy. This study focused on the sectors of steel and cement, construction, mining and food, and health. During the pandemic period, the stock prices of all the selected sectors showed rapid decline whereas the construction sector showed a 128% of declined which was recorded as the highest impact. The conclusions were made using the results generated by SPSS and it showed foreign exchange rates, economic growth, and Covid made a huge external impact while ROA and debt to equity made a significant internal impact on the share price.

2.3 Empirical Review in the Local Context

Menike and Prabath (2014) conducted a study to investigate the impact of EPS, DPS, and BVPS on stock prices. For that, they chose a sample of 100 companies listed in CSE. The study concludes that there was a positive impact of these ratios on stock prices. Hence this study stated that DPS and BVPS showed a significant impact while EPS showed a less impact, therefore they recommended investors to use DPS as the first variable to be considered in the process of decision making.

A study was conducted by Sarifudeen (2016) to test the effect of DPS, EPS, and NAVPS on the share price of the sample of 65 companies listed in the CSE. The results of this study proved that independent variables have a significant impact on the stock price. As well as this study suggested that firms to disclose relevant accounting information without any misstatements since those financial information affects the investor's decision-making.

The aim of the investigation which was conducted by Dissanayake and Biyiri (2017) to examine the impact of internal factors such as EPS, DPS, and ROE on share price, concerning the hotel industry in CSE. The results of the study proved that there was a significant positive relationship among all three independent variables and the share price. With those findings, they can accept all the hypotheses. Therefore, this study recommended that investors focus on those factors when making investment decisions.

3. METHODOLOGY

3.1 Conceptual Framework

With the help of reviewing existing studies and theories, the following model was developed to carry out the research. This study only considers financial performance and condition which is depicted through financial ratios.

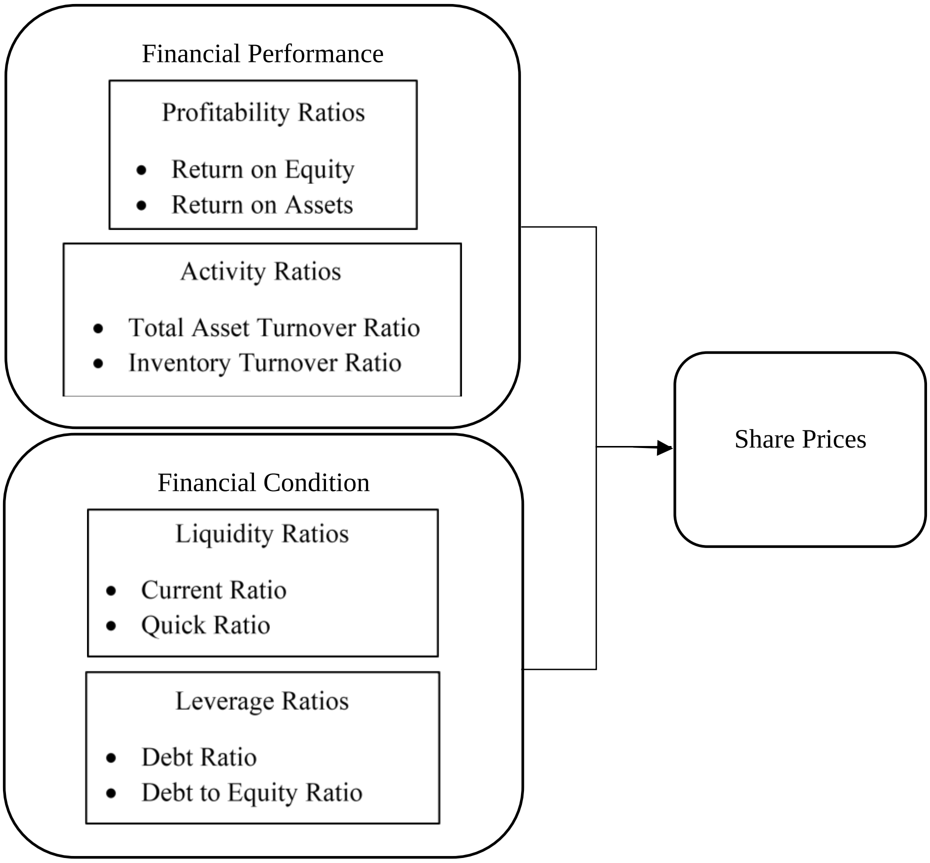

Figure 1: Conceptual Framework

Source: Compiled by Authors, 2021

3.2 Population and Sample

The Population comprises 21 listed companies in the Food Beverage & Tobacco sector of CSE as of 21 May 2021 and researchers consider this sector since it is one of the major sectors in the Sri Lankan economy and also to fill identified gaps. Then researchers selected 15 companies as a sample, using a simple random sampling technique. Data was collected for the recent 5 years from 2015/16 to 2019/20. The study focuses on secondary data collected through the published annual reports of the sample while share price data is obtained through the Colombo Stock Exchange data library.

3.3 Hypotheses

This study was performed to test the validity of the following hypotheses,

$H_{1:}$ Return on equity has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

$H_{2:}$ Return on assets has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

$H_{3:}$ Total assets turnover ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies

$H_{4:}$ Inventory turnover ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

$H_{5:}$ Current ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

$H_{6:}$ Quick ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

$H_{7:}$ Debt ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

H_8: Debt to equity ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

H_9: Financial performance has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

H_{10}: Financial condition has a significant impact on the share price of listed Food, Beverage & Tobacco companies.

3.4 Model of the Study

This study employed descriptive statistics, correlation analysis, and multiple regression to analyze the data. To test the hypotheses the following multiple linear regression model is developed.

$$SP = \beta_0 + \beta_1 ROE_{it} + \beta_2 ROA_{it} + \beta_3 TAT_{it} + \beta_4 IT_{it} + \beta_5 CR_{it} + \beta_6 QR_{it} + \beta_7 DR_{it} + \beta_8 DER_{it} + \varepsilon_{it}$$

Where,
SP = Share Price
ROE = Return on Equity
ROA = Return on Assets

TAT = Total Asset Turnover Ratio
IT = Inventory Turnover Ratio
CR = Current Ratio
QR = Quick Ratio
DR = Debt Ratio
DER = Debt to Equity Ratio
ε = Error Term
it = Companies, years

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics

Table 1: Descriptive statistics

	Minimum	Maximum	Mean	Median	Mode	Std.Dev
MPS	0.000	2799.900	433.292	124.800	1.900	664.435
ROE	-6.081	3.7334	0.314	0.120	-6.081	1.177
ROA	-0.343	0.717	0.125	0.087	-0.016	0.165
TAT	0.393	6.084	1.766	1.463	0.393	1.371
IT	2.542	23.832	8.317	7.369	2.542	4.311
CR	0.510	8.620	2.289	1.550	0.630	1.758
QR	0.180	7.297	1.686	1.005	1.860	1.630
DR	0.000	0.987	0.199	0.085	0.000	0.250
DER	-12.959	14.293	0.343	0.091	0.000	2.308

Source: Compiled by Authors, 2021

Descriptive statistics describe the basic features of the data set and the results showed 75 amounts of data that consists of a cross-section of 15 Food, Beverage & Tobacco companies and a time series of 5 years. The share price stood on average of 433.292 which highly fluctuated from a minimum of 0 to a maximum of 2799.900. ROE fluctuated around an average of 0.314 during the sample period and the standard deviation of ROE showed as 1.177 illustrated that ROE could be dispersed by -1.177 or + 1.177 from its mean value of 0.314. ROA fluctuated around a mean of 0.125 which could be deviated by its standard deviation of – 0.165 or + 0.165. The TAT stood an average of 1.766 which fluctuated from a minimum of 0.393 and a maximum of 6.084. The minimum IT for the sample showed as 2.542 by Ceylon Tobacco Company PLC whereas a maximum showed as 23.832 by Three Acre Farms PLC. CR stood at an average of 2.289 and the dispersion around the mean was 1.758 which indicated share price could deviate by -1.758 and + 1.758. The QR for the sample fluctuated around a mean of 1.686 where the standard deviation for the QR was 1.630. The range for the DR was 0.987 which could be obtained by taking the difference between the maximum of 0.987 and the minimum was 0. The minimum value for the DER was – 12.959 where the maximum value was 14.293 and the average value stood at 0.343.

4.2 Testing for normality

To decide what statistics to be used for analyzing the collected data initially the normality of the data set was tested. To test the normality of the sample data, Skewness and Kurtosis were used and Z values for both were calculated.

Moreover, Kolmogorov-Simonov, Shapiro-Wilk tests and histogram were used. All the results showed that the data set is not normally distributed and contains outliers.

Table 2: Test of Normality

	MPS	ROE	ROA	TAT	IT	CR	QR	DR	DER
Skewness	1.900	-0.980	1.596	1.613	1.622	1.354	1.629	1.480	0.447
Z value	6.859	-3.538	5.762	5.823	5.856	4.888	5.881	5.343	1.614
Kurtosis	3.073	13.593	4.620	2.009	3.250	1.499	1.954	1.577	32.634
Z value	5.608	24.805	8.431	3.666	5.931	2.735	3.566	2.878	59.551
Kolmogorov-Smirnov	0.300	0.355	0.194	0.210	0.125	0.179	0.244	0.223	0.428
Probability	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000
Shapiro-Wilk	0.691	0.547	0.795	0.804	0.860	0.845	0.777	0.785	0.344
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	75	75	75	75	75	75	75	75	75

Source: Compiled by Authors, 2021

Since all calculated Z values were not in the range of +1.96 to -1.96 except for the Z value for DER, these showed that data were not normally distributed. And also, skewness should be closer to zero but in this study, it is not met. Furthermore, kurtosis should be closer to 3 to consider that the data set is normally distributed. As well as to consider that data are normally distributed, for both Kolmogorov-Smirnov test and Shapiro-Wilk test's P value should be greater than 0.05 (P>0.05). But according to the results, all P values were zero. And also, according to the graph generated for the overall model which is shown in below figure 2, it can see there are more outliers in this study since it exceeds the range +3.29 where standardized residuals should not exceed. By these all requirements, the researcher can conclude that variables are not normally distributed.

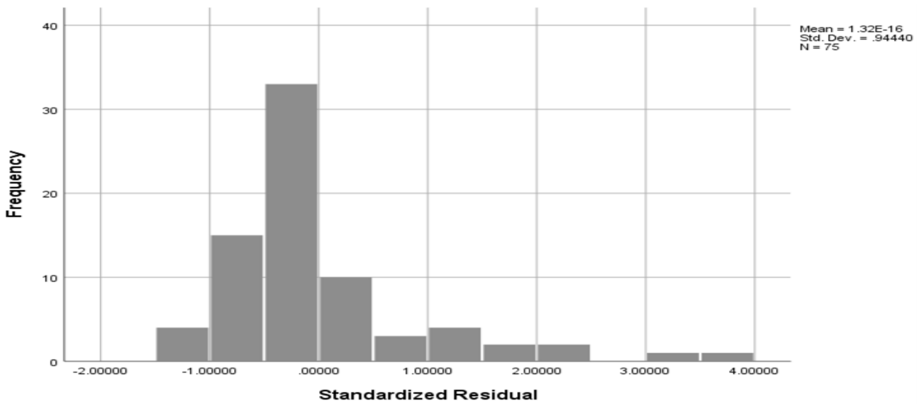

Figure 2: Normality test for the overall model

Source: Output SPSS 26

Then researchers converted the overall model into a logarithm due to the non-normality of the data set and converted the model as follows.

$$Log(SP_{it}) = \beta_0 + \beta 1Log(ROE_{it}) + \beta_2 Log(ROA_{it}) + \beta_3 Log(CR_{it}) + \beta_4 Log(QR_{it}) + \beta_5 Log(TAT_{it}) + \beta_6 Log(IT_{it}) + \beta_7 Log(DR_{it}) + \beta_8 Log(DER_{it}) + \varepsilon_{it}$$

The normality for the converted model was tested and it showed that the data has been normally distributed after converting the model into log values.

Table 3: Test of normality

Standardized Residuals	
Skewness	0.226
Z value	0.66470
Kurtosis	-0.393
Z value	-0.5883
Kolmogorov-Smirnov	0.072
Probability	0.2
Shapiro-Wilk	0.987
Probability	0.860

Source: Compiled by Authors, 2021

By the results, it shows that the skewness is 0.226 which is closer to zero and the Z value for skewness is 0.66470 which is in the range of +1.96 to -1.96. The Kolmogorov –Smirnov test shows a probability of 0.2 which is greater than the required probability value of 0.05. Furthermore, the Shapiro-Wilk test shows a significance of 0.860 also greater than 0.05.

As well as researcher used a histogram which is shown in the following figure 3, to show the graphical picture of the distribution pattern of the overall model. And the graph clearly showed that the model has a normal distribution, since standardized residual within the range of -3.29 to +3.29, with less number of outliers.

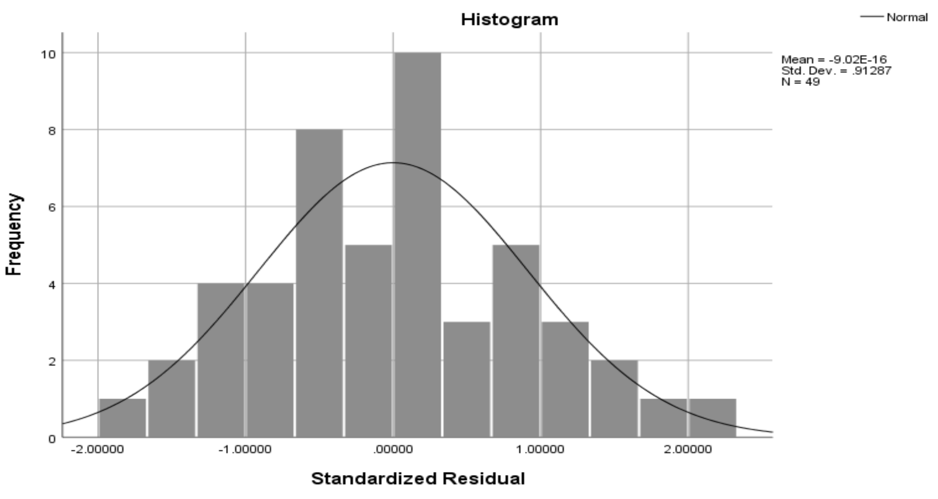

Figure 3: Normality test for the overall model (after converting in to log values)

4.3 Correlation Analysis

Correlation analysis examines the strength of the relationship between two variables. According to Care *et al.* (2018), they interpreted the type of relationship between the dependent and independent variable using the value of correlation coefficient as, if the correlation coefficient lies between 0.00 to 0.199, they interpreted the relationship as very weak, where the value of correlation coefficient in between 0.2 to 0.399 it is a weak relationship. They said there is a moderate relationship if the value of the correlation coefficient is in the range of 0.4 to 0.599. If the value of the correlation coefficient is between 0.6 to 0.799 there is a strong relationship and if the coefficient's value is between 0.8 to 1.00 there is a very strong relationship between dependent and independent variables.

Table 4: Correlation analysis

Variable	MPS	ROE	ROA	TAT	IT	CR	QR	DR	DER
MPS	1								
ROE	0.482**	1							
ROA	0.387**	0.888**	1						
TAT	0.600**	0.749**	0.641**	1					
IT	0.326**	-0.029	0.098	0.076	1				
CR	-0.188	-0.392**	-0.105	-0.400**	0.264*	1			
QR	-0.169	-0.270*	0.003	-0.345**	0.279*	0.962**	1		
DR	-0.086	0.282	0.036	0.101	-0.112	-0.708**	-0.583**	1	
DER	-0.095	0.300**	0.026	0.124	-0.112	-0.681**	-0.550**	0.891**	1

** Correlation significant at the 0.01 level
* Correlation significant at the 0.05 level

The above 4 table shows the results of Pearson's correlation for the converted data. Results showed that both ROE and TAT presented a positive, moderate relationship with share price, and the two variables significantly correlated with the share price at a 1% significant level. The CR, QR, DR, and DER showed a very weak and negative relationship with the share price while IT and ROA showed a weak positive relationship with share price, and both variables significantly correlated with the share price at a 1% significant level.

4.4 Regression Analysis

Before running the regression analysis, four basic assumptions have tested using the converted model.

1) Residuals are normally distributed.
   The normality of data and the results shown in table 2 and figure 3 proved that data has been normally distributed after the conversion of the model.

2) Absence of multicollinearity.
   It is tested using Correlation and according to Wulandari (2020) if independent variables are correlating 0.85 ($r > 0.85$) that is treated as multicollinearity between two independent variables. According to the above table 4, it can be found that there is a very strong and positive linear relationship among the variables ROA-ROE, QR-CR, and DER-DR where r values showed as 0.888, 0.962, and 0.891 respectively. The main reason for that is denominators of those independent variables' formulas are the same. That means both ROA and ROE used profit after tax, where QR and CR used current liabilities and DR and DER used company debt and equity figures. Except those the researcher can conclude that variables are agreed

with the assumption of absence of multicollinearity to run the regression analysis.

3) Absence of autocorrelation.
This measures the relationship between a variable's present value and its past values. The concept of autocorrelation is highly used in time series data. Here it used the Durbin Watson test and it produces statistics that range between 0 to 4 and values which are in the middle range or closer to 2, indicate that less correlation where values closer to 0 or closer to 4 indicate positive (Durbin Watson value < 2) or negative (Durbin Watson value > 2) autocorrelation respectively(www.investopedia.com).

Table 5: Test of autocorrelation

Model Summary	Durbin-Watson
1	1.231

Source: Compiled by Authors, 2021

Durbin Watson value is placed in the middle range but it is not much closer to the 2. Therefore, researcher can conclude that there is less autocorrelation in this model but it does not have much effect on the model since the researcher does not consider purely time series data. Therefore, it can conclude that there is no effect for the regression analysis from the autocorrelation.

4) Absence of heteroskedasticity.
The scatterplot graph was derived using the predictive value of the independent variable (ZPRED) with the residue (SRESID). If it shows a particular pattern in the graph, it can be concluded that there is the problem of heteroskedasticity (www.statisticsbyjim.com). The below figure 4 does not contain any regular pattern therefore it can be concluded that this model does not contain the problem of heteroskedasticity.

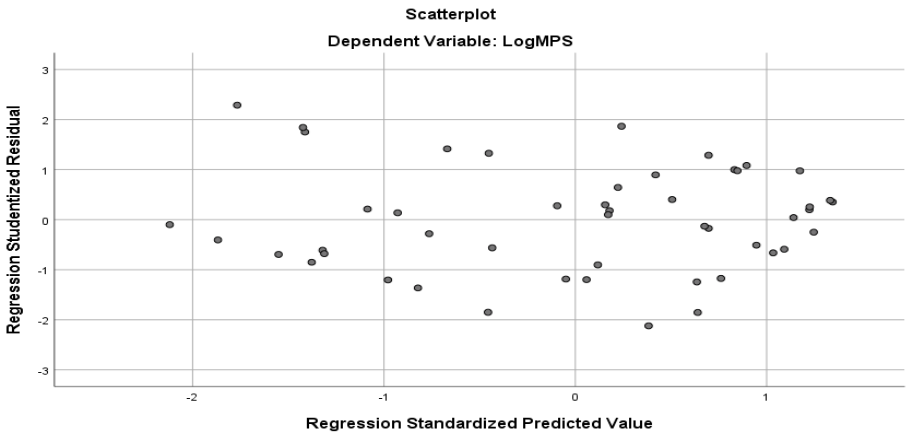

Figure 4: Test of heteroskedasticity

Source: Output SPSS 26

The study met all four assumptions of regression, and the model summary and regression results are shown in Table 6 and Table 7 respectively.

Table 6: Model summary of regression

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Significance
1	0.726	0.527	0.432	0.75849	0.000

Source: Compiled by Authors, 2021

R shows the multiple correlation coefficient which is a linear correlation between the observed and model-predicted values of the dependent variable. Since the value is 0.726 it indicates a strong relationship. The R Squared statistics, which is 0.527 with a statistical significance of $P<0.05$. This suggests that 52.7% of the variants in the share prices of Food, Beverage & Tobacco companies was predicted from the independent variables (ROE, ROA, TAT, IT, CR, QR, DR, DER) and the rest of 47.3 % would be explained by other variables not included in the study. Since the Standard Error of the Estimate is 0.75849, it can be concluded that observed values are closer to the regression line as well as it can be made more accurate predictions with the regression line.

Table 7: Regression results

Variable	Coefficient	Std. Error	t statistic	Significance
C	-1.093	2.281	-0.479	0.635
ROE	0.208	0.592	0.351	0.727
ROA	-0.326	0.706	-0.462	0.647
TAT	1.397	0.65	2.15	0.038
IT	2.171	0.674	3.218	0.003
CR	-2.069	2.62	-0.79	0.434
QR	0.964	1.816	0.531	0.599
DR	-0.079	0.392	-0.202	0.841
DER	-0.219	0.337	-0.65	0.519

Source: Compiled by Authors, 2021

The results indicate that TAT and IT have a significant positive impact while other variables are insignificant at a 95% confidence level. Since the regression model is log converted, coefficients depict the percentage change in the dependent variable due to a 1% change in the independent variable. 1% increase in ROE cause 0.208% increase in share price, 1% increase in ROA cause 0.326% decrease in share price, 1% increase in CR, QR, TAT, IT, DR, and DER cause 2.069% decrease, 0.964% increase, 1.397% increase, 2.171% increase, 0.079% decrease and 0.219% decrease of share price respectively and vice versa.

4.5 Hypotheses Testing

The hypotheses testing for this study can be done by using the p-value of each variable derived from the multiple regression model. If the p-value is less than 0.05 then accept the hypotheses, if the p-value is greater than 0.05 it should have to reject the hypotheses. Table 8 shows that the results of the hypotheses.

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Table 8: Summary of the hypotheses testing

	Hypothesis	Results
Hypotheses 1	Return on equity has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 2	Return on assets has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 3	Total assets turnover ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Accepted
Hypotheses 4	Inventory turnover ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Accepted
Hypotheses 5	Current ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 6	Quick ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 7	Debt ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 8	Debt to equity ratio has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected
Hypotheses 9	Financial performance has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Partially accepted
Hypotheses 10	Financial condition has a significant impact on the share price of listed Food, Beverage & Tobacco companies.	Rejected

Source: Compiled by Authors, 2021

4.6 Discussion

The results of the study revealed that ROE has a positive relationship with share price and also it is an insignificant variable. These results are proved by the findings of Vijitha and Nimalathasan (2014), Al Qaisi, *et al.* (2016). Dissanayake and Biyiri (2017) showed ROE has a positive but significant impact which is not consistent with the results of this study. It can be said that the influence might be different based on the sector since they used the hotel industry in CSE.

The results showed TAT has a positive relationship with share price as well as it is a significant variable. These results are proved by Ferrer and Tang (2016).CR has a negative relationship with share prices further the study revealed that CR is an insignificant variable. These results are proved by Asmirantho and Somantri (2017), Lebo and Tasik (2017). DR showed a negative relationship and also it is shown as an insignificant variable. Al Qaisi *et al.* (2016) also examined DR on share prices but they found that it was a significant variable. It can be said that the sector could affect the results since they used insurance companies for their study. And also, DER is not a significant variable that shows a negative relationship with share prices. This also does not consistent with the results of the studies because scholars obtained different results for their researchers for example Subramaniam and Anandasayanan (2018) stated that a positive relationship as well as it is significant.

5. CONCLUSION

This study was conducted with the general objective of "to examine whether there is any significant impact of financial performance and condition on share price". To see the impact researchers have selected only one sector of CSE and that is Food, Beverage & Tobacco. By reviewing the theories and empirical studies share price has been selected as a dependent variable and profitability ratio and activity ratios were selected as indicators of financial performance, while liquidity ratios and leverage ratios were selected as indicators of financial condition and these were the independent variables of the study.

The empirical findings indicated both positive and negative relationships between independent and dependent variables. Most of the empirical findings of the correlation analysis were consistent with the results of the study while few variables were not. Regression results showed activity ratios (total assets turnover, inventory turnover) made a significant impact on share price while others made an insignificant impact. Some of these regression results are proved by a few previous studies, while some results are not proved, this might be due to the use of different sectors, periods, and different macro-economic factors. Further, this study is supported by the theories of fundamental analysis and efficient market hypothesis.

Therefore, accordance with the results, ultimately it can be concluded that financial performance affects the share price of the Food, Beverage & Tobacco companies while financial condition has an insignificant effect.

5.1 Recommendations

Potential investors should consider financial performance when making investment decisions regarding this sector. Food, Beverage & Tobacco companies should try to improve especially activity ratios which are total assets turnover and inventory turnover that indicate the financial performance to increase share price. The following estimated model can be used in their decision-making purposes.

$$\text{Log}(SP_{it}) = 1.397\ \text{Log}(TAT_{it}) + 2.171\ \text{Log}(IT_{it}) + \varepsilon_{it}$$

5.2 Suggestions for Future Research

The present study is limited to only one sector which is listed in CSE. Therefore, future researchers can consider more than one sector which is more helpful to users to make accurate decisions. This study considers 15 companies as a sample. Then future researchers can select more firms as a sample to perform their investigation.

In this study researchers only consider the influence of financial performance and condition over the share price. But there are more other factors that could affect share price therefore researchers can consider other factors to conduct research. And also, this study was limited to 5 years. Future researchers can consider longer periods to make more reliable conclusions. This study considers the linear relationships between the variables, so future researchers can include nonlinear relationships to extend the study and to verify the results further.

REFERENCES

Ahsan, M. (2020, November 19). The influence of corporate internal and external factors on Bumn share price: A case study in 12 BUMNs. *Asian journal of Economics,Business and Accounting, 19*(3), 9-21.

Al Qaisi , D., Tahtamouni, D., & Al-Qudah, D. (2016, October). Factors affecting the market stock price - The case of the insurance companies listed in Amman stock exchange. *International Journal of Business and Social Science, 7*(10), 81-90.

Asmirantho, E., & Somantri, O. K. (2017). The effect of financial performance on stock price at pharmaceutical sub-sector company listed in Indonesia stock exchange. *Jurnal Ilmiah Akuntansi Fakultas Ekonomi, 3*(2), 94-107.

Bansal, R. (2014). A comparative analysis of the financial ratios of selected banks in the India for the period of 2011-2014. *Research Journal of Finance and Accounting, 5*(19), 153-167.

Care, F. R., Subagio, B. S., & Rahman, H. (2018). Porous concrete basic property criteria as rigid pavement base layer in indonesia. *MATEC Web of Conferences 147. 147*, pp. 1-11. EDP Sciences.

Dissanayake, T., & Biyiri, E. (2017, April). The impact of internal factors on share price : Reference to hotel industry in Colombo stock exchange. *Business and Management Research Journal , 7*(3), 33-37.

Fernando, P., & Gunasekara, A. (2018). Is the market efficiency static or dynamic-Evidence from Colombo Stock Exchange. *Kelaniya journal of Management, 07*(01), 13-25.

Ferrer, R. C., & Tang, A. (2016). An empirical investigation of the impact of financial ratios and business combination on stock price among the service firms in the Philippines. *Academy of Accounting and Financial Studies Journal, 20*(2), 104-115.

Menike, M., & Prabath , U. (2014, April 18). The impact of accounting variables on stock price : Evidence from the Colombo stock exchange in Sri Lanka. *International Journal of Business and Management, 9*(5), 125-137.

Pandey, I. (2015). *Financial Management* (11 th Edition ed.). New Delhi, India: Vikas Publishing House Pvt Ltd.

Puspitaningtyas, Z. (2017). Is financial performance reflected in stock prices ? *Advances in Economics, Business and Management Research, 40*, 17-28.

Sarifudeen, A. (2016, July). The impact of accounting information on share prices : A study of listed companies in Sri Lanka. *Journal of Accountancy and Finance*, *3*(1), 47-59.

Subing, H. J., Kusumah, R. R., & Gusni. (2017, December 25). An empirical analysis of internal and external factors of stock pricing : evidence from Indonesia. *Problems and Perspectives in Management* , *15*(4), 178-187.

Subramaniam, V., & Anandasayanan, S. (2018). Capital structure and stock prices:Empirical evidence from listed beverage, food,and tobacco companies in Sri Lanka. *International Journal of Social and Administrative Sciences*, *3*(2), 83-90.

Theresia, C. L., & Hizkia, H. T. (2017). The impact of financial ratios on price to book value(PBV) in automotive and component sub sector listed in IDX within 2007-2016 periods. *Jurnal Riset Ekonomi*, *5*(3).

Vijitha, P., & Nimalathasan, B. (2014, January). Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka. *Merit Research Journal of Business and Management* , *2*(1), 001-006.

Wulandari, S. (2020, February). The effect of financial ratios on share price consumer goods sector companies listed in Indonesia stock exchange. *Journal of Research in Business,Economics,and Education*, *2*(1), 348-359.

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Impact on internal corporate governance attributes on firm's value relevance

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ABSTRACT

Shareholders usually depend on accounting information for taking investment decisions. Therefore, such information needs to be reliable and accurate as they may predict share prices. It is widely accepted fact that good governance practices could improve value of firms. Thus, the purpose of this study is to examine how internal corporate governance attributes affect value relevance of accounting information of listed companies of Sri Lanka. The panel data window consists of 185 non-financial firms for nine years from 2011 to 2019. Internal corporate governance characteristics include board size, leadership structure, board activity, board gender diversity, presence of key committees, board independence, ownership of the largest shareholders, managerial ownership, foreign ownership, institutional shareholders, internal control and risk management, cross directorships, and audit committee independence. Findings imply that leadership structure, board gender diversity, presence of key board committees, largest shareholder ownership, managerial ownership, and foreign ownership, book value per share, firm size, and sales are all significant. Gender diversity on the board of directors, the existence of key board committees, largest shareholder ownership, foreign ownership, book value per share, firm size, and sales all have a beneficial impact on the firm's value. At a 95% confidence level, leadership structure, management ownership, and cross directorship have a negative impact on the firm's share price. The importance of appropriate laws and supervision surrounding financial reporting in the Sri Lankan financial system underlines the importance of accounting information's value relevance in allowing asset owners and managers to make capital allocation decisions. This research backs up the idea that corporate governance is important for ensuring, among other things, reliable financial reporting. The conclusions of this study may lead to the CSE adopting more stringent corporate governance agreements in order to improve the value relevance of financial data.

Keywords: Accounting Information, Corporate Governance, Value Relevance

1. INTRODUCTION

For many developing countries, good corporate governance is a critical aspect in increasing the firm's value. (Rouf, 2011). However, the link between corporate governance and the value of a company of the firm different from each other because of their social, economic, and regulatory conditions which affect their corporate governance structures. So, academic investigations, financial and management practices and public regulation need to understand the different factors which affect the firm's value (Abdurrouf, 2010). Fiador (2013) claims that confirming the quality of accounting evidence is one of the most essential functions of internal corporate governance. The value of accounting is reflected in the price of a company's stock.

However, the value of accounting information is seek to improve by using corporate governance (De Almeida, 2009). With good corporate governance applies stakeholders are like to pay a price premium for a share in companies. Corporate governance characteristics struggle with the voluntary or mandatory corporate governance. Corporate governance disclosures are increase firm market value (Ararat, 2017). Firm market value can be measured by using share price, earnings per share, book value per share etc. Firm's financial statements are relevance and they can review its corporate governance practices it they consist with international best standards. Corporate governance practices are essential to achieve organization goals. The organization goals are related to the investor's goals. However, the fundamental goals of the business corporation are to maximize the shareholders' wealth by increasing the market price of the shares of the corporation. To achieve this manager should act as on behalf of the best interest of shareholders as well as stakeholders.

Many researchers have explored the different association between corporate governance attributes and value relevance. Stakeholders are much interested on the Corporate Governance which effect to value design (Mungly, 2016). If shareholders are feeling well governed, they ready to pay more for those firms. Having additional outside directors on board raises the importance of information (Bushman et al., 2004 and Karamanou, & Vafea, 2005). Directors can communicate more effectively and provide more information, which reduces the scope for earnings management at a time when a small board can maximize the importance of financial reporting (Mungly R. B., 2016). According to Jensen (1993), When the duties of the board chair and the CEO are split, it requires more transparency, which refines financial reporting and reduces the danger of accounting principles being violated. Yermack (1996) found board size and firm's profit have a negative correlation. The findings of those researchers are differing from one another. It shows that there is an inconsistency of the findings between various researchers. In developing countries like Sri Lanka, it is widely thought that excellent corporate governance is necessary to increase the firm's value. As a result, this study is being done in this area in order to close the empirical gap (Rouf, 2011). This study examines the impact on internal corporate governance attributes on firm value relevance.

Scholars and academicians get more benefits to undertake further studies and increase the body of knowledge on internal corporate governance qualities impact on a firm's value relevance as well as it is important to know the problem of whether the corporate governance practices may be in correct way in the company has become a major issue for both companies and academics. It is also important to investors to take their correct decision. All these corporate governance disclosures explained how much they affect the firm value. As an example, if the certain company has larger foreign ownership, there share price is also higher than other firms. So rational investors are engaging into invest in this kind of company.

Some corporation engage their governance practices as they wish and according to the codes of corporate governance, but they don't know which is the best combination of these practices. Corporate governance practices are more important to every firm to increase their firm's value relevance. Earnings per share and book value are important factors in stock prices. This study would consider the moreover preference towards the board size if the board having more independent directors have been noticed and CEO duality when book value is being considered.

Investors want valuable accounting information to take their investment decisions. Therefore, the quality is the most important factor of financial information and that financial accounting data is important for determining the optimal share prices. This study investigates the relationship between earnings per share, book value per share, firm size, and sales with share prices, as well as the impact of internal corporate governance attributes on firm value, in order to assess the quality of accounting information and make decisions for investors on whether it makes any changes to the value relevance of accounting information listed companies on the Sri Lankan Colombo Stock Exchange.

2. LITERATURE REVIEW

According to the literature review, if value relevance is the ability of financial statement information to evaluate firm value is determined by the interaction between corporate governance traits and value relevance (Beisland, 2009). Firstly, will review the theoretical background related corporate governance discourses and value relevance. As a second part explains the empirical evidence will be reviewed including local and international evidence.

2.1 Theoretical Background

Theoretical background provides a survey of the literature by first recognizing the major theories in the field of corporate governance.

Agency Theory

Agency theory explains the governance relationship as a contract between shareholders and directors. It is argued that directors appear to maximize their own potential benefit by taking actions that benefit them, whereas shareholders appear to maximize their own benefit by taking actions that benefit them. Board structure, managerial behavior control, and strategic decision-making are all founded on agency theory research (Hafsi, & Turgut, 2013). Under agency theory, corporate governance features are used to assess the role of managers in fulfilling part of their contractual relationship with the investor.

Stewardship Theory

According to the legal view of the corporation, shareholders nominated and appoint to act as steward for their interest who called as directors. Directors should have to act as steward of the shareholder's interest. Managers effort carefully to maximize shareholders' value by benefit of being moral stewards of corporate resources under the stewardship model (Donaldson, 1990). As a result, the idea that management performance is influenced by governance structural barriers that prevent effective action, but not primarily by self-interest (Davis, Schoorman, & Donaldson, 1997).

Resource Dependence Theory

This theory takes a strategic opinion of corporate governance. It sees a governing body of the corporate organization as a lynchpin between firm and the resources it need to achieve its objective. Hung (1998) stated that, for access to valued resources many companies have to depend other companies. According to the resource dependence theory, companies are consistent and rely on the external environment for survival. According to Pfeffer (1972) board of directors has a significant influence on the company's external environment. The ability of the board of directors to fulfill this job is linked to a director's ties with other corporations; for example, the board links as the final is commonly viewed as a conduit with companies (Shropshire, 2010).

Stakeholder Theory

Stakeholder theory has expanded common status among scholars, corporate executives, and media (Freeman, 1999). The firm goals can be affected to achievement by any individual or group of stakeholders (Al Mamun et al., 2013). Shareholders, employees, suppliers, customers, lenders, governments, local charities, and numerous interest groups are all considered stakeholders. This theory explained how to maximize interests of firm stakeholders and their satisfaction. On the other hand, this theory includes to identify the nature of the balance between the managers and firm managers to planning and implementing proper methodologies to achieve their goals.

Institutional Theory

The meaning of institutional theory discourses the reservations of firm transactions among financial agents (Al Mamun et al., 2015). The duty of institutions in an economy is eliminating uncertainty and establishing best structure that facilitates the relationship between firms by reduce cost of information and transaction. This theory explained that enterprises can move beyond institutional constraints when they have the same level opportunity for an active part in an institutional environment.

2.2 Empirical Evidence

Investors are much interested on firm's value creation and they have to look up to corporate governance. Shareholders like to pay more responsiveness for those firms they impression are well directed. According to this study there are 13 hypothesis developments are used to identify firm's value relevance. They are Board size, Leadership Structure, Board activity, Board gender diversity, Presence of the key board committees, Board Independence, Ownership of the largest shareholder, management ownership, foreign ownership, institutional shareholders, internal control and risk management, cross directorship and Audit committee independence.

Board Size

Total number of members in the board is called as board size. Board have a strong relationship between the company and its environment it they have large number and also provides direction to play a vital role in the conception of company personality (Pearce, & Zahra, 1992). Manager's responsibility is to monitoring the board members. The board's size may allow for effective supervision and high-quality company decisions. (Pearce, & Zahra, 1992). Yermack (1996) stated that the size of the board of directors has a detrimental impact on the company's performance.

Leadership Structure

If the chairman and CEO are the same person, the leadership structure is known as CEO duality, and if the positions are separated, it is known as CEO non-duality (Al Mamun, 2015). The evidence of the connection between CEO duality and firm performance differs from one another (Gill & Mathur, 2011). According to the agency hypothesis, there is a negative relationship between CEO duality and company value because it deals with the CEO's monitoring and control. However, a small number of corporations have gone the other way, with some switching from a dual CEO leadership structure to a non-dual structure (Moscu, 2013). As a result, many opinions about how the CEO and chairman of the board should be separated remain ambiguous.

Board Activity

Many studies have found a statistically significant and favorable link between the number of corporate board meetings and firm success (Vafeas, 1999). One of the most important determinants of company is sum of meeting through business year. If board members do not meet or meet only a few times, their monitoring and leadership functions are harmed (Menon, & Williams, 1994). Earlier Studies from Adams (2003) and Lara et al., (2009) stayed that proxy for board monitoring can measured by number of meetings. The number of times the board members meet in a year is referred to as board activity (Pamburai et al., 2015).

Board Gender Diversity

Board gender diversity is defined as the total number of female board members divided by the total number of board members. According to Gul et al., (2011) Through greater control and monitoring, gender-diverse boards improve the quality of public attributes for manager's activities and reports, making financial information more responsible for stakeholders. Furthermore, Campbell, & Minguez-Vera, (2008) show that the number of women on a company's board of directors is linked to its worth, and that greater gender diversity may provide economic value. Additionally, Campbell, & Minguez-Vera, (2008) suggest that in a European setting, the board's gender diversity has an impact on the quality of the monitoring job done by the board of directors.

Presence of Key Board Committee

Corporate directors are offered support by board committees in order to attain and release their tasks and duties successfully. If a company has a large number of board committees, it may result in inefficiencies and incorrect coordination among multiple committees, resulting in a low market value (Cadbury, 1992). The character of audit committees in overseeing outside audits and accounting procedures were explained by Jiraporn (2009) and stated that the board is expert through effective board committees. According to Kesner (1988) indicated that the composition of the committee is the most crucial board result.

Board Independence

To determine board independence, divide the total number of board members by the number of independent board members. As previously stated, panels with a majority of outside members are better able to oversee and control management (Cornett et al., 2009). Similarly, Song et al.,(2010) illustrate that the price significance of fair value assets is linked to the independence of a company's board of directors. According to Ezzamel, & Watson, (1993) for a study conducted on UK enterprises, having extra independent managers on the board can boost the firm's profitability. For research conducted on UK firms.

Ownership of the Largest Shareholder

In emerging countries, where investors are less protected, ownership concentration is higher (La Porta et al., 1997). This could mean that principals have a better motive and ability to monitor agents, reducing management opportunism (La Porta et al., 1999). The percentage of ownership has been proposed as a control mechanism for shareholders to regulate management and limit agency conflicts inside the business. (Alchian, & Demsetz 1972). They found that this internal control mechanism has a considerable impact on shareholder wealth, business value, and manager discipline.

Management Ownership

Shareholders are interested in increasing their personal wealth and future work chances, whereas managers are interested in expanding their personal wealth and upcoming career paths. This will create a conflict of interest between management and shareholders, as the former want to make sure their money isn't stolen or invested in beneficial ventures (Jensen, & Meckling, 1976). As per standpoint of agency theory on the alignment of interests, Sappington (1991) implies that incentives for managers to achieve value maximization are required to align the interests of managers and shareholders (Jensen, & Meckling, 1976). Because the views of managers and shareholders become more aligned as managerial ownership increases, the incentive for opportunistic behavior is reduced.

Foreign Ownership

Foreign shareholders can help emerging markets expand and integrate into the global economy (Khanna, & Palepu, 2000). Spira & Bender (2004) discovered that imported rights has a favorable impact on business presentation due to improved observing. Both Mitton (2002) and Lins (2003) found that in emerging markets, company performance is positively associated to outside ownership. Many developing countries have inadequate domestic capital for asset which has driven stock market liberalization in many growing countries, allowing foreign shareholders to invest in domestic equities instruments (Bekaert et al.,2007).

Institutional Shareholders

Institutional shareholders may have a greater influence on the decision-making of directors due to their larger ownership stake. They may even encourage increased disclosure of financial information. The researchers calculated listed firms in Australia and discovered an important positive association among institutional investor’s proportion rights and flexible attributes of corporate governance practices. According to (Bushee, & Noe, 2000) there is an important positive bond with corporate disclosures and institutional shareholdings as measured by the Association for Investment Management and Research (AIMR).

Internal Control and Risk Management

Internal control systems, (Jensen, 1993) may be influenced by managerial motivations, company approvals, and boards of directors, but they may not be adequate to assure corporate transparency and self-interested firm behavior. According to risk management theory, in financial organizations, firm share prices reflect the benefit of interest rate risk management, but the results are less evident when looking at industrial enterprises (Smithson, & Simkins, 2005). Risk management benefits the company since it lowers tax expenses (Smith, & Stulz, 1985) financial distress expenses and other costs.

Cross Directorship

The CEO can serve on the boards of many businesses. Cross directorship is the term for this situation. Cross-directorships may indicate talent management and ability in bringing diverse perspectives to the board. They may be able to make benefits since they have contact to multiple firms' networks and resources (Pfeffer, 1972). Another viewpoint is that cross directorships may jeopardize commitment and monitoring quality, so undermining the entire aim of flexible corporate governance. La Porta (1999) who discussed commitment compromise and Beasley (1996) who identified a link between cross directorship and financial statement fraud. Similarly, Cotter et al., (1997) discovered that enterprises with several directorships receive a greater premium when they are merger targets.

Audit Committee Independency

Due to the effect of independence on commissioners' facility to substantial monitor financial reporting, Klein (2002) identifies that audit committee independence has an impact on the significant of audit committees in monitoring financial performance. Fiador (2013) suggest that the audit committee's independence should be a fixed criterion for the committee to be able to do its duties flawlessly. The independence of the audit committee has no substantial impact on the value relevance of firm evidence (Ayadi, 2015).

3. METHODOLOGY

The sample, data sources, and study model are all part of the methodology analysis. It also goes through the theoretical foundations of the econometric model

Data, Sample and population

The population comprises of 222 listed firms for the period from 2011 to 2019. Sample consists with 185 non- financial companies in Colombo Stock Exchange (CSE) in Sri Lanka. This study assumes that this sample size is available at the applicable stage. The sample of firm selected using probability sampling techniques with stratified random techniques. The study establishes a hypothesis and shows a certain connection between corporate governance disclosures and the firm’s stock price in Sri Lanka's non-financial firms. In order to test the hypothesis, it was decided to obtain the relevant numerical values and ratios of non-financial firms from its annual reports, and this analysis only provided quantitative data based on secondary data.

Methods

Non-financial firms in Sri Lanka use similar corporate governance practices across non-financial institutions over time on the basis of this guidance. The data was analyzed by applying regression analysis which relating to the corporate governance characteristics indicators and the share price during the study period.

Variables and measures

$$\mathrm{p}_{it} = \alpha_0 + \beta_1 BS_{it} + \beta_2 LS_{it} + \beta_3 BA_{it} + \beta_4 BD_{it} + \beta_5 BC_{it} + \beta_6 BI_{it} + \beta_7 OLSH_{it} + \beta_8 MAN_{it} + \beta_9 FO_{it} + \beta_{10} IS_{it} + \beta_{11} ACI_{it} + \beta_{12} EPS_{it} + \beta_{11} BVPS_{it} + \beta_{11} FS_{it} + \beta_{11} S_{it} \varepsilon_{it}$$

P = Natural logarithm of share price of the company at the end of year.
BS = Natural logarithm of board size.
LS = A dummy variable that takes the value of 1 if the propositions of CEO and Chairman are held by one person, otherwise 0.
BA = the total number of times the board of directors meets in a financial year.
BD = Proportion of females on a board.
BC = A dummy variable that takes a value of 1 if the firm has nominations, remuneration audit committees and related party transaction otherwise 0.
BI = Proportion of INEDs.
OLSH = Proportion of shares owned by the largest shareholder.
MO = Proportion of share hold by managers (Directors and Commissioners).
FO = Proportion of foreign promoter shareholding.
IS = Proportion of institutional shareholding.
IC = A dummy variable that takes the value of 1 if the firm has internal control and risk management, otherwise 0.
CD = Natural logarithm of number of cross directorships held by the CE
ACI = Proportion of Independent directors of the committee according to the total number of directors on the audit committee.
EPS = Company’s profit divided by weighted average outstanding shares of its common stock.
BVPS = Total equity divided by the number of shares Outstanding.
FS = Natural logarithm of total assets.
S = Natural logarithm of sales.
U = Error term.

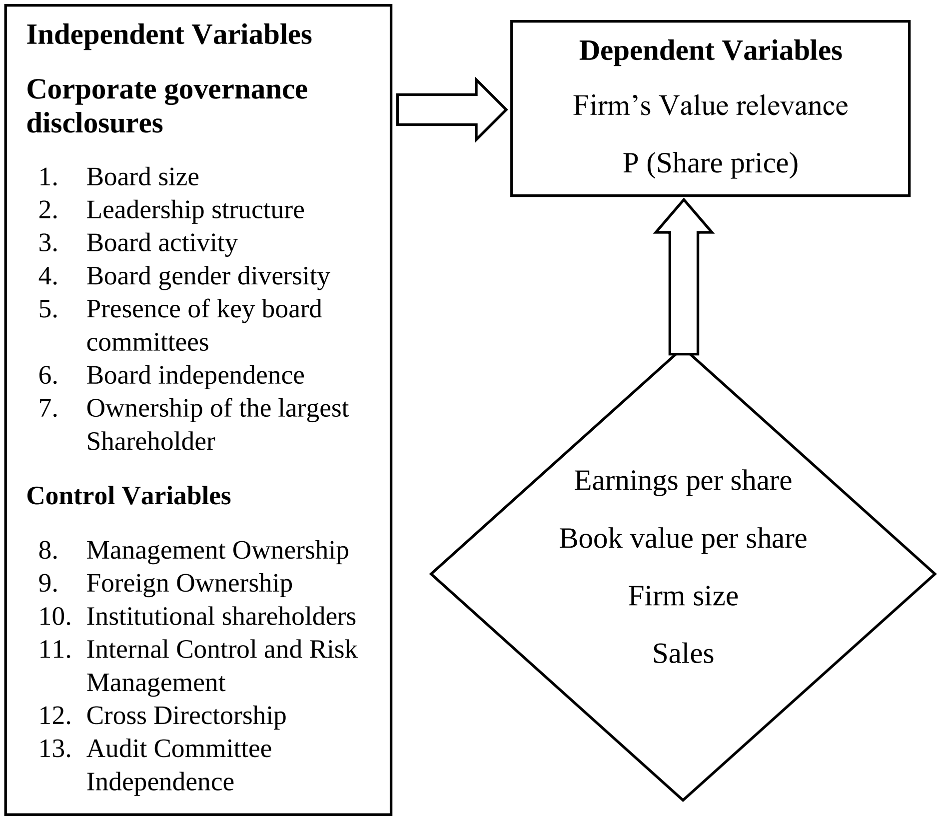

Figure: 01 Conceptual Framework

Conceptual framework illustrates the relationship between the variables of this study. The independent variable related to share price of the firms which is the dependent variable in this study and the independent variables are, Board Size, Leadership Structure, Board Activity, Board Gender Diversity, Presence of Key Board committees, Board Independence, Ownership pf the Largest Shareholder, Management Ownership, Foreign Ownership, Institutional Shareholders, Internal Control and Risk Management, Cross Directorship, Audit Committee Independence and four control variables, Earning per share, Book value per share, Firm size and Sales. Dependent variable can explain reasonably by using these independent variables

4. RESULTS AND DISCUSSION

The study's findings illustrate the link between a company's worth and its corporate governance qualities. The results of the regression are reported using descriptive statistics, the correlation test, and the Pooled OLS Model, Fixed Effect Model, and Random Effect Model. To achieve the research study's goal, statistic techniques such as average, standard deviation, correlation, regression analysis, and data interpretation through STATA and tables were employed for data display. To discover the relationship between corporate governance features and firm value, descriptive statistics were used to explain relevant statistics for all variables, and regression was employed just for share price firm-year observation.

Descriptive Analysis

Table 4: Descriptive Analysis

Variable	Mean	St.d.	Min	Median	Max
Share Price	232.45	1024.75	14.40	41.00	108.00
Board Size	7.91	2.12	6.00	8.00	9.00
Leadership Structure	0.28	0.45	0.00	0.00	1.00
Board Activity	4.78	3.26	4.00	4.00	6.00
Board Gender Diversity (%)	0.08	0.11	0.00	0.00	0.14
Presence of Key Board Committees	0.23	0.42	0.00	0.00	0.00
Board Independence (%)	0.39	0.13	0.30	0.38	0.45
Ownership of the largest shareholders (%)	0.53	0.22	0.36	0.51	0.68
Management Ownership (%)	0.10	0.32	0.00	0.00	0.06
Foreign Ownership	13.47	25.37	0.00	0.78	10.90
Institutional Shareholders	65.37	35.19	49.48	82.32	90.65
Internal Control and Risk Management	0.97	0.16	1.00	1.00	1.00
Cross Directorship	4.35	6.03	1.00	3.00	6.00
Audit Committee Independence	81.69	20.29	66.67	75.00	100.00
Earnings Per Share	10.01	49.80	0.18	2.60	10.31
Book Value Per Share	144.17	344.48	14.45	44.28	122.40
Firm Size (Mn)	7834	15886	1400	3600	7500
Sales (Mn)	428	10568	200	820	3200

Source: Authors' Own

According to Descriptive Statistics data, the average share price for the last nine years was Rs. 232.45 for the 185 companies considered in the study. For all industries, the average board size was eight. For all industries, the average value of board meetings was 5. The average percentage of females on the board is shown to be 8%. This is a great example of how gender diversity across the board is much lower in Sri Lanka.

Correlation Matrix

According to the correlation analysis, the size of the board of directors is inversely connected with the price of the stock, and it is somewhat closer to 0. As a result, there is a negative weak association between share price and board size, with a value of -0.089. The activities of the board show that it has a positive value. As a result, there is a link between share price and board action. A weak link exists between share price and board activities, indicating a 0.111 correlation.

The price of a company's stock is linked to the gender diversity of its board of directors. The number is 0.156, indicating a positive but weak relationship between the two variables. However, there is a negative association between share prices and board independence and the ownership of the largest shareholders. The values are a little closer to zero. As a result, there is a weak negative relationship between board independence and share price, as well as ownership of the largest shareholders and share1 price (firm value).

Table 2: Correlation Matrix

Panel A: Control Variables

	EPS	BVPS	FS	S
1	1			
2	0.322***	1		
3	-0.007	-0.031	1	
4	0.0430	-0.018	0.586***	1

Panel B: Share Price & Internal Corporate governance

	P	BS	BA	BD	BI	OLSH	MAN	FO	IS	CD	ACI
1	1										
2	0.089***	1									
3	0.111***	0.102***	1								
4	0.156***	0.013	-0.101***	1							
5	-0.063**	0.140***	0.177***	-0.014	1						
6	-0.002	0.240***	0.093***	0.066***	0.044	1					
7	0.040	-0.034	-0.004	0.004	0.072***	0.231***	1				
8	0.073***	-0.037	-0.029	0.115***	-0.012	0.144***	-0.064***	1			
9	0.154***	0.039	-0.010	0.141***	-0.016	0.191***	0.288***	0.109***	1		
10	-0.055**	-0.025	-0.022	-0.029	-0.021	-0.059**	0.020	-0.031	0.073***	1	
11	0.085***	0.109***	-0.019	-0.041	0.249***	-0.025	0.079***	-0.013	-0.012	0.073***	1

***, ** and * indicate significance at the 1%, 5% and 10% levels respectively

Panel A shows the correlation relationship among control variables. Panel B shows the correlation between share price and internal corporate governance characteristics

The ownership of management or directors has a favorable link with share prices. However, the value is closer to 0, indicating a value of 0.04. As a result, the poor association between these two variables can be explained. A positive link exists between foreign ownership and share price; it is also closer to 0. 0.073 is the value. As a result, there is only a weak relationship between these two variables.

The percentage of institutional shareholders and the stock price have a negative correlation; however, it is closer to 1 at -0.154. As a result, there is a modest negative correlation between the price of a stock and the number of shares held by institutional shareholders. Cross directorship and share price have a negative relationship. The negative weak correlation between mean share price, and business value, and cross directorship is -0.055. Independence of the audit committee also explains the unfavorable link between firm values. It's -0.085, which is a little closer to zero. This indicates that these two variables have a negative and weak relationship.

According to the dummy variables the study includes 03 dummy variable. They are, leadership structure, key board committees and internal control & risk management system. Leadership structure or the CEO Duality has a positive correlation between share prices, but it is somewhat closer to 0. The value is

0.052. So, there is a weak correlation between these two variables. Other two variables have a negative correlation. Key board committees and share price have a somewhat weak correlation that indicates -0.277. On the other hand, firm's internal control & risk management and firm's values have a negative correlation it is -0.019. This is also weak correlation.

The study's control variables are earning per share, book value per share, firm size and sales. Without firm size other their variables have positive correlation between firm's values. Earnings per share has a 0.045 that is weak correlation between these two variables. However, there is a strong correlation between book value per share and share price. That value is 0.655. Sales and share price have a positive weak correlation. That value is 0.016. Among the control variables firm size is created a negative correlation between share prices. The value is -0.033.

Panel B shows that board size, board independence, ownership of largest shareholders, percentage of institution shareholders' shareholdings, cross directorship, audit committee independence, firm size, key board committees, and internal control & risk management have a negative correlation between firm values. Other variables that have a favorable link with company values include board activities, board gender diversity, management ownership, foreign ownership; earnings per share, book value per share, sales, and leadership structure.

Panel Regression Analysis

There are four main types of panel data models and briefly described them. Pooled OLS (Ordinary Least Square) model delights a dataset like any other cross-sectional data and disregards that the data has a time and individual dimensions. A Fixed-effects model takes into reflecting individual differences as well as time-dependent variations. Random effects models go a step further by considering the variances between single entities. When we analyzing industry fixed effect model that include industry specific effect. Fixed effect is considering only firms affect not industry effect.

Table 3 shows that ten variables are significant. Leadership structure, Board gender diversity, presence of key board committees, Ownership of largest shareholders, Management ownership, Foreign Ownership, Book value per share, Firm size and Sales are significant at 99% confidence level according to the industrial fixed effect model. Board gender diversity, presence of key board committees, Ownership of largest shareholders, Foreign Ownership, Book value per share, Firm size and Sales Positively impact on the firm's value. Leadership structure, Management ownership negatively impact on firm's share price. Cross Directorship negatively impact on share value and it is significant at a 95% confidence level.

Table 3: Regression Analysis

	Dependent Variable: Log			
(Share Price)				
Variable	**(01)**	**(02)**	**(03)**	**(04)**
Board Size	-0.00	0.03*	0.02	-0.01
Leadership Structure	-0.26***	0.01	0.01	-0.22***

Board Activity	0.01	0.01	0.01	0.01
Board Gender Diversity	0.77***	0.32	0.45	1.04***
Presence of key board committees	0.11	-0.09	-0.06	0.28***
Board Independence	-0.28	-0.27	-0.28	0.32
Ownership of the largest shareholders	0.74***	0.20	0.34	0.68***
Management Ownership	-0.13	-0.05	-0.05	-0.15***
Foreign Ownership	0.01***	0.00	0.01*	0.01***
Institutional shareholders	0.00	-0.00	-0.00	0.00
Internal control and risk Management	-0.40**	-0.22*	-0.21*	-0.15
Cross directorship	-0.00	-0.02*	-0.02**	-0.01**
Audit committee independency	0.00	0.00*	0.00	-0.00
Control Variables				
Earnings per share	0.00***	-0.00	0.00	-0.002
Book value per share	0.00***	0.00*	0.00*	0.002***
Firm size	0.00	0.00	0.00	0.00***
Sales	0.00**	-0.00	0.00	0.00***
Year				
2012		-0.09**	-0.09**	-0.13
2013		-0.08	-0.09	-0.17
2014		0.05	0.04	-0.09
2015		-0.02	-0.05	-0.29**
2016		-0.08	-0.11	-0.38***
2017		-0.12*	-0.16**	-0.54***
2018		-0.36***	-0.40***	-0.80***
2019		-0.47***	-0.51***	-0.93***
Constant	3.35***	3.79***	3.74***	2.06
Pooled OLS	Yes	No	No	No
Random-effect	No	Yes	No	no
Firm-fixed effect	No	No	Yes	no
Industry-fixed effect	No	No	No	yes
Robust Standard error	No	No	No	yes
R-square	0.4053	0.1998	0.2872	0.5097
Prob >F	0.0000	0.0000	-	-
Prob> chi^2	-	0.0000	0.0000	-
Groups	185	185	185	185
Observations	1665	1665	1665	1665

Source: Authors' Own

Notes: ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively.

5. CONCLUSION AND IMPLICATIONS

The research looked at the link between corporate governance and the value relevance of non-financial enterprises listed on the Colombo stock exchange. Different correlations between corporate governance traits and business value relevance were discovered using the data. As a result, we began looking for a common solution to the problem of flexible corporate governance features affecting the firm's value relevance. As a result of these data, we can deduce the following association among variables. Gender diversity on the board of directors, the existence of key board committees, largest shareholder ownership, foreign ownership, book value per share, firm size, and sales all have a beneficial influence on the firm's value. Leadership structure, management ownership, and cross directorship all have a detrimental impact on the stock price of a firm. In this study 185 CSE listed Sri Lankan firms were evaluated using only nine years of data. Therefore, future researchers can expand the sample size and time span in the future. Furthermore, this study only employed secondary data, whereas future researchers can include primary data in their studies.

REFERENCES

Adams, R. B., & Ferreira, D. (2008). Do directors perform for pay? *Journal of Accounting and Economics, 46*(1), 154-171.

Alchian, A. A. (1950). Uncertainty, evolution, and economic theory. *Journal of Political Economy, 58*(3), 211-221.

Ararat, M., Black, B. S., & Yurtoglu, B. B. (2017). The effect of corporate governance on firm value and profitability: Time-series evidence from Turkey. *Emerging Markets Review, 30,* 113-132.

Ayadi, O. F., Ojo, A. T., Ayadi, M. F., & Adetula, D. T. (2015). Gender diversity in the governance of the Nigerian securities market. *Corporate Governance*.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review*, 443-465.

Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: evidence from the UK. *Corporate Governance: An International Review*, *12*(1), 47-59.

Beisland, L. A. (2009). A review of the value relevance literature. *The Open Business Journal*, *2*(1).

Bekaert, G., Harvey, C. R., Lundblad, C., & Siegel, S. (2007). Global growth opportunities and market integration. *The Journal of Finance*, *62*(3), 1081-1137.

Bushee, B. J., & Noe, C. F. (2000). Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research*, 171-202.

Bushman, R., Chen, Q., Engel, E., & Smith, A. (2004). Financial accounting information, organizational complexity and corporate governance systems. *Journal of Accounting and Economics, 37*(2), 167-201.

Cadbury, A., Butler, J., Lipworth, S., Macdonald, N., Smith, A. H., & Brown, S. (1992). Committee on the financial aspects of corporate governance. Gee, London.

Campbell, J. Y., Lo, A., & MacKinlay, C. (1997). The Econometrics of Financial Markets," Princeton University Press, Princeton. New Jersey: MacKinlay.

Cornett, M. M., McNutt, J. J., & Tehranian, H. (2009). Corporate governance and earnings management at large US bank holding companies. *Journal of Corporate Finance*, *15*(4), 412-430.

Cotter, J., & Silvester, M. (2003). Board and monitoring committee independence. *Abacus*, 39(2), 211-232.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, *22*(1), 20-47.

De Almeida, J. E. F., de Lima, G. A. S. F., & Lima, I. S. (2009). Corporate governance and ADR effects on earnings quality in the Brazilian capital markets. *Corporate Ownership and Control*, *7*(1), 52.

Donaldson, L. (1990). The ethereal hand: Organizational economics and management theory. *Academy of Management Review, 15*(3), 369-381.

Ezzamel, M., & Watson, R. (1993). Organizational form, ownership structure and corporate performance: A contextual empirical analysis of UK companies 1. *British Journal of Management*, *4*(3), 161-176.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics, 26*(2), 301-325.

Fiador, V. O. (2013). Corporate governance and value relevance of financial information: evidence from the Ghana Stock Exchange. *Corporate Governance: The International Journal of Business in Society*.

Freeman, R. E. (1999). Divergent stakeholder theory. *Academy of Management Review, 24*(2), 233-236.

Gill, A., & Mathur, N. (2011). The impact of board size, CEO duality, and corporate liquidity on the profitability of Canadian service firms. *Journal of Applied Finance and Banking, 1*(3), 83.

Hafsi, T., & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of Business Ethics, 112*(3), 463-479.

Harvey Pamburai, H., Chamisa, E., Abdulla, C., & Smith, C. (2015). An analysis of corporate governance and company performance: A South African perspective. *South African Journal of Accounting Research, 29*(2), 115-131.

Hung, H. (1998). A typology of the theories of the roles of governing boards. Corporate Governance: *An International Review, 6*(2), 101-111.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

Jensen, M. C., & Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics, 11*(1-4), 5-50.

Jiraporn, P., Kim, J. C., & Kim, Y. S. (2011). Dividend payouts and corporate governance quality: *An Empirical Investigation. Financial Review,* 46(2), 251-279.

Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research,* 43(3), 453-486.

Kesner, I. F. (1988). Directors' characteristics and committee membership: An investigation of type, occupation, tenure, and gender. *Academy of Management Journal,* 31(1), 66-84.

Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3), 268-285.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics,* 33(3), 375-400.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1-33.

Mamun, A. A., Yasser, Q. R., & Rahman, M. D. (2013). A discussion of the suitability of only one vs more than one theory for depicting corporate governance.

Menon, K., & Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy*, 13(2), 121-139.

Mitton, T. (2004). Corporate governance and dividend policy in emerging markets. *Emerging Markets Review,* 5(4), 409-426.

Moscu, R. G. (2013). Does CEO duality really affect corporate performance? *International Journal of Academic Research in Economics and Management Sciences*, 2(1), 156.

Mungly, Y., Babajee, R. B., Maraye, N. P., Seetah, K., & Ramdhany, N. G. (2016, January). A study on corporate governance and value relevance of accounting information: evidence from listed companies in Mauritius. In *Proceedings of the Fifth Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences* (AP16Mauritius Conference).

Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies,* 29(4), 411-438.

Pfeffer, J., & Salancik, G. R. (2003). The external control of organizations: A resource dependence perspective. Stanford University Press.

Shropshire, C. (2010). The role of the interlocking director and board receptivity in the diffusion of practices. *Academy of Management Review*, 35(2), 246-264.

Smithson, C., & Simkins, B. J. (2005). Does risk management add value? A survey of the evidence. *Journal of Applied Corporate Finance*, 17(3), 8-17.

Song, C. J., Thomas, W. B., & Yi, H. (2010). Value relevance of FAS No. 157 fair value hierarchy information and the impact of corporate governance mechanisms. *The Accounting Review*, 85(4), 1375-1410.

Spira, L. F., & Bender, R. (2004). Compare and contrast: Perspectives on board committees. Corporate Governance: *An International Review*, 12(4), 489-499.

Stulz, R. M. (1999). Globalization, corporate finance, and the cost of capital. *Journal of Applied Corporate Finance*, 12(3), 8-25.

Rouf, D., & Abdur, M. (2011). The relationship between corporate governance and value of the firm in developing countries: Evidence from Bangladesh. *The International Journal of Applied Economics and Finance*, 5, 237-244.

Rouf, D., Abdur, M., Siddique, M., & Rahaman, A. (2010). Good corporate governance principles and recommendations for good practices. *Journal of Socioeconomic Research and Development*, 7(5), 970-974.

Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), 113-142.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211.

The Impact of Glass Ceiling on Employee Performance of Divisional Secretariat Women Employees in Kurunegala District

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ABSTRACT

"Glass ceiling" is used to describe as invisible or artificial barriers that discontinue women from raising the corporate ladder to senior positions. Specially, it is an unseen and unreachable, strong barrier that impedes minorities and women from moving to the upper levels of the corporate ladder, regardless of their qualifications or achievements. There were several studies which had identified the presence of the glass ceiling and several negative effects of factors of glass ceiling. Women employee performance is more important to the developing countries. Different studies had identified that glass ceiling affect to women employee performance. But the thing is literature does not provide clear evidence on the impact of glass ceiling on women employee performance in Sri Lankan Context. The objective of the present study was to examine the effects of factors of glass ceiling on employee performance of Divisional secretariat women employees in Kurunegala District, because women employees are the important point of the Sri Lankan administrative system and their performances are more important to dealing with citizen in clear pathway with the dimensions of glass ceiling like as individual factors, organizational factors, family factors and social factors. For the purpose of the study primary data were collected through questionnaire from the sample of 346 women employees in Kurunegala District. Reliability test, Validity test, demographic analysis, descriptive analysis, regression analysis was performed in data analysis. The hypotheses of the study were accepted then it indicated the presence of the glass ceiling among the women employees in divisional secretariat offices in Kurunegala District. The regression analysis of the study was indicated the factors of glass ceiling had significance and negatively influence on women employee performance. Further results of the analysis had identified, Divisional Secretariat women employees of Kurunegala District were facing high level glass ceiling and the women employee performance were below the moderate level. Further study resulted that women employees' performance is very low and there may be several factors which affects to the performance. Then the relevant authorities have to consider individual, organizational, family and social factors of glass ceiling and enhance the women employee performance.

Keywords: Glass Ceiling, Employee Performance, Women Employee

1. INTRODUCTION

The overall success of an institution in achieving its strategic objectives relies heavily on the performance of the employees. Employee performance is a function of ability to gain the overall strategic goals. The individual performance of an employee will lead to the organizational effectiveness. The success or failure of the organization depends on employee performance (Chi, 2017). Therefore, organizations are investing a huge amount of money on employee development (Hameed, 2012).In recent years, women as well as gender issues, have to turn into a major area of concern. Seminars, workshops are being held over the world to discuss women progressing in all areas of life. That is because of the most significant feature of the global labor market in the last half of the twentieth century, which is increasing the participation of women (Black, 1999). Female laborers participate more than 40% in many countries. It had been gradually increased (Waner, 2014).

Every country that has seen positive changes and rend in female labor force participation saw an increasing in the share of women who are employed. With sustained development, women make educational gains and the value of their time according to low level income, middle level income, high level income countries (Tzvetkova, 2017). There is considerably more variation across developing countries in labor force participation by women than by men. This variation is driven by a wide variety of economic and social factors, which include economic growth, education and social norms.An invisible, seemingly unbreakable barrier in the work place preventing the career ascension of women and minorities into the highest levels of their career path called "glass ceiling" (Kinick, 2007). By the way, the glass ceiling is a popular metaphor for explaining the inability of many women to advance past a certain point in their occupations and professions. There are several numbers of researches finding out the effect of the glass ceiling mainly link with the organizational performances and commitment and women employee's career advancement through their performance & job satisfaction (Lathabavan, 2017).

To increase organizational commitment, career advancement, organizational effectiveness, most of the important thing is employee's performances. Employee performance is higher in happy and satisfied workers and management. It is easy to motivate high performance to attain organization target (Kinick, 2007). Employee performance is directly or indirectly related to organizational performance, the researchers who (Kesari, 2016) content analysis in nine different factors found to be related to the construct in employee performance.

Every single country achieves its targets the most valuable factor is the economy of a country. There are two types of organizations in a country named private and public. Sri Lanka has the largest employee base in the public sector. Public sector organizations affect the productivity of the economy directly and indirectly. To manage perfectly, districts of Sri Lanka are divided into administrative subunits known as the "Divisional Revenue Officer'' (D.R.O) division. Later it was named "Assistant Government Agent'' (A.G.A) and currently, it is titled as divisional secretariat. These offices are one of the leading government sector organizations directly work with the citizen. Therefore employee performances are very important to develop the country. According to the Ministry of Home Affairs, (2016), the majority of the employees are female.

Year	Female Employees		Male Employees	
2016	28,713	61%	18,555	39%

Source: Census of public & semi--government sector employees sector employment – final report (2016).

As a percentage, female employees are 61% and male employees are 39%. When considering the statistics, the percentage of women participation is high. When considering the top-level position of the administrative officers in the public sector, statistics according to the Ministry of Home Affairs,

Divisional secretaries by sex and year,

Year	Female Employees		Male Employees	
2014	97	31.7%	209	68.3%
2018	115	36.9%	197	63.1%

Source: Department of Census & Statistics, Ministry of National Policies & Economic Affairs, Final report (2016)

Accordingly, this study is mainly concerned with the effect of the glass ceiling on women's employee performance. Although various researches have been carried out to identify the impact of glass ceiling on women employee commitment, career advancement, women employee performance, but the thing is, factors of glass ceiling such as individual, organizational, family, social factors have not been focused on the women employee performance in the Sri Lankan context. So, the researcher found a research gap in this regard. By conducting this research, the researcher hopes to fill the existing research gap. There is no substantive empirical study has been conducted to impact of the glass ceiling on women employee performance of the administrative sector in Sri Lanka. The objective of the present study is to examine the impact of the glass ceiling on women employee performance. This study is important because it will examine the impact of factors of glass ceiling on women employee performance of divisional secretariat offices. The result can be used in the administrative sector of any organization who tries to understand glass ceiling. Based on the findings, relevant authorities can take some actions to increase women employee performance.

2. LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Gender Stereotype

Gender stereotyping is a procedure of judging female and the male on the base of their culturally and recommended roles, then assigning them in different classifications, limits the prospective of both females and the males (Agars, 2004). This can be simply mean, role fixation associated with the different genders and it is actually outlined, which particulates different individuals because of the sexual characteristics sourced from varies of philosophies like conventional (sabir, 2017). Gender Stereotype has vivid features, like in traditional women consider as weak for the working condition because of their slim and body figure (Helgeson, 2002), their duties & limitations (Borgida, 1999). The interests for gender stereotype discuss in 1995's the logical attraction with organizational supportive works (Acker, 2009, Sing, 2013).

The work environment restrict the women because the stereotypical attitudes, being selected decision-making process, promotions, other opportunities, handling some higher responsibilities of an organization (Acker, 2009).Gender stereotype is different from the glass ceiling because it behavior, other situations, it covers the whole area than the glass ceiling (Brescall, 2016), glass ceiling is such kind of part restrict higher position for women and minorities (Hoobler, 2016).

2.2 Glass Ceiling Effect

In the twentieth century, there was no study on the workers' problems (Acker, 2009). Ann Morrison introduced the glass ceiling in the 1980s and according to (Maxwell, 2007) glass ceiling a common trend is the hidden curtain that hides the natural talent of the women and retains all of the far from top management of an organization. Especially, it is an unseen and unreachable, strong barrier that impedes minorities and women from moving to the upper levels of the corporate ladder, regardless of their qualifications or achievements (Commission, 1995). Glass ceiling a term which comes to light in 1980 caught the attention of researchers including that research (Bell, 2002). The glass ceiling effect refers to obstacles that hinder the growth of women employees in the workplace and deprive them of achieving a leadership position in the organization (Crimes, 2007), is a gender bias (Bell, 2002). Lots of women have made significant progress by focusing on the work they have done in their careers, but because they face glass ceiling barriers, they are still rarely involved in top-level jobs in the works places (Helm, 2006).

In 1986's the word ceiling means that upper limits of the going to the career ladder or the cooperate ladder then glass simply means that the subtlety and transparency barrier (Schellhardt, 1986). According to the (sabir, 2017) women encounter has varied obstacles that restrict women's potential to achieve fulfilling the career with a chance to go ahead from developing and promote the high levels. The glass ceiling disregards merit and achievement of females arise the reinforcing discriminatory barriers that can identify the harassment, gender bias, organizational norms, not favor women, hindering their career upward mobility, then it glasses ceiling is "barriers so sublet and transparent, yet so strong that it prevents women and minorities from moving the hierarchy (Skinner, 2005).

The barriers of women employees and the minorities face when they developing through their careers and termed as glass ceiling, that can identify the high attention in today's world, most of the women are limited to the lower and middle level of management position in the organization due to the glass ceiling syndrome (Keenawinna, 2015).The effects of glass ceiling vary different countries and in different types of economic sectors (Keenawinna, 2015).

Working women are readily gathering the required experience and the educational levels, this is concerning women and the minorities' encounter what is the term means that glass ceiling in the today's work place (Jayawardane, 2015).

2.2.1 Factors affect to the glass ceiling

The glass ceiling is present all over the world that can identify the factors that keep women away from the same place, through intensity may vary based on the nation or region (Srivasdthav, 2020). Several studies mention vary of factors that women have a lack of connecting the top-level management (Zaharieva, 2019). Researchers found the several types research dealing with varies of factors, individual factors, family factors, organizational factors; social factors (Remya Lathabavan, 2017). Glass ceiling syndrome is a strong and powerful variable it affects to restrict women, it is proven by the several kinds of researches like as Asian, African countries (Mai Ngo Khong, 2017), (sabir, 2017). There are many researchers had found several types of factors affected by the glass ceiling concept, it includes family factors, individual factors, organizational factors, and several types of varies of factors (Mai Ngo Khong, 2017)

2.2.2 Impact of glass ceiling

Several kinds of studies identify the impact of glass ceiling in different ways, there may be varies of consequences of glass ceiling (Remya Lathabavan, 2017). Glass ceiling has many outcomes, it is proven effective and cognitive beyond of organization and the individual (Srivasdthav, 2020). They feel membership in the organization and the employees positively and negatively. This glass ceiling effect impact positively or negatively to the organizations, employees, and the society (Srivasdthav, 2020). More degree of identification of an employee with the organization more conformity with the organization goals and it is indirect effect to the societal problem around the world (Dutton, 1994). Most of the research had found the glass ceiling affects the negative outcomes to the women employees, organizations, and the society.

2.3 Women Employee performance

Employee performance is higher in happy and satisfied workers and management find it easy to motive high performance to attain firm targets and employee could be only satisfied when they feel themselves competent to perform their job. (Angelo Kinicki, 2006).

The most significant feature of the global labor market is the increasing participation of women. According to (Uduwella, 2019) during the last two decades in the global labor market, there has been an increase in the proportion of women at lower management positions. Women contributed to more than 50% of the graduates.

Employee performance is individuals' behaviors regarding the self-control and the effective achievement of the organization's goals and other side employee performance generally refers to the amount of output generate from the job execution (P. Campbell, 1996). The employee is a key element of the organization and valuable asset. The success or the failure depends on the employee's performances (Abdhul Hameed, 2011). Productivity and output are the results of employee performances (Abdhul Hameed, 2011). Employee performance is a collection of actions and behaviors that are under control of the individuals to contribute the organizational goal and objectives. Generally, refers the amount of output generated from job execution by an employee over the particular time period of an organization (Hellriegel, 1999).

2.3.1 Factors affect to the women employee performance

Research work of the factors affect to the employee performance, there are several kinds of factors like, team work, positive moods glass ceiling, personal support, task performance, self-efficacy, helping other co-workers affect to the employee performance in the organization. Especially researchers identified which glass ceiling is one of the main aspects for affect to the women employee performance in the organization situations.

2.4 Glass ceiling and the women employee performance

According to the (Anesh, 2013), find the glass ceiling on working women in the Durban, so they found that the glass ceiling is existing the South African Durban organizations. Factors are situational factors, family role, equal opportunities. Glass ceiling affect to the women employee growth and performance level their progressing in the organization.

The corporate culture affects to the negative relationship among the employee performance level with good condition. The sample size was 35 women employees for that study(Krueger, 2020). The hypotheses accepted with the female employees who were not perform well at the glass ceiling work condition in the organization then female employees were like to increase their effort to the organization but glass ceiling mainly influence, work through negative kinds (Buckalew, 2012).

(Diane, 2006), Effect of the stereotype about one's group as being true on oneself. Effect stereotype treat on women's performance of managerial task and explored gender role identification as a moderate of the stereotype threat effect. Conduct the research on the GC and the Coping Mechanism Academia and they find the due to their assigned social roles especially women who newly start their career (Omer Faruk Karagoz, 2020). According (M Khyzer Dost, 2012) in Pakistan exist the glass ceiling effect private a public organization. Employees' especially female employees are artificially restricted to be promoted in to top level positions. Glass ceiling affect to the organization's lesser productivity and lesser performance. (Mubbsher Munawar Khan, 2012), Found the significant effect of the glass ceiling on the women employee performance according to the Pakistan organization with special reference Lahore and Islamabad cities.

3. METHODOLOGY

The research methodology and procedure use to conduct this study and represent the ways of how the data will be collected in order to proceeds the research. Also, it describes the methods that have to be followed to achieve the objectives of the research. Research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Sekaran, 2006).

"Specification of the most adequate operations to be performed in order to test hypotheses under given conditions" called as research design (Beri, 2005).

Research philosophy contains important assumptions about the way in which view worldwide, these types of assumptions will underpin research strategy and beliefs choose as part of that strategy (Sounders, 2019) .The first assumption in the pragmatism is ontology simply means, more or less the study of reality. And it describes the nature of reality; what rational impact does it possess on the society & surroundings. Typically, methods can be identified as analysis of the research and identify the research problem, questions and practical solution and outcomes. According this pragmatism is selected to the research as the philosophy. The research approach is the second layer of the research onion, it includes deductive and inductive and abductive approaches (Sounders, 2019). It is concerned with how theories and knowledge gained to the study. This is whether research should use the deductive approach in which develop theory and hypotheses and designed a research strategy to test hypothesis. As result of that in this research, most appropriate to use the deductive approach. It involves the development of a theory, subjected to a rigorous test through the series of propositions. Deductive approach is dominant research approach in natural science where the laws present the basis of predict their occurrence, explanation, allow the anticipation and permit them to be controlled.

According to the several types of research strategies this study conducts as deductive approach then most suitable strategy is survey strategy. Always survey strategy is usually associated with the deductive approach and it is most popular in business, management researches. There are several kinds of survey strategies like as, questionnaires, structured observation and structured interviews. The survey strategy allows collecting quantitative data which can analyze the quantitatively using descriptive and inferential statistics. In this study questionnaire is the most suitable survey strategy because this study conducts as explanatory and descriptive studies (Sounders, 2019).

This study adopts the quantitative method (using the questionnaire and documents) which is known as mono method (Sounders, 2019). Quantitative is predominantly used as synonym for any of the data collection techniques or data analysis procedure such as graphs or statistics that they are generates or uses the numerical data. The quantitative data are using questionnaires and structured observation analyzing and statistical procedure.

According to (Robson, 2002), Cross-sectional studies often employ the survey strategy and may be like in describe to incidence of a phenomena or explain factors are related in different organizations and done at particular point of time period. In this study cross sectional time horizon use to investigation concerned with the study of glass ceiling how to affect to the women employee performance.

The researcher developed a model to conceptualize the theoretical framework of the study.

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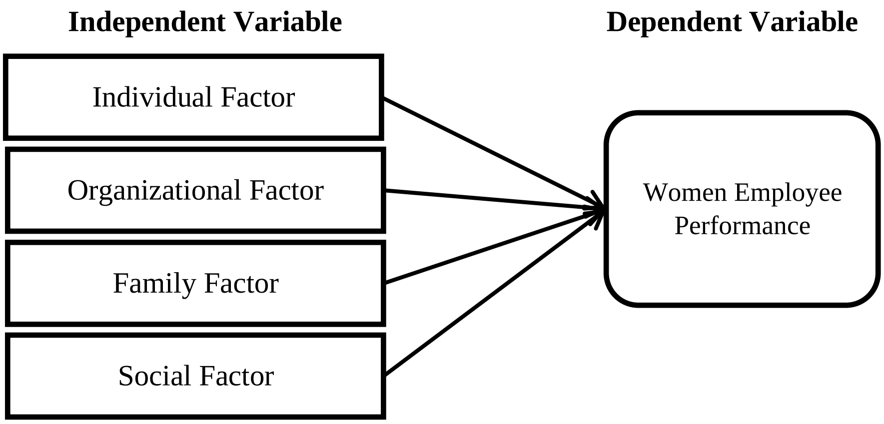

Figure 1: conceptual framework of the study

Source: Researcher constructed 2021

For this research a deductive approach was deemed suitable where it initiates with an in-depth review of literature to identify gaps in literature for which hypotheses will be formulated and tested. This will be a quantitative study in which attention will be paid to collecting numerical data. Under this research, the sample was 346 women employees working in Kurunegala Divisional Secretariat office, Ehetuwewa Divisional Secretariat office and Polpithigama Divisional Secretariat office located in Kurunegala District. Out of the 3347 populations, the researcher selected 346 as and a sample based on the convenience sampling method, which is a non- probability sampling technique where the respondents were selected based on easy accessibility.

A survey strategy was selected as it facilitates gathering a massive amount of data. A questionnaire was used to collect data which comprises of five point-size scale questions. The questionnaire comprises of four independent variables namely, individual factor, organizational factor, family factor, social factor, in order to identify impact on women employee performance. Furthermore, several secondary sources such as journal articles, research papers, reviews, newspapers, magazines were used. SPSS was used in analyzing the data collected. Descriptive analysis, regression analysis was employed for further analysis.

4. RESULTS

The demographic data comprise with the age, marital status of the respondents, number of children, educational level and working experience of the respondents. Majority of the women employees are below 40 years accounting to 55.78%. Most of the respondents represent from the age group of 31-40, which had been valued as 37.57%. The sample was consisted with 14.74% of respondents who were more than 51. Marital status of women also a considerable factor of determining the actions and decisions. Majority of 80.06% women employee in divisional secretariat offices in Kurunegala District are married. Rests of the 19.94% of the total sample were single. Majority of the women employee have two children it is represents 43.35%. 13.58% of respondents had one child and 18.79% respondents from the total sample were had three or more children. Most of the women employees had degree as their highest educational level and it was 57.80% from the total sample and 3.76% represent the degree incomplete educational level.

4.1 Descriptive Analysis

4.1.1 Normality Test

Descriptive statistics describe the behavior and nature of the data. The purpose of carrying out a descriptive analysis is to get a thorough understanding regarding both dependent and independent variables. For describing the descriptive statistics, a researcher had used frequencies, the mean and Skewness, Kurtosis.

Table 1: Normality Test Table

Variables	N	Mean	Skewness		Kurtosis	
	Statistics	Statistics	Statistics	Std. Error	Statistics	Std. Error
Individual Factor	346	4.0014	-1.927	.131	4.525	0.261
Organizational Factor	346	4.1048	-2.018	.131	5.023	0.261
Family Factor	346	4.0867	-1.381	.131	2.699	0.261
Social Factor	346	4.1698	-1.812	.131	4.465	0.261
Women Employee Performance	346	1.9225	2.223	.131	5.350	0.261

Source: survey data analysis

According to the table 1 Skewness values of the variables fall in the range +3 to -3 and Kurtosis is appropriate range -10 to 10. This denotes that the data collected for the sample of glass ceiling factors are normally distributed. Therefore, all the distribution can be considered to be Normal. Therefore, all distributions can be mentioned that it is possible to apply parametric test to carry out the research further.

4.1.2 Multicollinearity Test

Multicollinearity is a state of high interrelationships between independent variables. It is an important issue in the analysis of regression variances.

Table 2: Multicollinearity Test

Independent Variable	Collinearity Statistics	
	Tolerance	VIF
Individual Factor	0.483	2.072
Organizational Factor	0.383	2.610
Family Factor	0.465	2.149
Social Factor	0.509	1.965

Source: Survey data analysis

Comparing Tolerance values and Variance Inflation Factors it was found that the Tolerance values are higher than 0.2 and VIF values are less than 5. Therefore, the Tolerance values and the VIF values are within the expected range that prevents the multicollinearity.

4.2 Reliability Analysis

The reliability measure is identified to testing for both consistency and stability. This is one of the most important aspects of data analysis where the reliability of the data has to be established. The metric used to measure reliability is Cronbach's alpha which is a coefficient. This coefficient depicts how much various elements are negatively correlated to one another. The output value of the Cronbach's alpha will range between zero and one. Consistency specifies how well the items measuring a concept hang together as a set. The internal consistency reliability is unsatisfactory when the value is 0.06 or lesser and higher when it is greater than 0.7. Table 1 had summarized the reliability of the constructed questions to measure the glass ceiling and women employee performance.

Table 3: Reliability Analysis

Variables	Cronbach's Alpha	Decision Rule	Comment about Reliability
Individual Factor	0.793	0.793 > 0.7	Reliable
Organizational Factor	0.782	0.782 > 0.7	Reliable
Family Factor	0.776	0.776 > 0.7	Reliable
Social Factor	0.808	0.808 > 0.7	Reliable
Women employee performance	0.891	0.891 > 0.7	Reliable

Source: Researcher constructed 2021

According to the table 3, clearly presented Cronbach's alpha values are greater than 0.7. Therefore, it could be deduced from this that the data is reliable and suitable to continue with hypothesis test and descriptive analysis.

4.3 Validity Test

KMO test is a measure of how suited the collected data is for the factor analysis. The test is measure sampling adequacy for each variable in the model and for the complete model. The validity can measure using the Bartlett's test and according to the Bartlett's test to significant the variable its value should be reduce than 0.01 ($P<0.010$). And also, validity measure through the average variance extraction and value should be greater than 0.5. KMO value should be greater than 0.5 ($KMO>0.5$) in this research context to prove the validity.

Table 4: KMO& Bartlett's Test

Variable	KMO & Bartlett's Test	Bartlett's Test of Sphericity (Sig)
Individual Factor	0.738	0.000
Organizational Factor	0.756	0.000
Family Factor	0.697	0.000
Social Factor	0.768	0.000
Women Employee Performance	0.855	0.000

Source: Researcher constructed 2021

4.4 Regression Analysis

A regression analysis was carried out to identify the impact of independent variables on the dependent variable, which is women employee performance in divisional secretariat offices. According to the regression principles, hypothesis can be rejected provided that the F statistic is significant at 0.05. The β (Beta) value facilitate in identifying the impact of the independent variable on the dependent variable. In this section analysis measures the relationship between factors of glass ceiling and women employee performance.

Table 5: Model Summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	.477	.471	.46468

Source: Researcher constructed 2021

According to the above table shows the summary of the model. The figure "R" multiple correlation indicates that how strongly the multiple independent variables related to the dependent variable, R is represented by 0.691. It suggests the strong correlation between the factors of glass ceiling and women employee performance. It tells how much of the variance in the dependent variable, women employee performance explained by the R Square of the model is 0.477. This means that 47.7% of the dependent variable (women employee performance) can be explained by factors of glass ceiling.

Table 6: Model significance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	67.154	4	16.788	77.751	.000[b]
Residual	73.630	341	.216		
Total	140.784	345			

a Dependent Variable: WEP
b Predictors: (Constant), IF, OF, FF, SF
Source: Researcher constructed 2021

According to the Sekaran (2003), ANOVA statistical tool can be considered as a tool used for hypothesis testing. The model is statistically significance as the p-value of 0.000 is below then 0.05 ($p<0.05$). It indicates that developed regression line is strong enough to predict the behavior of the dependent variable in accordance with the changes in independent variable.

4.5 Hypotheses Testing

The study aims to identify how factors of glass ceiling affect to women employee performance in the context of the divisional secretariat offices in Kurunegala District. This will identify how glass ceiling will affect women employee performance based on various independent variables such as individual factor, organizational factor, family factor, social factor.

Table 7: Coefficient Table

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	5.186	.187		27.693	.000
Individual Factor	-.259	.059	-.248	-4.391	.000
Organizational Factor	-.175	.061	-.180	-2.843	.005
Family Factor	-.119	.052	-.131	-2.284	.023
Social Factor	-.245	.052	-.258	-4.696	.000

a. Dependent Variable: Women Employee Performance
Source: Researcher constructed 2021

4.5.1 Hypothesis 1

H1 – There is a significant effect of individual factors of glass ceiling on women employee performance.

From studying the Coefficient table can explained that how much deviation occurs in dependent variable when shifting one unit of independent variable. As per the above data coefficient between individual factor of glass ceiling and women employee performance is -0.259 at (0.000) significance level. It implies one unit of change in individual factor of glass ceiling will affect to decrease women employee performance by 0.259. While one unit of change in individual factor of glass ceiling in negatively affecting to decrease of women employee performance at the 0.000 significance level.

So according to the regression analysis significant value should be less than 0.05 ($P < 0.05$). Then according to the regression table 4.10 result of the coefficient of the individual factor of glass ceiling was -0.259 and its respectively significant value is 0.000 and it is negative impact on women employee performance ($\beta = -0.259$, $p = 0.000$). Then H: 1 can be accepted.

4.5.2 Hypothesis 2

H2 – There is a significant effect of organizational factors of glass ceiling on women employee performance.

As per the above data coefficient between organizational factor of the glass ceiling and women employee performance is -0.175 at (0.005) significant level. It implies one unit of change in organizational factors of glass ceiling will affect to decrease women employee performance by 0.175. While one one unit of change in organizational factors of glass ceiling is negatively affecting to decrease women employee performance at the 0.005 significant level.

Then coefficient of glass ceiling of the organizational factor was 0.175 and its respectively significant value is 0.005 and it is negative impact on women employee performance ($\beta = -0.175$, $p = 0.005$). Then H: 2 can be accepted.

4.5.3 Hypothesis 3

H3 – There is a significant effect of family factor of glass ceiling on women employee performance.

According to the table 4.10, coefficient of the family factor of the glass ceiling is -0.119 at (0.023) significant level. It implies one unit of the change in family factor of glass ceiling will affect to decrease women employee performance by 0.119. While one unit of change in family factor of glass ceiling is negatively affecting to decrease women employee performance at the 0.023 significance level. Then regression analysis significant value should be less 0.05 ($P<0.05$). Then according to 4.10 table results, coefficient of the family factor of the glass ceiling was 0.119 and its respectively significant value is 0.023 and it is negative impact on women employee performance. Then H: 3 can be accepted.

4.5.4 Hypothesis 4

H4 – There is a significant effect of social factor of glass ceiling on women employee performance.

According to the table 4.10 results, coefficient of the social factors of glass ceiling shows -0.245 at (0.000) significance level. It implies one unit of change in social factor of glass ceiling will affect to decrease women employee performance by 0.245. While one unit of change in social factor of glass ceiling in negatively affecting to decrease women employee performance at the 0.000 significance level.

Then regression analysis significant value should be less than 0.05 ($P< 0.05$). So, results of the above table 4.10, coefficient of social factors of glass ceiling was -0.245 and its respectively significant value is 0.000 and it is negative impact on women employee performance (β = -0.245, p= 0.000). Then H: 4 can be accepted.

Table 8: Summary of the Hypothesis testing

Hypotheses	Description	Results
H1	There is a significant effect of individual factor of glass ceiling on women employee performance	Accepted
H2	There is a significant effect of organizational factor of glass ceiling on women employee performance	Accepted
H3	There is a significant effect of family factor of glass ceiling on women employee performance	Accepted
H4	There is a significant effect of social factor of glass ceiling on women employee performance	Accepted

Source: Researcher constructed 2021

5. DISCUSSION

The main objective of the study was to identify the effect of the factors of glass ceiling on employee performance of the divisional secretariat women employees. For that, a sample of 346 were selected based on the convenient sampling technique and collected data were analyzes. All the variables were identified as reliable and normally distributed and hence the research was carried forward with the demographic analysis. The age composition denotes that the most of the women employees are below 40 years old. It was identified most of the women employees are working divisional secretariat offices in young age range. According to the marital status and having number of children of the women employees, also many of the women are married and the majority of the women employees have two children. Then it was identified women employees had several works to do both working place and home background.

As per the highest educational background analysis, it mainly denotes majority 57.80% women employees had a degree as their educational qualification. So it means they have the educational background to go ahead in their job positions. Analysis of the experience of the women in divisional secretariat offices majority of the women had 50.58%, more than 5 years working experience. So, they have more experience of working with any task in the office background. According to the descriptive analysis results, the average sample of the study had agreed on the factors of glass ceiling variables are resulted 3.89, 4.01, 4.08 and 4.16 mean values respectively individual, organizational, family and social factor of glass ceiling. It indicated the presence of the glass ceiling among the women employees in divisional secretariat offices in Kurunegala District. The mean value of the women employee performance was 1.92 which was close to the disagree level.

6. CONCLUSION

The administrative sector is the backbone for the development of a country. Because every single country achieves their target, the most valuable factor is economy of country. There are two types of organizations in a country name as private and public. Sri Lanka has the largest employee base in the public sector. Public sector organizations affect to the productivity of the economy directly and indirectly. To manage perfectly, districts of Sri Lanka are divided into administrative subunits named as "Assistant Government Agent'' (A.G.A) and currently, it titled as divisional secretariat.

These offices are one of the leading government sector organizations directly work with the citizen. According to the Ministry of Home Affairs, (2016) majority of the employees are female, as the main factor is women's participation in public sector administrative offices. The main objective of the study was to identify the effect of glass ceiling on the women employee performance. It was more compatible with the previous research findings like as, (Anesh, 2013)& (Buckalew, 2012).

Firstly, the study has comprehensively determined the existence of a glass ceiling from the perspective of government divisional secretariat women employees in Kurunegala District. Secondly, the study has successfully found out the regression illustrating the significant impact like as individual, organizational, family and social factor s of glass ceiling and the women employee performance of the divisional secretariat offices in Kurunegala District.

It means that women's employee performance is significantly affected by the glass ceiling practices. Women employee performance is very important to a country like Sri Lanka. As this study resulted from performance is affected by the glass ceiling, government and the relevant authorities need to get actions on these problems and enhance the women employee performance. Efficient employees will supply good service for the public and it is positively affecting to the country. This study concludes glass ceiling affects the women employee performance significantly. Because of that all the relevant authorities and the government should get the relevant actions to reduce the glass ceiling to increase the women employee performances in Divisional Secretariat offices.

Organizations should understand the advantages of eliminating the glass ceiling and innovate the way to change their organizational culture to create a biased and discrimination free environment. Women should develop their thinking patterns according to the social matters arising against to them. So they always think their positive minds with fresh ideas. Positive thinking patterns can avoid to any case in social problems.

This study is considering only public sector women employees in divisional secretariat offices. Because of that, this study result may be different when it applies to other private sector women employees. In this research had mainly focused on the only the glass ceiling concept as the factor affect to the women employee performance. But there are many factors affect to the women employee performance.

The study, glass ceiling measure by only four factors like as individual, organizational, family and social factors but researchers found several types of factors affect to the glass ceiling (cultural factors, gender stereotyping, gender discrimination). Due to the Covid-19 pandemic situation researcher can't collect the data through simple random sampling method because the total number of the women staff do not attend daily for their works, the limited staff join to do their work in office premises. Then convenience sample method uses as data collection method. The study was based on women employees in Kurunegala District. Future studies can be conducted by expanding the geographical area and also in another sector.

REFERENCES

Abdhul Hameed, A. W. (2011). Employee development and its affect to the employee performance. *International Jounal of Business & Social Science*, *13* .

Acker. (2009). glass ceiling to inequality regimes. *Sociologic du travail*, *5*(1), 199-217.

Agars, M. D. (2004). Reconsidering the impact of gender stereotypes on the advancement of women in organaization. *SAGE journals*, Psychology of Women Quartely, *28*(2),103-111.

Anesh, M. S. (2013). The glass ceiling a perspective of women working is Durban. *An International Journal*, *28*, 28-42.

Angelo Kinicki, R. K. (2006). *McGraw-Hill/irwin*.

Bell, T. B. (2002). Principle and Practices of educational management. *Sage*.

Beri, G. (2005). Business Statistics. *2E Tata McGrow Hill Education*.

Black, H. G. (1999). Globalizing People Through International Assignment. *New York addison Wesley*.

Borgida, D. B. (1999). Who Women are women should be, descrioptive & prspective gender stereotyping. *Phychological, policy & law*, *5*(3),665.

Brescall. (2016). Gender Stereotype of emotion lead to biased evaluation of female leaders. *the Leadership Quartely*, *27*(3), 415-428.

Buckalew, E. (2012). The Future CEOs and Their glass ceilng. *journal of Business studies and Quartely*, *3*(4) ,145-153.

Commission, G. C. (1995). A solid Investment.

Crimes, S. &. (2007). Gender terror. *Al Mansara*.

Diane, B. a. (2006). Steriotype Treat & women's work Performance. *Human Resource Management, 19*(2), 133-158.

Dutton, L. H. (1994). Traumetic responses among battered women who kill. *Journal of Traumatic Stress*, 794: 549-564.

Helgeson, V. (2002). The Psychology of gender. *NJ;prentice Hall*.

Hellriegel, J. &. (1999). Management. *Journal of Business, Cihicinnati, Ohio: South Western college*, 8th edition.

Helm, B. M. (2006). Women and Glass Ceiling in south african banks. *Women in Management Review*, 311-326.

Hoobler, G. L. (2016). Women's Underrepresentation in upper management. *Organizational Dynamics*, *40*(3), 151-156.

Jayawardane, T. S. (2015). importance of glacc ceiling on the career upward mobility of women on a selected large scale companies. *Human Resource Management Jornal*, *2*(1).

Keenawinna, T. S. (2015). Impact of glass ceiling career development of women. *Human Resource Management*, *2*(1).

Kesari, R. K. (2016). Employee Performance at work place.

Kinick, R. K. (2007). Oraganizational Behaviour.

Krueger, S. F. (2020). The glass ceiling: exploring the leadership journy of men and women in High- Tech . *Digital USD*, 184.

M Khyzer Dost, Z. U.-R. (2012). The organizations having high level of glass ceiling has lower productivity. *Kuwait Chapter of Arabian Journal of Business Management* , Review 33 (843) 1-11.

Mai Ngo Khong, N. T. (2017). Effect of the corperate glass ceiling factors on female employees organizational commitement. *Jornal of Advanced Management Science*, *5*(4).

Maxwell, S. O. (2007). Enabling the career development of female managers. *women in managemant*.

Mubbsher Munawar Khan, Z. U.-R. (2012). The Glass ceiling vs employee performance impact on the employee's satisfaction level. *Singaporean Journal of Business, Economics and Mangement Studies*, 51(1105), 1-17.

Omer Faruk Karagoz, a. D. (2020). The glass ceiling effect and coping Mechanism in Academia.

P. Campbell, J. G. (1996). The subsantie nation of the job performance variability. 258-299.

Remya Lathabavan, S. A. (2017). The glass ceiling & women employees in Asian organization. *Asia Pasific Journal of Business Adminisrtration*, 311-319.

Robson. (2002). *Real World Research.* 2 nd Edition, Oxford,Blackwell.

sabir, H. (2017). Gender Stereotype, glass ceiling and women career advancement. *City University Research Journa, AIC, Malaysia*, 236-246.

Schellhardt, C. H. (1986). The glass ceiling: why women can not seem to break the invisible barrier thet blucks them from the top jobs. *The Wall Street Jounal*, *24*(1).

Sekaran. (2006). Research methods for business: A skill-building approach. *New York: John Wiley & Sons*, *Inc*, 4th Edition.

Skinner, N. C. (2005). An alterative view through the glass celing . *Women in Management Review* , *20*(8) 595-609.

Sounders, L. (2019). *Research Methods for Business Students.* United Kindom: 8th Edition,Person Education,KAO Two,KAO Park,Harlow CM17 9 NA.

Srivasdthav, S. (2020). An illusion or realism. *Journal of General Mangement*, *45*(4) 217-229.

Uduwella. (2019). Impact of Glass ceiling on women career development in non- state banking sector in Sri Lanka. *Tropical Agriculture Research*, 106-108.

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Impact of Environmental Management Accounting (EMA) Practices on Financial Performance of Domestic Licensed Commercial Banks in Sri Lanka

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ABSTRACT

The purpose of this research paper is to look into the Environmental Management Accounting (EMA) practice used by domestically licensed commercial banks in Sri Lanka to achieve financial Performance. This is an exploratory study that uses primary data to solve the research question of how does the EMA practice impacts the financial performance of domestic licensed commercial banks in Sri Lanka. The EMA practice is being used as an independent variable, and factors which including environmental information, environmental evaluation, environmental cost savings, and environmental laws were used to quantify the independent variable, whereas financial performance, which is measured using profitability and revenue growth is the dependent variable. The population of this study included all the domestic licensed commercial banks in Sri Lanka. As the population is of a manageable size all the 13 domestic licensed commercial banks were considered as the sample. All the primary data related to the study, a total of 130 responses were collected through a well-structured questionnaire from the top, middle, and lower-level managers of the domestic licensed commercial banks. The data were analyzed through descriptive statistics, correlations, and multiple regression using SPSS software. The correlation shows that Environmental Information, Environmental Evaluation, Environmental Laws, and Environmental Cost Saving have a statistically significant positive relationship with financial performance. Multiple regression analysis demonstrated that EMA practice has a positive impact on FP in licensed commercial banks in Sri Lanka, and it accepted all the hypotheses of this study. The findings point the way toward establishing a solid knowledge platform for future EMA development. According to the findings, the government should create a legislative and regulatory approach to manage environmental issues, and banks should comply with them to reduce penalties and increase financial performance. This study report adds to the growing collection of empirical studies on EMA practices in Sri Lanka.

Keywords: Domestically Licensed Commercial Banks, Environmental Management Accounting, Financial Performance

1. INTRODUCTION

1.1. Background to the study

Business organizations believe that some environmental costs are not significant to their business function. There are some production costs of environmental elements that do not incur to the organization's operations. Environmental management accounting (EMA) will be helped to manage this environmental issue of every organization. Environmental Management Accounting can be demonstrated as collecting, generating, analyzing, and, using environmental financial information to make decisions (Bartolomeo, et al., 2000). At present Sri Lankan organizations are performing the environmental accounting practices such as measurable accounting, carbon emission, accounting for energy, eco-friendly capital budgeting, activity-based costing, assessments of environmental impact, life cycle analysis, and biodiversity accounting. The product costs considerably changed as a result of the proactive approach to environmental concerns. As a result, companies must analyze all business costs (including environmental costs) to make better decisions (Jasch, 2003). Businesses rely on that environmental costs are inconsequential to their operations. Organizations are not affected by the fact that certain manufacturing costs have an environmental aspect. EMA and reporting also hold businesses accountable for how much environmental protection they incorporate into their corporate decision-making. An organization's decisions should consider the effect of its operations on the environment as well as all other stakeholders. EMA also aids companies in determining how much resources they are destroying from the environment and how much money they are contributing back to the environment.

"The banking sector is a major source of financing to many industries and businesses" (Suganya, and Kengatharan, 2018). As the banking sector plays a major role, the economy of a country cannot survive without well-performed banks which leads to the continuous economic growth of the country. This banking function requires a great sense of responsibility and accountability on the behalf of the bank, because it may result in indirect pollution if banks fail to do proper due diligence on the adverse environmental consequences of specific businesses and industries before funding them. This financing role of banks makes massive accountability and responsibility for every bank as this indirectly impacts the pollution of the environment, if banks failed to have proper validated measurements concerning the negative environmental impacts before financing (Arulrajah & Saumya, 2016). In the context of the Sri Lankan organizational view, there are few studies on EMA, and still at its initial stage. It is little that more researches talk about the application and practice of EMA on financial performance regarding the banking sector yet it provided with more competitive advantages. Initially, this research lends empirical support to findings and observations about the factors that have accelerated the adoption of EMA in the banking sector.

1.2. Problem Identification and Justification.

The fundamental use of EMA is to expand the environmental management process which directs to recognize the exploitation of environmental performance, this has moved the focal point of traditional bookkeeping from provision of financial information to the reduction of asset utilization and effective consumption of natural resources (IFAC, 2005). EMA practice will provide the best environmental and financial performance by influencing the decision-making process of the organization (Schaltegger, et al., 2008).

However, the level of awareness and a better understanding of the environmental cost generated by the organization and the opportunities that can be gained through a proper environmental management process is lost in present (Deegan, 2001).

In the Sri Lankan context, it has been generally observed that there is an empirical gap that relates to the impact of EMA practice on the financial performance of the domestic licensed commercial bank sector in Sri Lanka. In general, these selected domestic commercial banks have implemented various EMA practices to have some benefits of both environmental and financial. Yet, this area of research has not been analyzed closely in Sri Lanka. This lack has provoked to conduct this empirical study, to fill the gap by adding to the existing collection of information on the EMA practice which can be used to manage the environmental impacts by domestic banks predominantly. This study attempts to expand the impact of EMA practice in the banking sector. Further, the influences of EMA to have high financial performances through the management of environmental factors of the banking sector have not been yet analyzed in the context of Sri Lanka.

1.2.1. Research Question

- How does the Environmental Management Accounting (EMA) practice impact the financial performance of domestic licensed commercial banks in Sri Lanka?

1.2.2. Research Objectives

- To analyze the impacts of EMA practice on the financial performance of domestic licensed commercial banks in Sri Lanka

2. LITERATURE REVIEW

2.1. Theories applied in EMA practice

Based on three theories, including contingency theory, institutional, and legitimacy theory, this study developed hypotheses concerning factors use to measure the EMA practice. The contingency theory refers to the structure of an organization, while the other theory is concerned with the link between organization and society. Early empirical studies examining the relationship between key determinants and Exception of Chang (2007), who tried to point out that the three main obstacles to the implementation of EMA had been money issues, government restrictions, and organizational behavior.

2.1.1. Contingency Theory

Pioneering researchers such as Burns and Stalke, Hage, and Lawrence and Lorsch, concisely defined contingency theory in 1960. This idea demonstrates that an organization’s structure is influenced by the environment’s uncertainty. Contingency theory is a branch of organizational behavior theory that examines how uncertainty variables like technology, culture, and environment have influenced organizational decision making (Islam, J., & Hu, H. A, 2012). Furthermore, Qian and Burritt (2009), acknowledged that an organization must meet its functional requirements while remaining consistent with its organizational structure and management process to achieve its goals.

Uncertainties are the functional aspects of an organization, such as its strategy, technology, scale, and resources. Parker (1997) developed a contingency framework that linked environmental accounting, environmental strategy and uncertainties in the environment of the organization. Despite the limited usage of contingency theory in environmental accounting research (Bouma & van der Veen, 2002), it is agreed here that the contingency perspective is potentially valuable for explaining environmental accounting, particularly environmental management accounting. Furthermore, Muslichah (2004) suggested that efficient management accounting is dependent on many factors, including the environment, organizational features, and management decision-making perspectives. It was also revealed that the strategy of an organization and the design of an organization and the design of an accounting system have a beneficial or a positive relationship.

2.1.2. Legitimacy Theory

Legitimacy theory argues that an organization and the society in which it functions have some sort of relationship (Fernando, S. and Lawrence, S., 2014). Because organizations consume resources from society and give products and services to that society, they are not isolated units (Niap, 2006). According to legitimacy theory, once managers believe that providing specific information is critical to an organization's survival, they will pursue strategies to provide continuous information to achieve or uphold legitimacy. The role of legitimacy theory in volunteer environmental reporting has been the subject of the majority of publications. A society can notice changes in an organization's environmental performance, according to Hoffman (2001). Environmental considerations may be incorporated into an organization's accounting process for a variety of reasons. To put it another way, accountability in disclosing environmental information to the public can be critical to reforming the accounting system. The legitimacy theory states that business success is legitimate when it is regarded to be fair and deserving of assistance, or when it is accepted by society. An organization may participate in a legitimization process to earn or increase integrity, retain its existing sense of legitimacy, or to recover or safeguard its damaged or endangered legitimacy (O'Donovan, 2002). Deegan C. (2002), believes that when managers believe their organization's actions aren't under the social expectations, corrective strategies are expected, according to legitimacy theory. Whenever society expects businesses to act responsibly toward the environment, businesses will rise to the challenge and build legitimate internal procedures. EMA's application will be renewed as well because it plays a critical role in ways of identifying and establishing legitimacy (Chang, H.H, 2007).

2.1.3. Institutional Theory

In contrast to contingency theory, which is centered on the technological environment, the institutional theory is related to the effects of situational variables on associations, with the organizational structure described as the set of criteria that individuals and groups should fulfill in gaining support and authenticity (Chang, H.H, 2007). The attitudes and intentions of social groups are heavily influenced by social values and conventions. Efforts that maintain social standards and guidelines will be considered as proper as a result of institutionalization. The organization is a social concept that is still a part of the social structure (DiMaggio & Powell, 1983). Social standards and guidance have an impact on an organization, as well as the people who work there, the advantages that the organization generates, and how the company adapts to its surroundings. Three mechanisms, according to DiMaggio and Powell (1983), greatly impact an organization's governance decisions: coercion, norm, and imitation. The coercive process, specifically, relates to procedural rules, restrictions, and charges; the normative framework, to organizations' collective social views and beliefs; and the mimetic process, to the concept that when a sociological phenomenon or connection is approved and adopted in a sector, other individuals likely to act reasonably. (Schaltegger, et al., 2008). Chang (2007), has examined how EMA application has been influenced by the institutional setting of increased environmental consciousness. If there is a strong expectation in an organization's institutional framework that EMA must be implemented, the organization must take appropriate actions under society's demands. According to Qian and Burritt (2008), devised an EMA implementation strategy based on institutional components such as governmental interference, professional education and development, mimetic influence, and a professional association system.

2.2. EMA practice and Financial Performance

Bennett and James (1998) and Qian et al. (2011) suggested that one of EMA's main goals is to help enterprises with good data achieve sustainable growth by making better environmental decisions. The product costs considerably changed as a result of the proactive approach to environmental concerns. As a result, companies must analyze all business costs (including environmental costs) to make better decisions (Jasch, 2003). In traditional management accounting, many environmental costs are concealed, unaccounted for, and frequently distributed over multiple accounts (UNDSD, 2003). Environmental Management Accounting (EMA) is a unique and comprehensive branch of management accounting that assists managers in identifying, monitoring, and optimizing total company expenses and their implications by raising managers' knowledge of hidden and undervalued environmental costs (Burritt, 2004; Jasch, 2003). EMA can also identify lost opportunities for cost savings, innovative products, and obtaining a competitive advantage over its competitors by revealing expenses hidden by traditional accounting. Environmental and social disclosures, according to Deegan (2002), have a positive justifying impact on the organization, and environmental management practices are critical factors for a firm's longer-term market competition.

To begin with, total annual costs present a grim image of expenditures for businesses because EMA also determines the level of inefficiency costs. Accordingly, businesses aim to discover, analyze, and cut costs by first identifying and tracking expenses down to their origins and then looking for new and better ways to decrease costs and enhance performance in their production processes (Gale, 2006a; Jasch, 2003). Secondly, it allows decision-makers to evaluate better cost information when creating new methodologies, as well as helps to identify the advantages and disadvantages of technological advances. However, according to Bartolomeo et al. (2000), EMA does not result in the development of entirely new procedures, but rather in incremental adjustments to current ones. Third, EMA's techniques enable to improve business performance and reduce material wastages.

EMA, according to Xiaomei (2004), is a new part of accounting aimed at achieving an economic and social development goal by employing basic accounting theories to identify, evaluate, and disclose an organization's environmental performance and the environmental consequences of its economic activities. Companies are gradually deciding that maximizing profits at any cost is no longer the most advantageous way to operate their firm and improve their competitive edge, according to Schaltegger, Burritt, and Peterson (2003). Even though many companies claim some environmental management accounting activity, Bartolomeo et al. (2010) mentioned in their detailed survey that this reflects only a few exploratory projects instead of a thorough and structured application, such as accounting function was not essential to many corporate environmental management activities. Traditional management approaches of financially acceptable practices are unable to detect all internal costs arising from pollution in the environment, therefore simply identifying costs is insufficient to make waste control.

Khalid and Lord (2012) backed up Bartolomeo et al. (2010)'s statement that financial considerations have always been the primary concern, though they use ecologically friendly practices in some situations. Companies will prefer to adopt any environmental-related techniques as long as it gives benefits to the organization financially. Organizations should not trade off their environmental requirements to obtain cheaper materials or goods from Customers, and they should focus on environmentally safe tools and methodologies, and financial firms should focus on ensuring that they only approve environmentally viable projects and financing decisions, among other recommendations. Environmental management accounting (EMA) is defined by Jasch (2003) as a combined approach that allows data from financial accounting, cost accounting, and material flow balances to be transferred to increase material efficiency, protect the environment, and financial burden, and lower pollution control costs.

Long-term expenses can be decreased by implementing more effective energy practices, reducing the usage and waste of other resources, and establishing more effective waste management and cleanup, as outlined by Laitner (2002). According to Babakri, Bennett, Raos, and Franchetti (2004), more quantitative proof after the adoption of an EMS has been presented, such as cost savings from using recycled products or materials, and able to gain the advantages by following such recyclable procedures.

However, because corporations have not recorded or assessed the costs and advantages of making environmental enhancements in many cases, the balance of costs and benefits remains unknown, which can support skeptics' reasoning towards investing in environmental protection (Hamschmidt and Dyllick, 2001). This could also be related to issues determining advantages since environmental management systems may not have been in a position for long enough to collect complete amounts of information (Babakri, Bennett, Raos, and Franchetti 2004).

Environmental management accounting (EMA) is defined by Jasch (2003) as a combined approach that allows data from financial accounting, cost accounting, and material flow balances to be transferred to increase material efficiency, protect the environment, and financial burden, and lower pollution control costs. Many environmental management accounting studies identify a favorable relationship between financial performance and the level of company environmental information (Waddock and Gravess, 1997)

3. METHODOLOGY

3.1. Population and Sample

The population targeted for this study includes all the 13 domestic licensed commercial banks in Sri Lanka. Out of 24 licensed commercial banks, of which, 13 are domestically incorporated banks, while the other 11 are local branches of foreign banks. However, only 13 domestic licensed commercial banks were included in this analysis. As the population is of a manageable size and possible to collect data from the entire population, the sample size is also the total population of 13 domestically incorporated licensed commercial banks in Sri Lanka.

3.2. Data Collection

All the data related to the study was obtained from all the three-level managers in finance department of the domestic licensed commercial banks. Questionnaires have been distributed among those three-level managers, and in this list of questions, all the 13 domestic licensed commercial banks were asked about their EMA practices, which are commonly practiced or adopted by these Banks. The impact of Environmental Management Accounting practice on financial performance will be discussed in detail, with a focus on quantitative factors. The information of the research has been gathered from the year 2015-2019 based on the availability of data. The sample of this study was the whole population of 13 domestic licensed commercial banks. Managers were asked about the profitability and revenue growth during that past 5-year period through the questionnaire. There is a special reason to select this period for this research because this period can identify lower levels of market fluctuations.

3.3. Measurement of Variables

The independent variable of this research is EMA practice which was used to test the hypotheses. The four dimensions Environmental Information (EI), Environmental Evaluation (EE), Environmental Laws (EL), and Environmental cost savings (ECS) are used to measure this independent variable. Different researchers have used these variables in different ways to measure this independent variable. The dependent variable is the financial performance of the Domestic licensed commercial banks of Sri Lanka, and it will be measured using profitability and revenue growth.

3.4. Research Hypothesis

3.4.1. Producing Environmental Information and Financial Performance (USEPA,1998)

Identifying environmental expenses and associated financial streams is a real technique to get higher management's attention by connecting environmental responsibilities to costs. The USEPA (1998) stated that the concept of environmental costs was determined by how a business intended to use the information, such as capital budgeting or product development. For the conversion, management accounting approaches such as measuring performance, functional budgeting, costing, and pricing are used; all parts of providing environmental information are beneficial to the organization. Accordingly, the first hypothesis developed as:

H1: There is a significant impact of producing Environmental Information on financial performance.

3.4.2. Environmental Evaluation and Financial Performance

Firms must examine the internal and external advantages and costs of their operations to achieve the corporate goal of being environmentally friendly. Understanding the environmental costs and benefits of procedures and products may help organizations assess costs and pricing products more accurately, as well as develop future operations, products, and services that are more ecologically friendly. A profitability study should be performed using proper time frames and variables that do not eliminate long-term savings and advantages. An accurate evaluation of the investment portfolio responses to environmental costs should be conducted, taking into account the impact of resource price fluctuations as well as potential regulation changes. The second hypothesis is,

H2: There is a significant impact of Environmental Evaluation on financial performance.

3.4.3. Environmental Evaluation and Financial Performance

It has been suggested that a company's compliance with government restrictions is merely the first step on the road to long-term development (Magara, Aming, & Momanyi, 2015). Companies must track the usage of hazardous substances and pollution to comply with environmental legislation (and/or environmental regulatory compliance). Environmental compliance measures were implemented primarily to limit the risk of fines or penalties. Proactive coping strategies, such as environmental cleanups and paying penalties for breaking the law, are a costly burden for businesses, reducing profitability and severely impacting cash flow. This concept provides the following hypothesis:

H3: There is a significant impact of compliance with Environmental Laws on financial performance.

3.4.4. Tracking of Environmental Cost Saving and Financial Performance

As a consequence of climate change, companies are challenged to manage efficiency in a manner that produces profitability while minimizing environmental impact. One technique to assure waste reduction, including environmental sustainability is to incorporate environmental costs and benefits into the financial management accounting system. Environmental managers can utilize EMA technology to detect and control environmental expenses that can aid companies to rationalize environmentally friendly manufacturing initiatives and identifying ways to cut costs while improving sustainability practices.

H4: There is a significant impact of tracking Environmental cost savings on financial performance.

3.5. Conceptual Framework

The conceptual framework of the study is based on the deduction method and for analysis of data collected from primary resources quantitative techniques were employed and which has designed to represent these independent and dependent variables. The model for the study can be presented based on the review of literature on EMA practice and the financial performance of banks, and the framework is shown below.

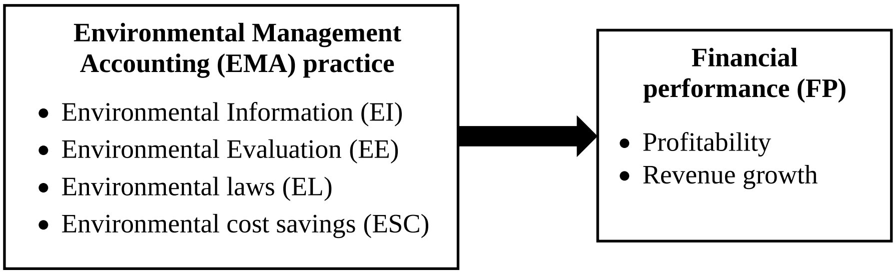

Figure 1: Conceptual Framework

Source: Developed by Researcher, 2021

3.6. Analysis Techniques

Due to the use of statistical and primary data, the descriptive quantitative approach is used to determine the conclusions of this data analysis. The information was gathered, coded, revised, and entered into a Statistical Package for Social Science (SPSS). The degrees of EMA implementation and estimated financial success levels in Sri Lanka's domestic banks were investigated using frequency distribution tables and descriptive statistics. The correlation value between EMA practice and financial performance was measured using inferential statistics utilizing Spearman's Correlation Coefficient. To identify the impact of EMA practices on financial performance, multiple regression was used.

4. FINDINGS

4.1. Descriptive Analysis

4.1.1. Frequency distribution analysis for variables

The commission took the view that evaluating the descriptive statistics was an excellent routine to guarantee that data were usually as expected under the conditions of mean, standard deviations, etc. (Garson, 2012). This survey addressed 130 respondents representing thirteen domestic banks from the top, middle, and lower-level managers. Using descriptive statistics to evaluate data was a good process for ensuring that data were usually as expected under the conditions of mean, standard deviations, and so on. Accordingly, mean values for EI, EE, EL, and ECS are 3.877, 3.723, 3.797, and 3.769 respectively. Around 77% of the respondents indicated that there was adequate, timely, accurate, reliable, and concise environmental information and, environmental evaluation. Around 80% of the respondents had a positive view on the compliance of environmental laws, but only 75% of respondents are satisfied with their environmental cost-saving procedures.

4.2. Exploratory Data Analysis

4.2.1. Testing for Outliers

The presence of outliers would radically change the analysis of the outcome and would also violate the normality of the data set. Owing to this reason, it should be investigated carefully to make sure that there were no outliers within the data set. The most common sources of outliers were errors of data entry, not defining missing values, unintended sampling, true non-normal distribution. (Garson, 2012). Boxplot diagrams indicated the outliers of the data set. By considering the below boxplots, it could be concluded that the data set of the study had no outliers.

Figure 2: EI Outlier

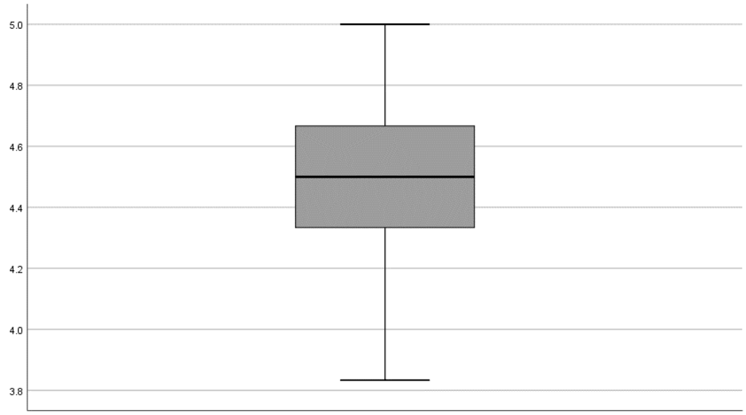

Figure 3: EE Outlier

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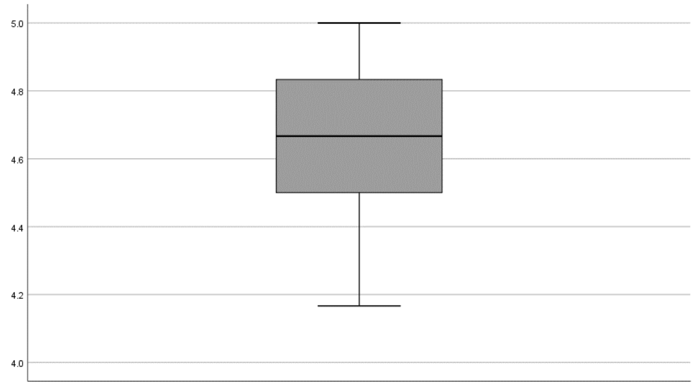

Figure 4: EL Outlier

Figure 5: ECS Outlier

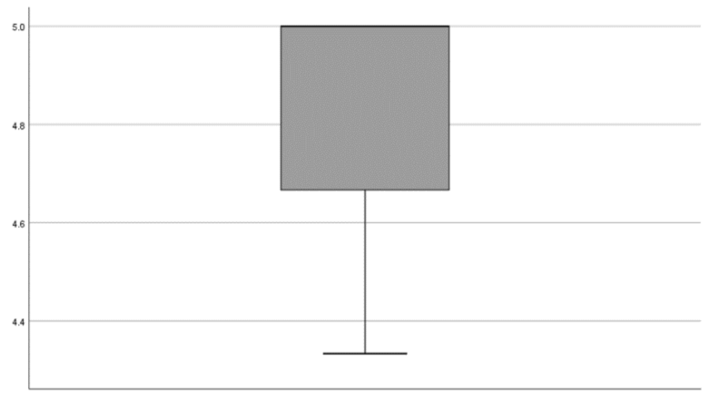

Figure 6: FP Outlier

4.2.2. Testing for Normality

The normal distribution has been the most commonly applied distribution of all distributions. In broad terms, most statistical methods believed normal distribution. Throughout the cases in which data have been non-normally distributed, alterations were necessary to accurate the data. The normality of the data set may be discovered both mathematically and vividly. Shapiro Wilk's and Kolmogorov Smirnov's assessments have been utilized to demonstrate the normality of the data set statistically. Corresponding to records, the data set

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might be determined as normally distributed and the notion of normality has been acknowledged in the research.

Table 5: Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
MEAN_EE	.339	130	.000	.790	130	.000
MEAN_EL	.346	130	.000	.775	130	.000
MEAN_ECS	.327	130	.000	.821	130	.000
MEAN_EI	.293	130	.000	.816	130	.000
MEAN_FP	.305	130	.000	.793	130	.000

Source: (SPSS output, 2021)

4.2.3. Testing Homoscedasticity

The notion of homoscedasticity was described to make an equal variance and suggested that the variation across the regression line was identical for all the values of the forecast variable (X). Heteroscedasticity that the infringement of homoscedasticity had been present after the scope of the mistake in the expression varied through the amount of an independent variable. The survey created scatter plots for equally major structures and it verified the non-infringement of the homoscedasticity supposition.

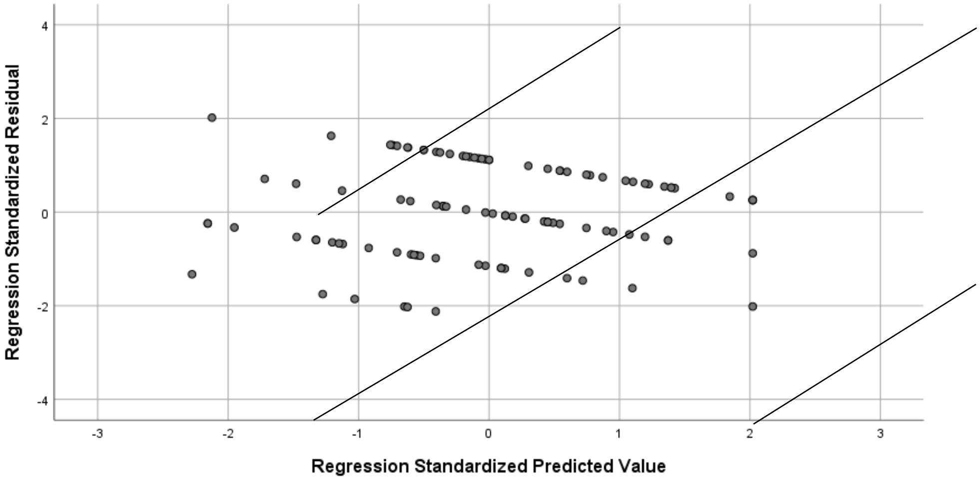

Figure 7: Homoscedasticity of the Study using Scatter Plot

Source: (SPSS output, 2021)

4.3. Inferential Statistics

4.3.1. Testing Multicollinearity

Multicollinearity remained an excessively superior correlation between the independent variables; and as a consequence of this, the special effects of those independents could not have been divided. If the tolerance value was not more than 0.2, that independent ought to be declined from the study owing to multicollinearity (Garson, 2012). Corresponding to Hair in 2009, this cut-off amount was 0.1. The law of thumb for the VIF value was that VIF ought to be a smaller amount than 10. Nevertheless, agreeing to Garson (2012), VIF be supposed to not be greater than 4.

The chart below shows the tolerance and VIF values of the exogenous variables of the research. As it demonstrated all tolerance amounts of the exogenous variables remained larger than 0.1 and VIF amounts were also not more than the key amount of 10. Consequently, all the variables of the survey were independent of one another and have not established the dilemma of multicollinearity.

Table 6: Statistics

Model		Collinearity Statistics	
		Tolerance	**VIF**
1	(Constant)		
	MEAN_EI	.189	5.303
	MEAN_EE	.149	6.730
	MEAN_EL	.351	2.847
	MEAN_ECS	.163	6.116

Source: (SPSS output, 2021)

4.3.2. Correlation Analysis

The correlation coefficient used to be a gauge of the intensity of the connection between or among variables. Values of the correlation coefficient have always been between -1 and +1. A correlation coefficient of +1 designated that two variables were flawlessly connected in an optimistic linear logic, a correlation coefficient of -1 designated that two variables remained flawlessly connected in a negative linear logic, then a correlation coefficient of 0 designated that here stood no linear relationship between the two variables. The nearer it happened to 1 the stronger the relationship.

Table 7: Correlation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	.480	.169		2.846	.005
	MEAN_EI	.120	.073	.152	1.635	.004
	MEAN_EE	.241	.098	.258	2.454	.015
	MEAN_EL	.339	.070	.329	4.814	.000
	MEAN_ECS	.193	.087	.222	2.222	.028

Source: (SPSS output, 2021)

Corresponding to the findings that come up demonstrated in table 3, the correlation coefficients of the EI, EE, EL, ECS, and FP revealed a 0.823, 0.837, 0.813, 0.840 correlation coefficient that has been solid in strength because all were beyond 0.5. After taking into account the P-value in the preceding table, it is characterized by utilizing sig. (2-tailed) and three out of four relationships in the above table, sig. (2-tailed) was 0.000 which showed 100% significance (Table 3).

4.3.3. Testing Hypotheses: Regression Analysis

Multiple regression analysis remained deemed as an expansion of simple regression analysis. By and large, multiple regression analysis had been utilized when the investigator sought to forecast the amount of a variable based upon additional variables in the research. Essentially, two types of variables might be observed in multiple regression analysis.

In the current study, environmental information, environmental evaluation, environmental laws, environmental cost-saving were the independent variables that have been carried out as the X value, at the same time as the dependent variable, the financial performance had been considered as the Y values. A confidence level of 95% has been applied during the whole process.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.892[a]	.795	.789	.379	.795	121.309	4	125	.000	1.265

a. Predictors: (Constant), MEAN_ECS, MEAN_EL, MEAN_EI, MEAN_EE
b. Dependent Variable: MEAN_FP

Source: (SPSS output, 2021)

This study consisted of 0.795 R2 value and that indicated this model has 79.5% of the variance in environmental information, environmental evaluation, and environmental laws, environmental cost-saving that remained foretold by financial performance. This presented the complete power of connotation in the prototypical. Adjusted R-square signified 78.9% value and that explained this dependent variable has been designated by the individual variables. EMA application significantly and positively affected the financial performance of the domestic licensed commercial banks in Sri Lanka (r = 0.892). 89.2% of the financial performance is explained by the four independent variables. Therefore, that concluded this regression model was well fitted.

The Durbin-Watson static assessment remained as an examination achieved in instruction to measure the attendance of autocorrelation in the regression model of the research. Rendering to the above table, a value of 1.265 destined that here remained optimistic autocorrelation in the assessment model.

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.901	4	17.475	121.309	.000[b]
	Residual	18.007	125	.144		
	Total	87.908	129			

Source: (SPSS output, 2021)

This was an arithmetical assessment frequently used in occurrences anywhere there stood more than two groups, 0.000 – Statistically Significant or 0.05, or any value fewer this would outcome in substantial result although 0.05, or slightly value larger than this value remained non-important. Rendering to the table exposed above the general model was 0.000 that substantially below the 5% confidence substantial level. This model showed a significant result because the P-value was zero which indicated less than 0.05.

As exposed above, the analysis designated that the Beta values of the independent variables remained 0.152 (Sig. value = 0.004), 0.258(Sig. value = 0.015), 0.329(Sig. value = 0.000), 0.222(Sig. value = 0.028) in EI, EE, EL, ECS correspondingly, in addition it remained significant at 95% of confidence level. Therefore, it demonstrated that environmental information, environmental evaluation, environmental laws, environmental cost-saving have positively impacted financial performance in licensed commercial banks in Sri Lanka. Based on the above values, the multiple regression line equation is as below.

$$Y = (-0.48) + 0.120(EI) + 0.241(EE) + 0.339(EL) + 0.193(ECS) + \varepsilon$$

5. DISCUSSIONS AND CONCLUSION

5.1. Conclusion

Environmental Management Accounting (EMA) practice is a newer technique in the field of management accounting. EMA must be adjusted towards the firm's specific requirements instead of being used as a generic solution (Schaltegger, et al., 2008). Acceding to the Larojan and Thevraban (2014), there is a Significant positive correlation exists between EMA practice and financial performance of the listed manufacturing companies in Sri Lanka. Further EMA practice has positively impact on profitability of Sri Lankan enterprises (Gunerathne, et al.,2014). Accordingly, this study results also align with those previous literature. Using a representative dataset, this study explored a strongly positive relationship between EMA practices and FP. And also, EI, EE, EL, and ECS which were used to measure the EMA practices were positively and strongly impacted the bank's financial performance separately. These study findings can be used as the basis for further researches and investigation in form of literature on EMA practice in the Sri Lankan banking sector and further beneficial to other researchers who wish to undertake a study relates to the practice of EMA on financial performance other than the banking sector.

As the banking sector plays a major role in the Sri Lankan economy it impacts all the other sectors directly or indirectly. Although there are some inherent limitations, the results suggested that a study on EMA concept might be implemented to produce a well-equipped environmental framework within banks, reducing economic recession, inflationary effects, and wastage by using more effective strategies.

5.2. Implications of the findings

The conclusions also guide other organizations who are having problems pricing strategies and managing asset wastage in the globalization era of technology, which is accompanied by rising levels of pollution. The findings should also serve as a reminder to accounting regulators and standard setters to include and emphasize EMA practice in accounting standards, as developing countries are unfamiliar with the concept. Therefore, these results imply government regulators, policymakers, researchers, managers, potential and existing shareholders, academics, accounting regulators, and other stakeholders.

5.3. Recommendations for further Studies

The findings of this study offer opportunities for further investigations. The researcher has to experience the ability to provide suggestions and recommendations for further researchers to gain more worthy if any research will be conducted by them in this field. Further, the researcher can add much variety of techniques to generalize their findings. Furthermore, the study might be expanded to analyze EMA practice and financial success utilizing direct interviews rather than questionnaire surveys, which would have a greater impact on the managers' ability to provide an accurate and non-biased judgment. And also, a need for policymakers and standard setters to include the EMA practices on financial performance in the harmonized International Financial Reporting Standard and other local GAAPs due to its relevance to business organizations.

REFERENCES

Bartolomeo, M., Bennet, M., Bouma, J. & Heydkamp, P., (2000). Environmental Management Accounting in Europe: Current Practice and Future Potential. *The European Accounting Review*, *9*(1), pp. 31-52.

Deegan, C., (2001). An Analysis of Environmental Disclosures by Firms Prosecuted Successfully by the Environmental Protection Authority. *Accounting, Auditing and Accountability Journal*, *9*(2), pp. 50-67.

Ding, H., Li, S., Liu, T. and Liu, B., (2014). A literature survey of research on environmental accounting: theoretical review and prospect. *International Journal of Financial Economics*, *2*(1), pp.13-25.

Garson, G.D., (2012). Testing statistical assumptions. Asheboro, NC: Statistical Associates Publishing.

Gunathilaka, D. and Gunawardana, K.D., (2019). Environmental Management Practices on Financial Performance: With Special Reference to the Rubber Industry in Sri Lanka. *Vidyodaya Journal of Management*, *5*(2).

Gunerathne, N., Peiris, S., Edirisooriya, K. & Jayasinghe, R., (2014). Environmental management accounting in Sri Lankan enterprises, Department of Accounting, University of Sri Jayawardanepura, Sri Lanka.

Ismail, M.S., Ramli, A. and Darus, F., (2014). Environmental management accounting practices and Islamic corporate social responsibility compliance: evidence from ISO14001 companies. Procedia-Social and Behavioral Sciences, 145, 343-351.

Jasch, C., (2003). The use of Environmental Management Accounting (EMA) for identifying environmental costs. *Journal of Cleaner Production*, *11*(6), 667-676.

Larojan, C. & Thevaruban, J., (2014). Impact of environmental management accounting practices on the financial performance of listed manufacturing companies in Sri Lanka. Proceedings of the 3rd International Conference on Management and Economics, *26*, 27.

Mayndarto, E.C. and Murwaningsari, E., (2021). The effect of environmental management accounting, environmental strategy on environmental performance, and financial performance moderated by managerial commitment. *Journal of Industrial Engineering & Management Research*, *2*(2), 35-38.

Schaltegger, S., Bennett, M., Burrit, L. R. & Jasch, C., (2008). Environmental management accounting (EMA) as support for cleaner production. Environmental management accounting for cleaner production, 3-26.

Suganya, S.J. and Kengatharan, L., (2018). Specific factors and financial performance of domestic licensed commercial banks in Sri Lanka. *SCMS Journal of Indian Management*, *15*(2), 5-12.

Xiaomei, L., (2004). Theory and practice of environmental management accounting. *International Journal of Technology Management & Sustainable Development*, *3*(1), 47-57

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The Impact of Perceived Organizational Support on Women Career Development with Reference to Divisional Secretariats in Kandy District

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ABSTRACT

Generally working women face career development challenges and still women underrepresented in top level positions in organizational hierarchy. This study investigates the impact of Perceived Organizational Support on Women Career Development and its ability to identify organizational factors that contribute to career development by minimizing or overcoming challenges. The study was guided by four objectives.1) To identify the current level of organizational support, 2) To identify the relationship between Perceived Organizational Support and Women Career Development, 3) To investigate the impact of Perceived Organizational Support on Women Career Development and 4) To identify the most supportive factor for Women Career Development. Merely this was a survey conducted based on secondary level female employees in divisional secretariats in Kandy district and 331 taken as sample and used stratified random sampling method to select a representative sample and random number method for generating random sample. This study found that there is a significant positive correlation between Perceived Organizational Support and Women Career Development. In addition to that there is a significant impact of supervisor support, Organizational Rewards, Coworker support on Women Career Development and supervisor support is the most supportive factor for the Women Career Development in selected organizations. Following the results, the study concluded that Perceived Organizational Support has a significant impact on Women Career Development. However, programs should be built within the organizations that enhance the mutual quality relationship between the supervisor and secondary level female employees in divisional secretariats in Kandy district.

Keywords: Perceived Organizational Support (POS), Women Career Development (WCD), Supervisor Support, Organizational Reward, Organizational Justice, Coworker Support

1. INTRODUCTION

1.1. Background of the Study

Globally, female labor force participation has been one of the most remarkable economic developments of the last century. Although it has shown a declining trend in recent years in the 21st century, approximately 50% of women participate in the labor force. It was 47% in 2020 (Catalyst, 2020). A distinctive feature that can be seen today is the absence of considerable gender bias in terms of qualifications to perform the same job. In Sri Lankan context female

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labor force participation was 32% in 2020 and the participation rate of females in the labor force is gradually increasing according to their level of education. 12% of male and 20% of female employment in the public sector evidenced that the majority of the public sector in Sri Lanka is made up of female employees (Labor force survey report, 2020). Census of public and semi government sector employment reports in 2016 evidenced that the majority of degree holders are female (male 11%, female 25%) and professionally qualified than male employees. However, if Women have the ability and desire to pursue a career and a higher position of their choice, they face different challenges from choosing a career to pursuing a career path. Especially in working life, Women face more challenges coming from internal sources such as individual factors as well as external sources such as organizational factors, cultural factors, and social factors. But there are factors that can contribute to career development by overcoming or minimizing the impact of those challenges.

1.2. Problem Statement

Working Women face many challenges in the world related to difficulties and shortcomings associated with their career development. Toughest challenges for working Women worldwide are work family balance, unequal pay, and lack of good paying jobs. (ILO-Gallup, 2017) Women may also be discriminated in Sri Lanka at the point of the job adverts that ask only for male candidates. Some companies still continue to look for only male applicants to fill certain vacancies, especially certain top level management positions (Daily Mirror, 2017). One of its consequences is that still low representation of women in top level position. Globally Women in senior management role were 29% (Catalyst, 2020). In Sri Lankan context female contribution as mangers, senior officials to the total employment were 27% (LFSR 2020) when consider divisional secretariats in Sri Lanka, the divisional secretary (SLAS grade 1 officer) holds the highest position in organizational hierarchy. Even though Female participation is higher than male in divisional secretariats, female officers holding the position of divisional secretary still lower compared with male officers.

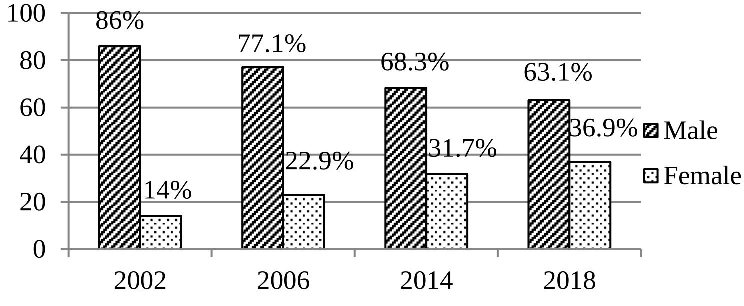

Figure 1.1: Divisional Secretaries by sex and year

Source: Department of census and statistics' website

According to a pilot survey 2021, criticism and threats from certain parties, Work life balance and securing jobs are challenges faced by majority of female employees in divisional secretariats in Kandy district. One of respondents said that it is very hard to deal people with different attitudes and most of the job satisfaction is based on the attitudes of the chief. A significant number of respondents confirm that it is difficult to adapt quickly to technological changes in the workplace. They have also mentioned that the career development is a big challenge for them because of the challenges, issues faced by them. Providing evidence for its negative consequence, Table 1 shows the gender gap at the highest position in organizational hierarchy. That is female officers holding divisional secretary relatively very low compared with male officers from 1990 to date.

Table 10: Divisional secretaries by Gender

Divisional secretariat	Male	Female	Divisional Secretariat	Male	Female
Udapalatha	8	1	Panwila	9	3
Kandy four Gravets & Gangawatakorale	7	1	Doluwa	6	1
Thumpane	9	5	Ganga IhalaKorale	11	1
Harispattuwa	5	1	Madadumbara	8	0
Poojapitiya	1	6	Hatharaliyadda	7	0
Minipe	12	4	PasbageKorale	7	3
Akurana	7	2	Ududumbara	9	1
Pathadumbara	12	4	Pathadumbara	9	3

(Source: divisional secretariats websites)

Accordingly, Core research problem to be addressed in this study" is there a significant impact of POS on WCD.

1.3. Research Objectives

- To identify the current level of organizational support perceived by secondary level female employees
- To identify the relationship between POS and WCD
- To investigate the impact of POS on WCD
- To identify the most supportive factor for WCD

1.4. Significance of the Study

Number of researchers have studied the glass ceiling effect on WCD. Little amount of research has been studied on career boosting factors associated with WCD. Scarce literature exists about organizational factors that facilitate the WCD. This study identifies the impact of organizational supportive factors on women's career development so they able to climb the career ladder by overcoming or minimizing the negative impact of challenges. Hence this study will contribute to fill the knowledge gap in the area of career development for Women in Sri Lanka. This study will provide guidance on making adjustments in human resources practices to support female employees so they can achieve career success. From this study female employees will clearly identify supportive factors for their career development. Therefore, they can make future plans regarding career success with a clear idea about organizational support. It will also inspire future researchers to carry out further research in the same or related field.

1.5. Scope of the Study

This study focused on Secondary level female employees considering challenges faced by them relating to their career development and selected POS Factors to investigate its impact on WCD with reference to the all-divisional secretariats in Kandy district.

2. LITERATURE REVIEW

2.2. Theoretical Framework

2.2.1. Career Development

Career development is the life long process of fostering and cultivating the shape of the individual's working life so as to make best use of inherent talent, skills, knowledge and interests for that person's and employer's benefit and also to match it as closely as possible to other aspects of the person's life (Uduwella, et al., 2019). career development is understood not only include the development of skills and increase knowledge in the work, but also to obtain the appropriate role of the interests and talents of employees and adjustments to the working group and its norms, as well as knowledge of the values of the organization (Rande, et al., 2015) Also it is An ongoing process by which individuals' progress through a series of stages, each of which is characterized by a relatively unique set of issues, themes and tasks.(Greenhaus, et al., 2019, p.13) Accordingly career development can be defined as a continuous process of building one's capabilities that suit oneself as well as the organization by moving through different characterized stages so that can reap benefits not limited to him/her selves.

2.2.2. Overview of the Women Career Development

Women states in the labor market is significantly worse than men and women have less opportunities to be employed, start a business or move up the corporate ladder (Perera, et al.,2018) even if they are work as men, Women face numerous obstacles in their career development (Bombuwela, et al.,2013) Because of the barriers they face, women career advancement is more complicated than men (Broadbridge, et al., 2015). Women face career blockage at a much earlier stage than men and as Women move up the corporate ladder, they regularly experience the glass ceiling (Husna,2015**).** Glass ceiling" is a term that signifies a diversity of barriers that prevent qualified females from advancing higher in their organizations (Gunawardena, 2017**)**. In Sri Lankan context economy has evolved, the glass ceiling effect still exists in many companies, preventing Women from progressing up the career ladder and preventing Women from advancing their career (Uduwella, et al., 2019**)**. Even though the glass ceiling remains the barrier to WCD, some Women have succeeded in climbing the corporate ladder to the upper level (Jayathilaka, 2016**)**.

2.2.2.1. Challenges/barriers Associated with Women Career Development

Table 2: Challenges Associated with WCD

Source	Category	Challenges /barriers
Alsharif, 2018	1. Cultural Factors	Gender-role stereotypes and attitudes, Traditionalism and tribalism, Gender segregation discrimination
	2. Family Factors	A lack of Cooperation, Dominance of male, Family – Work balance
	3. Individual Factors	Lack of ambition, Lack of power, Lack of confidence
	4. Organizational Factors	Unequal advancement opportunities, Gendered organization system, Lack of training and coaching
	5. Geographical Factors	Extra time, Long Distance, Career immobility
	6. Economic Factors	An inadequate income, Inappropriate reward and incentives, Inadequate working conditions
	7. legal and constitutional	Lack of Women protection law, Absence of comprehensive development plan
Uduwella et al., 2019	1. Family Factors	Child Care, Elder Care, Spouse Care, House Work
	2. organizational Factors	Management Policies and practices, Senior Management Beliefs, Organizational Structure
	3. Cultural Factors	Attitudes and behaviors, Male dominate culture
Bombuwela et al., 2013	1. Individual Factors	Lack of confidence, personal traits and inability to sell themselves
	2. Family Factors	Childcare, house work
	3. organizational Factors	Organizational policy, management style
	4. Cultural Factors	Beliefs and stereotype
Jayathilake, 2016	1. Situational Factors	Organizational working environment, negative perception and stereotypes, commitment to career constitute, lack of support by people, pay attention to say at meetings, coping with new technology and organizational encourage women for leadership positions
	2. Cultural Factors	Corporate culture
	3. Personal Factor	Barriers in organizational support, number of task and working load, nearest colleagues and friendship and lack of fellow manager's support.

The challenges faced by Women relating to their career development can be categorized in to major areas. Different researchers used different categories in their study and individual factors, organizational factors, family factors and cultural factors can be seen as common categories. Based on (Bombuwela, et al., 2013; Jayathilake, 2016; Uduwella, et al., 2019) can be identified as the main areas where barriers arise related to WCD in Sri Lanka. Therefore, Individual factors, Organizational factors, family factors and cultural factors reflect the individual barriers coming from themselves, organization, family and culture respectively.

2.2.2.2. Career Boosting Factors Associated with Women Career Development

Career boosting factors mean factors that improve Women careers in some way. Positive factors have a supporting and/or advancing effect on WCD and these so-called career boosting factors (Muoniovaara, et al.,2015). Family-friendly policies, Time off work, Career development program, Training and challenging work as possible organizational practices that would be supportive of Women career advancement. That top-level Women have more likely or probability to gain career advancement when the organization policy and management styles are a support to them. Furthermore, highlighting Individuals' skills, tenure, hard work, reputation and performance, Mentorship and supportive work relationships, Supervisor and peer relationships, effective networking relationships have a positive effect on career advancement (Afande, 2015).

2.2.3. Perceived Organizational Support (POS)

POS is defined as a general belief in which employees feel that their organization values their contributions and cares about their well-being (Krishhan, et al., 2012). organizational support is employee's perception about how much their organization provides them support in difficult situations performing various Tasks (Khan, 2017). This is a perception or judgment of how much support an employee feels or thinks an organization provides to him or her (Beheshtifar M, et al., 2012**)**. POS is also valued as assurance that aid will be available from the organization when it is needed to carry out one's job effectively and to deal with stressful situations. (Robert, et al., 1986**).**

2.2.4. Theory of Perceived Organizational Support

Organizational Support Theory 1986

The development, nature and outcomes of POS are considered in organizational support theory. It describes how POS produces positive outcomes for workers and organizations. According to the theory, employees perceive their organization to have a favorable or unfavorable attitude toward them, which is expressed in the treatment they receive. Employees develop POS to meet socio emotional needs and to determine the organization's tardiness to reward increased efforts made on its behalf. The basis of organizational support theory is the exchange relationship between employee and organization. POS evolves over time as a result of multiple exchanges between employees and their employer overtime and reflects the extent to which employees perceive their organization values their contribution, respect them and care about well-being.

2.2.5. Antecedents of perceived organizational support

Based on organizational support theory, there are favorable treatments that employees receive from the organization. Eisenberger, et al. (2002) suggest fair organizational procedures, supervisor support, and rewards and job conditions as antecedents of POS. In addition to that following table 3 shows the other factors of perceived organizational support.

Table 3: Factors of Perceived Organizational Support

Ahmed et al., 2012	Management support, supervisor support, coworker support
Thasika Y, 2020	Leader-Member exchange, Satisfaction with the pay system, Working conditions, supervisor support, organizational rewards, procedural justice, Career opportunities, fairness, organizational rewards and favorable job conditions.
	Participation in decision making, the fairness of rewards, and growth opportunities, Interactive justice, Appropriate HR practices, Tangible Rewards, Supervisor support

2.2.5.1. Supervisor Support

The supervisor support refers to the extent to which employees believe their supervisors value their contributions, offer assistance and care about wellbeing (Burns, 2016). There are many types of supervisor support. Supervisors give their emotional support in the form of sympathy, caring, comfort and encouragement. (Pohl, 2017). When employees perform their tasks, the supervisor gives their instrumental support by providing assistance through tangible aid or services (Samsudin, et al., 2019). And also, supervisors provide their support by providing timely information and feedback on employee performance (Kumar, et al., 2018).

2.2.5.2. Organizational Rewards

Organizational rewards are the financial and non-financial benefits and psychological benefits that organizations provide their employees in return for their contributions and efforts. (Victor J, et al., 2017). It is also defined as anything that an employee receives extrinsically or intrinsically as services they provide or as a result of the work they do for the organization (Francis, et al., 2020). As an example, Basic payments, job promotion, retirement benefits, medical allowances etc. are considered as extrinsic rewards and recognition, training and skill development, work freedom and independence etc can be taken as intrinsic rewards (Salah, et al., 2016).

2.2.5.3. Organizational Justice

Organizational Justice is defined as Employee perception of fair treatment by their organization (Arneguy, et al., 2018). There are mainly three types of justice called distributive justice, procedural justice and interactional justice. The fairness of decisions related to distribution of resources within an organization considered as distributive justice (Yean, et al., 2016). The procedural justice indicates fairness of decision-making procedures in organization (Yadev, et al., 2017) and Organizational interactional justice reflects the equality in supervisor subordinate relationship (Nidhi, 2016).

2.2.5.4. Coworker Support

The work-related assistance, encouragement and sustainment provided by colleagues in the workplace is referred as coworker support. The support from coworkers is received in a socio-emotional way such as providing care, empathy and love rather than providing information and assistance related to the task (Loi, et al, 2014).

2.3. Conceptualization of the Research s Model

Through an extensive literature review, the researcher identified several factors under the POS and the researcher was selected supervisor support, Coworkers support, organizational rewards and organizational justices as dimensions of perceived organizational support. Conceptual framework of the study describes and elaborated network of associations among the variables. Accordingly, researcher derived the conceptual framework as follows.

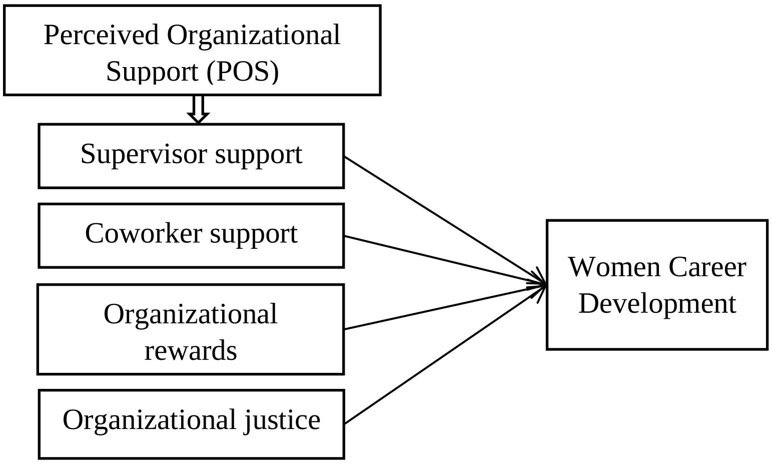

Figure 2: Conceptual model

Independent variable

In this study POS may impact as independent variables and under POS, factors such as supervisor support, organizational rewards, organizational justice and coworker support were considered by researcher POS to determine the impact of POS on WCD.

Dependent variable

According to present study WCD is considered as a dependent variable that depends upon the perceived organizational support. Researcher was used new dimensions for WCD namely present satisfaction, Career orientation, future Aspiration ((Verma, 2018)) for measure the WCD

2.4. Hypothesis

Hypotheses are derived to test the association between independent variables and dependent variable based on the conceptual framework. The developed hypotheses are as follows

1) H0: There is no significant impact of supervisor support on WCD
   H1: There is a significant impact of supervisor support on WCD
2) H0: There is no significant impact of organizational rewards on WCD
   H1: There is a significant impact of organizational rewards on WCD
3) H0: There is no significant impact of organizational justice on WCD
   H1: There is a significant impact of organizational justice on WCD
4) H0: There is no significant impact of coworkers' support on WCD
   H1: There is a significant impact of coworker support on WCD

3. METHODOLOGY

3.1. Research Design

A research design is a blueprint or plan for the collection, measurement and analysis of data, created to answer the research question. According with the basic components of a research design (Sekaran, 2003) purpose of this study was to identify the impact of POS on WCD in divisional secretariats in Kandy district. This research is being carried out in order to identify and describe the characteristics of the variables of interest in a particular situation. Therefore, this is a descriptive study. The type of investigation was correlational because there is a small disruption to the normal flow of work in the system as the researcher collect information by interviewing employees through questionnaires. According to the (Sekaran, 2003) The studies done in a non-contrived setting are called field study and studies conducted to establish cause and effect relationship in a natural environment relevant to the employees, consumers, managers etc. are called field experiments. Therefore, this is field study and also field experiments. In this study data was collected from secondary level female employees in divisional secretariats within a particular period of time. Hence this study is a cross sectional study. The data was gathered from each individual of female employees. Therefore, the unit of analysis in this study is individual.

3.2. Population, Sample, Sampling Technique and Sampling Frame

The target population of this study was 2321 of secondary level female employees in divisional secretariats in Kandy district. Based on Krejcie and Morgan table, 331 taken as sample and used stratified random sampling method to select a representative sample. Under that used random number method for generating random sample

3.3. Operationalization

Table 3: Operationalization

Concept	Variable	Indicators	Measure
Perceived organizational support	Supervisor support	• Emotional support • Instrumental support • Informational support • Appraisal support	5 point Likert Scale
	Organizational Rewards	• Compensation • Training & career development programs • Recognition • Autonomy	
	Organizational Justice	• Fair distribution of rewards • Fair decision-making procedure • Fair treatment of Senior officials	
	Coworker support	• Coworker emotional support	

		• Coworker instrumental support
WCD	Career orientation	• Self-direction • Organizational orientation
	Present Satisfaction	• Satisfaction with the chosen job • Satisfaction with the career achievement • Satisfaction with the support from organization
	Future aspiration	• Competencies based aspiration • Top position-based aspiration

3.4. Data Collection

3.4.1. Primary Data Collection

The survey questionnaire is the most common method for primary data collection. It is an efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran U, 2003). Accordingly, a self-administered questionnaire method was used for the survey data collection.

3.4.2. Secondary Data Collection

Secondary data is the data that have been already collected through primary sources and readily available from other sources. In this study, secondary data was collected from online journals, E books, Annual performance reports, Statistical Reports, Newspaper articles and Websites

3.5. Data presentation and Analysis

The gathered data through questionnaires was used in this stage. The bar charts and table were basically used to present the data. The analysis was done by using statistical packages for the social science (SPSS) and Descriptive Analysis, Correlation Analysis and Regression Analysis were used as analytical techniques.

4. RESULTS

4.1. Response Rate

The response rate is the percentage of respondents who respond to the survey from the selected sample. Having a strong response rate is very important because it is a factor that determines the statistical power of the collected data and realism of the final conclusion accordingly. Generally, 310 out of 331 had responded to the questionnaire. Therefore, response rate identified as 94% (310/331*100) and it can be considered as an acceptable strong response rate.

4.2. Reliability Analysis

Testing of reliability is very important because it indicates how well the items which used to measure the variable are positively correlated to one another. With the purpose of testing the reliability of the questionnaire, pilot study was conducted among 33 female employees to cover the secondary level female employees in 20 divisional secretariats in Kandy districts. Finally, it can be concluded from the reliability analysis of the pilot survey data that the questionnaire is at a sufficient level of reliability.

Table 4: Reliability analysis

Variable	Cronbach's Alpha	Decision Rule	Reliability
Supervisor Support	.871	.871> .7	Acceptable
Organizational Reward	.702	.702> .7	Acceptable
Organizational Justice	.795	.795 > .7	Acceptable
Co-worker Support	.953	.953> .7	Acceptable
POS	.899	.899> .7	Acceptable
WCD	.709	.709> .7	Acceptable

Source: Researcher constructed 2021

4.3. Descriptive analysis

4.3.1. Frequency Distribution of Demographic characteristics

Analysis of demographic profiles evidenced that the majority of respondents are in the age group of 36-45 years. It is 47.4%. 86.5% of respondents are married. 47.1% are degree holders and most of the respondents are development officers. It is 35.84%. 62.6% of respondents are working under divisional secretariats and 63.9% are working under the current position for more than 6 years.

4.3.2. Measures of Central Tendencies

Table 5: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
SS	309	3	5	4.07	.500	.250
OR	309	2	5	3.68	.505	.255
OJ	309	3	5	3.97	.507	.257
CS	309	3	5	4.11	.557	.310
POS	309	3	5	3.96	.392	.153
WCD	308	3	5	4.03	.442	.195
Valid N (listwise)	308					

Source: Researcher constructed, 2021

Five (5) point Likert Scale ranging from Strongly Disagree (1) to Strongly Agree (5) was used as the response scale. According to the mean value as depicted in the Table 5, supervisor support (SS) received from organization higher than support through organizational reward (OR). Organizational justices (OJ) little bit higher than organizational rewards and mean value of coworker support (CS) reflects the way of highest support received from organization. Generally, mean value of POS was 3.96, which indicates that the current level of organizational support at a higher level.

4.4. Correlation analysis

With the aim of analyzing the nature, direction, and significance of the bivariate relationships of the variables, obtain Pearson correlation matrix. Table 6 shows that the Supervisor Support and Organizational Reward correlate with WCD and statistically significance at the 0.01 level with a Pearson correlation coefficient of 0.68 and 0.60 respectively. Those indicate a positive strong relationship with WCD. Organizational Justice and Coworker support also significantly correlated to the WCD and the coefficient value of 0.40 and 0.42 indicate positive moderate relationship with WCD.

Table 6: Correlation analysis

		SS	OR	OJ	CS
WCD	Pearson Correlation	.683**	.606**	.405**	.421**
	Sig (2-tailed)	.000	.000	.000	.000

Source: Researcher constructed, 2021

4.5. Regression Analysis

The Multiple Regression analysis used to predict the value of dependent variable based on independent variables.

Table 7: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.731[a]	.535	.528	.303

Source: Researcher constructed, 2021

Table 8: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.044	4	8.011	86.991	.000[b]
	Residual	27.903	303	.092		
	Total	59.947	307			

Source: Researcher constructed, 2021

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.964	.179		5.395	.000
	SS	.393	.048	.445	8.237	.000
	OR	.211	.047	.239	4.518	.000
	OJ	.059	.039	.067	1.495	.136
	CS	.112	.035	.141	3.219	.001

Source: Researcher constructed, 2021

As depicts in Table 4.4 and Table 4.5, R square statistics is 0.535 with a statistical significance of $p<0.05$. This suggests that 53% of the variance in the WCD was predicted by selected POS factors. Selected factors of POS significantly predict the WCD as $F (4, 303) = 86.991$, $P< 0.05$.

4.6. Hypotheses Testing

As per the test results depicted in Table 4.6, except hypothesis three (3), other proposed hypotheses were accepted as data did not support the null hypotheses.

H1: There is a significant impact of supervisor support on women’s career development

Unstandardized Beta Coefficients value (0.393), $P <0.05$, depicts that significant impact of Supervisor support on WCD.

H2: There is a significant impact of Organizational Reward on women's career development

Unstandardized Beta Coefficients value (0.211), $P < 0.05$, depicts that significant impact of Organizational reward on WCD.

H3: There is a significant impact of Organizational Justice on women's career development.

Unstandardized Beta Coefficients value (0.059), $P > 0.05$, depicts that non-significant impact of Organizational justice on WCD

H4: There is a significant impact of coworker support on women's career development

Unstandardized Beta Coefficients value (0.112), $P <0.05$, depicts that significant impact of coworker support on WCD

5. DISCUSSION AND CONCLUSION

5.1. Findings and Discussion

The first objective of this study was to identify the current level of organizational support. Based on results identified that current level of organizational support at a high level. Among, supervisor support and coworker support were found to be higher than organizational reward and justice. The second objective was to identify the relationship between POS and WCD. The findings of the study revealed that the Supervisor Support and Organizational Reward have a positive strong relationship and Organizational Justice and Coworker support have a positive moderate relationship with WCD. This has something similar with the previous research (Afande, 2015) which identified supervisor and peer relationship as a positive factor. Generally, there was a significant strong positive relationship between the POS and WCD after all the inter correlations are taken into account. The third objective was to investigate the impact of POS on WCD. Accordingly results of hypotheses testing reveled that supervisor support, organizational reward and coworker support have a significant positive impact on WCD and organizational justice has a non-significant positive impact on WCD. Final objective of the study was to investigate the most supportive factor for the WCD. Based on findings identified that supervisor support as the most supportive factors for the career development of secondary level female employees in divisional secretariats in Kandy district.

5.2. Conclusion

Working women face career development challenges and certain factors contribute to the WCD by overcoming or minimizing negative impact of those challenges. Hence the main objective of this study was to find out the impact of perceived organizational support on career development of secondary level female employees in divisional secretariats in Kandy district. Findings showed that Organizational support factors have more than 50% influences on WCD compared to other factors and the supervisor support, organizational reward and coworker support provide significant contribution for the women career

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development. However, supervisor support is the most supportive factor for their career development. Accordingly, the supervisor support will help secondary level female employees in divisional secretariats in Kandy district to climb up their career ladder successfully.

5.3. Recommendations

This study found that Supervisor support is the most supportive factor for the career development of female employees. Hence organization should improve organizational support system to further enhance the mutual relationship between the supervisors and these employees. Programs should be implemented within an organization so that close supervision can be done and they can be better evaluated. Also, supervisors need to identify the career development challenges faced by them and assist them in the form of instrumental, emotional, informational and appraisal ways so that they can climb up the career ladder. According to the nature of the job of the majority of them, they have to perform their duties outside the organization. Therefore, supervisor need to consider the challenges they face in such a situation and should always be given the supervision as they need to perform their duties properly. And also, these employees should always work to maintain an effective relationship with the supervisor

5.4. Limitations

Although many factors of POS have been identified, only four variables have been considered in this study. So, it is very important to observe other factors also. Because of Covid 19 situation in the country, here had to collect data online through a Google form. There was a problem with the authenticity of the information provided. Because some respondents were afraid to respond to the questionnaire.

The study was based solely on secondary level female employees working in the divisional secretariats in one of the districts of Sri Lanka due to practical information retrieval issues. Therefore, the findings will be applicable only for selected employee categories in the selected area.

5.5. Suggestions for Future Research

The findings of the study showed that organizational justice does not have a significant impact on Women career development. Future researchers can focus on the career development of Women working in another organization or same institution in another area and study whether this variable has a significant impact on Women career development. It is better to conduct the same study in relation to other organizations as well. Although the effects of four variables are studied here, future researchers can also study the effects of other sub variables on WCD

REFERENCES

Afande, F. O. (2015). Factors Affecting Career Development of Women Employees in the Banking Industry in Kenya, *Research on Humanities and Social*, *5*(5), 2224-5766.

Ahmed, I., Salmiah, W. K. W., Amin, S. M., Ramzan, M., & Khan, M. K. (2012). Theorizing antecedents of Perceived Organizational Support: A Literature Review Approach, *Middle East Journal of Scientific Research*, *12*(5), 692-698,DOI:10.5829/idosi.mejsr.2012.12.5.

Alsharif, S. A. (2018). The Challenges Associated with WCD at the State Universities in Saudi Arabia: A Ground Theory Approach,*International Journal of Gender and Women Studies.*

Arneguy, E., Marc, O., Florence S. (2018). Organizational Justice and readiness for change, A concomitant change examination of the mediating role of POS and identification, doi: 10.3389/fpsyg.2018.01172

Beheshtifar, M., Ali-Nezhad, H., Moghadam, M. N. (2012), Investigation of POS on Employees Positive Attitudes toward work, Interdisiplinary *Journal of Contemporary Research in Business*

Bombuwela, P.M., and De Alwis, A. C. (2013). Effects of Glass Ceiling on Women Career Development in Private Sector Organizations – Case of Sri Lanka, *Journal of Competitiveness*, *5*(2), 3-19

Broadbridge, A. M, Fielden, L. S. (2015). *Handbook of gendered careers in Management: Getting in, Getting on, Getting out*, Edward Elgar publishing Limited, UK

Burns, K. (2016). Perceived Organizational Support and Perceived Supervisor Support as Antecedents of Work Engagement. doi: 10.31979/etd.8hf7-dh9p

Catalyst. (2020). Statistical Overview of Women in Global Workplaces: Catalyst Quick Take. [online] Available at: <https://www.catalyst.org/research/Women-in-theworkforce-global/>

Catalyst. (2020). Women Business Leaders: Global Statistics. [online] Available at: <https://www.catalyst.org/research/Women-in-management/>.

Dailymirror. (2017). Sri Lanka needs more Women in workforce - Columns | Daily Mirror. [online] Available at: https://www.dailymirror.lk/Columns/Sri-Lanka-needsmore-Women-in-workforce/235-136064

Eisenberger, R., Linda, R., &Vandenberghe, C. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention, *Journal of Applied Psychology*. 87(3), 565-573, DOI:10.1037//0021-9010.87.3.565.

Francis, F., Zirra,C., & Charles J., M. (2020). Reward System as a Strategy to Enhance Employees' Performance in an Organization. *Archives of Business Research*, 8(6), 156-164. doi: 10.14738/abr.86.8403

Greenhaus,G, Callanan A, Godshalk V M, (2019), *Career Management for life* ,5th edition, Routledge. Newyork

Gunawardana, K. (2017). Women Participation in Senior Management Positions in Licensed Commercial Banks in Sri Lanka. *SSRN Electronic Journal*. doi: 10.2139/ssrn.2932679

Jayathilake, L.V.K, (2016). Women Managers and their Perceived Barriers for Upward Mobility in Public and Private Sectors with Special Reference to the Selected Services in Sri Lanka. *International Journal of Research and Innovative Technology*, *3*(2)

ILO-Gullup Report. (2017). Towards a better future for women and work: Voices of women and men

Kholis, N. (2017). Barriers to Women career Advancedment in Indonesian Academia: A Qualitative Emperical Study, *Advances in Social Science, Education and Humanities Research. 66*

Krishhan, J. & Mary, S., (2012), Perceived Organizational Support – An Overview on its Antecedents and Consequences, *International Journal of Multidisciplinary Research. 2*(4)

Kumar, M., Jauhari, H., Rastogi, A, Sivakumar, S., (2018). Managerial support for development and turnover intention: roles of organizational support, work engagement and job satisfaction, *Journal of Organizational Change Management*, https://doi.org/10.1108/JOCM-06-2017-0232

Loi, R., Ao, O., & Xu, A. (2014). Perceived organizational support and coworker support as antecedents of foreign workers' voice and psychological stress. *International Journal of Hospitality Management*, 36, 23-30. doi: 10.1016/j.ijhm.2013.08.001

Muoniovaara, M., &Turunen, S. (2015). Women's Career Development: A Case Study of the Career Paths of Female Middle Managers at Banks in Sweden, *Jonkoping International Business School Bachelor's Thesis Spring.*

Nidhi, N., Kumari, K. (2019). Interactional Justice: A key to Organization Citizenship Behavior, *International Journal of Pure and Applied Management Science*, 22-28

Perera, M.I.D, Thayaparanb, A. (2018). Factors affecting career advancement of top-level women in local banks in Colombo district.

Pohl, S., &Galletta, M. (2017). The role of supervisor emotional support on individual job satisfaction: A multilevel analysis. *Applied Nursing Research*, *33*, 61-66. doi: 10.1016/j.apnr.2016.10.004

Rande, S., Rahawarin, Y., Jamaluddin, A. and Zacharias, T., (2015). Factors affecting the career development of employees in secretariat office of city. *International Journal of Scientific & Technology Research*, *4*(3).

Robert, E., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support, *Journal of Applied Psychology*,*71*(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500.

Salah, M. (2016). The Influence of Rewards on Employees Performance. *British Journal of Economics, Management & Trade*, 13(4), 1-25. doi: 10.9734/bjemt/2016/25822

Samsudin, A., Ismail, A. (2019). The impact of Supervisor Support towards Extra-Role Behavior. *International Journal of Recent Technology and Engineering*, 8(4), 5109-5113. doi: 10.35940/ijrte.d8318.118419

Sekaran, U. (2003). *Research Method for Business: A Skill Building Approach*, 4th edition, John Wiley and Sons.

Thasika, Y. (2020). Factors of perceived organizational support: A conceptual study, *Research Conference on Business studies.*

Uduwella, U. and Jayatilaka, M., (2019). Impact of glass ceiling on WCD in non-state banking sector in Colombo. *Tropical Agricultural Research*, 30(3), p.106.

Verma, S. (2018), Examining the new dimensions of career advancement of Women employees, *Global Business Review, 21*(2), doi:10.1177/0972150918780757

Victor, J., & Hoole, C. (2017). The influence of organizational rewards on workplace trust and work engagement. *SA Journal of Human Resource Management*, 15(0). doi: 10.4102/sajhrm.v15i0.853

Yadav, L., & Gupta, P. (2017). Procedural Justice, Job Satisfaction and Organizational Citizenship Behaviour: Mediating Role of Organizational Trust—Indian Tourism Industry Study. Management AndLabour Studies, 42(3), 275-292. doi: 10.1177/0258042x17718738

Yean, T., & Yusof, A. (2016). Organizational Justice: A Conceptual Discussion. *Procedia - Social and Behavioral Sciences*, 219, 798-803. doi: 10.1016/j.sbspro.2016.05.082

Impact of Microfinance on Financial Performance SMEs: with Special Reference to Kurunegala District in Sri Lanka

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ABSTRACT

Small and Medium Enterprises (SMEs) can be identified as an invaluable turning-point of all the economies. It plays a major role by driving economic growth, regional development, and employment generation. Even though SMEs contribute to the economy in various aspects, they confront a broad array of business problems due to their operating conditions and some distinctive characteristics. Lack of finance is the major problem that they continuously face. In order to overcome this problem, the microfinance concept was established. However, when discussing the concept of SMEs, microfinance cannot be eliminated because these terms are interrelated. Thus, this study aims to examine the impact of microfinance on the financial performance of SMEs in the Kurunegala district. However, the existing literature is not sufficient to identify the impact between microfinance and the financial performance of SMEs. A vast number of studies establish mixed results, and in Sri Lanka, only a few studies are found. Therefore, the study aims to address the current gap in literature findings. In this study, microfinance is measured by microcredit, micro-savings and training programs, while financial performance is measured by net profit and return on assets. The data was collected through a well-structured questionnaire distributed via google forms. The convenience sampling method was used to select the participants from SMEs in the Kurunegala district. Although 150 questionnaires were distributed among the SMEs, only 130 SMEs responded. Descriptive analysis, ANOVA, correlation analysis and regression analysis were used to analyze the data by SPSS. Moreover, microfinance (Microcredit, micro saving and training programs) shows a significant positive impact on the financial performance of SMEs in the Kurunegala district.

Keywords: Financial performance, Microfinance, SMEs

1. INTRODUCTION

Small and Medium Enterprises (SMEs) have been recognized as one of the key drivers of economic growth and the promoter of the equitable development of all countries (Christopher, 2010; Olowe, Moradeyo, & Babalola, 2013; Gamage, 2003)**.** There are various terms used to recognize SME in the literature, such as small & medium industries or enterprises, micro-enterprises, rural enterprises, small & medium activities, cottage and small-scale industries, etc. (Gamage, 2003). SMEs are recognized as the backbone of the country. They play a critical and strategic role in driving strong economic growth, social development, job creation, and regional development (Olowe, Moradeyo, & Babalola, 2013). In addition, many SMEs play a crucial role in linking the supply chain with a large industry or the service sector (Ramawickrama, 2011). Thus, the role of SMEs is overlooked in every economy.

According to the estimation, more than 500,000 SMEs in Sri Lanka employ three to five people on average. Moreover, according to recent research work, SMEs contribute to 45% of employment and 75% of the total enterprises in Sri Lanka (CMA Sri Lanka, 2018). Many people start their SMEs using traditional activities such as agriculture, floriculture, handicrafts, rice milling, production of food items, textiles products, fibre, cane, and clay-based products, etc.

Though SMEs add value to the economy in various ways, it has to face a wide range of business problems due to their operating conditions and some specific characteristics such as lack of finance, lack of managerial skills, lack of IT access, ineffective leadership, time management problems, inadequate infrastructure, economic conditions, government rules and regulations, competition, etc. Among these factors, lack of finance is a major influential problem that most SMEs have to face in every country (Christopher, 2010).

SMEs' financing sources can be mainly categorized into two parts: internal sources and external sources. The common internal financing methods are own money and borrowed money from family, friends, relations or neighbours (Pei-Wen et al., 2016). Nevertheless, there are many external sources of financing this sector, such as business angle, trade credit, leasing, bank finance, venture capitalist and listing, (ACCA , 2019).

According to the literature, several reasons are affected to limit their financial access, such that SMEs have fewer collaterals, limited financial reports, weak financial literacy, and poor internal and external controls. As a result, there is a negative attitude on investors in investing in SMEs because they are worried about how their funds will be used and the amount of returns they could earn. Therefore, the sources of financing of SMEs are rare and difficult to find when compared to the large scale of businesses (Pei-Wen et al., 2016).

To solve this problem, microfinance is a highly advantageous to the SME sector. Microfinance, as an emerging trend in the financial industry, plays a critical role in today's globalized society. Microfinance institutions (MFIs) play an important role in Sri Lanka's urban and rural communities, providing a variety of financial as well as non-financial services (Rajapakshe, 2021). Microfinance is not merely banking; it is a development instrument (Mbugua, 2010). People who have faced different financial difficulties are highly concerned about microfinance facilities because they consist of financial services such as savings, credit fund transfer, insurance, pension remittances, etc. In addition, some MFIs provide non-financial services such as group formation, development of financial literacy and self-confidence, marketing, and improvement of technology for SMEs. On the other hand, microfinance services are a compulsory component of attaining success compared to other financial sources for SMEs.

2. LITERATURE REVIEW

2.1 Theoretical Review

Most of the research are based on the theoretical concepts due to their high impact. The current study also follows the definitions and key theories in microfinance and SMEs.

2.1.1 Microfinance

Though microfinance is typically found in emerging and developing countries, there is no exact definition to describe the concept of microfinance. Thus, it varies with the thoughts of different persons, countries, and organizations. Microfinance provides a wide variety of financial services, including savings, loans, payments services, micro leasing, and money transfer to the low-income people for their SMEs (Rathnayake, Fernando, & Fernando, 2019).

Khan & Rahaman, (2007) mentioned that most people think that the concept of microfinance is only considered about micro-credit, which is lending a small amount of money to low-income earners. But the author neglected that idea absolutely, and the author said that microfinance not only highlighted the concept of micro-credit but also has a broad perspective that includes micro insurance, transactional services, and especially micro-savings. Microfinance is not only this, but it also has a broader perspective which also includes insurance, transactional services, and importantly, savings. Khan & Rahaman, (2007)

According to the literature, there are different kinds of microfinance products and services described by the researchers. Microcredit, micro saving, micro insurance, and training programs are important among these products and services.

This study is based on some theories which have been presented to provide awareness for the association of the concept of microfinance. The Games Theory of Microfinance supports the group lending among microfinance institutions, and it is based on the Grameen lending model founded on group participants between four to seven who can borrow credit (Omondi & Jagongo, 2018). Women Empowerment Theory stated that one strategy to promote women's empowerment is to provide them with access to microfinance services (Huis et al., 2017).

2.1.2 Small and Medium Enterprises

There is no universally accepted unique definition for SMEs. Therefore, different countries and different organizations use various definitions to define SMEs according to their own perspectives. As a base, commonly use the number of employees, annual turnover and size of capital to define it.

Small and medium-sized companies (SMEs) are defined as enterprises with an employment of 10 to 250 workers in the majority of countries. Micro businesses are defined as businesses with fewer than ten employees (World Trade Organization, 2016).

SMEs are specified by the European Union, if they have a turnover not more than EUR 50 million and less than 250 employees, a balance sheet total of less than EUR 43 million and if not more than 25% of the shares of such an enterprise are owned by other enterprises.

Premaratne, (2002) has mentioned that there are some definitions used by various organizations to describe SMEs in Sri Lanka. The Department of Census Statistics (DCS) has described that to be a SME, there should be less than 25 employees and no criterion involving capital. The Ministry of Youth Affairs noted that the value of fixed assets not exceeding Rs 500,000 and not more than 3 employees should be worked to be a SME.

Different theories provide the theoretical background for a firm's decisions on the justification for their choice of financing sources. In simple terms, the Pecking order Theory describes how organizations seek financing for their business activities (Ibe et al., 2015). The Trade-off Model describes that usually, firms finance their need partly from debt and partly from equity (Madole, 2013).

2.2 Empirical Review

2.2.1 Micro credit

There is no specific definition declared the concept of micro credit and different authors mentioned their ideas related to micro credit in various ways. Micro credit is given a small amount of loan to low-income households at a low interest rate (Kumari, Azam, & Yusof, 2019). Accordingly, Silva (2012) has defined a micro loan as a formal arrangement in which the banks give money to clients (borrowers) who should agree to reoccurrence with interest at some predetermined future date.

Rathnayake, Fernando, & Fernando, (2019) mentioned that the findings of the study showed that microcredit is positively impacted the growth of SMEs. The same results have been proved by (Kumari, Azam, & Yusof, 2019; Rathiranee & Semasinghe, 2016). SMEs are restricted from obtaining loans from conventional credit institutions due to a lack of tangible security and procedural barriers in credit borrowings, are the some of highlighted constraints of SMEs and to overcome this problem micro credit is the highly influential factor (Kumari, Azam, & Yusof, 2019)

2.2.2 Micro savings

There are two types of saving opportunities provided to clients by MFIs, such as mandatory saving and voluntary saving (Kumari, et al., 2019). Mandatory saving is borrowers should be maintained saving for the fulfilling requirements of MFIs and obtaining future loans. Voluntary saving is referred to as maintaining saving products.

Rathiranee & Semasinghe, (2016) mentioned that there was a positive impcat between micro savings on financial performance.The author also stated that micro saving is vital for enhanced financial performance and outreach, especially in rural areas where access to financial services is restricted. In the foreign context also, some authors mentioned that micro savings have a significant positive impact on the financial performance of SMEs (Omondi & Jagongo, 2018; Gyimah & Boachie, 2018; Wambui, 2015). Omondi & Jagongo, (2018) discovered that MFI savings products for SMEs have faced stiff competition in the market due to the entry of new commercial banks and downscaling of old banks. While competition may benefit SMEs by allowing them to earn higher interest rates on their savings, it may harm MFIs by reducing the revenue available to lend. Rajapakshe, (2021) elucidated this positvie impact between both variables and mentioned that MFIs should alter their capacities to assist SME saving services in order to build effective savings programs.

2.2.3 Training programs

MFIs provide some training services such as financial management training, skill development training, business planning, social capital services and enterprise development training. Those training services provide great contributions to effectively use small credit to their clients. MFIs are conducting training opportunities for their borrowers to provide 'credit plus' financial services in rural areas. These services are based on maximizing the utilization of the available resources and skills (Kumari, Azam, & Yusof, 2019).

According to the previous literature, some authors mentioned that training programs did not significantly affect the financial performance of SMEs as well as some were said that training programs were significantly affected the financial performance of SMEs. Rajapakshe, (2021) concluded that training programs are not significantly impacting the SMEs because SMEs do not participate in training programs due to a lack of time, the fact that it is quite expensive, and the difficulty in determining its relevance to the firm's needs. Aladejebi, (2019) also agreed this negative impact between both variables and concluded that SMEs who did not take part in these training programs did so because they believed they already had or could recruit the skills the SMEs required.

But (Gyimah & Boachie, 2018; Rathiranee & Semasinghe, 2016 and Wambui, 2015) found the positive impact between training programs on the financial perforamnce of SMEs.As a summary, Gyimah & Boachie, (2018) mentioned that SME incomes can be improved by well-designed training programs. As a result, MFIs must devise methods for assessing the impact of financial skills training on SMEs furthermore.

Above mentioned results cause a better understanding of the impact of microfinance on the financial performance of SMEs and also an increase in the interest in this subject. There is extensive literature on the impact between microfinance and the financial performance of SMEs concerning many countries but not sufficient studies have been done on the Sri Lankan context. The present study will attempt to fill this vacuum. Given this background, the present study investigates the impact of microfinance on the financial performance of SMEs in the Kurunegala District.

3. METHODOLOGY

3.1 Research Design

The research methodology refers to the procedures by which researchers go about their work of describing, understanding, and predicting phenomena. Research onion illustrates the several decisions that the researcher will take when developing the research methodology. Among the different philosophies in research onion "Positivism philosophy" is the most relevant one for this study. Because this study is highly objective, focus on causality relationship, generalization results, highly structured and large samples measurements are here. The most suitable approach is "Deductive" for this study. Because most quantitative research is highly connected with the deductive approach, it describes as the "Theory Testing" approach since the researcher can test theories using empirical data. The relevant strategy for this study is "Survey". Because this strategy is usually associated with a deductive approach, and it is highly quantitative. , the most appropriate choice for this study is the "Mono method". According to the mono method, a single data collection technique and corresponding analysis procedures can be used. So, the researcher uses a questionnaire to gather data and analyze it using graphs and statistics. Under the concept of time horizon, this study is based on the "Cross-sectional" study. Because here, data collection is done at one point and again and again not to distribute the questionnaire. Regarding this study, the most relevant purpose is "Explanatory" because it relates to hypothetical testing and describes the causal relationship. Typically, quantitative studies are engaged with explanatory purposes.

3.2 Population and Sample

SMEs in the Kurunegala district are the population for this study. In the Kurunegala district, there are a lot of registered and unregistered SMEs that do their operation in different sectors. For the purpose of this study, the population comprises all 86,788 SMEs in the Kurunegala district (Department of Census and Statistics; Ministry of Policy Planning; Economic Affairs, Child Youth and Cultural Affairs, 2015).

To select sample size, this study only uses 4,794 registered SMEs in Kurunegala district (Department of Census and Statistics; Ministry of Policy Planning; Economic Affairs, Child Youth and Cultural Affairs, 2015). Hence, according to the previous literature and based on the annual turnover and number of employees selected 150 SMEs by using the convenience sampling method. Furthermore, the researcher selects these 150 sample SMEs which are facilitated from microfinance services.

According to the number of employees and annual turnover, many organizations have benn categorized SMEs into small industries, medium industries as well as large scal of industries.

Table 1: Identification Criteria of SMEs

Sector	Criteria	Medium	Small
Manufacturing sector	Annual turnover	Rs. Mn. 251 - 750	Rs. Mn. 16 - 250
	No. of employees	51 - 300	11 - 50
Service sector	Annual turnover	Rs. Mn. 251 - 750	Rs. Mn. 16 - 250
	No. of employees	51 - 200	11 - 50

Source: Ministry of Industry and Commerce (2017)

Based on the number of employees, the World Bank also determines the size of small enterprises in Sri Lanka; those with fewer than 49 employees are small industries, 50-59 employees are medium industries, and those with more than

100 employees are in large scale industries (Gamage, 2003). These measurement criteria have been used to analyze the current study. Therefore, the sample consisted of agriculture, plantation, manufacturing, wholesale and retail trading, and other services SMEs under the World Bank identification criteria.

3.3 Data Collection Method

Data has been collected through primary sources and developed a well-structured questionnaire for this research. A well-structured questionnaire is the most common method to collect primary data from a reasonably large sample in research. It is prepared based on the literature information, and some questions are prepared using the details given by the expertise and the researcher's knowledge. But data had to be obtained online via emails and WhatsApp through Google form methods due to the COVID-19 pandemic and the country's subsequent lockdown in certain areas. Therefore, although 150 questionnaires were distributed to the SMEs, only 130 returned questionnaires that were valid for the analysis. So, the response rate of the study was 87%. The research questionnaire consists of four major sections. To measure both variables, the researcher has used a five-point Likert scale.

The conceptual framework implies the relationship between independent variables and dependent variables. The dependent variable is the financial performance of SMEs, and the independent variable is microfinance. According to the factors identified by the previous literature, microfinance is evaluated from microcredit, micro saving, and also training programs. The dependent variable named SMEs' financial performance was evaluated using net profit margin and Return on Assets (ROA). So, the overall research study is based on these dependent and independent variables. Based on the conceptual framework, six hypotheses can be developed as follows.

H1: Microcredit significantly impact the net profit of SMEs in the Kurunegala district

H2: Micro saving significantly impact the net profit of SMEs in the Kurunegala district

H3: Training programs significantly impact the net profit of SMEs in the Kurunegala district

H4: Microcredit significantly impact the ROA of SMEs in the Kurunegala district

H5: Micro saving significantly impact the ROA of SMEs in the Kurunegala district

H6: Training programs significantly impact the ROA of SMEs in the Kurunegala district

3.4 Data analysis methods

Under this, collected data is analyzed by using the software called Statistical Package for Social Science (SPPS 25). Data analysis is done through descriptive statistics and inferential statistics. Here, descriptive statistics are used to obtain frequency distribution, central tendency measurements, and dispersions. To test the hypothesis and identify the relationship between microfinance and the financial performance of SMEs in the Kurunegala district, the researcher used Pearson correlation and, to test the impact between variables, used multiple regression analysis. Cronbach's alpha has been used to measure the reliability.

Regression analysis is the most appropriate method to analyze the data and, in this study, the researcher used two regression analysis models to understand how the financial performance changes according to independent variables.

Regression Analysis Model 01

$$P = \beta 0 + \beta 1\, MC + \beta 2\, MS + \beta 3 TP + ę$$

Regression Analysis Model 02

$$ROA = \beta 0 + \beta 1\, MC + \beta 2\, MS + \beta 3 TP + ę$$

Where,
P = Net profit
ROA = Return on Assets
MC = Micro credit
MS = Micro saving
TP = Training program
β_0 = Constant
β_1, β2, and β3 = Coefficient of independent variables
ę = Error term

4. RESULTS AND DISCUSSIONS

4.1 Descriptive Analysis

Table 2: Descriptive analysis

	Minimum	Maximum	Mean	Std. Deviation
Micro credit	1.29	5.00	3.8495	.62696
Micro saving	2.33	5.00	3.7885	.64158
Training programmes	1.00	5.00	3.4064	.65527
Net profit	2.00	5.00	3.7750	.65285
ROA	1.67	5.00	3.7615	.67722

Source: Author's own (2021)

The standard mean value (M) of the five-point scale was 3. According to the above table 2, number of observations of each variable was 130 and it shows high mean value of micro credit was 3.8495. Since M was more than 3, the level of agreement of respondent for micro credit is relatively high. The maximum and minimum value of micro credit is 5.00 and 1.29 respectively. The Standard deviation (SD) also more than the acceptable level of 0.5, it can be said that micro credit variable is in good position.

Based on the table of 2, micro saving also demonstrated a relatively high level of response due to the mean value was 3.7885. Its standard deviation was 0.64158. It has higher minimum value than other variables, it is 2.33 and maximum value is 5.00. In here SD was more than 0.5, micro saving also in good position.

As well as 3.4064 mean value was represented by the training programmes and its SD was 0.65527. This variable was relatively high and was in good position according to the mean value and standard deviation is in acceptable level. It has lower minimum value (1.00) and its maximum value is 5.00.

According to the table 2, as a dependent variable, net profit represented 3.7750 mean value and 0.65285 SD value which was in good position. It has 2.00 minimum value and 5.00 maximum value.

The last variable is ROA and it presents mean and SD as 3.7615, 0.67722 respectively. This variable is also in a good position according to the condition of SD. 1.67 minimum value and 5.00 maximum values ROA has obtained.

Finally, it can be concluded that all the independent variables (micro credit, micro saving and training programs) and dependent variables (Net profit, ROA) are in the high level of agreement of the respondents for each variable according to the mean values. As well as based on the 0.5 standard deviation condition all the variables are in good position.

4.2 Reliability Test

Table 3: Reliability Test

Variable	No of items	Cronbach's alpha
Microcredit	07	0.900
Micro saving	06	0.884
Training programs	06	0.880
Net profit	04	0.896
Return on assets	04	0.885

Source: Author's own (2021)

The reliability of a measure is established to test both consistency and stability of the data set and measured through Cronbach's alpha. According to that, microcredit has 0.900 Cronbach values which indicate higher internal consistency. Cronbach's alpha for micro savings, training programs, net profit and ROA was 0.884, 0.880, 0.896, and 0.885, respectively. All were Table 3: the result of reliability greater than 0.7, meaning that all questions used to test the quality of certain variables had better internal consistency and indicating that all questions for the analysis were highly reliable.

4.3 Correlation Analysis

Table 4: Correlation Analysis

	Correlation	
	Net profit	**ROA**
Micro credit	0.501	0.486
Micro savings	0.561	0.487
Training programs	0.357	0.353

Source: Author's own (2021)

Since there are two dependent variables, correlation analysis has been performed for net profit and ROA separately. All the independent variables are positively correlated with the net profit due to having Pearson Correlations of 0.501, 0.561, and 0.357, respectively. And also, all the significant values are less than 0.05; there are significant relationships between these variables. As well as, every independent variable has significant positive relationships with ROA having Pearson coefficients of 0.486, 0.487, and 0.353, respectively.

4.4 Multiple Regression Analysis-

Table 5: Regression analysis and model summary

Variable		Model (1)	Model (2)
Constant	B	0.950	1.000
	Std. Error	0.340	0.367
	Sig.	0.006	0.007
Micro credit	B	0.232	0.296
	Std. Error	0.096	0.103
	Sig.	0.016	0.005
Micro saving	B	0.369	0.262
	Std. Error	0.095	0.103
	Sig.	0.000	0.12
Training programs	B	0.156	0.185
	Std. Error	0.076	0.082
	Sig.	0.042	0.026
Model summary	R	0.609[a]	0.563[a]
	R^2	0.371	0.317

Source: Author's own (2021)

The model summary constrains the essential information regarding how well the regression model fit or did not fit with the observed data. According to the result of the model summary (Table 5) for model 1, the R-value was 0.609. It means 60.9%, which is at a beneficial level and significantly influential. Model 2, R value was 0.563 and as a percentage it was 56.3% which was at a beneficial level. R^2 is the square of R and is also known as the coefficient of determination and the R^2 value should be ($0 \leq R^2 \leq 1$). According to the Table 1, the R^2 value is 0.371, and it indicates that independent variables (Microcredit, Micro saving and Training programs) can explain 37.1% of the variation of net profit in this study for model 1. To prove this condition ($0 \leq R2 \leq 1$) , ROA was described by the 0.317 (31.7%) of microcredit, micro saving and training programs according to the sample of Kurunegala district in model 2.

Based on the coefficient values in table 5, the regression equation of the net profit can be constructed as follows.

$$P = 0.950 + 0.232MC + 0.369MS + 0.156TP + ę$$

Model 1 shows the coefficient of dependent variables of Net Profit (NP) and other independent variables (micro credit, micro saving, and training programs). According to the above table, all Beta values show the positive impact of Microcredit (β_1 = 0.232), Micro saving (β_1=0.369) and Training programs (β_{1} -=0.156) with net profit.

The validity of the effect is decided based on the significance value. In order to test the hypotheses, considering the probability of the t-test of microcredit was less than 5%. Hypothesis (H_1) stated that there is an impact between microcredit and the net profit of SMEs in the Kurunegala district. Since the p-value was 0.016 < .05, which illustrated that there was a significant positive impact of

Microcredit on the performance of SMEs in Kurunegala district; as a result, H_1 was supported (Model 1).

Hypothesis (H_2) stated that there is a positive impact between micro saving and net profit of SMEs in Kurunegala district. Since the t-test of p-value was 0.000 <0.05, which illustrated that there was a significant impact on micro saving on the net profit of SMEs, as a result, H_2 also was supported.

Hypothesis (H_3) stated that there is an impact between training programmes and the net profit of SMEs in the Kurunegala district. Since the t-test of p-value was 0.042 < 0.05, which illustrated that there was a significant impact of above mentioned two variables of SMEs in Kurunegala district, as a result, H_3 was supported.

According to the coefficient values in table 5; model 2, the regression equation of the ROA can be constructed as follows.

$$\text{ROA} = 1.000 + 0.296\text{MC} + 0.262\text{MS} + 0.185\text{TP} + ę$$

Table 5; shows the coefficient of the dependent variable of Return on Assets (ROA) and other independent variables (micro credit, micro saving, and training programs). According to the above table, all Beta values show the positive impact of microcredit (β_1 = 0.296), micro saving (β_1= 0.262) and training programs (β_1= 0.185) with ROA.

In order to test the hypotheses, considering the probability of the t-test of microcredit was less than 5%. Hypothesis (H_4) stated that there is an impact between microcredit and ROA of SMEs in the Kurunegala district. Since the t-test of p-value was 0.005 < 0.05, which illustrated that there was a significant positive impact of Microcredit on the performance of SMEs in Kurunegala district, as a result, H_4 was supported.

Hypothesis (H_5) stated that there is a positive impact between micro saving and ROA of SMEs in the Kurunegala district. Since the t-test of p-value was 0.012 <0.05, which illustrated that there was a significant impact on micro saving on ROA of SMEs. As a result, H5 also was supported.

Hypothesis (H_6) stated that there is an impact between training programmes and ROA of SMEs in the Kurunegala district. Since the t-test of p-value was 0.026 < 0.05, which illustrated that there was a significant impact of above mentioned two variables of SMEs in Kurunegala district. As a result, H_6 was supported.

According to the regression analysis results, microcredit has a significant impact on the Net Profit (NP) and return on assets (ROA) of SMEs. Both Net Profit (NP) and Return on Assets (ROA) represent significant impacts. Accordingly, that both sub-objectives to identify the impact of Microcredit on the net profit (NP) of SMEs and to identify the impact of Microcredit on Return on assets (ROA) were achieved. Therefore, microcredit has a significant impact on SME financial performance. This finding is compatible with the findings of Alhassan & Hoedoafia (2016), who examined the effects of micro credit on net profit (NP) of women-owned SMEs in Northern Ghana. The researcher revealed that there was a significant relationship between microcredit on the (NP) of SMEs in Northern Ghana. Likewise, the authors found that there was a significant positive impact between microcredit and the net profit of SMEs (Rajapakshe , 2021;Rathnayake, Fernando, & Fernando, 2019; Aladejebi, 2019; Pei-Wen et al., 2016). Therefore, according to the findings of this study, the significant positive impact between microcredit and the financial performance of SMEs is similar to previous researchers. So, according to the findings of this study, the significant positive impact between microcredit and the financial performance of SMEs was also proved by the previous researchers.

Micro saving also has a significant impact on the financial performance of SMEs in the Kurunegala district, according to the regression analysis results. Therefore, that both sub-objectives to determine the influence of micro saving on NP of SMEs and to determine the influence of micro saving on ROA of SMEs were successfully achieved. These findings were confirmed by the previous researchers also. Omondi & Jagongo (2018); who revealed that micro saving had a significant impact on the financial performance of youth SMEs in Kisumu County Kenya. And also, Gichuki, Mutuku, & Kinuthia (2014) investigated the selected factors (Microcredit and micro saving) perceived to influence the performance of women-owned SMEs in Kenya. Finally, the authors concluded that saving is one of the effective strategies for the performance of SMEs. Furthermore, based on the Sri Lankan literature, many researchers like Rajapakshe (2021); and Rathnayake, Fernando, & Fernando (2019) confirmed that there was a significant positive impact on micro saving on the financial performance of SMEs.

In this analysis, the final independent variable is training programs. It is a highly concerned variable according to the topic of the impact of microfinance on the financial performance of SMEs in the Kurunegala district. According to the analysis, training programs also have a significant impact on the financial performance of SMEs.But the problem is according to the previous literature; some authors mentioned that training programs did not significantly affect the financial performance of SMEs as well as some were said that training programs significantly affected the financial performance of SMEs. So here it should be specially discussed. Aladejebi (2019) mentioned that training programs did not significantly impact the performance of SMEs in Lagos Metropolis. The author concluded that microfinance banks should be adopted to provide training facilities to their customers. Kisaka & Mwewa (2014) pointed out that training was not statistically significant to the growth of SMEs in Machakos County in Kenya due to this training was not based on the real needs of SMEs.

Based on the Sri Lankan literature, some researchers also stated this insignificant impact between training programs and the financial performance of SMEs. Rajapakshe (2021) said that training programs are not significantly impacting the performance of SMEs in Central province. Furthermore, the author stated that when conducting training programs that are more specific to the businesses that the respondents operate. As a result, train them using a customized method that is customized to the needs and desires of that industry. Rathiranee & Semasinghe (2016) confirmed that insignificant impact between training programmes and financial performance by doing research based on Northern Sri Lanka.

5. CONCLUSION

In every developing country, discussing the concepts of SMEs and microfinance is very important because both concepts provide a huge contribution to the world's economies as per the word.

The study's main objective is to find the impact of microfinance on the financial performance of SMEs in the Kurunegala district. For the purpose of the study, data was collected through the well-developed questionnaire, which was distributed via online google form due to the COVID-19 pandemic. According to the analysis, it can be concluded that there is a significant positive impact of microfinance on the financial performance of SMEs. Furthermore, microcredit, micro saving, and training programs have a significant impact on SMEs' net profit and ROA in the Kurunegala district. In addition to that, all six hypotheses are accepted in this study. Based on the findings, the researcher has stated that most of the respondents used their own funds rather than microfinance facilities as an initial level of the business. But there was a trend to get microloans more and more when expanding their business.

Conclusively, the appropriate modifications of the unfavourable credit terms for SMEs by MFIs are strongly recommended. In addition to financial support, the government should seek ways of improving the infrastructure facilities of SMEs. Furthermore, the owners of SMEs should focus on maintaining adequate cash on hand to ensure that their working capital requirements are sufficient for the sustainability of the business. Further, the regulators and policymakers can consider the findings of the study in formulating policy decisions to enhance the financial performance of SMEs since the performance of SMEs directly relates to the growth of the country's economy. However, some training programs of microfinance providers do not address the requirements of SMEs, and therefore, considerable attention should be paid to training programs.

REFERENCES

ACCA (2019). *accaglobal.com*. Retrieved from https://www.accaglobal.com/lk/en/student/exam-support-resources/fundamentals-exams-study-resources/f9/technical-articles/sme-finance.html

Aladejebi, O. (2019). The Impact of Microfinance Banks on the Growth of Small and Medium Enterprises in Lagos Metropolis. *European Journal of Sustainable Development, 8*(3), 261-274.

Alhassan, E. A., & Hoedoafia, A. M. (2016). The effect of microcredit on Net profit and the challenges of Women Owned SMEs; Evidence from Northern Ghana. *Journal of Entrepreneurship and Business Innovation*, 5(2), 29-47.

Bernard, D. T., Kevin, L. L., & Khin, A. A. (2016). Entrepreneurial Success through Microfinance Services among Women Entrepreneurs in Sri Lanka: A Pilot Study and Overview of the Findings. *International Journal of Economics and Financial Issues, 6*(3), 1144-1150.

Christopher, I. F. (2010). Impact of Microfinance on Small and Medium-Sized Enterprises in Nigeria. *Proceedings of the 7th International Conference on Innovation & Management*, 1864-1871.

CMA Sri Lanka. (2018). Certified Management Accountant. *CMA Jouranl, 5*(4), 29-36.

Department of Census and Statistics; Ministry of Policy Planning; Economic Affairs, Child Youth and Cultural Affairs. (2015). *Non Agricultural Economic Activities In Sri Lanka; Economic Census 2013/2014.*

Gamage, A. S. (2003). Small and Medium enterprises development in Sri Lanka. (3), 133-150.

Gichuki, C. N., Mutuku, M. M., & Kinuthia, L. N. (2014). Performance of women owned enterprises accessing credit from village credit and savings associations in Kenya. *Journal of Global Entrepreneursip Research, 4*(16), 1-13.

Gyimah, P., & Boachie, W. K. (2018). Effect of Microfinance Products on Small Business Growth: Emerging Economy Perspective. *Journal of Entrepreneurship and Business Innovation, 5*(1), 59-71.

Huis, M. H., Hansen, N., Otten, S., & Lensink, R. (2017). A Three Dimensional Models of Women's Empowerment : Implicaions in the Field of Microfinance and Future Directions. *Front. Psychol, 8*, 1678.

Ibe, S., Moemena, I., Alozie, S., & Mbaeri, C. C. (2015). Financing Options for Small and Medium Enterprises (SMEs): Exploring Non-Bank Financial Institutions as an Alternative Means of Financing. *Journal of Educational Policy and Entrepreneurial Research, 2*(9), 28-37.

Kasali, T. A., Ahmad, S. A., & Lim, H. E. (2015). The Role of Microfinance in Poverty Alleviation: Empirical Evidence from South-West Nigeria. *Asian Social Science, 11*(21), 183-192.

Khan , M. A., & Rahaman, M. A. (2007). *Impact of Microfinance on Living Standards, Empowerment and Poverty Alleviation of Poor People: A Case Study on Microfinance in the Chittagong District of Bangladesh.*

Kisaka, S. E., & Mwewa, N. M. (2014). Effects of Micro-credit, Micro-savings and Training on the Growth of Small and Medium Enterprises in MachakosCounty in Kenya. *Research Journal of Finance and Accounting, 5*(7), 43-49.

Kumari, J. P., Azam, S. F., & Yusof, S. K. (2019). Does gender difference play a moderating role in the relationship between microfinance services and small-scale business performance in Sri Lanka? . *European Journal of Social Sciences Studies, 4*(5), 113-127.

Madole, H. (2013). *The impact of microfinance credit on the performance of SMEs in Tanzania: A case study of national microfinance bank-Morogoro.*

Mbugua, M. W. (2010). *Impact of microfinance services on financial performance of small and micro enterprises in Kenya.*

Ministry of Industry and commerce. (2017). *Annual Performance Report.*

Olowe, F. T., Moradeyo, O. A., & Babalola, O. A. (2013). Empirical Study of the Impact of Microfinance Bank on Small and Medium Growth in Nigeria. *International Journal of Academic Research in Economics and Management Sciences, 2*(6), 116-124.

Omondi, R. I., & Jagongo, A. (2018). Microfinance services and financial performance of small and medium enterprises of youth SMEs in Kisumu County, Kenya. *International Academic Journal of Economics and Finance, 3*(1), 24-43.

Pei-Wen, T., Zariyawati, M. A., Diana-Rose, F., & Annua, M. N. (2016). Impact of Microfinance Facilities on Performance of Small Medium Enterprises in Malaysia. *World Applied Sciences Journal, 34*(12), 1845-1849.

Premaratne, S. P. (2002). *Entrepreneurial networks and small business development : the case of small enterprises in Sri Lanka.*

Rajapakshe, W. (2021). The Role of Micro Finance Institutions on the Development of Micro Enterprises (MEs) in Sri Lanka. *South Asian Journal of Social Studies and Economics, 9*(1), 1-17.

Ramawickrama, J. (2011). *Can Small and Medium Enterprises have a Role in Achieving Sustainable Development in the Southern Province of Sri Lanka?Special Reference to the SMEs of Automobile Service Sector in the Matara Distric.* Unpublished Master's Thesis.

Rathiranee, Y., & Semasinghe, S. D. (2016). The Impact of Micro Finance Factors on Women Entrepreneurs‟ Performance in Northern Sri Lanka. *International Journal of Social Science Studies, 4*(3), 49-99.

Rathnayake, K. M., Fernando, P. I., & Fernando, A. (2019). Impact of Microfinance Services on Growth of Micro Small and Medium Scale Enterprises: Empirical Evidence from Micro, Small and Medium Scale Enterprises in Kalutara district. *Journal of Management and Tourism Research, 2*(1), 49-63.

Wambui, M. D. (2015). *The effect of micro finance services on the growth of SMEs in Kajiado county.*

World Trade Organization. (2016). *World Trade Report 2016.*

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