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Publisher: Elite Hall Publishing House

Editor in Chief:

Dr. Muzaffar Ahmed (Bangladesh)
E-mail:muzaahme1@gmail.com

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Dr. Edgardo Palza Vargas
Telfer School of Management
University of Ottawa, Canada
Email: edgardo.palza-vargas.1@ens.etsmtl.ca

Dr. Solomon Markos
Assistant Professor, School of Commerce
Addis Ababa University, Ethiopia
Email: solomonmarkos5@yahoo.com

Dr. Olu Ojo
Lecturer, Department of Business Administration
Osun State University, Nigeria
Email: oluojoe@yahoo.com

Dr. Mohammed-Aminu Sanda
Visiting Research Fellow, Lulea University of Technology, Sweden
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Email: masanda@ug.edu.gh

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Assistant Professor, Department of Economics,
University of Wah, Pakistan
Email: dr.khalidzaman@uow.edu.pk

Dr. Kartinah Ayupp
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Assistant Professor, M.S.G. Arts, Science & Commerce College, Malegaon, India
Managing Editor, International Journal of Management Studies
Email: infoijcms@gmail.com

Mr. Andrew McCalister
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Email: andrewmccalister@gmail.com

Dr. Mohsin Shaikh
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SKN College of Engineering, Pune, India
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Email: kpan@uncc.edu

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E-Mail: commercesundar@gmail.com

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E-mail: m.alawin@ju.edu.jo

Mr. Dinh Tran Ngoc Huy
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Dr. Cüneyt AKAR
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Email: cakar@bandirma.edu.tr

Dr. Abdul Hafaz Ngah
Senior Lecturer,School of Maritime Business and Management,
Universiti Malaysia Terengganu, Malaysia
Email: hafaz.ngah@umt.edu.my

Mr. Mostafa Torabi
Assistant Professor, Department of Business Administration
Brandon University, Canada
E-mail: torabim@brandonu.ca

Dr. Jia Chi Tsou
Associate Professor, Department of Business Administration
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E-mail: jtsou.tw@yahoo.com.tw

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E-mail: yajnya.dutta@gmail.com

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Professor DHC, Doctoral School of Economics,
Stefan cel Mare University of Suceava (Romania)
E-mail: ionel.bostan@fdsa.usv.ro

Web: http://ijibm.elitehall.com
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EVALUATING THE USE OF E-COMMERCE FOR THE PERFORMANCE OF THE SME SECTOR

Asanka D. Dharmawansa[1], BMAM Balasooriya[2], RAM Madhuwanthi[3]

[1, 2]Department of Industrial Management, Wayamba University of Sri Lanka

[3]Esoft Metro Campus, Kurunegala

[1]Corresponding Authors Email: asankad@wyb.ac.lk

Abstract

The use of e-commerce in small and medium enterprises (SMEs) has emerged as an essential topic in information systems studies in recent years. The Internet is the primary channel of sales and marketing for exporters. Effective use of Internet-based tools like websites, and other instruments allows exporters to find potential business contacts, increase sales and promote their products and services worldwide. However, past studies show that SMEs have been sluggish to adopt and implement e-commerce due to various impediments. Therefore, this study is aimed to examine the use of e-commerce for the performance of the SME exporters in the North Western Province of Sri Lanka by focusing on a sample of 201 exporters. One-way ANOVA analysis revealed that business activities and purchases using electronic mechanisms significantly correlates with company performance measured by export turnover. Therefore, the study concludes that export firms more involved in e-commerce had a higher company performance.

Keywords: SME Exporters; E-Commerce; E-Commerce tools;

1. INTRODUCTION

Study Background

One of the most highly debated topics in business today is electronic commerce. It is already reshaping customer and supplier relationships, streamlining business processes, and, sometimes, restructuring entire industries. By removing time and space barriers, e-commerce rewards both businesses and consumers.

Five decades ago, policymakers believed that only large enterprises could contribute to economic growth and development. Currently, this notion is rejected, and SMEs have been identified as the backbone or heart of any economy in the world (Arinaitwe, 2006).

SMEs are currently used export as a strategic method for their business operations. This is because, in an age of globalization, Internationalization is critical to business survival and growth, and export is the simplest entry mode. As a result, most SMEs choose exports to enter the International market (Forte and Moreira, 2018). There are several e-business tools available that can utilize exporters to gain maximum benefits over competitors. E-mail, Web sites, Web advertisements, Web links, Web banners, and social media are the few most common and effective e-business tools that SME exporters use to promote their business globally.

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Although SME exporters can increase their business outcomes by utilizing e-business tools effectively while spending less capital, it is uncertain whether they can properly exploit this opportunity. Most of the SMEs in Sri Lanka seem not in a position to utilize e-business opportunities due to several reasons. Therefore, they lose many export prospects considerably and large-scale exporters may take advantage of it. That would be a significant reason to lower SME export turnover share significantly.

Utilizing e-commerce tools is vital for SME exporters since businesses can gain competitive advantages through e-commerce adoption (Jones et al, 2003; Xu et al, 2008). Distance must no longer be an obstacle in doing business deals. Any entrepreneur with technology knowledge will have an advantage over his competitor because dealings through e-commerce tools assist him in conducting business with no boundaries. Also, contacts can be made no matter where the customers are located. E-Business opens new opportunities to export-oriented firms, especially small ones; because it reduces business transactions cost (Chau, 2003). In short, e-commerce allows enterprises to reposition themselves in the International marketplace. Therefore, e-commerce is a crucial requirement for SME exporters to gain competitive advantages over any other entrepreneur since exporters make transactions globally.

There is no practical empirical study that has been conducted to investigate the use of e-commerce by small and medium enterprises in the North-Western Province in Sri Lanka. Most studies are focused on the entire SME sector in the country and are not limited to regional areas. This is one of the significant of this research.

Research Problem

Most of the SMEs in Sri Lanka seem unable to utilize e-commerce opportunities due to difficulties in utilizing the technology, insufficient managerial capabilities, and lack of finance and knowledge.

According to the Sri Lanka Export Development Board (2020), the number of SME exporters is 94.45% of the total number of exporters in the North Western Province (NWP). Therefore, a large number of exporters in NWP represent on small and medium scale. However, their share of export turnover was recorded as 47.7%, while large-scale exporters' share accounted for 52.24% of the total export turnover, whereas their share of exporters accounted for only 5.5%. These facts provide an exciting implication that although the share of SME exporters is huge, the outcome they have encountered is very low. Therefore, SMEs lagged far behind large-scale exporters in terms of export earnings (EDB, 2020). This is an issue that SME exporters face, and it could badly impact upgrading their capability to a large scale. Therefore, they lose many export prospects considerably, and large-scale exporters may take advantage of it. That turnover may be a reason to lower the share of SME export.

Research Objectives

The objective of this study is to identify the impact of utilizing E-commerce for the performance of SME Sector exporters in North Western province in Sri Lanka.

2. LITERATURE REVIEW

SME Sector Overview

There is no generally accepted definition for SMEs. It varies across countries and even within countries based on various parameters such as employee count, balance sheet totals of fixed assets, invested capital,

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and business turnover (Vandenberg et al, 2016). Sri Lanka, like the other countries, lacks a nationally accepted definition of SMEs, and various institutions use different definitions to define SMEs. In Sri Lanka, SMEs are defined primarily by their annual turnover and employee count. In Sri Lanka, SMEs are defined as having an annual turnover of less than Rs. 750 million and fewer than 300 and 200 employees in the manufacturing and service sectors, respectively (Force, 2002).

According to the Sri Lanka Export Development Board (2020), SMEs provide significant support for socioeconomic development. These businesses account for up to 52% of GDP. As a result, it is regarded as the economic backbone.

E-commerce and SME Sector

The effect of using e-commerce for enterprises is one of the key areas that researchers have been investigating for many years after the development of the Internet. Wymer and Regan (2011) investigated the factors that influence SMEs' adoption of e-business and e-commerce technologies. Furthermore, Grandon et al. (2011) compared e-commerce adoption theories, while Neilson et al. (2010) investigated the International perspective of e-business development in wine industry SMEs. Beynon-Davies (2010) considered e-business as a regional development driver. Furthermore, Scupola (2009) investigated the perspectives of SMEs in Australia and Denmark on e-commerce adoption, and Williams et al. (2010) investigated small business sales growth in the UK and Internationalization links to website functions.

According to Sterrett and Shah (1998) and Stockdale and Standing (2004), micro-sized SMEs can compete with larger organizations via e-commerce because their size allows them to be more adaptable and responsive to changing conditions. As a result of effective e-commerce deployment, businesses are no longer bound by geographical boundaries and can compete in new national and global markets for suppliers and customers (Damanpour and Damanpour, 2001). Regarding financial support Galloway and Mochrie (2005) contend that SME owners/managers require assistance from government and support agencies to make an effective mindset shift. Such assistance can take many forms, including business advice and financial assistance in grants and loans.

Sadowski et al. (2002) suggested that successful adoption of Information and Communication Technologies (ICT) varies according to enterprise size, exporting activity, awareness of benefits, industrial sector, customers, and influence of trading partners. Currently, the Internet is commonly used by SME firms in developing countries for communication; the Internet is least used for e-commerce, and e-mail is considered an important means of communication (Andam, 2003). However, SMEs' e-commerce use is limited due to their recognition of the significance of face-to-face engagement with their buyers and suppliers.

Unfortunately, SMEs in Europe continue to underutilize the potential of information and communication technology, new ideas, and business models (Renner et al, 2008). SMEs are the main source of entrepreneurial skills and creativity and contribute to economic and social unity. They are the key to innovation and are emerging as global players through their participation in global production and supply chains. European SMEs cannot afford to fall behind in the challenging race for competitive nature and excellence, where technological advances and innovation play a critical role. SMEs must also understand how to retain developments to make informed choices when selecting and implementing e-business solutions.

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The adoption of e-business has been a concern for most businesses (Xu et al, 2008). It has emerged as a crucial way of conducting business activities in a competitive global environment (Hornby et al, 2002). Significant benefits, such as enhanced consumer relationships, wider market reach, and operational efficiency, can be realized by the adoption of e-business solutions (Andam, 2003; Xu et al, 2008). Despite such benefits, the adoption rate of e-business by small-to-medium enterprises has not been significant due to adoption barriers (Khu-Smith and Mitchell, 2002).

Factors Influencing the use of E-Commerce for the Performance of the SME Sector

The potential benefits derived from e-commerce increase when businesses engage in business transformation (Chau, 2003). According to the study by Tang (2000), various factors that affect SME exporters' performance on online platforms are described in-depth as follows.

H1. Business activities using electronic mechanisms significantly affect the performance of SMEs.

E-commerce is the buying and selling of products and services and the transfer of money or data over an electronic network, most notably the Internet. These transactions can be business-to-business, consumer-to-consumer, business-to-consumer or consumer-to-business. In 2002, Clayton and Criscuolo showed that with the e-commerce usage, there is a significant change in the business interactions and the operating process of firms and it significantly affects the firm performance.

H2. The sales process over the internet significantly affects the performance of SMEs.

According to Shaytura et al. (2017), the sales process over the Internet can help businesses reach new markets and increase their sales and revenue. Attracting quality traffic that results in the desired actions, such as orders, requests, or phone calls, is the primary task of any Internet marketer and the genuine desire of any business owner.

H3. Customer communication over the Internet significantly affects the performance of SMEs.

The Internet has grown exponentially over the past decade and has changed consumer behavior in shopping patterns ranging from traditional to digital commerce to e-commerce (Dewi and Hartono, 2019). The age of the Internet and social media has opened the door to communication, allowing business owners to communicate instantly with customers around the world. Assessing the value of e-commerce usage in the manufacturing sector in California, Zhu and Kraemer (2002) showed that interactions with customers positively significant with the firm performance.

H4. Promotion of products/services via the Internet significantly affects the performance of SMEs.

According to Zinkhan, (2002), the Internet has the potential to revolutionize all kinds of business activities, including the creation, promotion, and delivery of services. Online marketing is a collection of tools and methods for promoting products and services over the Internet. Internet advertising is the primary source of attracting the target audience to the website (Shaytura et al, 2017).

H5. Financial transactions over the Internet significantly affect the performance of SMEs.

Many business firms are performing online / merchant transactions over the Internet, Mobile, and POS terminals as part of an e-commerce transaction. Customers perform general business transactions, which could be Domestic Payments or International Cross Border Payments from the Bank / Fintech platform over the Internet. Zhu and Kraemer (2002) assessed the e-commerce value to performance in the Manufacturing sector firms. They identified that e-commerce is capable to facilitate transactions online and found that

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online transaction is significant indicating a positive association with the firm performance.

H6. Ordering and tracking orders over the Internet significantly affects the performance of SMEs.

According to the research done by Akturk et al. (2022), E-commerce order tracking allows an applicant to monitor all of their online orders and shipments and communicate the order status to customers at any time. E-commerce order tracking includes features like shipment tracking, estimated delivery dates, and frequent updates on the order status. With the help of the order tracking system, customers can always monitor the implementation status of their orders. Karagozoglu and Lindell (2004) highlighted that ordering and tracking orders to streamline customer's purchasing process positively relates with the firm performance.

H7. Data exchange between business partners significantly affects the performance of SMEs.

Trading partners are business entities that conduct electronic transactions. In today's complex business ecosystem, organizations are critically dependent on the smooth exchange of critical data that impacts their bottom line. Evaluating the e-commerce usage in the manufacturing sector in California, Zhu and Kraemer (2002) identified that interactions with business partners positively significant with the firm performance.

H8. Purchases via the internet significantly affect the performance of SMEs.

There is an enormous amount of information in terms of details and the number of sources available to everyone (Karimi, 2013). Customers use the Internet to research products, make a purchase, and even use e-services. However, different tasks or stages of the purchase process might take place via the Internet channel. In other words, the Internet affects consumers' behavior by allowing for cross-channel purchases. Exploring the e-commerce involvement of SMEs, Karagozoglu and Lindell (2004) depicts that purchase fulfillment feature positively relates with the firm performance associated with the expansion of the customer base.

This study is used eight independent variables related to SMEs' e-commerce usage and business performance based on the literature.

3. RESEARCH METHODOLOGY

Research Design

A questionnaire was developed to collect the data from the selected sample. The collected data were analyzed using SPSS statistical analyzer software. The primary and secondary data were collected and analyzed in an acceptable and interpretable manner. Two main analytical techniques were used to analyze the gathered primary data through questionnaires. Accordingly, based on the type of variables used to address the research questions, Correlation analyses were used to observe the relationship between selected variables and a one-way ANOVA test was used to see the association between selected variables. One-way analysis of variance (ANOVA) is used when there is a categorical independent variable with two or more categories and wishes to test for differences in the means of the dependent variable broken down by the levels of the independent variable. The independent variable of this research has eight categories.

Moreover, it was intended to test whether the means of one dependent variable broken down by the independent variables differ significantly among each segment to see if there is an association between these variables or not. Therefore, to test developed hypotheses, one-way ANOVA was performed for each of the

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variables. In addition, descriptive statistical methods were used to illustrate the data in a meaningful way.

Data Sampling and Collection

The study is based on collecting data from both primary and secondary data sources and collecting primary data on empirical evidence of current e-commerce practices, and a questionnaire has been designed and implemented. Data was collected through a survey-based questionnaire. The questionnaire included likert scale questions, and respondents had the opportunity to select the preferred answer for each question. The secondary data were collected and used for the formation of background information and were collected from well-published articles and reports.

As per the recently published statistics, there are 3027 SMEs registered as exporters in Sri Lanka (Wijayarathne and Perera, 2018). According to the Morgan table, this study distributed the survey-based questionnaire among 341 SME exporters selected from the "Directory of Exporters," which has been published by the Export Development Board (Krejcie and Morgan, 1970). However, only 256 exporters responded to the questionnaire, and 201 responses were collected after removing the invalid and incomplete questionnaires. Therefore, the analysis is based on a sample of 201 SME exporters. For convenience on accessibility to the sample, the convenience judgmental sampling method was applied to select the sample while ensuring the sample reflected the actual population distribution.

4. DATA PRESENTATION AND ANALYSIS

Sample Representation

The SME exporters who are located in North Western Province have been selected for this study. The 341 questionnaires were distributed, and only 201 responses were selected for the analysis using Statistical Package for Social Sciences (SPSS) software. The first section of the survey-based questionnaire gathered information about the demographic characteristics of SME exporters and their background of the organization. The demographic characteristics of the exporters are described in terms of the owner's gender, age, and educational background. The background of the organization is described in terms of its business association type, experience in business trade, industry sector, number of employees, and annual export turnover.

When analyzing the age distribution of the respondents, the highest number of respondents was recorded within the age range of 26-45 years (53.7%), while the second-highest age range is between 46-65 years age range (38.3%). This suggests that people between the ages of 25 and 45 tend to be involved in the export business, considering the experience and strength of the age group. The majority of the respondents were male with 157 counts (77.9%), and the rest were female with 44 counts (22.1%). Therefore, it is identified that men made more contributions while women's ownership of formal small and medium-sized enterprises (SMEs) is low in Sri Lanka's export sector, and most women struggle to transition away from informal micro-scale businesses. The analysis shows that more than 39% of employers have completed at least one diploma program, the second-highest number of respondents has completed secondary school education, and 24.5% of respondents have completed graduate education. The small and medium enterprise sector consists of a single owner, partnership, and limited liability business. The findings show that individual entities have

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a higher contribution of 40.3% than other types of businesses. This is because many businesses operate under a single owner type for various reasons such as privacy, decision marking power, fewer legal provisions, flexibility of operations, and ease of dissolution. Furthermore, the joint venture contributed 29.4% of the total participants, and the limited liability enterprise contributed 27.9%. In the current trend, more and more businesses are registering under the limited liability category due to taxes and other benefits. Analysis shows that 39.6% of respondents are in business within 1 to 5 years, and 35.1% of respondents are in business within 6-10 years. 14.9% of participants are new entrants to the export business and 10.4% of participants have more than ten years of experience in this trade.

There are various industrial sectors in the small and medium-scale export sector, and according to the survey, the Machinery Equipment and Accessories sector contributes more than 21% to provincial exports. The second-largest contributors are Pharmaceuticals and Medicinal products, which account for 16.9% and 13.4% of the Fish, fisheries products and Accessories sector. For the purpose of research, the number of employees in the company of the respondents was categorized into three categories. The majority of SMEs (71.1%) employed less than 50 employees. 51-100 engaged with 26.4% of the total SMEs. Furthermore, it was observed that only 2.5% of the SMEs were employed over 100. Looking at the annual export turnover of the respondents, a high percentage of 46.3% belongs to the turnover category of Rs. 8-20 million. The second highest response rate can be identified as less than the Rs. 8 million categories with a percentage of 40.8%. About 1/8 of the SMEs rated their annual income exceeding Rs.20 million.

Descriptive Statistics

Table I -Descriptive Statistics

Descriptive Statistics									
	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Business activities using electronic mechanisms	201	1.00	5.00	3.9826	0.51083	-1.741	0.172	7.348	0.341
Sales process over Internet	201	3.65	4.46	4.0771	0.15766	-0.241	0.172	0.042	0.341
Customer communication over Internet	201	2.75	5.00	4.0858	0.41053	-0.283	0.172	1.022	0.341
Promotion of products/services via the Internet	201	2.25	5.00	4.0958	0.42848	-0.431	0.172	1.832	0.341
Financial transactions over the Internet	201	2.00	5.00	4.1468	0.44817	-0.509	0.172	2.146	0.341
Ordering and tracking orders over the Internet	201	2.50	5.00	4.0983	0.43730	-0.646	0.172	1.740	0.341

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Data exchange between business partners	201	2.67	5.00	4.1542	0.46049	-0.341	0.172	0.848	0.341
Purchases via the Internet (suppliers)	201	2.25	5.00	4.1642	0.43779	-0.524	0.172	1.839	0.341
Performance of SME sector	201	3.00	5.00	4.1341	0.41664	-0.022	0.172	0.017	0.341
Valid N (listwise)	201								

Descriptive statistics explains the data set by summarizing the specific features of each variable with the sample size. As per Table I, the Mean represents the average response given by subjects in the sample population. According to the table, the mean value for the independent variable of Business activities using electronic mechanisms is 3.9, implying that the respondents' idea about Business activities using electronic mechanisms affects the performance of the SME sector from a neutral to agree on the level. The 4.0 mean values for the independent variables of Sales process over the Internet, Customer communication over the Internet, Promotion of products/services via the Internet, and Ordering and tracking orders over the Internet signify that such variables moderately affect the performance of the SME sector. The Financial transactions over the Internet, Data exchange between business partners, and Purchases via the internet (suppliers) also signify neutral to agree on the level of performance of the SME sector. Therefore, the mean value could be concluded that all selected independent variables moderately affect the performance of the SME sector.

Correlations

The Correlation coefficient value between the variables can be either negative or positive, ranging between values of +1 to -1. Depending on the value of correlation, the strength of the relationship between the two variables is concerned, and the negative or positive sign will determine the direction of the relationship between the considered two variables.

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Table II-Correlation Analysis

		Business activities using electronic mechanisms	Sales process over Internet	Customer communication over Internet	Promotion of products/services via the Internet	Financial transactions over the Internet	Ordering and tracking orders over the Internet	Data exchange between business partners	Purchases via the Internet (suppliers)	Performance of SME sector
Business activities using electronic mechanisms	Pearson Correlation	1	0.196**	0.344**	0.295**	0.367**	0.244**	0.189**	0.241**	0.058
	Sig. (2-tailed)		0.005	0.000	0.000	0.000	0.000	0.007	0.001	0.417
	N	201	201	201	201	201	201	201	201	201
Sales process over Internet	Pearson Correlation	0.196**	1	0.303**	0.269**	0.187**	0.349**	0.176*	0.259**	0.215**
	Sig. (2-tailed)	0.005		0.000	0.000	0.008	0.000	0.012	0.000	0.002
	N	201	201	201	201	201	201	201	201	201
Customer communication over Internet	Pearson Correlation	0.344**	0.303**	1	0.539**	0.373**	0.459**	0.304**	0.425**	0.326**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
	N	201	201	201	201	201	201	201	201	201
Promotion of products/services via the Internet	Pearson Correlation	0.295**	0.269**	0.539**	1	0.499**	0.425**	0.351**	0.449**	0.300**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
	N	201	201	201	201	201	201	201	201	201
Financial transactions over the Internet	Pearson Correlation	0.367**	0.187**	0.373**	0.499**	1	0.550**	0.483**	0.440**	0.284**
	Sig. (2-tailed)	0.000	0.008	0.000	0.000		0.000	0.000	0.000	0.000
	N	201	201	201	201	201	201	201	201	201
Ordering and tracking orders over the Internet	Pearson Correlation	0.244**	0.349**	0.459**	0.425**	0.550**	1	0.518**	0.487**	0.275**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000
	N	201	201	201	201	201	201	201	201	201
Data exchange between business partners	Pearson Correlation	0.189**	0.176*	0.304**	0.351**	0.483**	0.518**	1	0.428**	0.314**
	Sig. (2-tailed)	0.007	0.012	0.000	0.000	0.000	0.000		0.000	0.000
	N	201	201	201	201	201	201	201	201	201
Purchases via the Internet (suppliers)	Pearson Correlation	0.241**	0.259**	0.425**	0.449**	0.440**	0.487**	0.428**	1	0.484**

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	Sig. (2-tailed)	0.001	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	N	201	201	201	201	201	201	201	201	201
Performance of SME sector	Pearson Correlation	0.058	0.215**	0.326**	0.300**	0.284**	0.275**	0.314**	0.484**	1
	Sig. (2-tailed)	0.417	0.002	0.000	0.000	0.000	0.000	0.000	0.000	
	N	201	201	201	201	201	201	201	201	201
**. Correlation is significant at the 0.01 level (2-tailed).										
*. Correlation is significant at the 0.05 level (2-tailed).										

According to Table II, there is a significant of 0.000 value (p-value) among the dependent variable of performance of the SME sector and independent variables of Customer communication over the Internet, Promotion of products/services via the Internet, Financial transactions over the Internet, Ordering and tracking orders over the Internet, Data exchange between business partners, Purchases via the Internet (suppliers) since that value is below 0.01 (Standard alpha value). It depicts that there is a strong positive relationship between the above dependent variable and independent variables, and independent variable changes are highly affected for the dependent variable.

ANOVA

Table III-ANOVA Test

Model		Sum of Squares	df	Mean Square	F	P value
1	Regression	9.886	8	1.236	9.555	<.001[b]
	Residual	24.832	192	0.129		
	Total	34.718	200			
a. Dependent Variable: Performance of SME sector						
b. Predictors: (Constant), Purchases via the Internet (suppliers), Business activities using electronic mechanisms, Sales process over Internet, Data exchange between business partners, Promotion of products/services via the Internet, Customer communication over internet, Financial transactions over the internet, Ordering and tracking orders over the internet						

ANOVA test explains how well the regression equation will be fitted to the data which has been gathered. Accordingly, the P value of the ANOVA test (Table 04) is 0.001, which is less than 0.05. Therefore, it can be said that the regression model is significant.

Coefficients

Table IV-Coefficients Analysis

Coefficients[a]							
Model	Unstandardized Coefficients		Standardized Coefficients	t	P value	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound

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(Constant)	1.022	0.679		1.505	0.134	-0.318	2.361
Business activities using electronic mechanisms	-0.112	0.055	-0.138	-2.028	0.044	-0.222	-0.003
Sales process over Internet	0.234	0.177	0.088	1.323	0.188	-0.115	0.582
Customer communication over Internet	0.151	0.080	0.149	1.887	0.061	-0.007	0.309
Promotion of products/services via the Internet	0.025	0.078	0.026	0.321	0.748	-0.129	0.179
Financial transactions over the Internet	0.069	0.077	0.075	0.898	0.370	-0.083	0.222
Ordering and tracking orders over the Internet	-0.084	0.081	-0.088	-1.039	0.300	-0.244	0.076
Data exchange between business partners	0.107	0.068	0.118	1.558	0.121	-0.028	0.242
Purchases via the Internet (suppliers)	0.361	0.073	0.379	4.969	0.000	0.218	0.504
a. Dependent Variable: Performance of SME sector							

According to the Table IV, P values of Business activities using electronic mechanisms (0.044) and Purchases via the Internet (0.000) variables are only less than 0.05, which indicates that these independent variables have a significant impact on the performance of the SME Sector.

Hypothesis Testing

According to the Table IV, the P value for business activities using an electronic mechanism is 0.044, which is less than 0.05. Therefore, in this scenario null hypothesis (H_0) is rejected, and concluded that there is a significant impact on the performance of the SME sector with the business activities using electronic mechanisms at a 5% level of significance. Moreover, the P values for sales process over the Internet, customer communication over the Internet, Promotion of products/services via the Internet, and financial transactions over the Internet are 0.188, 0.061, 0.748, and 0.370, respectively, which are greater than 0.05. Therefore, the null hypotheses are not rejected and conclude that there is no significant impact on all the above-mentioned factors, with the performance of the SME sector at a 5% level of significance.

According to the coefficient table, P values for ordering and tracking orders over the Internet and data exchange between business partners are 0.300 and 0.121, respectively, which are greater than 0.05. Therefore, the null hypotheses are not rejected and conclude that there is no significant impact on ordering and tracking orders over the Internet and data exchange between business partners, with the performance of the SME sector at a 5% level of significance. The P value for purchasing over the Internet is 0.000, which is

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less than 0.05. Therefore, the null hypothesis is rejected, and concluded that there is a significant impact on the performance of the SME sector with the purchasing over the Internet 5% significance level.

5. CONCLUSION AND RECOMMENDATIONS

This study has provided a series of key features of SME exporters' e-commerce practices in NWP. The study's objective is to determine the relationship between e-commerce usage and SME sector performance. As per the results of empirical analysis, it was determined that there is a significant difference exists between the eight variables of e-commerce usage on SME performance. It is revealed that there is a significant association between SME performance and e-commerce usage only with two variables, namely business activities using electronic mechanisms and purchases via the Internet. This finding re-confirms the arguments of Chau's study (Chau, 2003). It suggests that as the strategic use of e-business increases, the degree of business performance increases. This study has provided some insights into the utilization of e-commerce amongst a range of SMEs in NWP.

The study revealed that there is a relationship between the performance of the SME sector and e-commerce usage. Organizations should understand that e-business is a competitive advantage, and managing the business and improving market performance and it is not merely an option but a matter of survival. In a highly competitive business environment, the outcomes of this study can be utilized to determine the importance of using the latest e-business tools to survive with the increasing global competitiveness. Further, the outcomes of the study can be utilized for the indirect exporters who intend to grow as direct exporters. The high usage of E-commerce will help them to find suitable and trustworthy buyers for their direct exports.

Since the current e-commerce usage of SME Exporters in NWP is comparatively low, there is a good opportunity for further improvement of this study. This study can be further improved by including all SMEs generating more generalized knowledge about E-commerce usage and the performance of SMEs in Sri Lanka. Based on the research result, it is also recommended to develop a political vision, strategic objectives, policies and design mechanisms for the cooperation between parties to control E-commerce adopting programs to protect the information to prevent misuse and increase cyber security. Further, the national policy should be continued to focus on improving the technical infrastructure necessary for the adoption of E-commerce and the procedures and internal systems that support e-commerce. The government also should improve the legal infrastructure, such as privacy law, e-signature and knowledge acquisition law. Providing skilled personnel is the main benefit to the SME exporters, who are currently not engaged with the E-commerce tools at the required level due to a lack of qualified human resources. Language problems are the main issue with a lot of SME Exporters who are located in rural arrears. Considering the above, technical and IT knowledge about the latest e-commerce tools should be included in the school-level syllabus. Also, the advanced versions should be included in the syllabus of technical colleges, universities and other higher educational institutions. On-the-job training opportunities at the SME Export companies should be provided to get practical experience. Foreign training opportunities will be given to the employees who are attached to the high potential SME companies, with the involvement of government institutions to get higher returns to the country. Therefore, necessary action should be taken by the relevant parties to bridge this gap.

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E-TAXATION COMPLIANCE AMONG E-COMMERCE SMES ONLINE SHOP OWNERS

Eliphas Frank Tongora
Dar es salaam Institute of Technology (DIT), Computer Studies Department, Morogoro/B.Titti RD Junction.P.O BOX 2958, Dar es salaam
E-mail: eliphast@gmail.com.

Abstract:
Electronic Commerce (e-Commerce) is a new marketplace that has many advantages. With the help of the internet, e-Commerce has made a major difference in the way business operates globally, offering substantial benefits to all parties: businesses, consumers, and even governments through tax. e-Taxation itself, is a complex, controversial issue, and very sensitive subject that might affect the relationship between nations. The objective of the paper is to find out whether it is possible to digitally or physically tax e-Commerce should it be desirable to do so, for delivered products. Additionally, content analysis method was utilized to identify the relevant precursors of tax compliance among e-Commerce SMEs shop owners. Furthermore, the paper will also highlight three components of tax compliance such as Tax awareness, Service Quality, and Tax fairness with their association.

Keywords: e-Commerce, E-taxation, Tax compliance, SMEs, online shop owner

Introduction

Taxation of e-Commerce is a major concern for local, international agencies and tax authorities internationally. Taxation itself is a complex and controversial issue. Hence, it should not come as an unexpected that there are so many debates regarding taxation of e-Commerce. Despite the vital role that e-Commerce has played in the revolutionizing the way business is done, it has been blamed for easing tax loss and tax evasion [1]. The situation has been aggravated by the strain like uncertainty and double taxation which make parties of e-Commerce unenthusiastic and devastate development of e-Commerce negatively [2]. e-Commerce further faces the challenges of disgraceful infrastructural deficiency, outdated legal and regulatory framework, and e-tax implementation of existing laws, coupled with widespread ignorance. All these make e-Commerce more fascinating in developing countries including Tanzania. In addition to these challenges is the level of complexity and technological complicacy involved in such transactions [3]. These enormous earnings losses, occasioned by e-Commerce expansion, have fueled the discussion on the need to come up with practical ways of curbing tax evasion and avoidance occasioned by the growth of e-Commerce. Given on to with this dilemma, governments worldwide face the formidable task of protecting their income base without stifling either the development of new technologies or the involvements of the business community in the evolving and growing e-market place [4]. It is hence the aim of this study to

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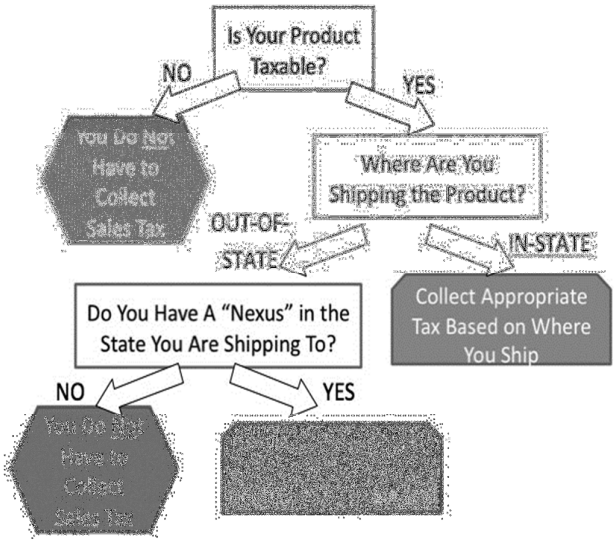
examine e-tax compliance among SMEs online shop owners. Furthermore, e-Commerce clears the way for mobile, long distance, and anonymous transactions when the seller may be outside the territorial power of the taxing government or when the destination of the goods and services can be masked [5]. Hence, there is a problem of identifying the seller or taxpayer, his place of business, verifying transactions and establishing a link between the taxpayer and the transactions for tax purposes [6].



Background of the study

One dramatic problem among e-Commerce practitioners is that they tend to evade taxation when they do business online or by mobile phone. They presume that tax authorities will not be able to find out their online business earnings [7]. This is because e-Commerce business conducted online is completely different from other practices of businesses. The e-Commerce is described as being borderless since its transactions have been observed to flow flawlessly worldwide.

Therefore, the compliance e-taxation of these borderless transactions seems disputable [8]. Moreover, no evidence of transaction in e-Commerce business coupled with no compulsory order to prepare an audited account enhance the likelihood of undetectable transactions. The Internet does not leave any paths that can help the relevant tax authorities to track e-Commerce players' locations and thus the e-taxation becomes a loophole. Millions of tax income were lost as the e-Commerce penetrators continue to dig deeper into the governments' jurisdictions as to confirm the relevant authorities find it impossible to control this issue [9]. It was alleged that because of the implication of uncertainty territory and jurisdiction components of e-Commerce taxation could greatly affected tax collection and tax loss [10]. e-Tax avoidance and inevitably evasion are involved concerns about tax compliance among e-Commerce [11]. In an e-Commerce business, the possibilities of secretion transactions are mega and the possibilities to contribute to a transaction are in many cases virtually non-existent. Tax non-compliance including tax avoidance and tax evasion has always been challenge with which tax authorities have had to battle. Although the development of technology and the Internet has greatly expanded business chances, it also contributes to illegal activities

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online, and create a new classification of entrepreneurs who run the business outside law or at the boundaries of the law [12] which, in turn, leads to wide scopes of the digital shadow economy.

Problem statement

In order to understand the tax compliance among e-Commerce environment, give inputs to tax authority like TRA for Tanzania, in order to educate and create awareness among e-Commerce SMEs online shop owner. Tax education is part of the service provided by the authorities including overwhelming the information, understanding and give guide to the public especially taxpayers about taxation and tax law. Normally, SMEs online owners who understand tax regulations would adhere the regulations to prove that they practiced good conduct of business and minimizes the risk of regulatory fines., on the other hand Service quality, enhances SMEs owners' confidence and satisfaction which is closely related to tax compliance. In addition, service quality was experimentally bash as a vital role to influence profitability, satisfaction, customer, repurchase behavior, and loyalty. Therefore, it is as well as expected to influence tax compliance. Lastly, the insight of tax fairness creates ethical attitudes which ultimately rehabilitate decision of honest and choices and induce tax compliance. Based on the enlightenment, e-commerce SMEs compliance has a great role in economic impact of the government and should be rehabilitated to create a discipline and honest culture. There up on, recognizing the significant effects of tax compliance among e-commerce SMEs online shop owner, the purpose of this paper is to determine components of tax compliance in e-commerce environment such as service quality, tax awareness and tax fairness. The identification of these components will give useful insights to the tax authorities particularly in rehabilitating future tax policies in the field of e-Commerce taxation and subsequently for the better compliance enforcement.

Research Questions (RQ)

Below are the Research questions of the e-Commerce tax compliance formulated to be answered RQ: Tax service quality, tax awareness and tax fairness contribute to the tax compliance among e- commerce SMEs online shop owners?

Research Objectives (RO)

In order to accomplish the Research questions above, the specific research objectives of this study were as follows:

i. To examine the association between tax compliance and Service quality among e- Commerce SMEs online shop owner
ii. To examine the association between tax compliance and tax awareness among e- Commerce SMEs online shop owners.
iii. To examine the association between tax compliance and tax fairness among e- commerce SMEs online shop owner.

Literature Review

i. Tax Compliance

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Tax compliance refers as fulfilling all tax obligations as specified by the law freely and completely. However, tax evasion is a major challenge in many countries. Research shows that laws and regulations they do not sufficiently address e-tax evasion, and therefore, there is a different approach that should address the so called 'voluntary compliance'. Voluntary compliance is more likely to be particularly essential in countries where enforcement capacity is not strong enough. Mainly there are two types of tax compliance and that is 1) administrative compliance and 2) technical compliance [13]. Begins with Administrative compliance, this deals with complying the administrative rules to declare tax returns and paying tax on time. Whereas technical compliance deals with the calculation and payment of taxes based on the technical requirements of the provisions of the tax laws. Furthermore, three aspects of tax compliance consist of filing, reporting and payment. compliance is to report true tax base, to calculate tax liability correctly, and finally to file tax returns in time and in appropriate manner [14]. Any contrary to the above behaviors is considered as a non-compliance. Tax compliance can also be defined as the degree to which taxpayers comply with the tax laws [15]. Hence, they defined tax compliance as the degree of compliance with tax laws and administration without the request of any enforcement activity. Generally, tax non-compliance consists both tax avoidance and tax evasion [15]. Their different criteria lie in its legality. Tax avoidance deals with eradicating or minimizing the tax liability within the scope of the law. Oppositely, tax evasion deals with an effort to minimize or totally eradicating the tax liability illegally which means by breach the tax laws [16]. As such, while tax avoidance is legally there but tax evasion is illegal. contrariwise, both deals with the manipulation of a people's activities to reduce tax liability but tax avoidance employed legal measures while tax evasion is illegal measure. Tax avoidance is commonly practiced by using intelligent analysis and choice of alternatives with less tax impact and by taking advantage of faults and loopholes in the existing tax laws [16]. It contains effective use of both the legitimate fiscal policies and technical lacks and ambiguity in the tax laws, which results in either permanent elimination of tax liability or a postponement of it [16]. Common tax avoidance technically includes different tax planning strategies such as utilizing various tax deductions and exemptions, managing capital expenditure to get maximum capital allowance, structuring a transaction to switch income receipt arises as capital and transfer pricing not in an arm's length arrangement [16]. Meanwhile, tax evasion is characterized by a deception and willful mind aims at paying less tax than it is legally due through unlawful courses of action. Tax evasion is a failure to disclose income or non-filing of tax return, or file return on time, or intentionally improper filing; illegally reducing tax by underreporting income or over reporting deductions by making false declarations or use fake invoices, making false claims for allowances and failure to pay tax by the due to date [17]. Although, the conceptual difference between tax avoidance and tax evasion depends on the legality of the taxpayer's actions [18] the intention of both tax evasion and tax avoidance is the same, that is to escape tax and the consequences are similar which is to make private gains at the expense of public loss [19], and results in loss of revenues to the government [16].

ii. Service Quality

Service quality refers as the difference between expectation and actual performance, this is most commonly accepted definition by researchers [20]. Service quality also can be defined as a degree of excellent either objectively or subjectively, evaluated. It is a judgment of how well a distributed service adapts to the

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customer's expectation. Service business providers frequently assess the service quality provided to their customer to increase their service quality, to identify problems and to attain customer satisfaction [21]. In the context of e-taxation, it is proved that the quality of tax service was considered as evidence that the society was modern and shown that the tax authority will always provide better service to taxpayers [22]. On the other hand, the service tax is the way to help tax authorities, administer, or prepare all the requirement purposes for taxpayers [23]. They also elaborated that taxpayer had to be treated in a similar way just like other private businesses. Quality of tax service is measured by whether taxpayer satisfied or not satisfied. Service which up to the standard can provide satisfaction to the taxpayers, can be accounted for and must be carried out consistently. The quality of service is determined by five components, which are tangibles, reliability, responsiveness, assurance and empathy [20]. Tangibles consist of physical facilities, equipment, and staff appearance. Reliability refers as the ability to perform the promised service dependably while accurately refer as the responsiveness of willingness to help customers and provide prompt service. Assurance defined as the knowledge, courtesy of employees and their ability to inspire trust and confidence while empathy is caring and individual attention the firm provides its customers. These five dimensions primarily focus on the SMEs online shop owners' aspects of service delivery (responsiveness, reliability, assurance, and empathy) and the tangibles of service offered. [24] the tax service provided by tax authority divided into three categories, which are information, interaction and transaction. Firstly, the transaction is the interior service, while information and interaction services are complementing the transaction service. The previous study, measure the tax service quality by three component elements such as responsiveness, reliability and informativeness [25]. Responsiveness is basically aimed at how fast the administrators will respond to any inquiries made by the taxpayers. The responsiveness refers to the availability to attend taxpayers in accurate timely manner. Moreover, it also indicates how friendly the system is in terms of format when they need to update the taxpayer's details such as status, location, and form of payment of their tax. [26] examined the quality of dimension of responsiveness in terms of the response to feedback. It is consistent with study which emphasized on responsiveness that deserves more attention with respect to tax quality [20]. Reliability refers as the process in which the system has the capacity to access its administration task accurately and dependably by evaluating as demand [27]. Similarly with the view of [20] that listed reliability as the most significant measurement in all service's quality dimensions. Reliability in tax service quality it is vitally essential due to when evaluating an innovation, there is a need to know how reliable the system meets the objectives of its adoption. Informativeness in service quality refers to the quality of information provided and available on the online system or website presented by the tax authority [28]. The accuracy and completeness of the information could be improved with objective measurement of information. Thus, the capability of tax authority to provide sufficient and helpful information which will benefit tax officials in return. The tax authority system is more accurate, relevant and convenient to use are more effective with the information provided with the interest of the SMEs online shop owner.

iii. Tax Awareness

Tax awareness refers to SMEs taxpayers' understanding and consciousness of tax laws and regulations on the specific tax issues. Consciousness is an element in human beings to understand the reality and how they

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react towards the facts [29]. The mode of consciousness of paying taxes will encourage SMEs Online shop owner taxpayers to pay tax, knowing and understanding about taxes [30]. Based on this statement, it revealed that the taxation awareness is related to the taxpayers in paying their tax obligations, reporting tax return, function and regulation along with the sanctions of the tax itself. Taxpayer awareness is understandable if the taxation regulation has been known, acknowledged, and respected. If the tax regulation is still not complied, that shows SMEs online shop taxpayer's awareness is still low. The low awareness of SMES taxpayer is suspected to be caused by the minimum knowledge and understanding of tax regulations [31]. Knowledge recognition and obedience to relevant tax law and regulation leads to tax awareness. Education and other mode of assistance to increase awareness may impact tax compliance or might not have any change. Tax awareness will arise through education and tax knowledge for mutual benefits of government and e-Commerce taxpayers in order to improve SMEs taxpayers view and implemented of tax law by authority. [32] summaries some indicators of awareness in paying taxes. There are three main indicators of SMEs online shop owner awareness related to the payment of taxes, which are: (1) the awareness that taxes are main source in supporting the country's development. By knowing this, the e-Commerce shop owner/ taxpayers are willing to pay taxes because they will be affected indirectly (2) The awareness that, delay in payment of taxes and the tax loss can cause adverse financial condition in the countries. E-commerce shop owner are willing to pay taxes because they understand that the delay in payment of taxes and the decline of the tax collection will impact on the reduced financial resources that could also lead to the delays in development. (3) The awareness that taxes are set by law and can be enforced by the authority. The awareness of enforcement will mobilize the e-Commerce online shop owner to meet their tax obligations by paying tax. Up on the explanation above, awareness of paying taxes can be measured as a form of moral attitude which gives contribution so as to support the development of the countries and attempts to comply with all the rules set by the authority

iv. Tax Fairness

Another component that most SMEs online shop owner concern about is referring to the tax fairness. A conceptual framework for fairness considerations suggests differentiating three area of fairness, as in psychology: distributive justice, which refer to the exchange of resource, both benefits and cost. Procedural justice refers to the process of the resource distribution, and retributive justice, refer to the perceived relevance of agreements in the case of norm-breaking [33]. Tax fairness can also be represented in two dimensions: horizontal equity and vertical equity. Contrariwise, there are three types of fairness: distributive fairness, procedural fairness, and retributive fairness. Firstly, the distributive fairness the focus on the fair distribution of costs and benefits in tax payment [34]. Secondly, Procedural fairness refers to equal tax collection among groups of e-commerce online shop owner taxpayers, and thirdly fair treatment of e-Commerce online shop owner/taxpayers in the use of forced power in punishments and audits, is called retributive fairness. In distributive fairness, an individual is concerned with the equality of the outcome and wants to be treated based on his or her merits, efforts, and needs. In procedural fairness, the main component of perceived fairness is neutrality of procedures, trustworthiness of tax authorities, polite,

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distinguished and respectful treatment [35]. Retributive fairness, on the other hand is unreasonable and disturbing audits, and unfair penalties will result a stressful and dissatisfied SMEs online taxpayers [34].

Relationship between Tax Compliance and Service Quality, Tax Awareness and Tax Fairness.

The Relationship between Tax Compliance and Service Quality.

The quality of service which up to the standard can provide satisfaction to taxpayers and can be accounted for and must be carried out consistently. [36] stated that the willingness of taxpayers to pay tax is largely influenced by the quality of services provided by the government. Feeling of pleasure and satisfaction with the services provided by the authority can initiate motivation and compliance for taxpayer. This is consistent with research by [37] which suggested that a tax authority could improve the compliance of taxpayers by establishing cooperation with taxpayers. [37] argued that the tax authority had to consider itself as service institution and provide quality service and treat SMEs online taxpayers as their partner. So, the optimistic perception of taxpayer towards tax service quality will lead to more compliance and vice versa. Based on previous findings, the present study has proposed that the behavior of SMEs online taxpayer would change according to their opinion and attitudes about the quality of the tax service. This study is an attempt to demonstrate the relationship between tax service quality and tax compliance among e-Commerce enterprises.

Thus, the proposed hypothesis is:

Ho: Tax compliance among e- commerce SMEs does not depend on Tax service quality in the global

Ha: Tax compliance among e- commerce SMEs depends on Tax service quality in the global

Up on supported by researchers above shows that

Ha_1: Service quality have a positive significance relationship with tax compliance among e-commerce SMEs online shop owner globally. This is a strong association were supported by researchers above to make the hypothesis accepted.

Relationship between Tax Compliance and Tax Awareness

There is a fact that tax is a source of income to support development of country. Knowing this reality, SMEs online shop taxpayer will pay tax because they know the important of it and delaying is not an option since gives impact to lack of financial resources. The delay of resources may lead to domino effect in country's development. The realization that the tax is set of legislation and can be enforced may encourage SMEs online shop taxpayer to do their absolute duty to pay tax. The experiment conducted by the researcher shows that the influence of tax awareness and SMEs online shop taxpayer compliance [38]. In the study, two group of bachelor's students are compared based on their assignment to study, which is on tax and marketing. The study found that student which study tax, reported to have more positive attitude towards tax compliance. in study mentioned that SMEs online shop taxpayer voluntarily pay taxes if they understand the variety of taxes that they have an obligation to pay and how to benefit from their contributions [39]. While another study found that SMEs online taxpayer awareness has a strong, positive association with the tax

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compliance of individual taxpayers.[40]. This finding is also similar to the one study which found that tax awareness has a positive association with tax morale statistically will increase tax compliance [41]. Based on study, the concept of tax awareness refers to tax knowledge and tax education amongst SMEs online taxpayers where tax knowledge improves individual's awareness and level of ethics towards tax compliance. Furthermore, understanding more about tax system will improve by tax education [42]. It is claimed that tax awareness as "self-awareness of SMEs taxpayers individually to take responsible to calculate, pay and report their own tax" [43]. Moreover, one another study explained that SMEs online shop taxpayers' awareness arise when taxpayers are knowledgeable of how to calculate tax and how to pay their tax liability [23]. From previous research, tax awareness was defined through tax education and tax knowledge as dimensions. From the above multiple supported literature review regarding tax awareness, hence developed the hypothesis as below:

Ho: Tax compliance among e- commerce SMEs online shop owner does not depend Tax awareness across the global
Ha: Tax compliance among e- commerce SMEs online shop owner depend on Tax awareness across the global.

This were overwhelmingly supported by researcher across the global
Ha_2: Tax awareness have a positive significance relationship with tax compliance among e-commerce SMEs online shop owner across the global. This is very strong association supported by literature review to make the hypothesis accepted

This was largely supported by researchers to make a strong association between Tax awareness and Tax compliance.

Relationship between Tax Compliance and Tax Fairness

Taxpayer's perception on whether a tax system is fair and impartial is very important as previous studies in [44] successfully and proven that positive perception results in good compliance behaviors. If tax fairness perception found exists, voluntary compliance will increase and vice versa. This was supported by the researchers who found that SMEs online taxpayers are less compliant if they perceived unfairness in existing tax system [45,46]. There is condition which makes the competition unfair between corporate taxpayers and SMEs online shop or individual taxpayers. For corporate taxpayers, audited account obligation has to be fulfilled, meanwhile no audited account obligation for enterprises business including e- Commerce enterprises. Unfairness may also happen when government did not enforce tax rules to e-commerce taxpayer, while brick and mortar taxpayer have to pay taxes. This condition which some SMEs online shop taxpayers have to pay taxes while some others don't, will lead directly to unfairness. taxation should be imposed according to equality, certainty, convenient and economy. Equality means tax will be charged to individual taxpayers or corporate taxpayer in fair and identical. Perception of fairness can also create ethical attitudes among taxpayers, which involves moral issues that choices and deals with right and wrong behavior. Tax

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fairness motivates to better and positive attitude toward tax. It summarized that tax fairness influence SMEs online taxpayer ethical attitude. Therefore, some researchers confirmed that fairness have significant correlation with tax compliance. To sum up, if SMEs online taxpayer perceived that the tax burden is fairly distributed within a peer group, tax compliance will increase.

From these supported arguments above, they lead to the following hypothesis:

Ho: Tax compliance among e- commerce SMEs online shop owner does not depend on tax fairness across the global

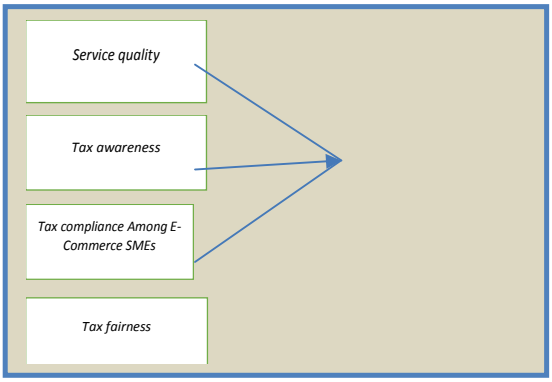
Ha: Tax compliance among e- commerce SMEs online shop owner depend Tax fairness across the global

The above hypothesis was accepted showing strong association between Tax fairness and tax compliance as shown below

Ha_3: Tax fairness have a significant positive relationship with tax compliance among e-commerce SMEs online shop owner across the global.

Model

According to the above hypotheses the following model was developed such that the Tax compliance was much affected by the tax awareness, quality of service and tax fairness. which says that the better the Quality of service, tax fairness and tax awareness the better the tax compliance and vice versa.



Conclusions

Mainly, the objective of this study is to put forward the determinants influencing e-Commerce SMEs online taxpayers' compliance in e-taxation. Literature on the on the relevant past researches showed that service quality, tax awareness and tax fairness, influence to tax compliance. This paper has different implications for theory and practice. Theoretically, the implication of this paper is in between the integration of prior compliance and non-compliance literature in sociology, management and economy as

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well as physiological to explain determinants in tax compliance. Also, another theoretical implication is the put forward the study model that could be used to conduct further studies on e-Commerce SMEs online shop tax and compliance. Eventually this would maximize e-tax collection in SMEs online shop owner in near future.

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GREEN MARKETING PRACTICES AND CONSUMER BEHAVIOR OF ORGANIC FOOD

Nguyen Thi Le Ha[1,3], Nguyen Pham Thuy Linh[2,3]

[1,2] School of Business Administration, International University, Ho Chi Minh City, Vietnam

[3]Vietnam National University, Ho Chi Minh City, Vietnam

Abstract

Green marketing can be defined as marketing actions that target at minimizing the negative environmental and social implications of existing products and production systems, while simultaneously promoting products and services with a lower environmental impact. In the study, green marketing concentrates on customer-facing strategies such as eco-labeling on organic products, providing customers with a green and eco-friendly shopping environment, implementing organic food promotion and advertising strategies. The study aims to investigate the impact of green marketing practices and factors including both facilitators and barriers on consumer behavior of organic food in an emerging market, Vietnam. Data about consumer purchase intention and behavior of organic food is gathered using both online and offline questionnaire survey. The collected data is then processed and analyzed utilizing statistical softwares namely SPSS and SmartPLS to examine if there are significant relationships among independent and dependents variables.

Keywords: Attitude; Consumer Behavior; Green Marketing; Organic Product; Usage Barrier; Valued Barrier.

Introduction

Research Background

Along with the development of integration and globalization, businesses are currently facing serious problems related to environmental pollution, climate change and the consequences of chemicals, growth substances, genetic change, etc. Food that is dirty and contains residues of antibiotics, pesticides and genetic modifications are one of the causes of poisoning, which is dangerous to consumers' health (Teng & Wang, 2015). In addition to ecological and environmental concerns, consumers are also becoming more sensitive about nutrition, health, and product quality (Willer et al., 2020). Therefore, the organic market has recently increased significantly and is considered one of the largest growth markets in the food industry (Hughner et al., 2007). According to Willer and Lernoud (2017), Organic Monitor reported that the development of organic agriculture is a common trend in many countries. In particular, the world has 50,9 million hectares of organic farming and a market potential of $81.6 billion in 2015 for retail sales of organic food and

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beverages. Europe and North America generate the most organic product sales (90 percent of organic food and beverage sales). As reported by the Ministry of Agriculture and Rural Development, the global market for organic agricultural products generated approximately 18 billion USD in 2000, but 100 billion USD in 2018 and 188 billion USD in 2021. By 2022, it is expected to reach $208 billion. With a market share of 90%, North America and Europe account for the majority of sales. Most of the growth came from Asia, with the main market shares from China, Korea, India and Thailand.

Business Associations of High-Quality Vietnam Products indicated that the fields of health and wellness in general and organic products in particular have grown in Vietnam during the past few years. According to Euromonitor, Vietnam's health and wellness product market has achieved a value of USD 5 billion in 2019 and has grown by more than 9% annually over the past five years, with retail sales of organic foods and beverages reaching USD 130 million in 2019. Promoting sustainable food consumption is one of the nation's top priorities, with the purpose of addressing growing concerns about environmental, health and food safety issues (Koning et al., 2015; Truong et al., 2012). To promote the development of the organic food industry, the Vietnamese government has implemented a number of initiatives, including Decree 109/2018/ND-CP dated August 29, 2018, on organic culture and food safety standards. Manufacturers and retailers have exerted considerable effort to provide a diverse selection of organic food products (such as vegetables, fruits, cereals, and meat) as well as to expand their distribution networks. Since 2018, Vietnamese businesses have started producing organic goods. However, Vietnamese companies' brand recognition is still low, making it difficult for them to join the European market (Ha Phuong, 2022) Organic food has been a niche industry in Vietnam in the past due to its high prices. However, as the country's economy develops and people's living standards improve, the need for safe and high-quality products also rises (Nguyen & Petlock, 2021). In addition, Vietnam is an emerging market with a population of over 95 million, a gross domestic product growth rate of over 6% over the past decade, and approximately 50% of income spent on food and beverages on average (World Bank, 2019). It is obvious that Vietnam has a great potential for organic food consumption. The study hopefully demonstrate that developing a sustainable economy, which includes the development and deployment of environmentally friendly, healthy organic food products, is a long-term, sustainable, and trending plan.

Problem Statement

In Vietnam, food poisoning and high rates of foodborne illness make a part of consumers worried about food safety (Ehlert & Faltmann, 2018; Ngo et al., 2020). The quality of food in Vietnam has still decreased in recent years, and consumers have numerous challenges when choosing foods that are both nutritious and safe for health. According to statistics from the Vietnam Food Safety Authority, in 2020, the whole country recorded 139 cases of food poisoning, with more than 3,000 people being poisoned (Nga, 2021). This is an alarming number for the foods of Vietnamese consumers. Therefore, to ensure the safety and health of consumers as well as comprehensive nutrients, organic food is the food that meets the needs of consumers. Organic foods have become a strong consumption trend for intelligent consumers due to their superior level of food safety and hygiene and their high nutritional quality.

Organic food is a new product and market for customers in undeveloped and developing countries (Thøgersen et al., 2015), particularly in growing markets such as Vietnam. One of the reasons the organic

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food market is underdeveloped is that consumers do not have a thorough understanding of safe food, lack information for traceability, are challenging to learn, and do not understand clearly the production process (Hughner et al., 2007; Kushwah et al., 2019). Furthermore, Vietnamese consumers believe that organic food is nutritious and healthful, so it is prohibitively expensive for all except the wealthiest consumers. As a result, organic food is only popular among a minority of Vietnamese customers.

Consumption behavior related to organic food has received considerable study from researchers in a variety of aspects, including characteristics, preferences, consumer attitudes, purchase intention, willingness to buy, and organic food consumption patterns in different nations (Kushwah et. al., 2019). However, there are few researches on attitudes, intentions, and purchasing behavior of organic food in Vietnam, and most studies only analyze the situation and offer solutions. Few researchers have investigated the factors that influence the intent to purchase organic food. In addition, green marketing has become a popular activity and an essential field of study for many businesses in the world. However, this is a relatively new form in Vietnam. Specifically, a limited number of researches has been conducted on the effect of green marketing techniques on consumers' intentions to purchase organic food in Vietnam. In addition, there is a lack of study on the factors that restrict the intent to purchase organic food. This study thus attempts to explore the impact of green marketing practices on consumer intention to purchase organic food as well as to assess different barriers to the purchase of organic foods.

Research Objectives

The current study aims to reach the below objectives.

- To identify the factors affecting and inhibiting consumers' attitudes and intentions to buy organic food
- To evaluate the degree of impact of each factor on consumers' attitudes and intentions to buy organic food
- To evaluate the degree of impact of green marketing practices on consumers' intentions to buy organic food

Literature Review

Organic Food

Organic foods are foods that are certified and labeled by reputable organizations. Organic certification is a certificate issued to a product to confirm that the product is organic. Organic products are governed by stricter regulations than conventional foods. All farmers, sellers, manufacturers, and importers must be registered, tested, and approved by the organizations. Organic certifications in the world include USDA, NSF/ANSI (American National Standard) certification, certification Natrue, ACO certified (Australian Certified Organic, OFC certified (Organic Food Chain), BDHI certified (Soil Association), BIO-SIEGEL, NASAA Certified Organic, EU ORGANIC BIO, JAS, etc., which are widely used in Vietnam. Organic foods include products from plants (fruits, seeds, tubers,...) and products from animals (meat, dairy, eggs, etc.) From these two basic categories, processed organic foods such as fruit juices, dairy, snacks, grains, etc. can be produced.

According to FAO/WHO, organic food is produced using a natural farming technique, without the

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use of chemical fertilizers, pesticides, growth accelerators, preservatives, or genetic modification. These techniques are replaced with site-specific management practices aimed at preserving and enhancing soil fertility over time and preventing pests and diseases. USDA organic foods are grown and processed in conformity with strict guidelines. Organic producers rely on natural substances and physical, mechanical or biological-based farming methods to produce food. A product could be labeled "organic" if it has been certified as having been grown in soil free of prohibited contaminants. For organic meat, it is required that animals be raised in living conditions consistent with their natural behaviors (such as the ability to graze), must be fed 100% organic food and forage, and no antibiotics or growth promoters were used.

Previous research has proven that organic food is safer and healthier because of the properties of organic food such as pesticide-free, more nutritious, contains more vitamins than conventional food (Chekima et al., 2017). Hence, this study considers organic food is environmentally friendly food. In the process of food production and processing, no genetically modified materials are used, no harmful chemicals such as pesticides, herbicides, growth stimulants, antibiotics are used.

Hypothesis Development

Intention Towards Purchasing Organic Food.

Intention is the perceived expression of a person's willingness to perform a certain behavior, and it is the most accurate predictor of behavior (Ajzen, 1991). Attitude towards behavior (attitude), intention to perform the behavior (intention) and actual behavior (behavior) are three concepts used in the TPB model (Ajzen, 1991). Buying intention is considered to be the stage preceding the behavior, it is assumed to be the motivating factor to achieve the buying behavior. It indicates the level of willingness, and effort to perform a behavior. in general, the higher the intention to buy organic food, the higher the probability of buying organic food (Ajzen, 1985). In other words, the intention to buy organic food is defined as a plan to buy a particular organic food in the future. If we can accurately predict purchasing intentions, we may be able to predict purchasing behavior. According to (Brown et al., 2003), consumers who intend to buy certain products will show a higher percentage of actual purchases than customers who demonstrate that they have no intention to buy.

There are 19 papers out of 32 empirical researches that studied the association between motivations, barriers, and consumer purchase decision using organic buying intention as the dependent variable (Kushwah, Dhir, Sagar, et al., 2019). Some studies on the gap between intention and behavior indicate that it functions as an independent variable influencing customers' actual organic product purchasing behavior (Singh and Verma, 2017). In many studies on consumer intention-behavior, the intention to buy organic food appears as a dependent variable that is influenced by factors such as attitude consumer level, perception (Hwang, 2016; Le-Anh & Nguyen-To, 2020; Liao et al., 2020; Radulescu et al., 2021). Some research in Vietnam investigated the intention to consume organic food; these studies focus on studying the behavioral intention of individuals in one of Vietnam's major cities, Hanoi (Le-Anh & Nguyen-To, 2020; Nguyen et al., 2019; Pham et al., 2018).

As can be seen, the consumer's intention to buy organic food is the first step in developing the need to buy organic food. In this study, the author mainly applies Ajzen's 1991 definition of intention as an

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indicator of an individual's willingness to buy organic food.

Environmental Concerns

Environmental concern is understood as the degree to which a person notices environmental problems and attempts to solve them or is willing to contribute to solving them (Dunlap & Jones, 2002). Understanding a person's interest in environmental issues allows for the prediction of their organic food purchasing behavior (Rana & Paul, 2017). Tregear et al. (1994) discovered that customers of organic products frequently show concern for the environment by participating in eco-friendly activities. Lin & Huang (2012) concluded that environmental concerns have a direct and positive effect on customers' intention to purchase products that are sustainable. Organic produce is thought to be less harmful to the environment than conventional food because it does not contain harmful artificial chemicals like pesticides, herbicides, and chemical fertilizers (Rana & Paul, 2017; Williams & Hammitt, 2001). As a result, purchasing organic food is an environmentally friendly behavior. Individuals who care about environmental issues will have a favorable attitude and purchasing behavior toward organic products, which are environmentally friendly.

Concern for the environment has a positive impact on consumers' attitudes toward purchasing organic food in the context of a developing country, specifically India (Yadav & Pathak, 2016a). Fleseriu et al. (2020) and Smith and Paladino (2010) proposed a positive and significant relationship between environmental concern and attitudes toward organic food purchasing in the Romanian and Australian contexts. In the Vietnamese market, Nguyen et al. (2019) conducted research in Hanoi, Vietnam, which revealed that environmental concern had a significant positive influence on Hanoi consumers' attitudes toward purchasing organic meat.

Organic food, with its benefits, is a new trend that contributes to environmental protection while also providing clean product lines that are beneficial to the environment and human life. Environmental awareness will influence consumers' attitudes and behaviors toward organic food.

H1: Environmental concern have positive effect on consumer attitude towards purchasing organic food.

Food Safety Concerns

Food safety concerns refer to the extent to which consumers are concerned about the quality of processed foods, food additives, and pesticide residues can endanger their physical health (Hsu et al., 2016). According to Van Loo et al. (2013), the primary motivation for consumers to use organic food is food safety. This is completely understandable, because when it comes to food safety, consumers immediately think of the use of fertilizers, pesticides, preservatives, antibiotics, and chemical additives in the food production process (Nagaraj, 2021), while organic foods are considered safe for human consumption because they are produced without the use of unwanted harmful chemicals (Rana & Paul, 2017).

Research by Michaelidou and Hassan, (2008), and Rana and Paul (2017) shows that food safety concerns play a crucial role in shaping consumer attitudes about organic food. Hsu et al. (2016) also revealed that food safety concerns have a substantial positive effect on attitudes towards organic food. Several studies in the Vietnamese market, particularly Hanoi, also confirm that food safety concerns have a significant positive relationship with attitudes towards organic food purchasing behavior (Le-Anh &

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Nguyen-To, 2020; Nguyen et al., 2019; Pham et al., 2018). This relationship has not been demonstrated in HCMC. Especially given the current consumer situation in HCMC, unsafe products are typically not purchased or consumed.

H2: Food safety concern have positive effect on consumer attitude towards purchasing organic food.

Health Consciousness

Health consciousness describes consumers who perceive and care about enhancing or preserving health and quality of life (Kraft & Goodell, 1993). The majority of these consumers will be knowledgeable and concerned about safety, nutrition, and fitness, as well as disease prevention by engaging in healthy activities and being health-conscious (M. F. Chen, 2009).

When considering the relationship between health awareness and the attitude and intention to buy organic food, Research by Rana & Paul (2017) and Yadav & Pathak (2016) indicates that health concerns have a substantial impact on customers' attitudes about organic food. According to the Romanian organic food purchase intention survey, health concern is one of the most important reasons why customers choose organic foods (Fleseriu et al., 2020). Another study conducted in developing nations such as India concurred that there is a high association between health consciousness and the attitude to purchase organic food (Singh & Verma, 2017, Kirmani et al., 2022). However, Michaelidou & Hassan (2008) stated that health consciousness has only a low impact on the attitudes of organic food consumers. Moreover, Nguyen et al. (2019) and Pham et al. (2018) suggested that health-conscious consumers in the Hanoi city of Vietnam have a notably favorable attitude toward organic food.

H3: Health consciousness have positive effect on consumer attitude towards purchasing organic food.

Organic Food Knowledge

Consumers' knowledge of organic products is defined as their understanding of organic foods and their capacity to evaluate its quality and distinctive characteristics (Nguyen et al. (2019). According to Aertsens et al. (2011), there are two basic categories of knowledge regarding organic food: subjective knowledge, or what consumers believe they know, and objective knowledge, or what they actually know. De Magistris and Gracia (2008) defined product knowledge is an important factor, having a significant impact from which there is a positive or a negative attitude on the intention to buy organic food. The reason for lack of knowledge is one of the barriers to buying organic food.

Previous researches have shown that knowledge has a strong impact on consumer attitudes and behavior (De Magistris & Gracia, 2008, and Aertsens et al., 2011). Smith and Paladino (2010) demonstrates that people's attitude and purchase decisions towards a product are influenced by their knowledge of the product. In a developing country market like India, Singh and Verma (2017) found that consumer education regarding organic food has a favorable effect on consumers' attitude to purchase organic items. Demirtas (2018) suggested that the level of knowledge about organic food has a significant influence on their attitudes and behavioral intentions towards purchasing/consumption in Turkey. The study of Nguyen et al. (2019) and Pham et al. (2018) demonstrate that there is a positive relationship between consumer attitudes in Vietnam towards organic products.

H4: Organic food knowledge have positive effect on consumer attitude towards purchasing organic food.

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Attitude Towards Purchasing Organic Food.

Attitudes toward a product refer to the way that buyers pay attention to and the things that they are interested in. Consumers who have a favorable attitude toward a product are more likely to choose the store and buy the product (Ajzen, 1985). TPB model has assessed attitude as one of the important factors affecting the purchasing decision of consumers. Attitude contributes to the explanation of each behavior. Good attitude, strong behavior, stimulating, increased behavior; Conversely, a bad or neutral attitude means that the behavior is hesitant or restricted. Attitudes form beliefs, which are then associated with specific behaviors (Ajzen, 1991).

Smith and Paladino (2010) demonstrated a strong effect of attitude towards behavior on intention to buy organic food. This relationship has been confirmed again by the study of Ham et al., (2018) with 411 responses from major household shoppers in five counties of Slavonia and Baranya in Croatia. The findings of this study are comparable to those of Hsu et al. (2016). This shows that consumer attitudes predict their intention to purchase organic foods. Previous studies in India have also shown that attitude has a positive effect on consumer purchase intention (Yadav & Pathak, 2016; Singh & Verma, 2017; Nagaraj, 2021). Similar to Demirtas (2018) conducted a study on factors promoting organic food choices with 431 consumers in Turkey. As a result, the intentional purchase attitude towards organic food significantly increased purchase intention. This relationship has been proven through the study of Fleseriu et al. (2020), which was conducted by using structural equation modeling. The results of this study are similar to the previous study of Tandon et al., (2020). It shows that attitude is one of the factors that positively influence the intention to buy organic food. In a recent study of Le-Anh & Nguyen-To (2020), Pham et al. (2018), the SEM approach was used to examine the impact of Hanoi residents' attitudes regarding buying organic food on their purchase intentions. Research results showed that Positive customer attitudes also influence the intention to purchase organic foods.

H5: Attitude have positive effect on consumer intention to purchase organic food.

Green Marketing

Peattie, (2004) defined green marketing as marketing actions targeted at minimizing the negative environmental and social implications of existing products and production systems, while simultaneously promoting products and services with a lower environmental impact. Specifically, Papadas et al., (2017) identified green marketing as an enterprise's commitment to provide safe and environmentally friendly products and services through the use of recyclable and biodegradable packaging and the adoption of more effective pollution prevention practices. In this study, green marketing focuses on customer-facing strategies such as eco-labeling on organic products, providing customers with a green and eco-friendly shopping environment, implementing organic food promotion and advertising strategies such as leaflets, and sales of various organic food brands (Nguyen et al. 2019).

Green marketing activities have been widely recognized as having a substantial influence on consumers' choices for environmentally friendly products (Maniatis, 2016), and organic foods are also recognized environmentally friendly items according to the studies stated above. Chen and Chang, (2012) suggest that if businesses can effectively use green marketing strategies, they can increase customers' trust in

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green products and their intent to acquire green products. Ko et al. (2013) study indicated that, from a Korean perspective, the close association between green marketing activities and corporate image has a positive impact on the intention to purchase that company's products. Comparable outcomes were found in a Malaysian investigation (Mohd Suki, 2017). Thus, adopting a green marketing approach that involves the dissemination of green-certified eco-friendly products and environmental claims can significantly influence customer attitudes and intentions regarding green products, especially organic food (Yadav & Pathak, 2016b). According to the research conducted by Tan et al. (2022) in Pakistan, green marketing initiatives have a positive effect on consumer purchasing intention. Nguyen et al. (2019) demonstrates that green marketing strategies have influenced customers' intentions to purchase organic food in Hanoi.

H6: Green marketing practices have positive effect on consumer intention to purchase organic food.

Value Barrier

The value barrier is customers' hesitation to purchase organic food due to the high price tag and value for money invested versus the time and effort expended to obtain the product (Kushwah, Dhir, Sagar, et al., 2019; Laukkanen, 2016). When users view information regarding organic food to be ambiguous and time-consuming to acquire, value barriers occur. When the new product's worth is lower than the current value, they feel anxious. Ram and Sheth (1989) suggest that for a product to be innovative, it must offer consumers with superior performance-to-price alternatives that motivate them to alter their current behavior. In the context of organic food, it has been discovered that customers limit their purchases due to the perception of higher prices (Yazdanpanah et al., 2015). Furthermore, the additional time and money worth of purchasing organic food is accounted for in perceived costs (Torres-Ruiz et al., 2018). As a result of the difference in value between organic food and conventional food alternatives, time and high cost are the two primary hurdles.

Organic food's high cost frequently discourages consumers from making purchases (Basha & Lal, 2019). According to studies conducted by Yadav and Pathak, (2016a), Basha and Lal, (2019), Nguyen et al., (2019), and Pham et al. (2018) the price of organic food is a barrier to consumers' decision to purchase it. The study by Kushwah, Dhir and Sagar (2019) examines the assumption that the value barrier has a negative influence on organic food customers' purchase intentions, which in turn has a negative link with consuming behavior. Scholars identify time concerns, high prices, and value for money as the most significant value barriers that discourage consumers from purchasing organic food.

H7: Value barrier have negative effect on consumer intention to purchase organic food.

Usage Barrier

The usage barrier is customers' resistance to purchase organic food because it is inconvenient for them because of supply shortages (Chekima et al., 2019; Laukkanen, 2016). Barriers to usage develop when users perceive a product to no longer provide a satisfactory experience, to be inconsistent with their habits, or to be unable to adopt new items (Ram & Sheth, 1989). Therefore, Tandon et al. (2020) suggests that usage barriers may be more apparent in the organic food setting due to customer rejection to unfamiliar products, particularly in emerging market.

The findings of previous studies show that information collecting, availability, and low store

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visibility are challenges that customers frequently experience while purchasing organic food (Bryła, 2016; Kushwah, Dhir, Sagar, et al., 2019). Other researchers have demonstrated that the limited availability of organic food goods can discourage customers from purchasing them (Brya, 2016; Pham et al., 2019).

H8: Usage barrier have negative effect on consumer intention to purchase organic food

Research Methodology

Research Approach

Quantitative research method is used in this study to collect and evaluate survey data, as well as to assess the theoretical research model and hypotheses. Quantitative research is a technique for collecting information and data in the form of arithmetic and statistical data in order to gain basic and general information about the research object for statistical analysis purposes. Information and data are usually gathered through surveys using a large-scale questionnaire and are often applied in the case of a large sample size.

Sample, Data Collection And Analysis

The study focuses on the primary elements that influence the purchasing behavior of organic foods, particularly from the standpoint of customer evaluation, or the consumer's perception of the product. Target participants are consumers who have purchased or intend to purchase organic food in the future from stores and supermarkets selling organic food.

In this study, Structural Equation Modeling (SEM) is employed for data analysis. This technique requires a large sample size (D. T. Nguyen, 2014). However, there is no standard for a sample to be called large. Researchers are constantly debating what sample size is considered large and appropriate for the SEM approach (Kline, 2011). EFA is another approach with a large sample size used in this research. According to Hair et al. (2014), the minimum sample size to apply EFA is 50, preferably 100 or more. The ratio of observations to a variable is 5:1 or 10:1, some researchers suggest should be 20:1. This survey has 32 questions using a 5-point Likert scale. Applying the ratio 5:1, the minimum sample size would be 160. It is also indicated that the larger the sample size, the higher the accuracy. Consequently, to ensure the accuracy of the research, sample size of 300 or more is preferred.

Analytical methods used to evaluate the above factors include: Exploratory factor analysis (EFA); Cronbach alpha scale test. The results from the scale test and exploratory factor analysis are re-evaluated by the Confirmatory factor analysis (CFA) method. Structural Equation Model (SEM) is then used for examining the relationships among factors in the research model.

Measurement Scale

In order to measure the variables, the present study utilizes the items being designed by other researchers. Particularly, environmental concern is evaluated using the scales that are developed by Pham et. al. (2018). Food safety concern is assessed by the items from Michaelidou and Hassan (2008). Health consciousness is measured by the items that are designed by Tarkiainen and Sundqvist (2005). Organic food knowledge is evaluated by the items adapted from Aertsens et al. (2011) and Nguyen et al. (2019). Attitude towards purchasing organic food is assessed by the items from Arvola et al. (2008), and Dean et al. (2012). Green marketing practices is measured by the items developed by Mohd Suki (2017). Value barrier is

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measured by the items adapted from Tandon et al. (2020), Kushwah et al. (2019), and Pham et al. (2018). Usage barrier is evaluated by the scale designed by Tandon et al., (2020) and Pham et al. (2018). Intention to purchase organic food is measured by the items built by Michaelidou and Hassan (2008), and Yadav and Pathak (2016).

Conclusion

Organic foods are increasingly produced and consumed thanks to their health and environmental benefits. The present study's purpose is to develop a research model for discovering the influence of green marketing practices and other factors including facilitators and barriers on consumer behavior of organic food.

In the study, the Independent and dependent variables are assessed by the measurement items adapted from Pham et. al. (2018), Michaelidou and Hassan (2008), Aertsens et al. (2011), Nguyen et al. (2019), Arvola et al. (2008), Dean et al. (2012). Mohd Suki (2017), Tandon et al. (2020), Kushwah et al. (2019), Pham et al. (2018). Tandon et al., (2020), Pham et al. (2018), Michaelidou and Hassan (2008), and Yadav and Pathak (2016).

Survey questionnaire is employed to gather the data about the target respondents who have purchased or intend to purchase organic food in the future from organic food stores and supermarkets. Not only online survey but also offline survey is carried out to get the necessary data. The gathered data will then be processed and analyzed using SPSS and SmartPLS to investigate if the proposed relationships among variables are significant.

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SOCIALIZATION: KEY IN ENHANCING ONES OVERALL STANDARDS OF LIVING

Dr. Radhika Kapur

Abstract

The socialization is the fundamental aspect, which renders an important contribution in leading to up-gradation of one's overall personality traits and standards of living. When the individuals are reinforcing the processes of socialization, they need to take into account the traits of morality and ethics. In other words, one should communicate in a polite and decent manner. Furthermore, individuals need to treat each other with respect and courtesy. In leading to reinforcement of socialization processes, one needs to hone their communication skills and interactive abilities. The socialization processes need to be put into practice by the individuals, throughout their lives. When the individuals are wholeheartedly determined towards enhancing one's personality traits and bringing about improvements in one's overall quality of lives, one needs to form an effective social circle. As a consequence, one generates information in terms of various ideas and perspectives, communicates in terms of solutions to various problems and incur the feelings of pleasure and contentment. This would render a significant contribution in enabling the individuals to cope with various types of psychological problems. Therefore, one is able to understand on a comprehensive basis that socialization is the key in enhancing ones overall standards of living. The main concepts that are taken into account are, understanding the meaning and significance of socialization, benefits of socialization and factors highlighting the importance of socialization in leading to effective growth and development of girls.

Keywords: Abilities, Communication Skills, Effectiveness, Social Circle, Socialization, Up-gradation, Well-being

From the stage of early childhood, throughout the lives, girls and women need to acquire an efficient understanding of meaning and significance of socialization. The socialization is the key, which will prove to be beneficial to women to a major extent. The family members, relatives, friends, instructors, supervisors, employers, neighbours and community members are the individuals with whom, socialization takes place (Chapter 5. Socialization, n.d.). Seclusion and loneliness are regarded as distressful states. These have unfavourable effects upon the overall personality traits of girls and women. Hence, in order to enhance one's personality traits and bring about improvements in one's overall quality of lives, it is of utmost significance to form an effective social circle. When one has an effective social circle, one generates information in terms of various ideas and perspectives, communicates in terms of solutions to various problems and incur the feelings of pleasure and contentment. Therefore, socialization is a concept, which proves to be advantageous to women on a comprehensive basis.

From the stage of early childhood, girls are taught that beyond their homes, also there is a world with

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which they need to interact with (Socialization, 2021). The women have various goals and objectives to achieve. These are acquisition of good-quality education, getting engaged in employment opportunities, promoting good health and well-being, augmenting skills and abilities, promoting well-being of their families and bringing about improvements in their overall standards of living. They cannot achieve these goals and objectives by living in isolation. Hence, it is of utmost significance for them to hone social skills and form an effective social circle. In educational institutions of all levels and in various types of employment settings, there are some tasks and activities, which are carried out on an individual basis, whereas, in case of others, teamwork is promoted. Hence, one needs to work in collaboration and integration with others. In the achievement of other goals as well, communication processes are the key that needs to take place in an appropriate manner. Therefore, when women are determined towards achievement of desired goals, they recognize the meaning and significance of socialization.

Socialization is the process through which the individuals generate information in terms of norms and values. The individuals cannot lead to enrichment of their living conditions through interacting with only family and community members. In other words, they need to integrate with the mainstream society. It is necessary for women, belonging to deprived, marginalized and economically weaker sections of the society to alleviate backwardness and augment their communication skills. In educational institutions of all levels and in various types of employment settings, the individuals are different from each other on the basis of various factors, i.e. caste, creed, race, religion, ethnicity, educational qualifications, occupations, cultures, personality traits and socio-economic background. They need to work in collaboration and integration with each other to do well in one's jobs and achieve desired goals. Hence, they need to form positive viewpoints and communicate with others in a polite and decent manner. Therefore, through socialization, one is able to generate information and augment their knowledge in terms of cultures and backgrounds of other individuals.

In order to lead to effective growth and development of girls, socialization is regarded as one of the key factors in terms of which they need to be made aware. Within joint families, there are number of family members with whom one socializes. On the other hand, in nuclear families, there are fewer family members. In schools, students interact with each other in an effective manner to hone their social skills. Parents encourage their girls to participate in social, religious and cultural activities to reinforce the process of socialization. The participation of women in economic and political activities are regarded as the key to reinforce the process of socialization. As a consequence, the girls and women are able to acquire an efficient understanding of the aspects that are associated with all the activities. When one socializes in an effective manner with individuals within as well as outside the homes, they are able to cope with psychological problems of anger, stress, and anxiety in an appropriate manner. Furthermore, they obtain assistance from others in providing solutions to various problems. Therefore, through socialization, one is able to augment skills and abilities and provide solutions to problems.

Understanding the Meaning and Significance of Socialization

Enhancing one's personality traits and bringing about improvements in one's overall quality of lives are regarded as indispensable goals of women. These are also the goals of women, belonging to economically weaker sections of the society. Hence, in order to achieve these goals, it is of utmost significance to form an

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effective social circle. When one has an effective social circle, one generates information in terms of various ideas and perspectives, communicates in terms of solutions to various problems and incur the feelings of pleasure and contentment. In order to lead to effective growth and development of girls, the parents are required to encourage their participation in social, religious and cultural activities. When girls and women participate in these activities, they are able to augment their communication skills. As a consequence, socialization processes will take place in an effective manner. Therefore, one is able to understand the meaning and significance of socialization, when it contributes in leading to up-gradation of overall quality of lives of women, belonging to all communities.

With advancements taking place and with the advent of modernization and globalization, the women, belonging to all communities aspire to enhance their career prospects. In leading to up-gradation of career prospects, women need to be informative in terms of various methods and approaches. Through acquisition of education, women are augmenting their knowledge and understanding. Furthermore, they need to put in efforts to look for employment opportunities. In various types of employment settings, the women are working to generate income and enhance their career prospects. In enhancing one's career prospects, one cannot carry out certain job duties in seclusion. In other words, one needs to put emphasis upon reinforcement of socialization. When one socializes in an effective manner with individuals within as well as outside the homes, they are able to benefit in number of ways, i.e. generating information regarding methods and strategies, augmenting understanding in terms of job duties and responsibilities, providing solutions to various problems, implementing ways to do well in one's jobs and leading to up-gradation of the overall structure of the organizations. Therefore, one is able to understand the meaning and significance of socialization, when it contributes in enhancement of career prospects.

The women have goals and objectives to achieve in personal and professional lives. Furthermore, they aim to up-grade their overall standards of living. For this purpose, there are various factors that need to be taken into consideration, i.e. possessing information regarding values and norms; being well-versed in terms of job duties and responsibilities; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; participating in social, religious, cultural, economic and political activities; providing solutions to various problems; implementing ways to promote good health; augmenting skills and abilities; forming cordial and amiable terms and relationships with family members; making available infrastructure, amenities and facilities; managing resources in an appropriate manner; possessing an helping nature and a co-operative attitude; depicting efficiency, honesty, righteousness and truthfulness and creating a pleasant environment within as well as outside the homes. The socialization processes will enable women to generate information in terms of various approaches. In other words, through socialization, one is able to augment their knowledge in terms of essential methods and strategies. Therefore, meaning and significance of socialization is understood, when women augment information in terms of all these factors.

Benefits of Socialization

The benefits of socialization are comprehensively understood by women, irrespective of their communities, categories and backgrounds. Within homes, educational institutions of all levels, various types of employment settings, neighbourhood and public places, it is of utmost significance for the individuals to

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socialize. In the lives of the women in both personal and professional spheres, they are putting into operation various tasks, participating in different activities or are wholeheartedly dedicating themselves towards the achievement of desired goals and objectives. In all these cases, they are required to socialize with family and community members. Through implementation of socialization, there are number of benefits that are experienced by women (Understanding Socialization in Sociology, n.d.). One of the important aspects that needs to be taken into account is, excessive socialization should be curbed. When the women are social to a major extent, it usually has unfavourable effects upon their living conditions. Hence, socialization with family and community members should not cause barriers within the course of implementation of job duties and achievement of goals. Benefits of socialization are stated as follows:

Generating Information regarding Values and Norms

Socialization is the process through which the individuals generate information in terms of values and norms. The individuals cannot lead to enrichment of their living conditions through interacting with only family and community members. In other words, they need to integrate with the mainstream society. It is necessary for women, belonging to deprived, marginalized and economically weaker sections of the society to augment their knowledge regarding values and norms. Within homes, within the course of pursuance of educational programs, in the implementation of job duties within employment settings and in participation in various tasks, it is not only necessary to be well-equipped in terms of methods and approaches, but it is also vital to generate information in terms of values and norms (Socialization, n.d.). After one has generated information, they need to implement it in their lives. Therefore, generating information in terms of values and norms is a benefit of socialization, which needs to be taken into account by women, belonging to all communities, categories and backgrounds.

Participation in Social, Religious, Cultural, Economic and Political Activities

Individuals, belonging to both urban and rural communities encourage their girls and women to participate in social, religious and cultural activities. The participation in these activities is positive aspect that takes place through reinforcement of the process of socialization. When girls and women are skilled at dancing, singing or playing of musical instruments, they are provided with the opportunities to depict their talents. Furthermore, they meet individuals and get engaged in socialization processes. The participation of women in economic and political activities are regarded as the key to reinforce the process of socialization. These lead to attainment of empowerment opportunities. As a consequence, the girls and women are able to acquire an efficient understanding of the aspects that are associated with all the activities. When one socializes in an effective manner with individuals within as well as outside the homes, they are able to hone their talents and expertize. Therefore, participation in social, religious, cultural, economic and political activities is a benefit of socialization. This benefit has contributed in a significant manner in enriching the overall living standards of women.

Forming an Effective Social Circle

Forming an effective social circle is regarded as one of the essential benefits of socialization. Social circle comprises of family members, relatives, friends, neighbours, instructors, supervisors, classmates and co-workers. The social circle will be reinforced through implementation of socialization processes. It is of utmost significance for all women to hone social skills and form an effective social circle, throughout their

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lives. In educational institutions of all levels and in various types of employment settings, there are some tasks and activities, which are carried out on an individual basis, whereas, in case of others, teamwork is promoted. Hence, one needs to work in collaboration and integration with others. In the achievement of other goals as well, forming an effective social circle will prove to be beneficial. In the implementation of this task, one needs to form positive viewpoints regarding other individuals. Furthermore, one needs to treat each other with respect and courtesy. Therefore, forming an effective social circle is a benefit of socialization. This benefit has proven to be advantageous to girls and women on a comprehensive basis.

Providing Solutions to various Problems

Problems are an integral part of the lives of women. They experience them in personal and professional spheres. In some cases, they are experienced in a major form, whereas, in other cases, they are experienced in a minor form. It is of utmost significance to provide solutions to them. Furthermore, they need to be prevented from assuming a major form. It needs to be ensured that problems do not give rise to impediments within the course of implementation of job duties and achievement of goals. The women experience various types of psychological problems as well, i.e. anger, stress, anxiety, frustration and depression. They need to cope with them in a satisfactory manner. When one socializes in an effective manner with individuals within as well as outside the homes, they are able to cope with psychological problems of anger, stress, and anxiety. Furthermore, they obtain help from other individuals in providing solutions to various types of problems. The women are able to exchange ideas and viewpoints and provide solutions to various types of problems in an adequate manner. Therefore, providing solutions to various problems is a significant benefit of socialization.

Promoting Good Health and Well-being

In promoting good health and well-being, there are various aspects that need to be taken into consideration. When women are overwhelmed by various types of health problems and illnesses, they make visits to medical and health care centres. They are required to consult medical practitioners and health care specialists. These are experts in their fields and make provision of adequate medical treatment. On the other hand, socialization takes place with family and community members as well. When the women, belonging to disadvantaged sections of the society are experiencing various problems, which has an effect on their health and well-being, they need to socialize with others. Through socialization, they will be able to exchange ideas and viewpoints and provide solutions to various problems. In other words, it is crucial for all the individuals to be well-equipped in terms of various methods and approaches, required in promoting good health and well-being. For augmenting one's knowledge and understanding socialization processes are essential. Therefore, promoting good health and well-being is regarded as one of the vital benefits of socialization.

Augmenting Skills and Abilities

The various types of skills that need to be augmented are, communication skills, decision making skills, time management skills, analytical skills, critical thinking skills, problem-solving skills, creative skills, technical skills, negotiation skills, presentation skills, personal skills, professional skills and leadership skills. On the other hand, abilities, which need to be up-graded are, possessing the abilities to work under stress, forming cordial relationships with others, providing solutions to various problems in an effective manner and augmenting abilities that are necessary to promote well-being and goodwill. The women need to pay

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attention towards leading to up-gradation of skills and abilities. These are put into operation in the personal as well as professional lives. When these are put into operation, one is able to do well in their jobs and generate the desired outcomes. Through socialization, they will be able to generate information that are necessary to augment skills and abilities. The family members, instructors, supervisors, employers, classmates, colleagues and other community members provide help and support that are necessary to hone all types of skills and abilities. Therefore, augmenting skills and abilities is a meaningful benefit of socialization.

Forming Positive Viewpoints in terms of various Factors and Individuals

Within as well as outside the homes, it is of utmost significance to form positive viewpoints in terms of various factors and individuals. When women are socializing, the socialization processes will take place in an effective manner, when they do not possess any kinds of negative feelings and reinforce positive viewpoints. Even when there are occurrence of limitations or negative viewpoints, but when women hone positive thinking, they will be able to reinforce socialization in a satisfactory manner. In educational institutions of all levels and in various types of employment settings, the individuals are different from each other on the basis of various factors. They need to work in collaboration and integration with each other to do well in one's jobs and achieve desired goals. Hence, they need to form positive viewpoints and communicate with others in a polite and decent manner. Through socialization, one is able to generate information and augment their knowledge in terms of cultures and backgrounds of other individuals. Therefore, the benefit of socialization is acknowledged, when women form positive viewpoints in terms of various factors and individuals.

Promoting Well-being of their Families

In promoting well-being of their families, there are various factors that need to be taken into consideration, i.e. possessing information regarding values and norms; participating in social, religious, cultural, economic and political activities; providing solutions to various problems; implementing ways to promote good health; augmenting skills and abilities; forming cordial and amiable terms and relationships with family members; making available infrastructure, amenities and facilities; managing resources in an appropriate manner; possessing an helping nature and a co-operative attitude; depicting efficiency, honesty, righteousness and truthfulness and creating a pleasant environment within homes. The socialization processes will enable women to generate information in terms of various factors. In other words, through socialization, one is able to augment their knowledge in terms of essential methods and strategies. The family members and community members make provision of support and assistance, particularly when women are focused upon promoting well-being of their families. Therefore, it is well-understood that promoting well-being of their families is a benefit of socialization, which needs to take place in a decent manner.

Facilitating Achievement of Desired Goals and Objectives

The women, belonging to all age groups, categories and backgrounds have number of goals and objectives to achieve. These are formulated in the personal as well as professional lives of women. In some cases, they are complicated, whereas, in other cases, they are manageable. In some cases, women may work individually towards the achievement of desired goals, whereas, in other cases, they need to work in

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collaboration with others. Women cannot achieve professional goals and objectives, particularly the ones in educational institutions and employment settings by living in isolation. Hence, it is of utmost significance for them to hone social skills and form an effective social circle. In educational institutions at all levels and in various types of employment settings, there are some tasks and activities, which are carried out on an individual basis, whereas, in case of others, teamwork is promoted. Hence, one needs to work in collaboration and integration with others. In the achievement of other goals as well, communication processes are the key that needs to take place in an appropriate manner. Therefore, facilitating achievement of desired goals and objectives is a benefit of socialization, which needs to be paid attention towards wholeheartedly.

Bringing about Improvements in their overall Standards of Living

In bringing about improvements in their overall standards of living, there are various factors that need to be taken into consideration, i.e. possessing information regarding values and norms; being well-versed in terms of job duties and responsibilities; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; participating in social, religious, cultural, economic and political activities; providing solutions to various problems; implementing ways to promote good health; augmenting skills and abilities; forming cordial and amiable terms and relationships with family members; making available infrastructure, amenities and facilities; managing resources in an appropriate manner; possessing an helping nature and a co-operative attitude; depicting efficiency, honesty, righteousness and truthfulness and creating a pleasant environment within as well as outside the homes. The socialization processes will enable women to generate information in terms of various approaches. In other words, through socialization, one is able to augment their knowledge in terms of essential methods and strategies (Socialization, 2021). Therefore, bringing about improvements in their overall standards of living is a benefit of socialization, which needs to be focused upon throughout the lives of women.

Factors highlighting the Importance of Socialization in Leading to Effective Growth and Development of Girls

When girls are born, parents augment their knowledge and understanding in terms of ways that are necessary in leading to their effective growth and development. In some cases, they are complicated, whereas, in other cases, they are manageable. In some cases, women are single parents, hence, they are required to put into operation the task of child development on their own. In the implementation of this task in an effective manner, they need to augment socialization processes. Through socialization they will augment their knowledge in terms of various approaches. In other words, through socialization, one is able to generate information in terms of values, norms and principles. After they have acquired information, they need to put them into practice in a wise and productive manner. Factors highlighting the importance of socialization in leading to effective growth and development of girls are, encouraging them towards acquisition of education; facilitating their participation in extra-curricular and creative activities; imparting them information in terms of morals and ethics and helping them to emerge into good human beings and productive citizens of the country. These are stated as follows:

Encouraging them towards Acquisition of Education

The girls, belonging to all communities, categories and backgrounds are getting enrolled in educational

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institutions of all levels to acquire education. Education is the instrument, which not only imparts information in terms of academic subjects, but also norms, values, morals and ethics. In educational institutions of all levels, when students are determined towards achievement of desired goals, they are required to socialize with classmates, instructors and other staff members. In cases of complicated lesson plans, help and support needs to be obtained from others. Furthermore, they are able to hone their communication skills and interactive abilities. Hence, socialization is the key in achieving educational goals and leading to up-gradation of the overall system of education. Therefore, encouraging them towards acquisition of education is a significant factor highlighting the importance of socialization in leading to effective growth and development of girls.

Facilitating their participation in Extra-Curricular and Creative Activities

The introduction of extra-curricular and creative activities in educational institutions stimulate the mind-sets of the individuals and develop motivation among them towards learning. The various types of extra-curricular and creative activities are, artworks, handicrafts, singing, dancing, role playing, playing of musical instruments, sports, yoga, taekwondo and so forth. When students are competent in any one or more of extra-curricular and creative activities, they may even take classes in other training centres. Socialization is regarded as the key, when the students are to augment their knowledge and understanding in terms of methods and procedures. In other words, to learn and enhance one's talent, one needs to socialise with instructors as well as classmates. Therefore, facilitating their participation in extra-curricular and creative activities is a meaningful factor highlighting the importance of socialization in leading to effective growth and development of girls.

Imparting them Information in terms of Morals and Ethics

Socialization is the process through which the individuals generate information in terms of morals and ethics. Parents, other family members and instructors impart information in terms of morals and ethics. In participation in various tasks and functions, it is not only necessary to be well-equipped in terms of methods and approaches, but it is also vital to generate information in terms of morals and ethics. These are regarded as indispensable to do well in one's job duties and achieve desired goals and objectives. From the stage of early childhood, throughout one's lives, one needs to implement morals and ethics. These are important in carrying out various job duties as well as in dealing with other individuals. Therefore, imparting them information in terms of morals and ethics is an essential factor highlighting the importance of socialization in leading to effective growth and development of girls.

Helping them to emerge into Good Human Beings and Productive citizens of the Country

Parents, other family members and instructors are vested with the authority and responsibility of imparting information in terms of methods and approaches to help the girls to emerge into good human beings and productive citizens of the country. Hence, socialization is regarded as one of the fundamental aspects to implement this task. In this case, the important aspects that need to be taken into account are, possessing information regarding values and norms; being well-versed in terms of job duties and responsibilities; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; possessing an helping nature and a co-operative attitude and depicting efficiency, honesty, righteousness and truthfulness. Therefore, helping them to emerge into good

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human beings and productive citizens of the country is a crucial factor highlighting the importance of socialization in leading to effective growth and development of girls.

Conclusion

Throughout their lives, women need to acquire an efficient understanding of meaning and significance of socialization. Implementation of socialization facilitates in generation of information in terms of various ideas and perspectives, provides solutions to various problems and augment the feelings of pleasure and contentment. Benefits of socialization are, generating information regarding values and norms, participation in social, religious, cultural, economic and political activities, forming an effective social circle, providing solutions to various problems, promoting good health and well-being, augmenting skills and abilities, forming positive viewpoints in terms of various factors and individuals, promoting well-being of their families, facilitating achievement of desired goals and objectives and bringing about improvements in their overall standards of living. Factors highlighting the importance of socialization in leading to effective growth and development of girls are, encouraging them towards acquisition of education; facilitating their participation in extra-curricular and creative activities; imparting them information in terms of morals and ethics and helping them to emerge into good human beings and productive citizens of the country. Finally, it can be stated, socialization needs to be put into operation in an adequate manner throughout the lives of women.

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DETERMINANTS OF CONSUMER PURCHASE BEHAVIOR OF ORGANIC FOOD

Nguyen Thi Le Ha[1,3], Tran Thanh Dat[2,3]

[1,2]International University, School of Business Administration, Ho Chi Minh City, Vietnam

[3]Vietnam National University, Ho Chi Minh City, Vietnam

Abstract:

Organic food can be known as food produced with free of artificial chemicals like hormones, pesticides, grasskillers or fertilizers. It is believed that organic food is better for consumers than non-organic food. However, in many emerging markets including Vietnam, consumers still have limited knowledge of organic food. The present study attempts to investigate factors affecting consumer behavior of organic food. Designed questionnaires are distributed to target respondents aging from 18 to 60 years old, having middle or high income and having awareness of organic food. Target respondents are requested to assess the determinants of their purchase behavior of organic food. Online and offline survey are both conducted to gather the necessary data. The collected data will then be processed using SPSS and Smart PLS to reach the research objectives.

Keyword: Attitude, Barriers, Consumer Purchase Behavior, Environment, Organic Food, Purchase Intention,

Introduction

Research Problem

In recent years, it is not hard to realize the rapid growth and expansion of industrial development, modernization and the overpopulation have been putting more pressure on the food production to find out more potential methods to increase the crop yield (Basha et al., 2015). Moreover, along with the rise of GDP and income, they lead to the rise of living standard and demand, it means that consumers' behaviors and preferences have continuously changed over the year. In other words, the ordinary food cannot fulfill the personal need of the customers; Instead, they concentrate more on the health consciousness and environmental concern, and they become the driving factors to introduce and raise the demand of "green consumption" or more specifically, "organic food" (Le-Anh & Nguyen-To, 2020).

The appearance of organic food can be seen as the solution to tackle for many social issues. Organic food not only ensures a part of food supply to resolve the hunger problem, but also improve consumers' health and disease prevention. Besides, in order to have an effective yield, fertilizers and pesticides are applied to farming, and it becomes the cause of environmental degradation while the organic food is knowns

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as the food which is produced without using artificial chemicals like hormones, grasskillers or fertilizers (Lairon, 2010; Yin et al., 2010). Therefore, organic food business is very promising with all the economies in the world(Willer & Kilcher, 2009). It can be said that when the consumers pay more attention to the organic food, it will create a chance for the sustainable development of this business especially in the emerging market. According to OECD (2019), Vietnam is a potential emerging market in Asia that converges many micro and macro factors to ensure the sustainable development. The figures from Q&Me also support the results of the studies on the attitudes toward the organic food, and Vietnamese's intention of purchasing organic food published in the same year (T. N. Nguyen, Lobo, et al., 2017) when they all concluded that food safety, healthiness and nutrition are three most essential factors that directly affect the Vietnamese customers' decision on organic food.

However, the high interest does not mean that there is high proportion of consumers in community; Instead, Q&Me (2018) stated that major customers and consumers of organic food in Vietnam belong to the high-income people while high proportion of the customers do not have exact knowledge about this type of food, and sometimes they cannot distinguish the difference between organic food and clean food.

Although there are many studies on the organic food consumption, it is still necessary to conduct further studies on this aspect in emerging markets like Vietnam. In fact, in spite of the high interest from the upper-class people and the increase of the number of organic food stores opened, the consumers' behaviors, preferences and knowledge about organic food in this place are still the mystery because most of studies on organic food in Vietnam mostly have a general vision in an enormous market (Vietnam market) rather than a specific market (T. N. Nguyen, Lobo, et al., 2017), and there are few studies on the particular markets done in Ha Noi (Le-Anh & Nguyen-To, 2020; H. V. Nguyen et al., 2019). Moreover, the scrutiny of the government and the knowledge of customers are still big issues with this aspect that create more opportunity for the improvement of business negative side relating to the food aspects (VNS, 2019). Particularly, in the late of September of 2022, "Bach Hoa Xanh" fell into a big problem when they did not check carefully their source of supply, and it led to the Chinese vegetables in guise of VietGap standard being sold in this system. Consequently, the trust for the organic food and safe food become a big question at this time, and it can probably be seen as a barrier to prevent consumers' purchase intention.

This study aims to explore the driving factors that affects consumer attitude toward organic food and the further result, purchasing intention.

Research Objectives:

The objectives of the present study are set up below:

- Examining the determinants of the attitude toward organic food and buying intention of consumers
- Evaluating the degree of influence of each factor on the attitude towards organic food and the degree of the moderator on the buying intention.

Literature Review

Organic Food

According to Pearson (2011) and his teammate, "organic food" can be defined and analyzed differently from various perceptions of many people from different countries around the world. In particular, it makes a significant contribution in emerging structure of food production which highly depends on

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practical factors and multi-aspect such as biology, sociology or ecology rather than only one-dimensional chemical and physical management (Doran et al., 2007; Guéguen & Pascal, 2016)

In general, "organic food" can be known as food produced with free of artificial chemicals like hormones, pesticides, grasskillers or fertilizers. In other words, these foods are produced in an environmentally friendly way which is safe not only for the consumers, but also for the environment. (Lairon, 2010; Tsakiridou et al., 2008)

In the late of 20th century, when the term "organic" was not so popular to the community, Food and Agriculture Organization (FAO) used to introduce the meaning of organic which is a method of production with the absence of synthetic materials in the growing system. Therefore, the products guarantee the high quality and environmental conservation.

However, Moustier (2006) also stated that "organic food" is different from the safe food which allows to use artificial substances in growing process with permissible quantity. Although many people choose to purchase the "organic food" due to the perception that "organic food" is more nutritious than conventional foods, it does not mean that the nutrition of safe food or conventional products cannot keep pace with "organic food" (Magkos et al., 2009). Besides some difference in micro nutritional value like Omega-3 fatty or antioxidant concentrations, the macro nutritional value has little variation between them (Vigar et al., 2020).

Theory of Planned Behavior:

In order to have deeper insight about customer attitude towards organic food and purchasing intention, the Theory of Planned Behavior (TPB) is applied. Theory of Planned Behavior, which is the extended version of Theory of Reasoned Action, was introduced by Ajzen for the first time in 1991, and was reviewed a few times until now. The theory of planned behavior, according to Ajzen (1991), can be known as the theory indicates the connection between the belief and the actual behavior. Since this theory provides a general and in-depth on the determinants of the intention of purchasing organic products, it is widely applied to many studies and researches including organic food purchasing intention around the world such as (Le-Anh & Nguyen-To (2020), Chen & Shen (2015), Pham et al. (2019).

Related Studies

Green consumption and organic products are currently still the hot topic for all researchers to discover because they have an interdependent relationship with many existing social and commercial problems in the world. That is the reason to explain why people living in different areas really desire to do research to realize the local consumers' behavior of green consumption and organic food purchase in their living area for a long period. Therefore, a study conducted in China (2014) by Jue Chen and his teammates about the perception and purchase intention towards green products illustrated some micro, macro or even demographic factors and results having significant impact on the final decision of consumers such as food safety, health consciousness, age, income, etc. The result of that study is briefly explained in the table below. However, it does not mean that only one research is enough when in that year, another research studied by Akbar Kabir and his team also reviewed these factors, but the result had a little bit difference from Jue Chen's. In other words, Akbar Kabir found out that gender played an indispensable role in purchase intention. The result is shown in the table below. Moreover, other studies from Pham et al. (2019) and

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Le-Anh & Nguyen-To (2020) both demonstrated nearly the same result which highly appreciated the awareness (knowledge) and information relating to the organic food in an emerging market (Vietnam market). However, the difference was the Pham's the information was shown through the media exposure why the Le-Anh & Nguyen-To research use the relationship between the awareness and information. Both researches' results are illustrated in the table below. Finally, in 2021, Ajai Pal Sharma through his study tried to understand the attitude and purchase intention of green products and used that result to recommend the suitable marketing strategy for green consumption. In other words, the research of Sharma is extremely detailed when it covers nearly most of the suggested factors in prior study, and other outstanding factors to reach further result which is green consumption.

Hypothesis Development

Environmental Concern

Lee (2009) defined the environmental concern as the consumers' emotional involvement towards various environmental issues. In other words, environmental concern appears to be an indispensable stimulator of pro-environmental behavior in different culture(Rheadetal.,2015).

Environmental concern is known as the belief whenever people mentioned about the environmental issues which they adopt from the given knowledge such as social media or private experience. Therefore, it is also claimed environmental concern is a uni-dimensonal factor used in conducting research (Chan & Lau, 2000)

Environmental concern is widely used in the researches of organic behavior (Chen et al., 2014; Pham et al., 2019; Rhead et al., 2015). Although the results of different journals are various, it cannot be denied that environmental concern is still taken into account in the topic relating to the environment (Le-Anh & Nguyen-To, 2020). In particular, according to Yilmaz and Ilter (2017), environmental concern has insignificant impact on the purchase intention of organic food which is opposite to the belief of many people. However, in contrast to the discovery of Yilmaz and Ilter, a previous study conducted by Yadav and Pathak (2016) in India, a remarkable influence on attitude toward organic food caused by environmental concern especially from young generation. Additionally, compared to other segments, the young consumers show an extremely high interest in consciousness and concern towards environmental issues (Do Paço et al., 2013).

Food Safety Concern

Absolutely, food cannot be entirely safe in all cases; Instead, it is threatened by variety of pathogens which are the original of certain foodborne diseases (Borchers et al., 2009). Therefore, food safety concern can be known as the behavior that consumers are fear of pesticides or grasskiller residuals and other threatening diseases (Pham et al., 2019). According to Michaelidou and Hassan (2007) and Yee (2005), consumers normally care about the food safety with regard to the artificial chemicals used in the farming process such as fertilizers or hormones, etc. Because the reasons to justify for consumers' behavior in organic aspect vary in accordance with regional areas from developing countries to developed countries where the food safety is highly appreciated (Rana & Paul, 2017) . As a result, there is an interdependent relationship between this factor and farming method that makes people believe that organic food is safer compared to the conventional products (Kouba, 2003) and food safety is more essential than price (paying) (Kriwy & Mecking, 2012).

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Several studies have the same result after analyzing collected data that food safety impact significantly on the attitude towards the organic products, purchase intention or even actual purchase behavior (Le-Anh & Nguyen-To, 2020; Michaelidou & Hassan, 2008; Pham et al., 2019).

Health Consciousness

Health consciousness reflects the readiness to make health-oriented decisions, and also the participate in the healthy activities (Becker et al., 1977; Moorman & Matulich, 1993). According to Magkos (2009), many consumers choose to purchase organic food because of their belief that nutrient content in organic food is more abundant than conventional food, so it is very good for personal health. Therefore, along with food safety, health consciousness seems to be very worth including in the researches because they are both important in relation with purchase intention(Rana & Paul, 2017). However, in some studies, health consciousness exceeds the food safety to become the most powerful determinant for purchasing organic food (Lillywhite et al., 2013). Moreover, several studies emphasized that consumers' attitude is affected by the health consciousness (Michaelidou & Hassan, 2008), and the consumers who highly take care of their health have a tendency to purchase organic food rather than who are not interested (Squires et al., 2001).

Knowledge and Information

Consumer knowledge of organic food which is also known as the awareness of organic food is understanding all products' characteristics because if a person does not have any information or lack of experience, they are not willing to try that product (Muhammad et al., 2017). However, the clients' knowledge about the organic food is a problematic issue because they even cannot distinguish the difference between organic food and safe food (Moustier et al., 2006). Therefore, this problem affects directly to the attitude towards organic food and the purchase intention. Particularly, according to Michaelidou & Hassan (2008) and Le-Anh & Nguyen-To (2020), this factor has a strong positive impact on the customers when they think about the organic food.

Attitude towards Organic Foods

According to Nguyen and Lobo (2017), attitude can be seen as the predominant that leads to the pro-environmental intention and behavior. Ajzen (1991) used to explain through the Theory of Planned Behavior that the positive attitudes are inclined to perform purchase intention. Thus, Lee (2009) emphasized that attitude is the remarkable factor of consumers' green purchase. Furthermore, several studies also support for that positive relationship between attitudes and purchase intention (Michaelidou & Hassan, 2008) while some other has the contrary conclusion that attitude towards organic products has the insignificant impact on the purchase intention (Nedra et al., 2015).

Perceived Barriers

Pham (2019) pointed out that the organic products purchase intention or actual purchase behavior is often correlated with certain preventions or we can call "barriers". It is not difficult to realize that the price consciousness is one of the most common factors belonging to perceived barriers when the high price is the reason for the non-purchase of organic food (van Doorn & Verhoef, 2015). As mentioned above, according to Q&Me (2018), most of customers of green products belong to the high-income class due to the high price of them. Besides, other both internal and external reasons also join hands to make a contribution in preventing

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people from organic food such as the insufficiency of information, the lack of eco-label on products, the poor green marketing to spread products' image (T. N. Nguyen, Phan, et al., 2017). Le-Anh and Nguyen-To (2020) also bolstered that purchase intention is affected considerably by the supply restriction and the lack of trust although the consumers have positive attitude towards organic food before. In Vietnam, Bach Hoa Xanh's scandal has made the issue of customer trust in organic and clean food increasingly acute, and that perceived barrier will affect directly and negatively to the purchase intention up to now (Dai, 2022).

Perceived Quality

Magkos (2009) stated that consumers tend to make comparison of quality between organic food and conventional products although the nutritional value in both types does not have too much variance. According to Vindigni, Jansen & Jager (2002) and Yiridoe (2005), the organic food is a totally fresh food which is free of harmful chemicals, higher micro nutrients, so it is more unique and better than conventional foods. Therefore, the perceived quality can be the core value that positively influence the purchase intention (Le-Anh & Nguyen-To, 2020)

On the basis of the preceding analysis and discussion, the hypotheses are proposed as follows.

H1: Environmental concern positively affects the attitude towards organic foods.

H2: Food safety concern positively affects the attitude towards organic foods.

H3: Health consciousness positively affects the attitude towards organic foods.

H4: Knowledge and information positively affects the attitude towards organic foods.

H5: Perceived quality positively affects the organic food purchase intention.

H6: Attitude towards organic foods positively affects the organic food purchase intention.

H7: Perceived barriers negatively affects the organic food purchase intention.

Research Methodology

Research Approach

Ritchie (2003) showed that there are two types of approach that most of researchers mainly uses to do research which are named as quantitative and qualitative method while Cresswell (2009) stated that there is a combination of both approaches which is called "mixed approach" which is used widely in recent years.

In the study, the quantitative approach will be employed to examine the relationship between the variables.

Sample, Sample Size and Sampling Technique

The study employs convenient sampling technique to gather data on the target respondents, who are living in Vietnam, aging from 18 to 60 years old, having middle or high income and having awareness of organic food.

Comfrey and Lee (1992) indicated that the following scale of can be used to evaluate the validity of the sample size: 50 – very poor; 100 – poor; 200 – fair; 300 – good; 500 – very good; 1000 or more – excellent.

Besides, Gorsuch (1997) mentioned that the minimum sample size should be decided based on the number of items with the proportion of at least 5:1 in the Exploration Factor Analysis (EFA). Definitely, the higher ratio applied, the more accurate result for the research.

In this study, the total number of items is 33. Thus, using the minimum ratio which is 5:1 means that

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the minimum respondents should be 165. However, in order to ensure the reliability and validity of collected data, the sample size for the study will be at least 200 respondents.

The necessary data will be collected through the questionnaire which is directly distributed to the respondents by both online and offline since it can increase the reliability and validity of the collected data and information. A pilot test is also very helpful to guarantee that the questionnaire is acceptable without any misunderstandings or mistakes and easy for the respondents to answer.

Measurement Scale

In the current study, the variables are measured utilizing the following items. Environmental concern is evaluated using the scaled that are developed by Le-Anh and Nguyen-To (2020), Mei et al. (2021), Lee (2009) and Lee (2011). Food safety concern is assessed by the items from Le-Anh and Nguyen-To (2020) and Golnaz et. al. (2011). Health consciousness is measured by the items that are designed by Golnaz et. al. (2011) and Pham et. al. (2019). Knowledge and information is evaluated by the items adapted from Le-Anh and Nguyen-To (2020). Perceived quality is measured by the items developed by Saleki and Seyedsaleky (2012). Attitude towards organic food is assessed by the items from Le-Anh and Nguyen-To (2020) and Pham et. al. (2019). Perceived barriers are measured by the items adapted from Pham et. al. (2019) and Le-Anh and Nguyen-To (2020). Purchase intention is measured by the items built by Le-Anh and Nguyen-To (2020) and Pham et. al. (2019) and Tarkiainen and Sundqvist (2005).

Data Process and Analysis

SPSS (Statistical Package for Social Sciences) and Smart PLS will be used to process the gathered data. The following statistical analyses will be conducted. Firstly, descriptive analysis is applied to determine the percentage, mean, frequency distribution of demographic data on the target respondents. Cronbach's alpha is also applied to verify the degree of reliability and internal consistency toward the answer of each variable. Additionally, Exploratory Factor Analysis (EFA) is utilized to discover the fundamental theoretical structure regarding the phenomenon and the correlation's structure between respondents and variables. Confirmatory Factor Analysis (CFA) is then conducted to test how well the observed variables represent number of constructs. Moreover, Structural Equation Modeling (SME) will be used to analyze the structural association of the observed variables with latent variables.

Conclusion

Consumer behavior play a very important role in achieving sustainability. Therefore, encouraging consumers to start acting more sustainably is necessary and beneficial. The main purpose of this study is to design a research model for discovering the factors influencing consumer attitude and purchase behavior of organic food.

To measure the independent and dependent variable, the study adapts the items developed by Le-Anh and Nguyen-To (2020), Mei et al. (2021), Lee (2009) and Lee (2011), Golnaz et. al. (2011), Pham et. al. (2019), Saleki and Seyedsaleky (2012), and Tarkiainen and Sundqvist (2005).

Target respondents are middle-class and high-class consumers living in Vietnam and having awareness of organic food. Necessary data is gathered through both online and offline survey. Statistical analysis softwares including SPSS and Smart PLS will then be used to process the data in order to explore the determinants of consumer attitude and purchase behavior of organic food.

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THE MEDIATING ROLE OF GENDER AND SELF-ESTEEM BETWEEN PARENT-CHILD RELATIONSHIP AND SEXUAL ABUSE AMONG SCHOOL ADOLESCENTS IN NIGERIA: A PATH ANALYTICAL MODEL

E.O Oladunmoye (PhD),[1]
Department of Counselling and Human Development Studies,
University of Ibadan, Ibadan, Nigeria.

L. O. Yekinni[2]
Department: Educational Psychology,
Institution: Federal College of Education (Special), Oyo, Nigeria.

S.O Maradesa (M.Ed)[3]
Department of Guidance and Counselling,
National Open University of Nigeria.

Toyin, A. Rasaq[4]
Institute of Education
University of Ibadan, Ibadan Nigeria.

M. A., Olugbode (PhD)[5]
Federal School of Statistics, Shasha, Ibadan.

Correspondence Email: oladunmoyetomenoch@gmail.com

Abstract

In recent years, the prevalence of adolescent mortality due to sexually transmitted diseases (STD), unwanted pregnancy, abortion, induced pregnancy, and related issues has been documented. These tragic events can be traced to teenagers' sexual abuse experiences. This led to an investigation on the role of gender and self-esteem as mediators between parent-child relationships and sexual assault.

The study adopted correlational design. A sample of three hundred adolescents were randomly sampled from the secondary schools in Ibadan North Local Government Area of Oyo State, Nigeria. Data was collected using reliable instrument (Sexual Abuse Scale α=0.87; Parental-child Relationship Scale α =0.77; Self-esteem Scale α =0.73).Three research questions were raised and tested at 0.05 level of significance

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using Pearson's product moment correlation and path analysis with Maximum likelihood estimation.
It was discovered that sexual abuse positively correlated with gender (r =.681, P<0.01) but negatively correlated with parent-child relationship (r = -.449, P<0.01) and self-esteem (r = -.310, P<0.01). From the path model the goodness of fit of the model was evaluated using $\chi 2$ statistics (0.286 < 0.3) and was found a good fit. A direct effect was also found between self-esteem and sexual-abuse (β = -0.236, p<0.01), parent-child relationship and sexual abuse (β = 0.176, p<0.01). On the other hand, an indirect effect was found between parent-child relationship and sexual abuse through gender (β = 0.603, p<0.01), which indicates that parent-child relationship increases the likelihood that a male adolescent (60.3%) will engage in sexual abuse than their female (39.7%) counterparts. Furthermore, an indirect effect was found between parent-child relationship and sexual abuse through self-esteem (β = -.236, p<0.01).

Among others it was recommended that parents should build a healthy relationship with adolescents as to be able to monitor and guide them against premarital sexual behaviour, Adolescents are enjoined to avoid peers who are not willing to positive contribution to their life. School administrators and policy makers are enjoined to intensify the teaching of sex education in secondary schools in other to acquaint adolescents with the danger in sexual abuse.
Key words: Self-esteem, Parent-child relationship, Adolescents, Sexual Abuse.

Introduction

Adolescence is often referred to as a stage between childhood and adulthood, this stage culminates in biological, cognitive and social change of a unique magnitude and rapidity that it is no surprise to find that it is associated with the onset or exacerbation of a number of health-related problems including depression, eating disorders, substance abuse and dependence, risky sexual behaviour, antisocial and delinquent activity and school dropout which are traceable to sexual abuse.

Sexual abuse is an unwanted sexual activity, with the perpetrators using force, making threats or taking advantage of the person or persons concerned, who are not able to give approval or consent. It is a sexual act associated with attempt to obtain a sexual act, unwanted sexual comments or advances, or acts of traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim in any setting, including but not limited to home and work. Perpetrators of sexual abuse could range between peers (class mates, play or age mates) and elderly individuals (relatives and neighbours); these individuals are people who are close or respected by the victims. However, the actual prevalence rate of sexual abuse in Nigeria is unknown as a result of gross underreporting (Birgisdóttir, 2015).

Nevertheless, it has been reported as the fastest growing crime in many parts of the world (Brocker, & Tocque, 2016). It has been argued that one in four female adolescent may have experienced sexual abuse by an intimate partner and up to a third of adolescent girls report their experience as being forced (Jacob, & Ravindranadan, 2017; Kim, Park, & Park, 2017). While a contemporary perspective claimed that least one in five female adolescents has been sexually abused by a man at some time in her life (UNICEF, 2017).

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The prevalence of sexual abuse in Nigeria is high although appeared contradictory, statistics have shown that 51.7% of female undergraduates had suffered one form of sexual abuse or another (Ward, Artz, Leoschut, Kassanjee, & Burton, 2018). This figure is higher than what was obtained in two studies from Northern Nigeria 89(13.8%, 22.2%). However, the occurrence of sexual abuse in Western Nigeria is not on the weak side but has not recorded a superior score over other region in Nigeria. The prevalence is generally high in Africa and varied between 16% in Cameroun, 23% in Sierra Leone, 34.4% in Ethiopia, 49% in Ghana to 65.6% in Zimbabwe, and 67% in Botswana10-15 (Office of National Statistics, (2020) Considering the various statistics estimated to show the severity and prevalence of adolescent sexual abuse, it won't be an understatement to establish antecedents and precedent of adolescent sexual abuse.

Self-esteem can be referred to as individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes, or likes him or herself (Gesinde, 2018). Self-esteem is a set of attitudes and beliefs that a person brings with him or herself when facing the world. It includes beliefs as to whether he or she can expect success or failure, how much effort should be put forth, whether failure at a task will "hurt," and whether he or she will become more capable as a result of difficult experiences (Adigeb, & Mbua, 2015; Chinawa, Obu, Manyike, Obi, Israel, & Chinawa, 2015). Adolescents with high self-esteem are characterized with self-love, courage, value for self and determination. It transcends to boasting adolescents sexual self-esteem which could be termed as the elegance of womanhood, but the interruption of individual on adolescents' sexual personality could damage their self-esteem. On this premise, adolescents' self-esteem could be damaged due to their exposure to sexual abuse; this might trigger feelings of disgust and shame, leading to deterioration of her sexual self-esteem.

When self-esteem declines, it creates range of psychological and behavioral consequences, as well as a potential restructuring of one's self concept. Psychological consequences associated with damaged self-esteem include: depression, anxiety, shame, suicidal ideation, isolation, decreased interested in sex, difficulties with sexual function, and fear of males (Henriques, & Shivakumara, 2015).Adolescent students who have problems with their self-esteem are prone to behavioral consequences such as not engaging in any relationship with opposite sex, avoiding materials that mention sex, avoiding seeing their own body naked, and discontinuing all elements of their lives that pertain to their sexuality (Akin-odanye, 2018). For other female individuals, behavioral consequences can include: increased desire for sex, excessive interest in sex, being overly sexual, and engaging in poorly accepted sexual behaviors that are distasteful to the individual (David, Ezechi, Wapmuk, Gbajabiamila, Ohihoin, & Odeyemi, 2018). Potentially, some women, with damaged sexual self-esteem, may experience a restructuring of their self-concept such that one is completely defined by who she is as a sexual being.

Parent-child relationship can be conceptualised as emotional exchanged between parents and their adolescent offspring: Some of these exchanges involve positive and healthy behaviors and others involve the opposite; some of the outcomes for adolescent development of these exchanges reflect good adjustment and individual and social success, whereas other outcomes reflect poor adjustment and problems of development. As is true for all facets of human development, there is then diversity in the nature and implications of parent-child relations in adolescence. Parent-child relationship if healthy creates trust, confidence, and sense of safety in adolescents. Adolescents who grew up under healthy parent-child relationship gets early

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maturity as they share most issues that appears strange or confusing with their parents for clarifications purpose. Parent-child relationship gives adolescents luxury of benefits, such as guidance about: life issues, sexual development, and relationship with individuals and self-defense. While parents who have time for their children saves them from falling victim of sexual assaults. Adolescents who by chance were sexually abused are often easily liberated from the jinx of the event instead of been a slave to it.

The characteristics of parent-child interaction that are associated with positive outcomes for the adolescent are similar in that they reflect support for and acceptance of the developing youth. Indeed, when parent-adolescent relationships provide support for the youth's behaviors, interest, and activities, numerous positive developmental outcomes are likely to occur. For instance, support has been associated with better school grades and scholastic self-concept (Grose, Chen, Roof, Rachel, & Yount, 2020); with perceiving that social relationships could be more beneficial to one's development than risky (Bleidorn, Arslan, Denissen, Rentfrow, Gebauer, Potter, & Gosling, 2016); with being more satisfied with one's life (Latzman, Casanueva, & Dolan, 2017); and with a decreased likelihood of involvement in drinking, delinquency, and other problem behaviors (Park, Lee, & Jun, 2017).

Certainly, receiving support from one's parents due to close relationship might elicit in the young person feelings of positive regard, or emotions characterized by a sense of attachment. When such emotions occur in adolescence, positive outcomes for the youth are seen. For instance, parent child relations marked by attachment are associated with high self-perceived competence, especially across the transition to junior high school, and with low feelings of depression or anxiety (United Nations, 2019). In addition, attachment is linked to feeling cohesive with one's family (Buntinga, Davidsona, McCartanb, Hanrattyb, Bywatersc, Mason, & Steils, 2018). Other research has found also relationships among attachment, a positive sense of self, and low levels of problematic behaviors/emotions, such as depression (Kelly, & Millar, 2017; Meinck, Cluver, Boyes, & Loening-Voysey, 2016).

According to the world health organization (WHO), there were an estimated 57,000 deaths attributed to homicide among children under 15 years of age in 2013. Global estimations of homicide suggest that infants and very young children are at greatest risk with rate for the 0-4 year old age group more than double those of 5-14 years old. The risk fatal abuse for children varies according to the world for children under 5year age living in high income countries, the rate are 2.3 time higher 6.1 per 100,00 for boys and 5.1 per 100,000 for girls. The lowest rates are see in high income countries in the world health organization European, eastern- Mediterranean and western pacific regions.

On the other hand, sexual abuse practices are the various acts perpetrated by parents, guardians, friends and other people against the child which literarily affects his or her psychological, physical, moral development and self-esteem. The child welfare league Nigeria (WLN) has reverted that about five million children are abused annually in Nigeria, resulting in rampant cases of stunted mental and physical growth of such children (David, Ezechi, Wapmuk, Gbajabiamila, Ohihoin, & Odeyemi, 2018). According to the report, large population of children now walk aimlessly on the streets been abandoned by parents or subjected to perform task beyond their mental and physical capacity, resulting in child delinquency. In an attempt to argue-out the rate of sexual abuse among Nigerian secondary school students, one could be curious of the role parent-child relationship and self-esteem play in the occurrence of sexual abuse among female

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secondary school students. This curiosity is born out of the plight to justifying the place of social factor (parent-child relationship and gender) and psychological intricacies (self-esteem) in the prevalence of sexual abuse among school adolescents in Nigeria. This therefore propelled a mediating perspective of the roles gender and self-esteem play in the relationship that exist between parent-child relationship and sexual abuse.

Purpose of the Study

This study generally intends to investigate mediating role of gender and self-esteem between parent-child relationship and sexual abuse. Specifically, it intends to;

I. Investigate the relationship between parent-child relationship, self-esteem and adolescents sexual abuse.
II. Estimate the significant pathways indicating direct and indirect effects of parent-child relationship, gender, self-esteem and sexual abuse among secondary school students?

Research Question

The following are to be tested at 0.05 level of significance.

I. What is the relationship between self-esteem, parent-child relationship and adolescent sexual abuse?
II. What are the significant pathways indicating direct and indirect effects of parent-child relationship, gender, self-esteem and sexual abuse among secondary school students?

Methodology

Design

The study adopted correlational design. This design is appropriate because the researcher does not have control over the concomitant variables as their manipulation had already occurred.

Population

The population for this study consists of all senior secondary school adolescents in Ibadan North Local Government Area of Oyo state. Ibadan North local government area is the largest local government area in Oyo state. The L.G.A has about 26 secondary schools within it geographical coverage.

Sample and Sampling Techniques

Multistage sampling was adopted for this study. The first stage involves a random selection of 15 secondary schools from the entire population. The second stage involved the selection of 20 adolescent students from the senior secondary school students (SS2). In the whole a sample of three hundred (300) adolescent students were randomly selected. This was used as a representative of the population.

Research Instrument

A questionnaire was used for data collection because of the literacy level of study population. The adaptation was made after extensive review of literature. The scale were piloted a week before the real administration to certify that the scales are fit and does not have ambiguous items. The questionnaire was divided into three sections. The sections are: A, B and C.

Section A: Adolescents' sexual abuse Scale

The Sexual abuse self-report scale (CASRS) is designed to measure adolescents' rate of experiencing abuse. It is rated on 4-point response format ranging from Never (coded as 1) to Always (coded as4). It has 38 items initial findings has strong internal consistency psychological sub-scale had the highest level of internal

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consistency 0.95 and sexual abuse sub-scale had a moderate level of internal consistency of 0.87. Sexual Abuse scale is a 19 item scale under the sexual abuse scale. The result of two times administration of the (CASRS) showed test-retest reliability of 0.82 to 0.80.

Section B: Self-Esteem Scale

A 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. It was adopted from the work of Rosenberg (2008), the scale is believed to be uni-dimensional. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. The scale recorded a reliability coefficient of 0.74 using Cronbach alpha.

Section C: Parental-child Relationship Scale (PRS)

20-item Parent-child relationship Scale was adapted from Small and Kerns (1993). It measures adolescent experience of parent-child relationship. Samples of the items reads: 1) "my parent(s) know where I am after school"; 2) "If I am going to be home late, I am expected to call my parent(s) to let them know". Students choose from out of five possible responses ranging from: 1= strongly disagree to 5=strongly agree. Cronbach's alpha for the 10-item scale was .84. The scale has been shown to have construct validity as evidenced by Dix's (2001) review of the scale: "The Parent-child relationship Scale has been used in at least three studies involving nearly 6,000 adolescents…higher levels of parental guidance have been related to lower levels of adolescent risk-taking and sexual activity. The scale recorded a reliability coefficient of 0.77 using Cronbach alpha.

Procedure for Data Collection

Copies of the questionnaire were administered to the participants in their various schools. Having obtained permission from the head of their department through the letter of introduction collected from the department of Counselling and human development studies. The participants were adequately briefed on the need to cooperate with the researcher. They were also assured of confidentiality of their responses. The data collection spread over two weeks, during which about 300 questionnaires were administered, and returned. These were scored and the data obtained were subjected to data analysis.

Method of Data Analysis

The data was collected and analysed with the aid of Pearson product moment correlation and path analysis with maximum likelihood estimate. The computation was done through SPSS version 26 and AMOS verion 24 to answer the two research questions.

The goodness of fit of the model was evaluated using $\chi 2$ statistics [$\chi 2$/degrees of freedom (df)] and root mean square error of approximation (RMSEA). If the $\chi 2$/df was <3, the model would be regarded as a good fit; if it was between 3 and 5, the model would be considered an acceptable fit. Furthermore, if the RMSEA value was <0.05, it would indicate that the model had reached a close fit, and if the value was <0.08, the model would be counted as a good fit. Additionally, fit indices were the comparative fit index (CFI), goodness-of-fit index (GFI), and normed fit index (NFI). If the CFI, GFI, and NFI values were 0.90 or higher, it would indicate that the model achieved a good fit.

Results

This segment presents various findings drawn from the study. The following results presented are based on the

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research questions raised, which the study has sought to answer.

Research Question 1: What is the relationship between independent variables (parent-child relationship and self-esteem) and adolescents' sexual abuse?

Table 1:Correlation matrix showing the relationship between study variables

Variables	Mean	Std.Dev	1	2	3	4
Sexual abuse	45.9180	4.61707	1.000			
Self-esteem	53.8860	5.13375	-.310**	1.000		
Parent-child relationship	55.8190	7.36406	- .449**	-.232	1.000	
Gender	.5360	.49970	.681**	-.053	.360**	**1.000**

*Correlation is significant at 0.05(2-tailed)

Table 1 reveals the relationship that exists between the independent variables (parent-child relationship, self-esteem and gender) and the dependent variable (sexual abuse). Sexual abuse positively correlated with gender (r =.681, P<0.01) but negatively correlated with parent-child relationship (r = -.449, P<0.01) and self-esteem (r = -.310, P<0.01). This implies that high parent-child relationship and self-esteem will reduce the tendency of sexual abuse among school adolescents. While gender uniqueness have prospect of increasing adolescent sexual abuse.

Research Question 2: What are the significant pathways indicating direct and indirect effects of parent-child relationship, gender, self-esteem and sexual abuse among secondary school students?

Table 2: Path Coefficient (Beta weights) of the adjusted sexual abuse model

Pathways			Unstandardised Estimate (B)	Standardized Estimate(β)	S.E.	C.R.	P
Gender	<---	Parent-childR	.024	.360	.004	6.085	***
Self-esteem	<---	Parent-childR	-.162	-.232	.043	-3.766	***
Sexual-abuse	<---	Parent-childR	.111	.176	.029	3.850	***
Sexual-abuse	<---	Gender	5.594	.603	.414	13.518	***
Sexual-abuse	<---	Self-esteem	-.213	-.236	.039	-5.508	***

Parent-childR: Parent-child relationship

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Table 2 reveals that there is a significant direct effect of parent-child relationship on gender (male coded 1 and female coded 2) (β = 0.360, p<0.01), implies that parent-child relationship is likely to increase the male adolescents dispositions by 36%. A significant direct effect of parent-child relationship on adolescent self-esteem was found (β = -0.232, p<0.01) in the model. It indicated that 1% increase in parent-child relationship will account for 23% reduction in the self-esteem of adolescent students. It was also shown in the table that gender recorded a significant direct effect on sexual abuse (β = 0.603, p<0.01), indicating that being a male gender adolescent increases the likelihood of engaging in sexual abuse by 60.3%. More so, a direct effect was also found between self-esteem and sexual-abuse (β = -0.236, p<0.01), which suggests that weak self-esteem promotes sexual abuse among adolescents by 23.6%. More importantly, a direct effect was found between parent-child relationship and sexual abuse (β = 0.176, p<0.01). This implies that parent-child relationship promotes the likelihood that adolescents will engage in sexual abuse by 17.6%.

On the other hand, an indirect effect was found between parent-child relationship and sexual abuse through gender (β = 0.603, p<0.01), which indicates that parent-child relationship increases the likelihood that a male adolescent (60.3%) will engage in sexual abuse than their female (39.7%) counterparts. Furthermore, an indirect effect was found between parent-child relationship and sexual abuse through self-esteem (β = -.236, p<0.01). This suggests that parent-child relationship could reduce sexual abuse when the self-esteem of the adolescent is on the increase.

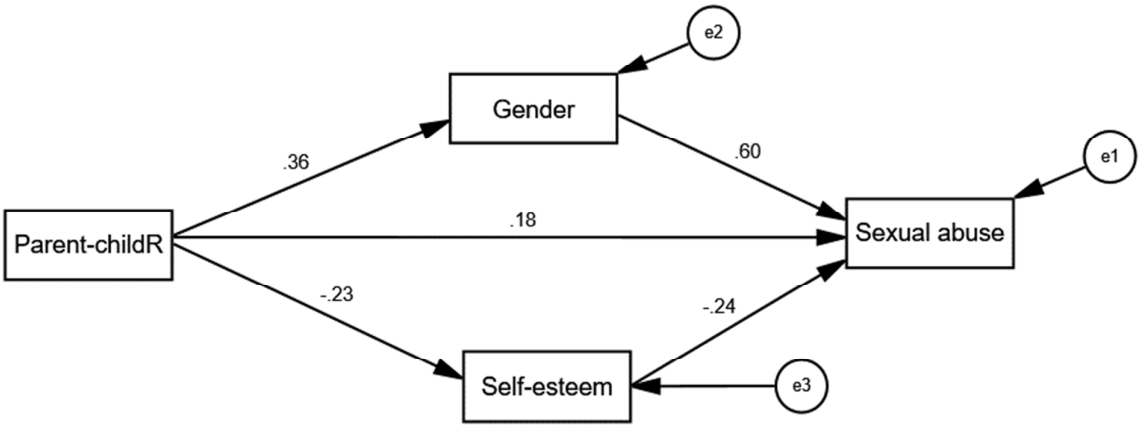

Figure 1: Adjusted path model of sexual abuse

Table 3: Maximum Likelihood Estimate showing Goodness of Fit Index of the sexual abuse model

Model	X^2	Df	P	GFI	NFI	CFI	RMSEA
Benchmark			>0.05	>0.90	>0.95	>0.90	**<0.06**
Initial Model	.621	2	.000	.892	.544	.566	**.041**
Adjusted model	.286	1	.593	.906	.999	.999	**.000**

GFI, goodness-of-fit index; NFI, normed fit index; CFI, comparative of fit index; df, degree of

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freedom; RMSEA, root mean square error of approximation.

Table 3 reveals that the initial (hypothesized) model recorded a moderate fit; $X^2(2) = .621$, $p<.001$, However, on the adjusted model gained a little improvement. The adjusted model recorded $X^2(1) = .286$, $p<0.01$. This implies that the model is relatively fit. Based on the recommendation by Cohen, (2000) and Tabachnik and Fidel (2007) the p-value notwithstanding the lesser the chi-square value the better the model. To further ascertain the increased fitness of the adjusted model over the initial model other fit indexes were considered: Normed fit index (NFI) = .999 > .95; Comparative fit index (CFI) = .999 > .90; Root mean square error of approximation (RMSEA) = .000 <.06. This implies that the adjusted model gained an incremental fitness over the initial (hypothesized) model, however, the adjusted model can be said to have a good fitness to the data.

Discussion of Findings

This study discovered that sexual abuse positively correlated with gender but negatively correlated with parent-child relationship and self-esteem. This indicates that high parent-child relationship and self-esteem will reduce the likelihood that an adolescent will engage or be a victim of sexual abuse. While gender uniqueness have prospect of increasing adolescent sexual abuse. This result is consistent with previous studies who argued that low sexual self-esteem is associated with victimization, and risk recognition is correlated with sexual assault (Henriques, & Shivakumara, 2015; Park, Lee, & Jun, 2017; Meinck, Cluver, Boyes, & Loening-Voysey, 2016). Thus, it is possible that sexual self-esteem may precede risk recognition which directly affects victimization. Specifically, women with low sexual self-esteem are likely to have poor risk recognition, increasing their risk of sexual assault. On the other hand, parent-child relationship negatively correlated sexual abuse. This result agreed with Kim, Park, and Park, 2017) who found that secure attachments mediated psychological distress in adolescents with a history of child sexual abuse (CSA). Similarly, United Nations, 2015) identified the mediating effect of attachment. In this study, CSA did not predict psychological adjustment (i.e., depressive symptoms, dissociation, and dysfunctional sexual behavior) when attachment was controlled meaning that although CSA is predictive of attachment, attachment style can mediate the negative outcomes of CSA.

A direct effect was also found between self-esteem and sexual-abuse ($\beta = -0.236$, $p<0.01$), which suggests that weak self-esteem promotes sexual abuse among adolescents by 23.6%. This result further corroborates Sawyer, Azzopardi, Wickremarathne, and Patton, (2018) sought to determine 1. the type of violence to which women were exposed during childhood and adulthood and 2. the relationship the self-esteem of married Turkish women and their exposure to domestic violence. Sawyer and colleagues found a negative relationship between scores on the Rosenberg Self- Esteem Scale (RSES) and scores on subscales of the Childhood Trauma Questionnaire (i.e., emotional abuse, emotional neglect, physical abuse, and sexual abuse. Specifically, women with more childhood trauma were more likely to report lower self-esteem than women with less childhood trauma. The relationship between self-esteem and childhood trauma suggests that, due to negative past experiences, women continue to feel victimized years after the abuse. Although feelings of victimization are not readily apparent to the individual, this can have a negative

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association with interpersonal functioning.

The result of this study also revealed that a significant direct effect of parent-child relationship on adolescent self-esteem was found (β = -0.232, $p<0.01$) in the model. It indicated that 1% increase in parent-child relationship will account for 23% reduction in the self-esteem of adolescent students. This further suggests that increased parent-child relationship could reduce sexual abuse occurrence. This result is in tandem with Mutavi, Obondo, Mathai, Kokonya, & Dako-Gyeke, (2018), who reported that parent-child relationship and adolescent sexual activity to have a complex relationship. Low levels of parent-child relationship are associated with a variety of risky behaviors, including unprotected sex, drug use, and drug trafficking. This implies that parent-child relationship could reduce adolescents' experience of sexual abuse.

Conclusion

This study investigated the mediating role of gender and self-esteem between parent-child relationship and sexual abuse. The study discovered that sexual abuse positively correlated with gender, but negatively correlated with parent-child relationship and self-esteem. This implies that high parent-child relationship and self-esteem will reduce the tendency of sexual abuse among school adolescents. While gender uniqueness have prospect of increasing adolescent sexual abuse. The mediation model suggests that an indirect effect was spotted between parent-child relationship and sexual abuse through gender, is a pointer proposing that parent-child relationship increases the likelihood that a male adolescent (60.3%) will engage in sexual abuse than their female (39.7%) counterparts. Furthermore, an indirect effect was found between parent-child relationship and sexual abuse through self-esteem. This advocates that parent-child relationship could reduce sexual abuse when the self-esteem of the adolescent is on the increase.

Recommendations

Based on the findings drawn from this study the following were the recommended

I. Parents are encouraged to develop healthy relationship with the adolescents by spending time together to discuss about issues of life which can go a long way in helping them to speak their mind.
II. Parents should endeavour to keep-track of the friends their children keep and as well guide them in their decision making about issues of life.
III. Adolescents are encouraged to trust their parents rather than their peers in resolving personal-social matters.
IV. Adolescents are enjoined to visit the school counsellor on their social-personal issues which they might not be able to discuss with their parents.
V. Parents are enjoined to make provision for their childrens' need so as to restrict them from seeking financial assistance from outsiders which might expose them to sexual abuse.
VI. School counsellors should orientate adolescents on the danger in sexual abuse such as HIV/AIDS, unwanted pregnancy, and sexually transmitted diseases (STD).

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ENCOURAGING SOCIAL WORK IS ADVANTAGEOUS IN ENHANCING LIVING CONDITIONS OF UNDERPRIVILEGED SECTIONS OF THE SOCIETY

Dr. Radhika Kapur

Abstract

The individuals have recognized the meaning and significance of social work, especially when they observe the societal problems. The occurrence of various types of societal problems are regarded as major impediments within the course of promoting community well-being. Hence, when the individuals are engaged in social work, they make provision of help and support to the individuals, who are overwhelmed by societal problems. Social work is an important concept, which needs to be reinforced in all communities. These give rise to barriers within the course of sustenance of one's living conditions in an adequate manner, promoting good health, enhancing one's personality traits and bringing about improvements in one's overall quality of lives. Hence, it is of utmost significance for the social workers to provide help to overcome barriers and bring about improvements in one's overall standards of living. After the individuals, belonging to deprived, marginalized and underprivileged sections of the society have generated information in terms of various approaches, they need to put them into operation in an appropriate manner. In other words, they need to inculcate the traits of diligence, conscientiousness, morality and ethics. Therefore, it is well-understood, encouraging social work is advantageous in enhancing living conditions of underprivileged sections of the society. One of the important aspects that needs to be taken into account is, one needs to carry out job duties in an effective and meaningful manner. The main concepts that are taken into account in this research paper are, understanding the meaning and significance of social work, ways put into practice to encourage social work and methods to be implemented in social work.

Keywords: Activities, Effectiveness, Enrichment, Individuals, Living Conditions, Societal Problems, Social Work

In India, throughout the country in both urban and rural communities, the individuals are overwhelmed by various types of societal problems (Siddiqui, 2020). These are poverty, backwardness, illiteracy, unemployment, homelessness and crime and violence. These problems are experienced in a major as well as in a minor form. These have unfavourable effects upon the physical and psychological well-being of the

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individuals. The individuals, belonging to deprived, marginalized, and economically backward sections of the society are the ones who are overwhelmed by these problems. These prove to be major impediments within the course of achievement of desired goals and leading to enrichment of one's overall quality of lives.

The encouragement of social work will contribute in a significant manner in bringing about improvements in one's overall living conditions. In the implementation of social work, there are number of tasks and activities that are carried out. One makes donations of various items, i.e. food, clothing, utensils, bags, books, stationary items, blankets etc. and monetary donations. When the individuals are residing in the conditions of poverty and they cannot afford certain items, in such cases making of donations of various items will prove to be soothing to them on a large scale. Therefore, this should be encouraged in implementation of social work.

Social work is referred to putting into operation the measures and approaches, which would render an important contribution in providing assistance and support to the individuals (What is Social Work? n.d.). Furthermore, they are helped to enrich their living conditions. When the individuals are overwhelmed by the problem of illiteracy, the individuals, who are engaged in social work are providing tuition classes free of cost. These are related to academic subjects as well as extra-curricular and creative activities. In the tuition classes, the individuals are given bags, books, and stationary items as well. When they are trained in terms of educational concepts, they are able to overcome the societal problem of illiteracy.

The individuals experience problems in finding employment opportunities. This problem is a barrier within the course of generating income, promoting better livelihoods opportunities and sustaining one's living conditions in an appropriate manner. When the individuals are doing social work, they encourage the individuals to develop their skills to generate income. Women, between the age groups of 20 to 60 are trained regarding production of artworks and handicrafts. When they are skilled, they market their products to generate income. Furthermore, both men and women are encouraged to get engaged in jobs. Some of the jobs are, domestic helpers, cooks, gardeners, carpenters, painters and so forth. Therefore, assistance is provided in overcoming illiteracy and unemployment.

There are number of causes, which enable the individuals to experience homelessness. Homelessness is regarded as one of the most chronic and distressful states. This is a major obstacle within the course of enhancement of one's living conditions. When the individuals are overwhelmed by the problem of homelessness, the individuals engaged in social work are providing support to find a living accommodation. There are establishment of housing accommodations with all the civic amenities and facilities. In this manner, one is contributing in a significant manner in alleviating the problem of homelessness.

The individuals, belonging to disadvantaged communities are experiencing various types of criminal and violent acts. The women and girls are experiencing them more as compared to men and boys. These are verbal abuse, physical abuse, sexual harassment, neglect, mistreatment, rape, acid attacks, grievous hurt, domestic violence and dowry harassment. In practicing social work, one is giving help and support to the victims of these acts. In some cases, domestic helpers are mistreated by their employers. In such cases, they are rescued by social workers. Furthermore, they are enrolled in skills development programs and acquisition of employment opportunities. Therefore, in this manner, they are obtaining help to alleviate psychological problems, and bring about improvements in their overall standards of living.

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Understanding the Meaning and Significance of Social Work

The research studies have indicated that the individuals, belonging to deprived, marginalized, and economically backward sections of the society are experiencing number of problems in their lives. These take place in personal and professional lives of the individuals. In other words within homes and work. These problems give rise to impediments within the course of enhancement of their career prospects, sustaining one's living conditions in an efficient manner and bringing about improvements in their overall quality of lives. These individuals are not aware in terms of various factors, methods and approaches. They need to obtain help and support from social workers and non-government organizations. The individuals belong to various age groups. In the implementation of social work, the individuals are helping others to alleviate various types of problems, and bring about improvements in one's overall standards of living. Therefore, the individuals are able to acquire an efficient understanding of the meaning and significance of social work, when they form the viewpoint that it is helping them to bring about improvements in the overall standards of living of individuals, belonging to disadvantaged communities.

It is well-understood by the individuals that when they are determined towards enhancement of career prospects, achieving other goals and objectives, leading to up-gradation of the living conditions and emerging into moral and ethical human beings and productive citizens of the country, it is vital for them to promote a normal mind-set. One is required to up-grade various types of skills, i.e. communication skills, creative skills, technical skills, professional skills, personal skills, negotiation skills, leadership skills, decision making skills, time management skills, analytical skills, critical thinking skills, and problem-solving skills. Furthermore, the abilities which need to be reinforced are, possessing the abilities to work under stress, forming cordial and amiable terms and relationships with others and augmenting the traits of morality, ethics, diligence and conscientiousness. Social workers are providing information to the individuals in terms of these skills and abilities. These are utilized in the personal and professional lives of the individuals. Therefore, the individuals are able to acquire an efficient understanding of the meaning and significance of social work, when it is proving to be favourable and advantageous.

Ways put into practice to Encourage Social Work

In the encouragement of social work, the individuals are helping others to alleviate societal and psychological problems, and bring about improvements in one's overall standards of living (Global Definition of Social Work, 2021). Furthermore, they are making use of their educational qualifications, competencies and abilities in an adequate manner. In this manner, one is contributing significantly in promoting community well-being. Within the course of putting into practice the ways to encourage social work, the individuals need to develop motivation. The development of motivation would stimulate the mind-sets of the individuals. As a consequence, they will carry out their job duties in a well-ordered and satisfactory manner.

It is of utmost significance to form positive viewpoints in terms of various factors. This would facilitate in development of enthusiasm. In practicing social work, it is vital for the individuals to be well-versed in terms of various types of ways. In the implementation of these ways, there are various factors that need to be taken into account, i.e. problems of the individuals, their needs and requirements, family background, age, occupations, address, location, religion, ethnicity and other factors related to personalities

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and the overall living conditions. Ways put into practice to encourage social work are stated as follows:

Making of Donations of various Items

The encouragement of social work will contribute in a significant manner in bringing about improvements in one's overall living conditions. In the implementation of social work, there are number of tasks and activities that are carried out. One makes donations of various items, i.e. food, clothing, utensils, bags, books, stationary items, blankets etc. and monetary donations. The making of donations of various items is regarded as one of the moral and ethical deeds. From the stage of early childhood throughout the lives of the individuals, the individuals are imparted information in terms of meaning and significance of making donations.

When donations are made either to individuals, belonging to disadvantaged sections of the society or non-government organizations, the individuals are contributing in a significant manner in leading to up-gradation of the living conditions of the individuals, particularly who are overwhelmed by the conditions of poverty and backwardness. When the individuals are residing in the conditions of poverty and they cannot afford certain items, in such cases making of donations of various items will prove to be soothing to them on a large scale. Hence, this should be encouraged in implementation of social work. Therefore, making of donations of various items is an indispensable way that is put into practice to encourage social work.

Overcoming the Problem of Illiteracy

Social work is primarily focused on overcoming the problem of illiteracy. It is understood by all individuals, irrespective of their communities, categories and backgrounds. When they will be educated, they will differentiate between appropriate and inappropriate, achieve desired goals and objectives in personal and professional spheres, and bring about improvements in their overall standards of living. Within the course of putting into operation the ways to overcome the problem of illiteracy, one needs to implement the measures and approaches, which would render an important contribution in providing assistance and support to the individuals. Furthermore, they are helped to enrich their living conditions.

When the individuals are overwhelmed by the problem of illiteracy, the individuals engaged in social work are providing tuition classes free of cost. These are related to academic subjects as well as extra-curricular and creative activities. These are artworks, handicrafts, singing, dancing, role playing, sports, physical activities, and so forth. In the tuition classes, the individuals are given bags, books, stationary and food items as well. When they are trained in terms of educational concepts, they are able to overcome the societal problem of illiteracy. Therefore, overcoming the problem of illiteracy is regarded as one of the crucial ways put into practice to encourage social work.

Encouraging Skills Development Programs

The individuals, belonging to deprived, marginalized, and economically backward sections of the society are encouraged towards skills development programs. The primary objective of these programs is to augment skills, abilities and aptitude of the individuals. The individuals experience problems in finding employment opportunities. The main cause is lack of skills and abilities. Hence, social workers invest financial resources and implement measures to encourage skills development programs. The lack of skills, abilities and aptitude is regarded as an impediment within the course of generating income, promoting better livelihoods opportunities and sustaining one's living conditions in an appropriate manner.

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When the individuals are doing social work, they encourage the underprivileged sections of the society to develop their skills to generate income. Women, between the age groups of 20 to 60 are provided training in terms of production of artworks and handicrafts. When they are skilled, they market their products to generate income. Furthermore, both men and women are encouraged to get engaged in jobs, such as, domestic helpers, cooks, gardeners, carpenters, painters and so forth. These are regarded as minority jobs. But the individuals feel pleasurable and contented, when they are engaged in these jobs. Therefore, encouraging skills development programs is a vital way put into practice to encourage social work.

Providing help in finding Employment Opportunities

Acquisition of employment opportunities is regarded as one of the primary goals of the individuals. The reason being, these will contribute significantly in generating a source of income, promoting better livelihoods opportunities and sustaining one's living conditions in an adequate manner. The individuals normally experience number of problems in finding employment opportunities. This problem is a barrier within the course of generating income, promoting better livelihoods opportunities and leading to enrichment of their living conditions. When the individuals are overwhelmed by the problem of unemployment, the individuals, who are engaged in social work are providing help and support to find employment opportunities.

In order to do well in one's jobs, meet the expectations of the supervisors and employers, retain one's jobs and incur the feeling of job satisfaction, it is indispensable to augment knowledge, skills and abilities. When the individuals are doing social work, they encourage the individuals to develop their skills. Furthermore, they provide information to the individuals in terms of various factors that would prove to be beneficial to them to a major extent. The communication processes need to be reinforced and should take place on regular basis. Therefore, providing help in finding employment opportunities is an essential way put into practice to encourage social work.

Alleviating the Problem of Homelessness

There are number of causes, which enable the individuals to experience homelessness. These are occurrence of natural calamities and disasters, migration to other regions, lack of resources, conditions of poverty, inability to pay back the loans borrowed, unpleasant environmental conditions within homes and so forth. Homelessness is regarded as one of the most chronic and distressful conditions. This is regarded as a major obstacle within the course of enhancement of one's personality traits and the overall living conditions. Furthermore, it has unfavourable effects on the physical and psychological well-being. When the individuals are overwhelmed by the problem of homelessness, the individuals engaged in social work are providing support to find a living accommodation.

There are establishment of housing accommodations with all the civic amenities and facilities. When homeless individuals are provided with the opportunities, they are not only alleviating homelessness, but are leading to enrichment of their living conditions. When the individuals are overwhelmed by the problem of homelessness, they are experiencing the psychological problems of anger, stress, anxiety and depression to a major extent. The critical thinking and problem-solving skills of the individuals get impeded on a comprehensive basis. Therefore, alleviating the problem of homelessness is a significant way put into practice to encourage social work.

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Providing Support to Victims of Criminal and Violent Acts

The individuals, belonging to disadvantaged communities are experiencing various types of criminal and violent acts. The women and girls are experiencing them more as compared to men and boys. These are verbal abuse, physical abuse, sexual harassment, neglect, mistreatment, rape, acid attacks, grievous hurt, domestic violence, child trafficking and dowry harassment. These are experienced within as well as outside the homes. In some cases, these are experienced in a major form, whereas, in other cases, these are experienced in a minor form. The places, where these are experienced are natal homes, marital homes, educational institutions, training centres, employment settings and public places.

These regarded as major obstacles within the course of enhancement of one's living conditions. Furthermore, it has adverse effects on the physical and psychological well-being. In practicing social work, one is giving help and support to the victims of these acts. In some cases, domestic helpers are mistreated by their employers. In such cases, they are rescued by social workers. Furthermore, they are enrolled in skills development programs and acquisition of employment opportunities. Hence, in this manner, they are obtaining help to alleviate psychological problems, and bring about improvements in one's overall standards of living. Therefore, providing support to victims of criminal and violent acts is regarded as one of the important ways put into practice to encourage social work.

Organizing Workshops in terms of various Factors

In the encouragement of social work, the individuals organize workshops in terms of various factors (Solving Social Problems, 2017). In both urban and rural communities, the individuals are overwhelmed by various types of societal problems. These are poverty, backwardness, illiteracy, unemployment, homelessness and crime and violence. These problems are experienced in a major as well as in a minor form. These have unfavourable effects upon the physical and psychological well-being of the individuals. The individuals, belonging to deprived, marginalized, and economically backward sections of the society are the ones who are overwhelmed by these problems.

These prove to be major impediments within the course of achievement of desired goals and leading to enrichment of one's overall quality of lives. The social workers organize workshops in terms of various problems. The problems are particularly the ones, which are having detrimental effects upon the overall living conditions of the individuals. In these workshops, presentations are made and speeches are delivered. The main objective is to make provision of adequate information to the individuals, which would help them to achieve personal and professional goals and lead to up-gradation of one's living conditions. Therefore, organize workshops in terms of various factors is a noteworthy way put into practice to encourage social work.

Putting into Operation Methods to lead to Enhancement of one's Living Conditions

In leading to enhancement of one's living conditions, there are various factors, which need to be taken into account by the individuals. These are, generating information and augmenting understanding in terms of various factors; making wise and productive decisions; implementing time management skills; providing solutions to problems in an adequate manner; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; coping with psychological problems in an adequate manner; possessing the abilities to work under stress; forming cordial and amiable

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terms and relationships with others; promoting health and well-being; preserving the environmental conditions; conducting research on regular basis and augmenting critical thinking, analytical and problem-solving skills.

When the individuals are engaged in social work, they are making provision of information to the individuals in terms of these ways. With advancements taking place and with the advent of modernization and globalization, it is of utmost significance for the individuals, belonging to disadvantaged sections of the society to be well-versed in terms of all these factors. Through organization of workshops and through communication processes, information is imparted by social workers in terms of these factors. After one has acquired an efficient understanding in terms of them, one needs to implement them in an adequate manner. Therefore, putting into operation methods to lead to enhancement of one's living conditions is a meaningful way put into practice to encourage social work.

Implementing Measures to Up-grade Competencies among Individuals

It is of utmost significance for the individuals, belonging to disadvantaged sections of the society to be well-versed in terms of measures to up-grade competencies. The various factors in terms of which competencies are up-graded as, creative skills; technical skills; professional skills; personal skills; negotiation skills; leadership skills; making wise and productive decisions; implementing time management skills; providing solutions to problems in an adequate manner; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; coping with psychological problems in an adequate manner; possessing the abilities to work under stress; forming cordial and amiable terms and relationships with others; promoting health and well-being; preserving the environmental conditions; conducting research on regular basis and augmenting critical thinking, analytical and problem-solving skills.

When the individuals are engaged in social work, they are making provision of information to the individuals in terms of these competencies. Furthermore, they are helped by them as well to up-grade these competencies and make use of them in an efficient manner. These competencies are utilized in the personal and professional lives of the individuals. When the individuals are putting into operation social work, they are contributing in a significant manner in up-grading the personality traits and aptitude among individuals, belonging to underprivileged sections of the society. Therefore, implementing measures to up-grade competencies among individuals is a fundamental way put into practice to encourage social work.

Implementing Measures to promote Community Well-being

When the individuals are engaged in social work, they are implementing measures to promote community well-being. The various measures, which need to be put into operation to promote community well-being are, implementing measures to alleviate societal problems; making wise and productive decisions; implementing time management skills; providing solutions to problems in an adequate manner; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; coping with psychological problems in an adequate manner; possessing the abilities to work under stress; forming cordial and amiable terms and relationships with others; promoting health and well-being; preserving the environmental conditions; conducting research on regular basis; augmenting critical thinking, analytical and problem-solving skills; bringing about improvements in infrastructure, amenities and facilities;

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organizing workshops in terms of various factors; putting into operation methods to lead to enhancement of one's living conditions and implementing measures to up-grade skills and abilities among individuals.

With advancements taking place and with the advent of innovations, it is of utmost significance for the individuals, belonging to disadvantaged sections of the society to be well-versed in terms of all these measures. Through organization of workshops and through communication processes, information is imparted by social workers in terms of these measures. These measures need to be put into operation in an efficacious manner to promote well-being and goodwill. Therefore, implementing measures to promote community well-being is a key way put into practice to encourage social work.

Methods to be implemented in Social Work

Within the course of putting into operation social work, there are various methods, which need to be identified by social workers. In some cases, the individuals are experiencing various types of problems and challenges (Types of Social Work, 2021). But when they are wholeheartedly determined towards putting into operation their tasks and activities in an adequate manner, they are required to augment their knowledge and understanding in terms of methods to be implemented in social work. In the implementation of job duties in an adequate manner, the social workers are required to put into operation the measures and approaches in accordance to various factors. These are problems of the individuals, their goals and objectives, needs and requirements, personality traits and demographic factors. The methods to be implemented in social work are, managing resources in an effective manner; honing communication skills and interactive abilities; carrying out the managerial functions in a well-ordered manner and ensuring the job duties and activities prove to be beneficial to the individuals. These are stated as follows:

Managing Resources in an Effective Manner

The individuals are required to manage resources in an effective manner. The various types of resources that need to be managed are financial, human, technical and material resources. The financial resources are the monetary resources. Human resources are the personnel. They need to make use of their competencies and abilities in an adequate manner. Technical resources are the various types of technologies used and material resources are the devices, machinery, tools and equipment. The management of resources in an adequate manner would contribute in a significant manner in doing well in one's job duties. Furthermore, these would facilitate in generating the desired outcomes. Therefore, managing resources in an effective manner is a method to be implemented in social work, which has been acknowledged by the individuals on a comprehensive basis.

Honing Communication Skills and Interactive Abilities

Within the course of implementation of social work, the individuals are required to hone communication skills and interactive abilities. Through reinforcement of these, the social workers are making provision of information to the individuals in terms of various factors. In order to achieve desired goals and objectives in both personal and professional spheres and lead to enhancement of one's living conditions, communication skills and interactive abilities are regarded as fundamental. The individuals need to overcome introversion and integrate with the mainstream society. The individuals, belonging to disadvantaged communities need to put emphasis upon up-gradation of this method throughout their lives. Therefore, honing communication skills and interactive abilities is a method to be implemented in social

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work, which has proven to be beneficial to the individuals in providing solutions to various types of problems.

Carrying out the Managerial Functions in a Well-ordered Manner

Within the course of implementation of social work, the individuals are required to carry out the managerial functions in a well-ordered manner. The various types of managerial functions are, planning, organizing, directing, staffing, co-ordinating, controlling, and leading. In non-government organizations, these functions are regarded as fundamental within the course of implementation of job duties. In order to do well in one's job duties, achieve desired goals and objectives in both personal and professional spheres and lead to enhancement of one's living conditions, the managerial functions need to be put into operation in an adequate manner. Therefore, carrying out the managerial functions in a well-ordered manner is a method to be implemented in social work, which has proven to be advantageous to the individuals in doing well in one's job duties and in generating the desired outcomes.

Ensuring the Job Duties and Activities prove to be Beneficial to the Individuals

When the social workers and non-government organizations are implementing social work, they need to ensure the job duties and activities prove to be beneficial to the individuals. The individuals, belonging to deprived, marginalized and economically backward sections of the society are usually overwhelmed by various types of societal problems. These problems have unfavourable effects upon the physical and psychological well-being of the individuals. They need help and support from social workers and non-government organizations to bring about improvements in their overall standards of living. Therefore, ensuring the job duties and activities prove to be beneficial to the individuals is a method to be implemented in social work, which needs to be taken into account by social workers, particularly when they have the major goal of promoting well-being of community members.

Conclusion

In urban and rural communities, the individuals are overwhelmed by various types of societal problems. These are poverty, backwardness, illiteracy, unemployment, homelessness and crime and violence. These problems have unfavourable effects upon the physical and psychological well-being of the individuals. The individuals, belonging to disadvantaged communities are the ones who are normally experiencing these problems. Ways put into practice to encourage social work are, making of donations of various items, overcoming the problem of illiteracy, encouraging skills development programs, providing help in finding employment opportunities, alleviating the problem of homelessness, providing support to victims of criminal and violent acts, organizing workshops in terms of various factors, putting into operation methods to lead to enhancement of one's living conditions, implementing measures to up-grade competencies among individuals and implementing measures to promote community well-being. The methods to be implemented in social work are, managing resources in an effective manner; honing communication skills and interactive abilities; carrying out the managerial functions in a well-ordered manner and ensuring the job duties and activities prove to be beneficial to the individuals. Finally, it can be stated, when social work is encouraged, the individuals will render a significant contribution in leading to up-gradation of the living conditions of the individuals, who are overwhelmed by various types of societal problems.

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DEVELOPMENTS TAKING PLACE IN INFRASTRUCTURE AND OTHER FACILITIES ARE NOTEWORTHY IN ENCOURAGING PROGRESSION OF THE COMMUNITIES AND NATION

Dr. Radhika Kapur

Abstract

In India, in both urban and rural communities, there is a need to put emphasis on developing infrastructure and other facilities. These need to be developed within homes, educational institutions at all levels, various types of organizations, public places and the environmental conditions. In the implementation of this task in an effective manner, there is a need to be well-versed in terms of various types of measures, approaches and methodologies. When developments will take place, they will prove to be beneficial to the individuals, communities and nation as a whole. One of the important aspects that need to be taken into account is, individuals, belonging to all communities, categories and backgrounds need to be well-versed in terms of measures to curb various types of pollution. These are, air, water, noise and land. One should put emphasis on promoting cleanliness. In the implementation of the job duty of development of infrastructure and other facilities, the individuals need to be informative. Hence, they need to conduct research in terms of various areas through various sources. Therefore, one can understand on a comprehensive basis that developments taking place in infrastructure and other facilities are noteworthy in encouraging progression of the communities and nation. The main concepts that are taken into account in this research paper are, understanding the meaning and significance of infrastructure and other facilities, factors taken into consideration in leading to developments in infrastructure and other facilities and management of water resources is essential in leading to developments in infrastructure.

Keywords: Cleanliness, Communities, Developments, Facilities, Infrastructure, Job Duties, Pollution

In order to lead to effective growth and development of the communities and nation as a whole, it is indispensable to focus upon development of infrastructure and other facilities. The infrastructure is referred to roads, railway networks, telecommunications, power supplies, water supplies, sources of transportation, broadcasting, public services and public transport. When the infrastructure will be in a well-developed state, one will contribute in bringing about improvements in one's overall standards of living. Apart from infrastructure, there is a need to bring about developments in other facilities as well. Within homes and in various types of organizations, there should be availability of furniture, heating and cooling equipment in accordance to the weather conditions, restrooms, clean drinking water, and so forth.

Within the course of putting into operation various types of job duties and bringing about improvements in various aspects of one's living conditions, it is necessary to ensure, infrastructure and other

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facilities are in a well-developed state. In the implementation of the job duty of development of infrastructure and other facilities, the individuals need to conduct research in terms of various areas. In this case, one makes use of books, articles, projects, other reading materials and internet, but fieldwork is regarded to be indispensable. It will contribute in generation of information regarding areas, which need to be improved and methods and procedures.

In India, more than 70 percent of the population resides in rural areas. In these areas, infrastructure and other facilities are not in a well-developed state. Hence, there is a need to formulate measures and approaches. The primary objective of these measures and approaches is to bring about changes and improvements (Boyle, 2021). In order to lead to effective growth and development of rural communities, it is necessary to ensure, infrastructure and other facilities are in a well-developed state. In the implementation of the job duty of development of infrastructure and other facilities, the individuals need to manage resources in an effective manner. The various types of resources, which need to be managed are, financial, human, technical and material.

These resources are regarded to be of utmost significance in leading to development of infrastructure and other facilities. In the present existence, it is necessary to make use of modern, scientific and innovative methods in the implementation of various tasks and activities. These are, maps, charts, models, graphs, pictures, images, designs, structure, various types of technologies and internet. The individuals, who are putting into operation the tasks of bringing about changes and improvements in infrastructure and other facilities, they need to make use of these methods in a satisfactory manner.

In order to lead to effective growth and development of the individuals, communities and nation as a whole, it is necessary to bring about improvements in the system of education. In educational institutions of all levels, it is of utmost significance to bring about changes and improvements in infrastructure and other facilities. The students get enrolled into them to learn and achieve educational goals. On the other hand, heads, directors, principals, instructors and other staff members are carrying out their job duties. Hence, in order to concentrate on one's job duties and lead to up-gradation of the overall system of education, one is required to focus upon developments in infrastructure and other facilities (Facility, 2021).

In various types of organizations, market places, public places and so forth, when one is putting emphasis upon bringing about changes and improvements in infrastructure and other facilities, one will be rendering a significant contribution in promoting well-being of community members. One cannot progress, unless information is provided in terms of various factors to the public. Through radio, television, newspapers and other facilities, individuals generate information and augment their knowledge and understanding in terms of various areas. Therefore, changes and improvements in infrastructure and other facilities will lead to up-gradation of system of education, organizations, market places, and public places.

Understanding the Meaning and Significance of Infrastructure and other Facilities

In order to lead to effective growth and development of the individuals, communities and nation as a whole, it is indispensable to focus upon development of infrastructure and other facilities. When the infrastructure will be in a well-developed state, one will contribute in bringing about improvements in one's overall standards of living. Apart from infrastructure, there is a need to bring about developments in other

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facilities as well. These are, restrooms, clean drinking water, furniture, heating and cooling equipment in accordance to the weather conditions and so forth. Within the course of putting into operation various types of job duties and bringing about improvements, it is necessary to ensure, infrastructure and other facilities are in a well-developed state. These are crucial in promoting well-being and goodwill. Therefore, the individuals are able to acquire an efficient understanding of the meaning and significance of infrastructure and other facilities, when they form the viewpoint that these are contributing significantly in bringing about improvements in their overall quality of lives.

In bringing about improvements in infrastructure and other facilities, the individuals are required to take into account various factors. These are, being well-versed in terms of job duties and responsibilities; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; depicting efficiency, honesty and truthfulness; conducting an analysis of the areas, which need to be improved; conducting research in terms of various subjects and concepts; generating information in terms of measures and approaches; making wise and productive decisions; implementing modern, scientific and innovative methods; managing resources in an effective manner; bringing about improvements in the system of education; leading to up-gradation of organizations, market places and public places; bringing about improvements in medical and health care facilities; encouraging a clean and green environment and focusing on the development of infrastructure, civic amenities and facilities. In both urban and rural communities, one needs to focus upon implementation of these factors on regular basis. Therefore, the individuals acquire an efficient understanding of the meaning and significance of infrastructure and other facilities, when they form the viewpoint that these are contributing meaningfully in bringing about improvements in living conditions of the community members. Furthermore, the progression of the overall nation will take place in an efficacious manner.

Factors taken into Consideration in leading to Developments in Infrastructure and other Facilities

In educational institutions of all levels and in various types of organizations, the individuals in leadership positions are vested with the authority and responsibility of implementing the factors in leading to developments in infrastructure and other facilities (Home, Applications, Infrastructure, 2021). It is apparently understood that they cannot carry out this task in seclusion. Hence, they need to work in collaboration and integration with other members. When they are to bring about developments and improvements, they usually obtain ideas and suggestions from the other members as well. The reason being, when developments are taking place, they should be beneficial to all the members of the organization, irrespective of their job positions in the hierarchy.

When this task is to be put into operation within homes, all the members of the household need to work in co-ordination with each other. In bringing about changes and improvements in roads, railway networks, telecommunications, power supplies, water supplies, means of transportation, broadcasting, public services and public transport and facilities such as, restrooms, clean drinking water, furniture, heating and cooling equipment and so forth, the individuals in leadership positions are required to put into practice various types of measures and approaches. Hence, they are required to augment their information in terms of modern and pioneering methods. Factors taken into consideration in leading to developments in

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infrastructure and other facilities are stated as follows:

Conducting Research in terms of various Areas

In the implementation of the job duty of development of infrastructure and other facilities, the individuals need to conduct research in terms of various areas. In this case, one makes use of books, articles, projects, other reading materials and internet, but fieldwork is regarded to be indispensable. The individuals, who are putting into practice the job duty of bringing about improvements in infrastructure and other facilities need to recognize the meaning and significance of this factor. It is apparently understood that they cannot carry out this task in seclusion. Hence, they need to work in collaboration and integration with other members. It is necessary for the individuals to inculcate the traits of diligence, resourcefulness and conscientiousness. Furthermore, they need to recognize the meaning and significance of morality and ethics. The implementation of these traits will contribute in generation of information regarding areas, which need to be improved and methods and procedures. Therefore, conducting research in terms of various areas is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor has proven to be effective and meaningful to the individuals to a major extent.

Generating Information in terms of Measures and Approaches

When the individuals have the primary objective of putting into practice their job duties in a well-ordered manner, there is a need to generate information in terms of measures and approaches. The information in terms of these can be generated through conducting research via various sources and communicating with others. When communication processes takes place in an effective manner with other individuals, one will augment one's knowledge and understanding. The primary objective of these measures and approaches is to bring about changes and improvements. In order to put into operation measures and approaches in a satisfactory manner, it is necessary to be well-informed and inculcate the traits of diligence, resourcefulness and conscientiousness. Furthermore, one needs to depict efficiency, honesty and righteousness. The implementation of these traits will contribute in generation of information which would be considered as worthwhile. It needs to be improved and various types of techniques, approaches and procedures need to be put into operation. Therefore, generating information in terms of measures and approaches is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor has rendered an important contribution in generating the desired outcomes.

Making Wise and Productive Decisions

When one is putting into operation the tasks of leading to development of infrastructure and other facilities, one is required to make wise and productive decisions. When the individuals have the primary objective of putting into practice their job duties in a well-ordered manner, there is a need to generate information in terms of measures and approaches. The information in terms of these need to be utilized in making wise and productive decisions. In putting into operation the decision making processes in an appropriate manner, one is required to conduct the analysis of the alternatives. One needs to make selection of the alternatives, which would be most suitable and meaningful. In terms of development of infrastructure

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and other facilities, decisions are made in terms of various areas, i.e. measures and approaches, modern, scientific and innovative methods, management of resources in an effective manner, recruitment of human resources, implementation of skills development programs, and so forth. Therefore, making wise and productive decisions is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor is regarded to be of utmost significance before initiating any tasks and activities.

Implementing Modern, Scientific and Innovative Methods

In the present existence, it is necessary to make use of modern, scientific and innovative methods in the implementation of various job duties, tasks and activities. These are, maps, charts, models, graphs, pictures, images, designs, structure, various types of technologies and internet. In some cases, the utilization of these methods is not a manageable job duty for the individuals. They experience number of problems and challenges. But getting engaged in regular practice will enable the individuals to be well-versed in terms of these methods. The individuals, who are putting into operation the tasks of bringing about changes and improvements in infrastructure and other facilities need to make use of these methods in a satisfactory manner. In order to put into operation these methods in a satisfactory manner, it is necessary to be well-informed and inculcate the traits of meticulousness, creativity and conscientiousness. Furthermore, one needs to depict efficiency, trustworthiness, morality and righteousness. Therefore, implementing modern, scientific and innovative methods is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor has proven to be favourable and significant to the individuals on a comprehensive basis.

Managing Resources in an Effective Manner

In the implementation of the job duty of development of infrastructure and other facilities, the individuals need to manage resources in an effective manner. The various types of resources, which need to be managed are, financial, human, technical and material. These resources are regarded to be of utmost significance in leading to development of infrastructure and other facilities. The financial resources are the monetary resources. Human resources are the personnel. They are required to make use of educational qualifications, competencies and abilities in an appropriate manner. Technical resources are the technologies that are utilized and material resources are the tools, machines, devices and other equipment in the implementation of various types of job duties. It is necessary for the individuals to inculcate the traits of diligence, resourcefulness and conscientiousness. Furthermore, they need to acknowledge the traits of morality and ethics. The implementation of these traits will contribute in managing resources in an efficient manner. Therefore, managing resources in an effective manner is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor is regarded as fundamental in leading to progression.

Bringing about improvements in the System of Education

In order to lead to effective growth and development of the individuals, communities and nation as a whole, it is necessary to bring about improvements in the system of education. In educational institutions at

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all levels, it is of utmost significance to bring about changes and improvements in infrastructure and other facilities (Infrastructure, 2021). The students get enrolled into them to learn and achieve educational goals. On the other hand, heads, directors, principals, instructors and other staff members are carrying out their job duties. Hence, in order to concentrate on one's job duties and lead to up-gradation of the overall system of education, one is required to focus upon developments in infrastructure and other facilities. Furthermore, it is necessary to lead to up-gradation in teaching-learning methods, instructional strategies, teaching-learning materials, assessment strategies and other academic activities. These are crucial in leading to developments in the system of education. Therefore, bringing about improvements in the system of education is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor is regarded as the key as it would contribute in a significant manner in leading to progression of individuals, communities and nation.

Leading to Up-gradation of Organizations, Market Places and Public Places

In various types of organizations, market places, public places and so forth, when one is putting emphasis upon bringing about changes and improvements in infrastructure and other facilities, one is rendering a significant contribution in promoting well-being of community members. Hence, in order to concentrate on one's job duties and lead to up-gradation of the overall structure of the organizations, one is required to focus upon developments in infrastructure and other facilities. Furthermore, it is necessary to lead to enhancement of various types of methods, approaches and procedures. One cannot progress, unless information is provided in terms of various factors to the public. Through radio, television, newspapers and other facilities, individuals generate information and augment their knowledge and understanding in terms of various areas. Hence, changes and improvements in infrastructure and other facilities will lead to up-gradation of system of education, organizations, market places, and public places. Therefore, leading to up-gradation of organizations, market places and public places is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor is regarded as the key as it would contribute in a useful manner in promoting well-being of the community members.

Getting engaged in Social Work

It is vital to recognize the meaning and significance of social work. In both urban and rural communities, the individuals are overwhelmed by various types of societal problems. These are poverty, illiteracy, unemployment, homelessness and crime and violence. In social work, one is focused upon making provision of support and help to the individuals, who are experiencing these problems. The individuals make donations of various items, such as, food, clothing, utensils, blankets, kitchen appliances, books, stationary, bags and even monetary donations. Furthermore, individuals sponsor the education of the children, belonging to economically weaker sections of the society. Coaching classes are organized for these individuals, free of cost. These are organized in terms of academic subjects and extra-curricular and creative activities. Furthermore, individuals are assisted, particularly the ones, experiencing various types of criminal and violent acts. Hence, social work has contributed in an efficacious manner in promoting well-being of community members. Therefore, getting engaged in social work is a factor taken into consideration in

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leading to developments in infrastructure and other facilities. This factor is regarded as vital, particularly when the individuals are focusing upon promoting well-being of the deprived, marginalized and economically weaker sections of the society.

Implementing Measures to eliminate Societal Problems

It is necessary to implement measures to eliminate societal problems. The various types of societal problems are poverty, illiteracy, unemployment, homelessness and crime and violence. To make provision of help and support to poverty stricken individuals, donations are made. The items include, food, clothing, utensils, blankets, kitchen appliances, books, stationary, bags and even monetary donations. To eliminate illiteracy, coaching classes are provided to them, free of cost in terms of academic subjects and extra-curricular and creative activities. In some cases, individuals are enrolled in educational institutions and their education is sponsored. To eliminate unemployment, the individuals are assisted to get engaged in employment opportunities. To eliminate homelessness, there are formulation of measures to make provision of housing accommodation to the individuals. On the other hand, in case of criminal and violent acts, the individuals, who are victims are recued. Furthermore, they are imparted with information and assisted to bring about improvements in their personality traits and living conditions. Therefore, implementing measures to eliminate societal problems is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor needs to be emphasised upon when problems prove to be major impediments within the course of progression of individuals and community as a whole.

Focusing on Well-being of Community Members

In focusing on well-being of community members, the individuals are required to take into account various factors. These are, being well-versed in terms of job duties and responsibilities; inculcating the traits of morality and ethics; implementing the traits of diligence, resourcefulness and conscientiousness; depicting efficiency, honesty and truthfulness; conducting an analysis of the areas, which need to be improved; conducting research in terms of various subjects and concepts; generating information in terms of measures and approaches; making wise and productive decisions; implementing modern, scientific and innovative methods; managing resources in an effective manner; bringing about improvements in the system of education; leading to up-gradation of organizations, market places and public places; bringing about improvements in medical and health care facilities; encouraging a clean and green environment and focusing on the development of infrastructure, civic amenities and facilities. In both urban and rural communities, one needs to focus upon implementation of these factors on regular basis. Therefore, focusing on well-being of community members is a factor taken into consideration in leading to developments in infrastructure and other facilities. This factor needs to be implemented, particularly, when one is determined to encourage development of the individuals, communities and nation as a whole.

Management of Water Resources is essential in leading to Developments in Infrastructure

In order to lead to developments in infrastructure and the overall living conditions, it is of utmost significance to focus upon management of water resources. One of the major problems that is having

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unfavourable effects within the course of management of water resources and preservation of the environmental conditions are, pollution of water bodies. Apart from this, there are other factors as well, i.e. corruption, lack of technical expertise, lack of support from religious authorities and poor environmental planning. In order to formulate and put into operation the measures and approaches that would contribute in curbing water pollution, individuals, belonging to all communities are to focus upon them in a satisfactory manner. It is a complicated task to put into operation the measures and approaches, particularly required to remove all waste materials from the water bodies. But individuals are engaged in this task. The fishermen generate a source of income by carrying out the task of fishing. Hence, when there will be an increase in water pollution, they will experience problems and impediments. Therefore, management of water resources is crucial, particularly when the individuals are determined towards promoting better livelihoods opportunities.

In rural and tribal communities, the individuals are dependent upon the natural environmental conditions. They obtain various types of materials and resources from the natural environment. The water is regarded as an essential requirement in order to sustain one's living conditions in an adequate manner. It is used for number of purposes, i.e. cleaning, washing, drinking, preparation of meals and other tasks and activities. In rural and tribal communities, the individuals are obtaining water from the water bodies. The different types of water bodies are, rivers, lakes, and wells. The individuals, belonging to these communities either possess low literacy skills or no literacy skills at all. They are usually not aware in terms of measures to curb water pollution. They tend to throw waste materials into the water bodies, thus causing water pollution (Water Resources Management, 2021). The utilization of contaminated water tends to cause various types of health problems and illnesses. Therefore, it is of utmost significance for the individuals to curb water pollution. It is necessary to keep the water bodies clean in order to promote developments in infrastructure.

In the management of water resources, there are various factors that need to be taken into consideration by the individuals. These are, not throwing any types of waste materials into the water bodies. Furthermore, wells should also be kept clean. In this manner, individuals will contribute significantly in curbing water pollution. The individuals should make use of water only to the extent that is required. In other words, one should prevent wastage and exploitation of water resources. There should be formulation of measures and programs, particularly the ones that would generate information among individuals in terms of ways to manage water resources in an adequate manner. The individuals, belonging to deprived, marginalized and economically backward sections of the society are required to augment their knowledge and understanding in terms of these measures. After they have acquired information, they are required to put it into operation in an adequate manner. Therefore, it is indispensable for the individuals to manage water resources, particularly when they are determined to lead to developments in infrastructure. The developments taking place in infrastructure will render an important contribution in promoting community well-being.

The research studies have indicated, Ganges and Yamuna are highly polluted rivers. The individuals in leadership positions are formulating measures and programs, particularly the ones that would generate information among individuals in terms of ways to manage water resources in an efficacious manner. The individuals, belonging to all communities need to acquire an efficient understanding of these measures and

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put them into operation in an adequate manner. It is unfortunate to note that there are waste materials in these rivers on a large scale. The individuals are making efforts to remove these waste materials and promoting cleanliness of the water bodies. When the cleanliness of water bodies is encouraged, it will not only prove to be beneficial to the members of the community but also living organisms in the water bodies. Water pollution is harmful to the living organisms in the water bodies. Hence, it is indispensable for the individuals to be well-versed in terms of measures and approaches to keep the water bodies clean. Therefore, individuals need to manage water resources, particularly when they are determined to promote well-being of themselves as well as the living organisms in the water bodies.

Conclusion

In order to lead to effective growth and development of the communities and nation, it is vital to lead to development of infrastructure and other facilities. When the infrastructure and other facilities will be in a well-developed state, one will contribute in bringing about improvements in one's overall standards of living. Factors taken into consideration in leading to developments in infrastructure and other facilities are, conducting research in terms of various areas, generating information in terms of measures and approaches, making wise and productive decisions, implementing modern, scientific and innovative methods, managing resources in an effective manner, bringing about improvements in the system of education, leading to up-gradation of organizations, market places and public places, getting engaged in social work, implementing measures to eliminate societal problems and focusing on well-being of community members. Management of water resources is essential in leading to developments in infrastructure. Finally, it can be stated, when developments will take place in infrastructure and other facilities, one will contribute significantly in leading to up-gradation of one's overall standards of living.

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SEGMENTATION OF WATER SUBSCRIBERS BASED ON THEIR LIFETIME VALUE AND RFM MODEL USING DATA MINING

Azime Mozafari[1], MohammadAli Taherdoost[2]

1- Master of Industrial Engineering, Iran University of Science and Technology, Employee at Shiraz Water and Wastewater Company, mozafaria@abfa-shiraz.ir.

2- Master of Industrial Engineering, Employee at Shiraz Water and Wastewater Company.

Abstract

Objective: Increasing population, drought and limited water resources have made water and wastewater companies pay more attention to customer identification. Due to the importance of surveying and identifying valuable and low-consumption water subscribers, in this study, using data mining methods, water subscribers have been segmented and identified based on their lifetime value and RFM model.

Method: To implement the proposed method, first the values of RFM model indicators including the last water payment (R) and the number of timely payments (F) and water costs (M) were extracted from the subscriber database and pre-processed. After weighting these three indicators using hierarchical analysis, subscribers were segmented using self-organizing neural network; Then the lifetime value pyramid was drawn to identify key subscribers and clusters of key and valuable subscribers were identified.

Results: The results show that among the three indices of the RFM model, the water amount index is the most important and the last payment index is the least important in determining the value of subscribers and based on this, subscribers were divided into six clusters. According to the life cycle value pyramid, the most valuable subscribers are located in cluster 3, which constitutes 33% of the total subscribers. These subscribers are mainly residential, commercial and industrial users, mainly living in region 2, these subscribers mainly pay their bills on time. They have paid and have a small amount of water.

Conclusion: By identifying valuable and key subscribers, suggestions were made to improve the service to subscribers by considering their value.

Keywords: Customer Life Value, Hierarchical Analysis, Self-Organized Neural Network, Water and Wastewater Company.

1.Introduction

Water consumption in Iran is more than per capita water consumption in places that are similar to Iran in terms of climate and social and economic life, and therefore this issue requires special attention to water consumption management. People's behavior in water consumption depends on their attitude and level of awareness (Foster & Beattie, 1981). Given the current state of the water crisis and the increasing demand for this vital and valuable substance, its management is important (Cominola et al., 2019). For successful

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implementation of water consumption management, it is necessary to review the behavior of customers and correct them if necessary. Therefore, today, it is very important for water and wastewater companies to study the patterns and how to use them, and it is very valuable to provide any solution to reduce consumption and prevent its loss. Water and wastewater companies have always tried to satisfy customers, supply and distribute water at reasonable prices and minimize costs. These goals will be possible when these companies have a correct knowledge and understanding of subscribers' behavior (Eskandary et al., 2020).

Nowadays, considering the production of large volumes of data and their storage, retrieving information from such large databases can be considered as one of the strengths of an organization. Numerous approaches have been used to collect, store, organize and manage existing data and achieve meaningful results. Data mining is one of the recent approaches in this field through which data can be stored and extracted effectively (Monika & Amarpreet, 2018). Data mining is a process that uses a variety of analytical tools to discover patterns and relationships between data (Berry and Linoff, 2012) therefore, it is a completely scientific process to discover hidden knowledge and unknown relationships between data, which deals with the issue of data mining with a new perspective. Data mining is a set of methods that allows a person to move beyond ordinary data processing and helps to extract information that is hidden in the mass of data. Data mining can also be considered as part of the larger process of knowledge discovery in databases in different environments. One of the most practical data mining techniques is the clustering algorithm that is used to extract and identify the pattern from the mass of data. This technique puts similar data in a cluster and presents a model as a representative so that this representative expresses the behavior of the data in that cluster. The purpose of clustering is that the data located in a cluster have the most similarity with each other and the least similarity with the members of other clusters. One of the techniques used for this purpose is the self-organizing artificial neural network, which is based on the interconnectedness of several processing units called neurons, which are arranged in certain layers (Rosenblatt, 1962; Han et al., 2011). Self-organized network training is based on the observer learning algorithm and Euclidean distance. At the end of the training phase, a map of the neurons is obtained, which is in fact a summary of the space analyzed by the network (Kreidler, 2008; Saggaf et al., 2003).

The data of the subscribers of the Water and wastewater Company is constantly increasing, while in the depth of this volume of data, there are very interesting patterns and relationships between different parameters that help to identify the subscribers and determine their value. This research intends to segment the water and wastewater company subscribers using the data available in the database. Identifying subscribers requires analyzing the target subscribers and categorizing them, which leads to finding groups of key subscribers based on their characteristics. In this way, using clustering, similar subscribers can be classified into the same groups. But the main question is how to identify key subscribers? Value for life is a concept that can help a lot in this regard. Accordingly, the proposed model is based on the RFM model, which is used to derive patterns of customer behavior and considers three factors of Recently (R), Frequency (F) and Monetary (M) for each record (Buttle, 2004; Cheng and Chen, 2009; Hughes, 1994). In this model, it is assumed that the subscribers with high value of each of the model indicators are the best subscribers, of course, as long as they behave as in the future (Keiningham et al., 2006). The reason for using the RFM model is that in this model, not only financial characteristics are considered but also non-financial

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characteristics are important (Seyed Hosseini et al., 2011). There are different opinions about the importance of RFM model indicators (Bin et al., 2008). In this study, in order to rank these indicators, the Analytic Hierarchy Process (AHP) is used, which is one of the multi-criteria decision making techniques (MCDM). This method, which is based on pairwise comparisons, determines the weight of each factor in terms of competing options, and finally combines a mathematical algorithm with matrices derived from pairwise comparisons to make the optimal decision. Thus, in the present study, we seek to answer three questions:

Question 1: What is the priority and importance of RFM indicators in determining the value of water and wastewater company subscribers?

Question 2: The subscribers of the water and wastewater company are divided into several clusters and what is the characteristic of the subscribers of each cluster?

Question 3: Which subscribers are more valuable to the water and wastewater company?

2- Research Methodology

Water and wastewater companies store a lot of data about their customers, while they are incapable of discovering the knowledge or value hidden in this data. The subscriber database is one of the most important assets of these companies that can be used to develop a strategy to better understand the behavior of subscribers and consumers by analyzing the characteristics and consumption behavior of each subscriber. Due to the importance of this issue, the present study was conducted with the aim of segmenting Shiraz water subscribers based on the RFM model. For this purpose, multi-criteria decision making methods and data mining along with an important concept called subscriber consumption value pyramid have been used. Therefore, the present study is an applied research due to conducting in a specific company (Shiraz Water and Wastewater Company) based on purpose-based classification, because the results can be used by organizations and water and wastewater companies in adopting appropriate policies. The present research has been carried out by survey-analytical method in which by combining multi-criteria decision making methods and data mining, a framework for clustering and predicting the behavior of Shiraz Water and wastewater Company subscribers has been presented to provide the ground for identifying key subscribers and selecting appropriate strategies according to the characteristics of the subscribers of each department. The data used from the subscriber database of Shiraz Water and Wastewater Company have been extracted and the research has been done in a periodic period and the subscriber database used in the research includes 813,685 records or subscribers. The research steps are shown in Figure 1.

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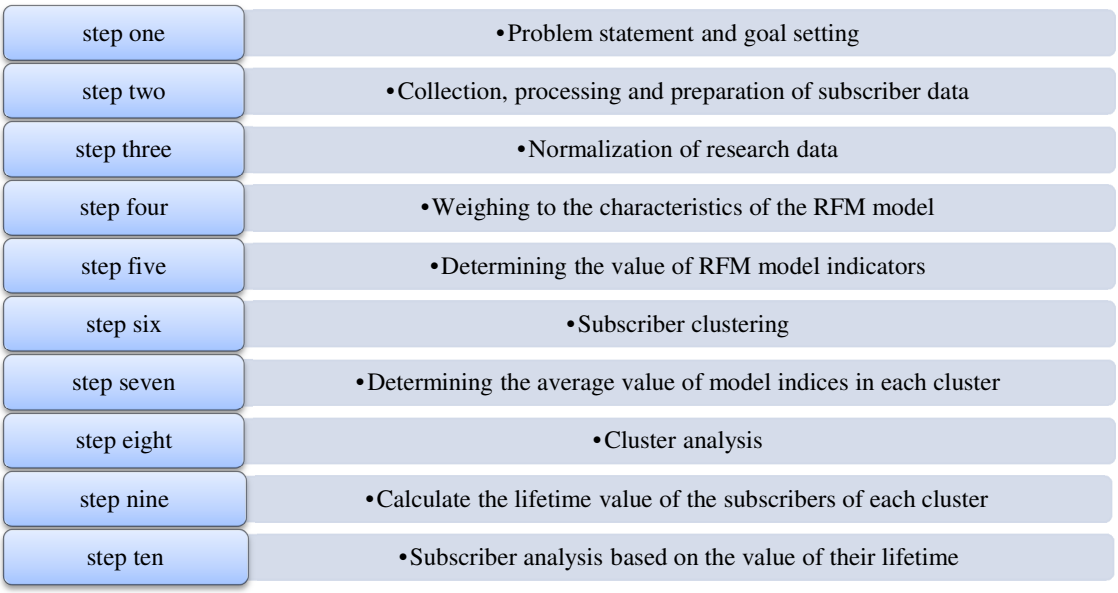

Figure 1- Research steps

3- Findings

3-1- Collecting and preparing research data

One of the most important steps in the knowledge extraction process is collecting raw data and identifying useful information to solve the problem. After recognizing the problem, we need to identify useful information to solve the problem and select the appropriate data sources. In general, in order to implement data mining techniques, criteria should be considered according to which subscribers can be clustered into different groups. Appropriate data were extracted from the company's subscriber database, which are described in Table 1.

Table 1- Research variables

Row	Field	Variable type	Scope of change
1	Number of subscribers	---	1 to 813,685 items
2	Account Type	---	Residential, commercial and industrial, public and administrative, religious and educational places, military, non-governmental
3	Address	---	Region 1 to 5
4	Recently (R	Reverse	0 to 103 days
5	Frequency (F)	Direct	1 to 10
6	Monetary (M)	Reverse	0 to 10,521,091

After recognizing the data, in order to extract useful knowledge from them, the data must be prepared. Data preparation techniques can increase the quality of data and thus the quality of output results. Data

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preparation, known as preprocessing, takes the most time and, according to evaluations, is one of the most important steps in knowledge discovery.

In order to prepare the data of the present study:

• Due to the fact that some numerical data are inverted, it is necessary to normalize the data.

• The "Number of subscribers" field only indicates the number of records available and is not used for data mining operations.

As shown in Table 1, the R-index is related to the time interval between the last payment of loans and the end of the period, and the shorter payment time indicates the high value of this index in the model. F-index indicates the number of times the subscriber has paid the amount of water on time, and a higher number indicates the high value of this index in the model. The M-index indicates the amount of water costs, the lower of which indicates the high value of this index in the model.

3-2- Normalization of research data

Given that self-organized network training is based on the Euclidean distance, the normality of network training data can severely affect the output maps, which is done using formulas (1) to (3).

$$R' = \frac{R_{\max} - R}{R_{\max} - R_{\min}} \quad (1)$$

$$F' = \frac{F - F_{\min}}{F_{\max} - F_{\min}} \quad (2)$$

$$M' = \frac{M - M_{\min}}{M_{\max} - M_{\min}} \quad (3)$$

In the above relations R, F and M are the principal values of the indices and $R_{\max}$, $F_{\max}$ and $M_{\max}$ are the highest values of the indices and $R_{\min}$, $F_{\min}$ and $M_{\min}$ are the lowest value of the indices and R', F' and M' are also the normalized values of the indices.

3-3- Weighting to RFM model indicators

The relative weights of the indicators are calculated using the Analytical Hierarchical Process and denoted by W_R, W_F and W_M. Using the opinions of ten experts in the water and wastewater industry, a matrix of pairwise comparisons for the criteria and options was formed and the weight of the options was calculated with the help of Expert Choice software.

According to the output of this method, the relative weights of R-index were is 0.30, weights of F-index is 0.34 and weights of F-index is 0.36. Also, at the end, to ensure the correctness of the answer, the compatibility rate of all matrices was calculated. Compatibility rate is an indicator that shows the accuracy of judgments, and for this purpose, its value should be less than 0.1. If this value is more than 0.1, we consider the judgments contradictory and random, which should be revised. In this study, the compatibility

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rate was less than 0.1 for all matrices. The obtained weights show the importance of the indicators, in this way, the first question of the research is answered and the M-index has the most importance and the R-index has the least importance in determining the value of subscribers.

3-4- Determining the value of RFM model indicators

The value of each index was determined by multiplying its normalized value by its weight according to formulas (4) to (6).

$$R'' = R' \times W_R \tag{4}$$

$$F'' = F' \times W_F \tag{5}$$

$$M'' = M' \times W_M \tag{6}$$

Then the average value of each of these indicators is determined by dividing the total value of that index in all records by the total number of subscribers according to formulas (7) to (9).

$$\bar{R}'' = \frac{\sum R''}{n} \tag{7}$$

$$\bar{F}'' = \frac{\sum F''}{n} \tag{8}$$

$$\bar{M}'' = \frac{\sum M''}{n} \tag{9}$$

After determining the value of the model indexes, the average value of the indexes was calculated according to the mentioned instructions, which was obtained for the R index equal to 0.1142, for the F index equal to 0.1220, and for the M index equal to 0.2081.

5-3- Clustering of subscribers

A self-organizing neural network is used for clustering and the results of the network output are analyzed in the form of graphic maps; This operation was performed in MATLAB software. To perform clustering, the network training data consists of 813,685 3D vectors of model indices. In this part, the second question is answered and after completing the steps at the end, six clusters are obtained and each subscriber is placed in one of these clusters. The clustering results are listed in Table 2.

Table 2- Clusters of subscribers

Clusters		**1**	**2**	**3**	**4**	**5**	**6**
Number of subscribers		40152	146203	271102	99025	201025	56178
Percentage of subscribers		5	18	33	12	25	7
Residential	Account	90	91	51	80	56	68
commercial and	Type	5	5	34	14	26	10

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industrial	(Percentage)						
public and administrative		2	1	5	2	10	6
religious and educational places		1	1	1	1	3	5
military		1	1	1	1	1	3
non-governmental		1	1	8	2	4	8
Region 1	Address)Percentage(	12	5	9	5	69	14
Region 2		4	8	65	5	14	10
Region 3		9	6	12	72	5	6
Region 4		69	10	6	10	5	55
Region 5		6	71	8	8	7	15
Less than 15 days (Suitable)	Recently)Percentage(	44	77	89	32	80	22
More than 16 days (Unsuitable)		56	23	11	68	20	78
0-1 (Low)	Ferequency)Percentage(	18	8	5	25	10	59
2-5 (Medium)		32	24	14	33	21	16
More than 6 (Much)		50	68	81	42	69	25
0-200,000 (low consumption)	Monetary)Percentage(	27	54	59	10	58	55
200,000-1,000,000 (Average consumption)		50	38	35	79	29	28
More than 1,000,000 (High Consumption)		23	8	6	11	13	17

6-3- Determining the average value of model indicators in each cluster

The average value of each index in each cluster is determined by dividing the total value of the index in that cluster by the number of subscribers of that cluster, which formulas (10) to (12) show this operation.

$$M_{R''} = \frac{\sum R''}{n} = 0/2587 \tag{10}$$

$$M_{F''} = \frac{\sum F''}{n} = 0/1817 \tag{11}$$

$$M_{M''} = \frac{\sum M''}{n} = 0/0852 \tag{12}$$

7-3- Cluster analysis

This analysis is done by comparing the average value of the indicators in each cluster with the average value

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of the indicators in the whole data and also by comparing the ranks of the clusters in each of the indicators. This comparison shows the average value of each of the model indicators in each cluster compared to the average value of these indicators in the whole data. For each index, the optimal situation is a situation where the average value of the index in a cluster is better than the average value of that index in the whole data, and it is indicated by the sign (↑).Unfavorable situation means a situation where the average value of the index in a cluster is not better than its average value in the whole data, and it is indicated by the sign (↓), and the results are shown in Table 3.

Table 3- Cluster analysis

Clusters		**1**	**2**	**3**	**4**	**5**	**6**
Average value	$M_{R'}$	0/2354	0/2632	0/2785	0/2104	0/2875	0/2241
Rank		4	3	2	6	1	5
Average value	$M_{F'}$	0/1794	0/2015	0/2120	0/1800	0/1911	0/1226
Rank		5	2	1	4	3	6
Average value	$M_{M'}$	0/0688	0/0855	0/0975	0/0714	0/0858	0/0721
Rank		6	3	1	5	2	4
The average value of indicators ($M_{M'}$،$M_{F'}$،$M_{R'}$)		)↓،↓،↓(	)↑،↑،↓(	)↑،↑،↑(	)↓،↓،↓(	)↑،↑،↑(	)↓،↓،↑(

8-3- Calculating the lifetime value of subscribers of each cluster

The lifetime value of the subscribers is calculated based on the weighted average value of the RFM indices in that cluster using formula (13).

$$CLV = W_R \times M_{R'} + W_F \times M_{F'} + W_{M'} \times M_{M'} \quad (13)$$

The lifetime value can be seen in Table 4.

Table 4- The lifetime value of clusters

Clusters	**1**	**2**	**3**	**4**	**5**	**6**
Lifetime value	0/1564	0/1783	0/1907	0/1500	0/1821	0/1349
	Fourth	Third	First	fifth	Second	sixth

9-3- Analysis of subscribers based on their lifetime value

In this step, the value of each cluster is determined in the form of a life value pyramid. As we move from the lower level of this pyramid to its higher levels, the clusters with lifetime value are more. In this pyramid, the lifetime value of subscribers is mentioned in six main clusters.

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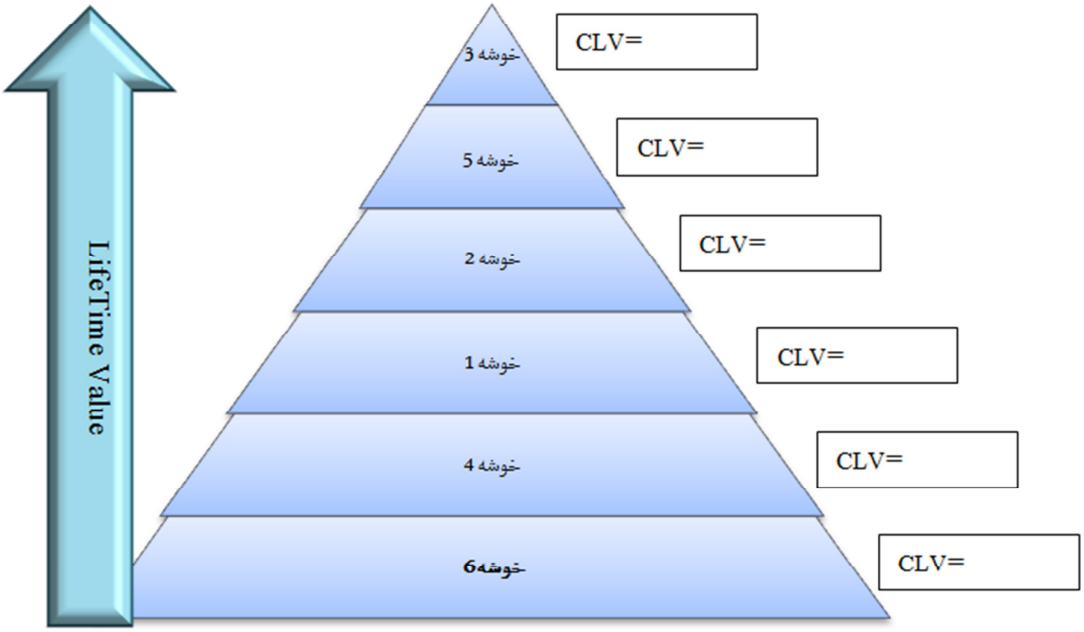

Figure 1- The value pyramid of subscribers' lifetime

According to the lifetime value pyramid, cluster 3 subscribers have the highest lifetime value. The subscribers of this cluster constitute 33% of the total subscribers, they mainly have residential, commercial and industrial use, they mainly live in region 2, these subscribers have recently (less than 15 days) paid their bills, the number of times they pay on time In this one-year period, it has been more than 6 times, and it is natural that their water price is mostly low.

After cluster 3, the subscribers of cluster 5 are of great importance, the subscribers of this cluster constitute 25% of the total subscribers, they mainly have residential, commercial and industrial use, they mainly live in region 1, these subscribers recently (less than 15 days)) have paid their bills, the number of times they have paid on time in this one-year period is more than 6 times, and their water bills are mostly low.

The next priority is with cluster 2, which includes about 18% of all subscribers, the subscribers of this cluster are mainly residential users, they mainly live in region 5, these subscribers have recently (less than 15 days) paid their bills, the number The frequency of their timely payments is more than 2 times in this one-year period, and their water bills are mostly average.

Cluster 1 is the next priority, which includes 5% of subscribers, the subscribers of this cluster mainly have residential use, they mainly live in region 4, the number of times they pay on time in this one-year period is more than 2 times, and their water price is mostly It is average.

The next priority is cluster 4, which includes about 12% of all subscribers, the subscribers of this cluster are mainly residential users, they mainly live in region 3, these subscribers have mostly paid their bills for more than 16 days, the number of times they pay on time In this one-year period, it is more than 2 times and their water price is mostly average.

Cluster 6 represents the subscribers who have the lowest value, the subscribers of this cluster include only

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7% of the total subscribers, they mainly have residential use, they mainly live in region 4, these subscribers have mostly paid their bills for more than 16 days. The number of times they pay on time in this one-year period is less than 2 times, and the amount of water charges is also high.

4- Discussion and Conclusion

Due to the expansion of information and communication technology in organizations, by using existing databases and using useful tools and algorithms such as data mining, it is possible to model the complex nature of data related to the consumption behavior of subscribers and the relationships between them and identify consumption patterns. By using data mining algorithms, it is possible to identify the complex nature of customers' consumption behavior in the form of patterns that provide a worthy contribution to consumption management. Considering the importance of this issue, in the current research, the segmentation of Shiraz water subscribers has been done using data mining techniques and the RFM model. It should be noted that for this purpose, the concept of consumer consumption value pyramid has also been used, and no research has been done in this direction in the water and wastewater industry. Presenting a cluster analysis in order to investigate more precisely the features of the subscribers in the clusters, as well as the final segmentation of the subscribers based on their lifetime value in the form of the lifetime value pyramid, are among the cases that have been used in this study. One of the special features of this research is the use of the self-organizing neural network method, which is one of the most accurate methods in the field of clustering and data mining.

Based on the findings of the research, Shiraz water subscribers were divided into six clusters, according to the value of the lifetime, clusters 3, 5, 2, 1, 4 and 6 were ranked first to sixth respectively. According to the value pyramid, Shiraz Water and Wastewater Company should make efforts to satisfy and encourage its valuable subscribers (with the highest lifetime value) in clusters 3, 5 and 2 and give special importance to the subscribers of these clusters. Since the subscribers of cluster 6 have the lowest value of the life period, it is better to conduct a more detailed study about the reasons for the low values of each of the model indicators in this cluster. It should be noted that the behavior of subscribers is not fixed and their database changes. The set of rules received from the database for a particular time is only valid for a certain time and then becomes obsolete, so it is suggested that in future studies, a wider dataset is used in terms of the time domain that definitely results in creating The results will be stronger and a wider range of practical knowledge about the behavioral characteristics of subscribers. On the other hand, intermittent periods of time from the company's database will provide the possibility of dynamic implementation of data mining based on the RFM model to determine the lifetime value of subscribers, whose results can reflect changes in the behavior of subscribers, play an important role in relation to them.

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RECOGNIZING THE FACTORS HIGHLIGHTING STATUS OF WOMEN IN ANCIENT INDIA

Dr. Radhika Kapur

Abstract

The main objective of this research paper is to recognize the factors highlighting status of women in ancient India. The primary role of women is to implement the household responsibilities and take care of the needs and requirements of family members. The women were given high status in the society and they felt satisfying and pleased. The women were provided with the opportunities, which enabled them to lead to up-gradation of intellectual and spiritual standards. During this period, there were many women rishis. In the later Vedic period, they experienced a decline in their status. In other words, they experienced discriminatory treatment. The system of sati and the practice of child marriage was not prevalent. In the Rig Vedic society, the status of women was high. The women were well-versed in terms of ways of putting into practice their job duties in a well-organized and satisfactory manner. Therefore, it can be stated, in ancient India, the women were given appreciation and reverence as well as experienced a decline in their status. The main concepts that are taken into account in this research paper are, women's position in ancient India, position of women in the Hindu dharma, factors highlighting status of women in ancient India, the practices of female foeticide and female infanticide in ancient India and participation of women in ancient India in education and politics.

Keywords: Activities, Ancient India, Education, Female Foeticide, Female Infanticide, Politics, Responsibilities, Women

During ancient India, women were appreciated and revered in the society. They rendered an important contribution in leading to well-being of their families and communities. The women were given high status in the society and they felt gratifying and contented. The women were provided with the opportunities, which enabled them to lead to enhancement of intellectual and spiritual standards (Women in Ancient India, n.d.). During this period, there were many women rishis. The wealthier classes believed in polygamy, but the system of monogamy was prevalent. The system of sati and child marriage was not prevalent. In the Rig Vedic society, the status of women was high. Whereas, in the later Vedic period, they experienced discriminatory treatment. The discriminatory treatment was observed in terms of acquisition of education, rights and other facilities.

The preference was given to male children. It was believed, females are liabilities. They will only make demands and will not yield any returns on investment. They were to eventually get married and were trained in terms of implementation of household responsibilities. On the other hand, male children were regarded as assets. It was believed, males will contribute in an efficacious manner towards promoting

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well-being of the families and communities. Provided, they are given the opportunities to do so. Hence, male children were enrolled in educational institutions and were encouraged towards acquisition of education. The family members contributed in an efficacious manner towards leading to development of competencies and abilities of male children. The women experienced a decline in their status with the prevalence of child marriage, sati and purdah system. The women were primarily equated with property in the epics and the purans (Rout, 2016).

During the Mauryan period, status of women was in a deteriorated condition. They were not given equal status as compared to their male counterparts. In spite of having a deteriorated condition, the women acquired employment opportunities as bodyguards and spies. In the kingdoms, women served as serving girls. They assisted the queens and the princes in the implementation of their job duties. The women belonging to upper castes were supposed to accept the purdah system. During this period, men were polygamous and sati was regarded as an accepted norm. Arthashastras imposed more stigmas upon them. The women were supposed to obey their husbands. There were laws and rules that were set and the women were supposed to follow them. The women were to take the permission of their husbands, if they were to go to any places. Furthermore, they were not vested with the authority and responsibility of making decisions on their own. In other words, the male members of the household were vested with the authority and responsibility of making decisions.

The status of women experienced a further decline during the Gupta period. They experienced abuse and mistreatment from the Smritishastras. Manu dictated that women will be dependent upon the male members of their family in order to sustain their living conditions in a satisfactory manner. The fathers during the childhood stage, husbands during youth and on their sons in their old age. The male members will formulate the norms in accordance to which they will live their lives. Apart from the practices of child marriage, sati and purdah system, the other systems which imposed unfavourable effects upon the status of women is prostitution and the Devadasi system. These systems became comprehensive and had effects upon the lives of the women to a major extent. When women could not make their own decisions and lived their lives in accordance to the norms and rules set by their male counterparts, it was frustrating to them.

The Indian society like the other classical societies were patriarchal in nature. The major aspects that were taken into consideration are sexuality, reproduction and social production. The women were given recognition, as their role was acknowledged in the implementation of these functions. On the other hand, there were formulation of rules that made women subordinates to their male counterparts. There were formulation of rules that deprived women from practicing rights and opportunities. The more subtle expression of patriarchy was through the symbolism that makes provision of messages in terms of the deprived status of women. This was communicated through the legends highlighting self-sacrificing. Self-sacrificing was regarding the pure image of the women and through the prevalence of rituals and norms. The status of women were recognized in two important roles, i.e. mother and wife. The women played important roles as mothers and wives. In other words, they carried out their job duties and responsibilities in an adequate manner.

Women's Position in Ancient India

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The status of women declined when the Vedic period came to an end. They were supposed to follow the rules and norms that were formulated by their male counterparts. They were primarily vested with the job duty of implementing household chores and taking care of the needs and requirements of the family members. One of the unfortunate aspects that imposed detrimental effects upon the status of women are, they were not allowed to participate in social, economic, political, cultural and religious functions. Within the course of time, the birth of the girls was not appreciated. The preference was given to male children. It was believed, females are liabilities. They will only make demands and will not yield any returns on investment. They were to eventually get married and were trained in terms of implementation of household responsibilities. On the other hand, male children were regarded as assets. It was believed that males will contribute in an effective manner in promoting well-being of their families and communities. Therefore, there were occurrence of major barriers within the course of up-gradation in the status of women.

In ancient India, the role and position of women is determined by certain norms and values, i.e. social structure, cultural norms, value system and social expectations. Changes are regarded as an integral part of the society. The women experienced a decline in their status as well as were treated with respect and courtesy. The pupils in the gurukuls acquired their education. The teacher was respected and obeyed by pupils. Furthermore, his wife was given respect like a mother. Apart from acquisition of education in terms of academic subjects, the pupils were trained in terms of other factors as well. These were related to implementation of household responsibilities. The teacher's wife trained them in terms of preparation of meals, rearing of the livestock, getting wood from the forests, fetching water and so forth. During the course of acquiring training in terms of these factors, the teacher's wife was revered by pupils. Hence, this shows that in ancient India, women were treated with respect and courtesy. The marriage of women was regarded as one of the vital factors that was emphasised upon in ancient India.

The functioning of the household was not possible and could not take place in an effective manner without women (Srivastava, n.d.). Hence, the roles of women as mother and wife was recognised to a major extent. The function of child development was regarded as significant. They possessed information in terms of all the factors that carried out the function of child development in an efficient manner. The widows were not revered within the society. The children usually obeyed and respected their mothers. But widows were deprived of various rights and opportunities. They were supposed to dress in white, not wear any jewellery or ornaments, and were not allowed to participate in social, economic, cultural and political functions. It was believed that the sight of the widow could be a barrier within the course of achievement of goals and objectives. In some cases, the women were deprived from participating in religious functions as well. They lived their lives confined to four walls of the household. Furthermore, they were supposed to follow the rules set by the male members of the household.

Position of Women in the Hindu Dharma

The roots of Hindu religion are in the Aryan society of the patriarchal system. In the lives of both men and women, family was given preference. In ancient times, there was prevalence of the joint family system. The joint family is the family system, when two or more nuclear families are residing under the common roof. The joint family comprises of grandparents, parents, siblings, aunts, uncles, and cousins. In the Aryan

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family, the birth of the male child was rejoiced to a major extent. The women were provided with freedom. The male members of the household did not impose any major restrictions on women. They were allowed to live their lives in accordance to their desires and aspirations. In the Hindu Dharma, there was prevalence of the viewpoint that man and a woman represent two aspects of one person. Scriptures say that Lord Shiva consists of the body in two halves, one is of the male and the other is of the female. Women are regarded to be more powerful and are regarded as Goddess of power (Shakti). The functioning of the society took place in accordance to the norms and values (Brief History of India, 2021).

In ancient India, religion was given preference. In education, the teachers put emphasis upon imparting information in terms of religious scriptures. Emphasis was put upon the traits of morality and ethics. It was believed that if the individuals lived their lives in accordance to these traits, they will contribute significantly in leading to enrichment of their overall quality of lives. In the area of spirituality, women were not discriminated against. They were provided with equal rights and opportunities as compared to their male counterparts. There were number of job duties in which the women were engaged in. They were employed as helpers in the homes of the wealthy classes. Furthermore, they were employed as helpers in palaces as well. The women were also engaged in the occupations of ministers. These jobs rendered an important contribution in enabling them to sustain their living conditions in an effective manner. Women were dependent upon the male members of their family in order to sustain their living conditions in a satisfactory manner. The fathers during the childhood stage, husbands during youth and on their sons in their old age.

The women did not have the right to property. This was regarded as the primary reason that they were dependent upon the male members of the family. There were formulation of rules that made women subordinates to their male counterparts. There were formulation of rules that deprived women from practicing rights and opportunities. The male members of the households formulated the laws and rules. These were supposed to be followed by all the members, including women. The philosophy of the patriarchal family was based on the principle that males are responsible for leading to effective growth and development of the family tree. This viewpoint enables the males to acquire protection, importance and recognition within the family. When marriage took place, women were given a subordinate status. They were supposed to follow the decisions made by the male members in terms of them. In the subordinate status, women were allowed to experience number of negatives. These negativities gave rise to impediments within the course of up-gradation of their status. Therefore, prevalence of subordination led to a decline in their status.

Factors highlighting Status of Women in Ancient India

During the ancient period, the women were appreciated and revered as well as experienced a decline in their status. Within the households, women have indispensable job duties to perform. Their contribution is regarded as indispensable to such an extent that the functioning of the household cannot take place without them. The male members of the household focused upon their job duties to generate a source of income. On the other hand, they carried out the job duties of formulating measures and laws. The women were required to put into practice their job duties in an adequate manner and obey the male members (Status of Woman in Ancient, Medieval and Modern Period, n.d.). Factors highlighting status of women in ancient India are

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implementation of household responsibilities, getting engaged in economic activities, deprived from acquisition of education, deprived from up-gradation of quality of lives, participated in tasks of governance and administration, and experienced discriminatory treatment. These are stated as follows:

Implementation of Household Responsibilities

From the stage of early childhood, throughout the lives of the women, they are trained in terms of implementation of household responsibilities. In order to lead to up-gradation of one's overall quality of lives, it is of utmost significance to focus upon implementation of household responsibilities. The various types of household responsibilities are, cleaning, washing, preparation of meals, fetching water, rearing of the livestock, child development, health and well-being, taking care of the needs and requirements of elderly family members and overall maintenance of the house. In most cases, the women need to listen and obey the rules, which have been formulated by the male members. For example, when they are preparing meals, they usually prepare the dishes, which are enjoyed by the male members of the household. Therefore, implementation of household responsibilities is regarded as one of the crucial factors highlighting status of women in ancient India.

Getting engaged in Economic Activities

In rural areas, agriculture and farming practices were regarded as primary job duties of the individuals. The women were also engaged in these occupations. Apart from agriculture and farming practices, the individuals, including women were engaged in other job duties as well. These are, production of artworks, handicrafts, silk weaving, pottery making and so forth. Furthermore, they also developed motivation and enthusiasm in singing, dancing and playing of musical instruments. The products were marketed and women also made use of their talents to generate income. When the individuals have a family business of production of these items, in such cases, they train their girls in terms of the production processes. From the stage of early childhood, the girls are imparted training in terms of manageable tasks and activities. They assisted their parents in the production processes. Therefore, getting engaged in economic activities is a vital factor highlighting status of women in ancient India.

Deprived from Acquisition of Education

In ancient India, there many women rishis. They were educated and informative in terms of morality and ethics. They imparted information to the individuals in terms of religious scriptures. The girls were deprived from acquisition of education at the end of the Vedic period. The reason being, it was believed, they were to eventually get married and in their marital homes, they will not be provided with the opportunities to make use of their educational qualifications in any manner. They will be vested with the job duty of implementing the household responsibilities and taking care of the needs and requirements of the family members. The individuals formed the viewpoint that if girls will be encouraged towards acquisition of education, it will be wastage of resources. The time and resources were utilized by the individuals to train girls in terms of all types of household chores and responsibilities. Therefore, deprived from acquisition of education is an essential factor highlighting status of women in ancient India.

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Deprived from Up-gradation of Quality of Lives

The women were required to experience various types of problems, which imposed detrimental effects upon their status. These are, they were not allowed to participate in social, economic, political, cultural and religious functions. They were not allowed to get enrolled in educational institutions and training centres to acquire education. They were only compelled to remain within the house. They implemented the household responsibilities and took care of the needs and requirements of the family members. Furthermore, they were meant to obey the rules formulated by the male members. These factors gave rise to major impediments within the course of up-gradation of their status and overall quality of lives. It is apparently understood, when the individuals will not be well-informed and when they will not be provided with the opportunities to socialise, they will experience impediments in leading to up-gradation of quality of lives. Therefore, deprived from up-gradation of quality of lives is an indispensable factor highlighting status of women in ancient India.

Participated in Tasks of Governance and Administration

The women participated in tasks of governance and administration. In the functioning of the household, these tasks gained prominence. These tasks were put into operation in case of individuals as well as other activities. The functioning of the household was not possible and could not take place in an effective manner without women. Hence, the roles of women as mother and wife was recognised to a major extent. The function of child development was regarded as significant. The women were vested with the authority and responsibility of taking care of the needs and requirements of family members. In kingdoms, the queens and princes contributed in the implementation of these tasks. When the women participated in these tasks, they rendered an important contribution in leading to enhancement of their status and living conditions. Therefore, participated in tasks of governance and administration is a significant factor highlighting status of women in ancient India.

Experienced Discriminatory Treatment

In the later Vedic period, women and girls experienced discriminatory treatment. The discriminatory treatment was observed in terms of acquisition of education, rights and other facilities. The preference was given to male children. It was believed, females are liabilities. They will only make demands and will not yield any returns on investment. They were to eventually get married and were trained in terms of implementation of household chores. On the other hand, male children were regarded as assets. It was believed, males will contribute in a useful manner towards promoting well-being of the families and communities. Provided, they are given the opportunities to do so. Hence, male children were enrolled in educational institutions and encouraged towards acquisition of education. The family members paid attention towards health and well-being of their male children. Whereas, adequate attention was not paid towards promoting health and well-being of girls. Therefore, experienced discriminatory treatment is an essential factor highlighting status of women in ancient India.

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The Practices of Female Foeticide and Female Infanticide in Ancient India

Family planning was regarded as an important aspect since ancient times. The institution of marriage was considered important. There was prevalence of the custom of child marriage. Child marriage is when marriage took place of both boys and girls before the age of 18 years. The girls are the ones, who experience detrimental effects as a result of child marriage. They are deprived from participation in various kinds of childhood activities. On the other hand, they are required to carry out the household chores and take care of the needs and requirements of family members. In some cases, girls and women experienced abuse and mistreatment from their husbands and in-laws. The various forms of abuse, i.e. verbal, physical, and emotional have unfavourable effects upon the physical and psychological well-being of women and girls. But in most cases, they are under compulsion to experience abuse and mistreatment. They do not leave marital homes and go to natal homes. The reason being, this would impede the status and reputation of their family members in natal homes. Furthermore, they were not provided with the authority to make their own decisions.

In ancient India, the birth of the girls was not appreciated. The reason being, the individuals formed the viewpoint that girls do not possess the capabilities that are required in promoting well-being of families and communities. In other words, they will not be provided with any opportunities that will lead to up-gradation of their skills and abilities. The preference was given to male children. On the other hand, females were regarded as liabilities. They will only make demands and will not yield any returns on investment. They were to eventually get married and were trained in terms of implementation of household responsibilities. On the other hand, male children were regarded as assets. It was believed, males will contribute in an efficacious manner towards promoting well-being of the families and communities. The prevalence of negative viewpoints in terms of girls encouraged the practices of female foeticide and female infanticide. Female foeticide is referred to killing of the girl child in the mother's womb. On the other hand, female infanticide is referred to killing of the girl child after she was born.

The families adopted different ways of aborting the foetus. This was prevalent among tribal communities. The woman, who aborted the foetus against her will was subjected to severe punishments. The religion and communities were the ones, who did not approve abortion. They possessed the viewpoint that women, who were engaged in such an act, should be subjected to self-punishment. In ancient times, there was implementation of certain ways to terminate pregnancy. The different ways that were adopted by the individuals include, making use of the herbs, creating abdominal pressure or a serious weapon. In most cases, when these ways are put into operation, the women feel disappointed to a major extent. In other words, it is painful to them. But they do not have any other option and are required to put into practice these ways. When the individuals are carrying out the practice of female infanticide, they adopted ways of killing the girl child after she was born. The prevalence of this practice deprives the girl children from the right to live. Therefore, prevalence of these practices gave rise to major impediments within the course of effective growth and development of girls.

In the 19th century, the British declared some regions as prone to infanticide. In 1805, they found among the Rajputs of the Saurashtra, there was prevalence of female infanticide. In eastern Uttar Pradesh, there was a village, where no daughters were found. In 1808, Alexander Walker, the chief authority of

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Baroda, summoned the heads of all communities to find out the reasons behind killing of the girl children. In 1870, the British government enacted the Prevention of Murder of Female Infants Act. During the initial stage, it was to be enforced only in the north-western provinces of Punjab and Oudh. In 1872, some of the areas were notified as prone to infanticide. The census figure indicated that women accounted for 40 percent. In 1898, female infanticide was recognized as the crime. The government order was passed, making it a cognizable offence. However, within eight years in 1906, the prevention of female infanticide act was abolished. The government claimed that infanticide was no longer practiced within the communities.

Participation of Women in Ancient India in Education and Politics

During the Vedic period, women were encouraged towards acquisition of education. It was believed that when they will be educated, they will be well-aware in terms of methods and procedures. Whether the women are implementing the household responsibilities or carrying out the functions of governance and administration or are participating in other job duties, the acquisition of education will facilitate in doing well in one's jobs and generating the desired outcomes. Education was regarded as an instrument, which would facilitate in sustaining one's living conditions in an adequate manner. It is necessary for the individuals to be well-versed in terms of morality, ethics, norms, values, cultures, standards and principles. This is facilitated through acquisition of education. The Vedic period witnessed many capable women, Apala, Ghosha and Visvavara. They performed the job duties of composing the mantras and rose to the rank of rishis or sages. When formal education was given to women and girls, they were required to recite the mantras or the verses with clarity and efficiency. Therefore, one is able to understand the participation of women in education is recognized.

The women participated in tasks of supervision and management. These signified their participation in politics. In the management of the household and various types of economic activities, these functions gained prominence. These tasks were put into operation in case of individuals as well as other activities. The management of the household was not possible and could not take place in an effective manner without women. Hence, the roles of women as mother and wife was recognised to a major extent. The function of child development was regarded as significant. The women were vested with the authority and responsibility of taking care of the needs and requirements of family members. In kingdoms, the queens and princes contributed in the implementation of these functions. When the women participated in these tasks, they rendered an important contribution in leading to enhancement of their status and living conditions. In order to carry out political functions in an effective manner, individuals need to be informative in terms of managerial functions of planning, organizing, directing, staffing, leading, co-ordinating and controlling. Therefore, it can be stated, participation of women in politics is recognized in ancient India.

Conclusion

During ancient India, women were appreciated and revered in the society. They rendered an important contribution in leading to well-being of their families and communities. The women were given high status in the society and they felt gratifying and contented. The status of women declined when the Vedic period came to an end. They were supposed to follow the rules and norms that were formulated by their male

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counterparts. The practices of female foeticide and female infanticide were prevalent in ancient India. Factors highlighting status of women in ancient India are implementation of household responsibilities, getting engaged in economic activities, deprived from acquisition of education, deprived from up-gradation of quality of lives, participated in tasks of governance and administration, and experienced discriminatory treatment. Participation of women in ancient India in education and politics was recognized. This facilitated in leading to up-gradation of their status. Finally, it can be stated, in ancient India, there are some factors that indicated reverence regarding women, whereas, other factors depicted a decline in their status.

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NEGATIVE CASH FLOWS, EQUITY ISSUANCE AND CASH HOLDINGS

Nguyen Thi Le Ha[1,3], Phan Le Phuong Thao[2,3]

[1,2] *School of Business Administration, International University, Ho Chi Minh City, Vietnam*

[3]*Vietnam National University, Ho Chi Minh City, Vietnam*

Abstract

Cash holding have increasingly attracted the attention of researchers after the development of liquidity preference theory. The present study's purpose is to discover the relationship among cash flows, level of cash holdings and equity financing. Financial data about companies with total assets greater than 1 billion VND that are listed on the Ho Chi Minh Stock Exchange from 2015 to 2019 will be gathered. Three models including ordinary least square model, fixed effect model, and random effect model are utilized to examine if there are significant associations among cash flows, level of cash holdings and equity issuance.

Introduction

Research Background

Literature has devoted a lot of attention to cash holdings, which are seen as a crucial indicator of a firm's financial flexibility. Specifically, it relates to the promptness with which businesses react to unexpected shocks that affect their cash flow and investment possibilities (Gamba & Triantis, 2008). Moreover, it has been reported by Harford et al. (2011) that businesses may reduce their exposure to the risks associated with restructuring by keeping more cash balances. Over the last two decades, the trend of businesses to conserve cash has experienced a dramatic increase in many countries, if not most of the world's economies. Thomas W. Bates (2006) stated that U.S. businesses amassed an abnormally high amount of cash between 1980 and 2006. The cash ratio, for example, has overdubbed from its previous level of 10.5% in 1980 to its current rate of 23.2% in 2006. Also in 2014, Forbes estimated that American corporations retained approximately $2.6 trillion in cash. Similarly, by the end of 2000, cash and equivalents accounted for almost 15% of all EMU firms' total assets, as Ferreira & Vilela (2014) reported. Consequently, empirical studies addressing the importance of cash holdings have lately piqued the attention of a number of researchers and filled an increasingly significant position in corporate finance literature. Despite this, cash does not accrue much than in the way of interest, why do businesses maintain such large reserves of it?

Recent research on this trend has offered many theories that emphasize intangible assets such as patents, trademarks, staff training, and other kinds of R&D initiatives. Some of the hypotheses include the following: (i) a generalized transition from the capital to intangible capital as stated by Falato et al. (2020); (ii) the introduction of high-cash, high-R&D enterprises onto public financial markets by Begenau & Palazzo (2016) and the growing attention to the healthcare and technology industries in the report of Booth & Zhou (2013) and Graham & Leary (2017). According to Kessels (2001), businesses in today's knowledge-based economy

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need to prioritize their capacity and effectiveness in producing, transferring, and using new information. In recent years, intangible knowledge has emerged as the preeminent means by which businesses may add value to their operations, displacing the more conventional physical production aspects (B Lev, 2001; Nakamura, 2003; Syverson et al., 2010; Kogan et al., 2012). This modification is strongly attributable to a broader "investment conundrum" by Mueller et al. (2017) characterized by diminishing private expenditures and a weaker relationship between a business proposition and potential growth. Additionally, non-physical capitals are important in enhancing business performance and efficiency and improving competitive advantages over rivals in the same industry. An increasing number of observations indicates that the unprecedented growth in new technologies will be the driving force that resolves the performance downturn seen in many OECD nations (Andrews & Gal, 2016). In light of this, intangible assets may account for a disproportionate share of a company's worth.

Researchers in the United States (Opler et al., 1999); (Foley et al., 2006); (Bates, 2006); (D'Mello et al., 2008), the United Kingdom (Al-Najjar & Belghitar, 2011), the European Union (Ferreira & Vilela, 2004), and elsewhere have focused on, and conducted research on cash balances (Guney et al., 2007; Al-Najjar & Belghitar, 2011). Meanwhile, there are limited publications that pay attention to the Asian market (Kim et al., 2011; Islam, 2012; Fischer et al., 2014). For this reason, executing the concept of cash holdings in Asian nations such as Vietnam is essential.

It has also been observed that most researches in Vietnam is carried out to examine cash maintenance level and the influence of cash accumulation on businesses' valuation rather than the characteristics as well as the capital contribution method in high-preserved firms. This is the case even though in retaining proceeds is a far more prevalent phenomenon. Alternatively, Almeida et al. (2004) suggested that "the fundamental reason for liquidity accumulation may not be the amount of cash on hand, but rather the tendency to conserve funds in the event of a cash flow disruption". Similar emphasis was also placed on the cash savings approach by Riddick et al. (2007). Therefore, this study is an attempt to investigate the significance of negative cash flow contributing to the rise in trends in stockpiling proceeds is more complicated than illustrated by earlier research, even while the trend toward intangible capital throughout the equity issuance is substantially connected with the growth of businesses with persistent negative NCFs.

Problem Statement

Numerous studies have been undertaken on this topic since it was originally raised, but there is little clarity about the importance of operating losses as well as nonphysical asset investments regarding the growth of cash reserve levels. In particular, the term "cash balance" refers to cash that is physically available for use in generating investments in assets or in delivering returns to investors (Gill & Shah, 2011). Many prior researches examining the determinants of cash holdings have highlighted the unavoidable significance of cash reserves play in a company's capacity to fund future expansion. These works draw conclusions based on changes in cash flow vulnerability evaluated for subsamples sorted by ex-ante proxies for company liquidity restrictions, such as dividend payout, size, age, or debt rating. However, the accuracy of such conclusions is highly dependent on the technique of measurement that is used for liquidity restrictions.

Additionally, the majority of prior analysis has relied on a database of the top publicly traded companies in

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big markets. In reality, these developed countries do not face the same liquidity limitations as emerging nations since their financial institutions are already in good form. As a result, understanding the relationship between asset intangibles with the tendency of negative net cash flows and preserving funds of Vietnamese businesses remains difficult.

Furthermore, the pandemic crisis and the subsequent collapse in global commerce in early 2020 had devastating effects on several nations. This depressing economic downturn has been felt not just in large economies like the United States, Japan, or European countries, but also in those countries whose economies are reliant on exports, such as the United Kingdom. Consequently, Vietnam was not exempt from this unexpected shock. Index from the General Statistics Office shows that the number of enterprises that have ceased operations in the recent period has steadily risen, from 67,823 in 2014 to 72,666 in 2017, and finally to 119,800 at the end of 2020. Specifically, there is evidence that inadequate cash management is responsible for the collapse of 60% of Vietnamese firms. Meanwhile, the dynamic trend of liberalization in Asia in particular and globally in general, as well as the substantial recovery in the post-financial-crisis period, have strengthened firms in Vietnam to intensively improve liquidity and solvency in order to survive in financial crises. As a direct solution to the severe repercussions of the great recession, an increasing number of businesses have gone under or been dissolved, providing an opportunity to assess and re-establish the segmented total assets. From there, liquid assets, such as cash and cash equivalents, are often viewed as a cost-effective and attractive means of enhancing a company's liquidity. However, there are not many studies in Vietnam that demonstrate how important cash reserves are for a business and what the explanatory power and distribution are for its growth.

Keynes (1936) also proposes that businesses should accumulate cash reserves as a means of protecting themselves against unfavorable cash flow shocks. Keynes believed that such shocks may result in underinvestment, especially in businesses that had both high and fluctuating investment levels, particularly firms develop mostly in the R&D field. As a consequence, businesses that have substantial R&D expenses and unstable cash flows have a tendency to keep more reserves of cash on hand (Bates et al., 2009). Regardless of the fact that holding more cash for safety purposes, there is still a lack of the capacity for cash flow volatility and R&D investments to gain excess capital retained by negative cash flow enterprises for operational aims.

Research Objectives

The study aims to provide a comprehensive overview of the growth in average cash holdings in publicly traded companies contributed by persistent negative cash flow as well as the transition to intangible assets and the staged external financing behavior on the decision to cash stockpiling of the proceeds. In other words, the study’s purpose is to investigate the significance between corporate cash balances during periods of low cash flow and high intangibility levels, and which source firms draw the necessary funds in order to maintain financial flexibility.

Scope of the Study

In order to investigate how funding needs and staged equity financing by negative NCF firms relate to the

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growth in the levels of cash holdings, the study concentrates on studying firms with total assets greater than 1 billion VND that are listed on the Ho Chi Minh Stock Exchange for the five-year period from 2015 to 2019.

Literature Review

Motivations of Cash Holdings

The rationale for holding cash can be explained by a range of variables that affect cash levels. In 1936, Keynes contributed extensively to the literature on the topic of cash balance. He provided insight that helped divide cash needs into four distinct groups, including precautionary motive, transaction motive, tax motive, and agency motive.

Precautionary Motive

First of all, Keynes argues that keeping a sufficient cash reserve to meet both immediate and long-term demands is intrinsically linked to the precautionary drive for saving. According to this rationale, businesses hold cash as a reserve to cope with unforeseen circumstances that might cause cash flow deficits, especially when access to capital markets is more restricted. Similarly, Kim et al. (1998) found that when the cost of accessing external capital markets is high, businesses hoard cash to ensure they have sufficient financial resources to better manage unanticipated situations. According to Opler et al. (1999), businesses that experience more variations in their cash flows have a greater propensity to reserve larger amounts of liquid assets than those with stable flows of money. Additionally, Han & Qiu (2006) argued that only the enterprises with limited financial resources are the ones in which the association between cash reserves and increased earnings volatility is statistically relevant. Furthermore, this theory also explains the tendency of US firms to increase cash reserves in recent years as they record more changes in their cash flows (Bates et al., 2009).

Transaction Motive

In regular business operations, it is necessary to maintain a basic balance to satisfy liquidity requirements. This reserve fund enables firms to be affordable in daily transactions for purchasing materials, wage fees, debt repayments, dividend liabilities, and several other expenses. Instead of going through the asset conversion process, using accessible money saves a lot of time and effort and businesses can be more proactive in transaction activities. Obviously, when firms have cash balances, they may leverage their own resources rather than resort to the more costly capital markets for financing. In order words, raising cash levels is an optimal option to minimize transactional expenses associated with the disposal of properties and external funding.

Tax Motive

This motive is stated by Foley et al. (2006), which is through cash hoarding to take advantage of cash benefits, namely the high rate of taxation on repatriated foreign revenue. Thus, it explains the rationale why U.S. multinational corporations prefer to retain their overseas revenues on deposit with their international subsidiaries rather than sending them back to the United States. Similarly, Harford et al. (2015) agreed with the opinion that tax burdens are the reason why firms are afraid of transferring money to the national market.

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Agency Motive

The final cause for cash holdings is claimed by Jensen (1986) in the same manner as the free cash flow theory. When management has amassed more cash than is required to finance investments with a positive net present value, this is referred to as having excessive cash reserves. As a result, managers have to come up with methods to spend it. Without the availability of successful investments, inferior investments will be undertaken or managers have the tendency to utilize the business's finances to serve their private purposes. Similarly, Dittmar et al. (2003) noted that such violation is more prevalent in firms with lax financial allocation policies. By that means, it is demonstrated that company governance has a substantial effect in controlling how much cash is retained. Specifically, strong governance ensures the protection of shareholder wealth against excessive resource misappropriation by managers (Dittmar & Mahrt-Smith, 2007; Harford et al., 2008).

Hypothesis Development

Operating Losses and Cash Growth in Balances

Several prior research has been conducted and proposed reasons for the growth in the liquid assets reserve. In accordance with Bates et al. (2009), the tendency of accumulating more cash on hand in many U.S. businesses in the period between 1980 and 2006 is explained by the precautionary purpose rather than the agency motive. In this paper, they assessed the impact of a change in business characteristics and emphasized that a greater amount of cash reserves correlates with a rise in cash flow fluctuation and R&D expenditure while inversely related to working capital and capital expenditures. According to Begenau & Palazzo (2016), these relationships are more significant in new entrants, especially in their operation and market development. Their analysis showed that groups of firms incurring losses tended to accumulate more cash in advance. Moreover, Opler et al. (1999) further demonstrated that businesses in riskier sectors' cash flow are preferable in cash hoarding, indicating that cash flow plays a substantial role in determining the amount of cash a company has on hand. In the contrast, C.-S. Kim et al. (1998) and Ferreira & Vilela (2004) hold a different view, which stated that cash flow and cash savings levels relate in opposite directions.

Besides, the rationales for cash surplus hoarding involve transaction concerns, tax concerns, agency conflicts, and hedging purposes. However, in the report of Nikolov & Whited (2014), they figure out that the minority of firms in their observation experience losses while earning from abroad. Therefore, they asserted the massive rise in cash is not related to the avoidance of taxes for foreign remittances. Also, over 80% of the sample distribution is not likely to be susceptible to transaction issues. For motives raised by conflicts in the agency, this study highlighted three underlying criteria, including firm size, privileged consumption, and inefficient ownership management, that have the least impact on the level of accumulation. This tendency is only explained in the smallest enterprises, where they are prone to more frequent stock offerings, and under stricter control than those with better conditions. Consequently, the sharp growth in accessible funds after the 70s implied the precautionary motive.

Furthermore, research and development expenses (R&D) have become an attractive aspect to investigate in recent papers. In accordance with Bates et al. (2009)'s statement in previous research, Falato et al. (2014) demonstrate that businesses' level of cash over their total asset rise when tax incentives for innovation in their domestic nation are adjusted. New entrants are the main subject for storing cash in order to serve for

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the updated R&D activities (Begenau & Palazzo, 2016). Additionally, Pinkowitz et al. (2016) pointed out the difference in R&D expenses can be reflected in the deviant amount of cash holdings. In particular, this is necessary for businesses to prepare a large amount of available money for the high expenses of continually evaluating and activating R&D initiatives, and for the most part, these firms have poor cash conditions. Nevertheless, without respect to the nature of the expenditure, R&D entails a financial outlay that must be fulfilled. As a result, it is better classified as working cash rather than surplus cash kept for provisions.

H1: There is a negative relationship between cash flow and the level of cash holdings.

Intangible Assets and Cash Balances

Nonphysical properties are a statistically significant determinant of the level of cash detention. In empirical studies, it is a common ideal that cash intangibility strongly impacts the decisions to maintain a certain amount of money on hand. According to Vithala R. Rao (2004) and Gleason & Klock (2006), innovation and brand loyalty are seen as investments that may grow a firm's intangible assets and have predictable beneficial impacts on future cash flow and intangible assets. Numerous studies demonstrate that in developing nations, company ownership is closely managed by controlling shareholders, particularly family-controlling shareholders. In this case, the agency conflict between dominant owners and minority shareholders has led to a significant decline in the value of these intangible properties.

From another view, intangible asset value may be affected directly or indirectly by factors related to the nature of the firm. These natures include the growth in sales revenue, firm size, leverage of firm, pay dividends, profitability, firm age, and multinationalism (Klapper & Love, 2004; Black et al., 2012; Gleason & Klock, 2006; Fukui & Ushijima, 2006; Uyar & Kuzey, 2014). Meanwhile, existing research has hypothesized that enterprises must maintain liquidity in the face of financial frictions, which in cases of overuse of leverage, cash flow volatility, connection with borrowing lenders, and many other kinds of issues may happen. From there, intangible investments have become an attractive object for both researchers and firms to analyze how it is stated as the cause of the business difficulty. As a result, it offers a straightforward explanation of the connection between these capital intangibles and the liquidity holdings of companies. In detail, when firms possess a high amount of intellectual property, they can face financial shortages at uncertain times due to their lack of borrowing capacity for leverage guarantees. Therefore, these businesses make an effort to keep a certain amount of liquidity on hand to contrive any unexpected financial needs in the future. To illustrate, Falato et al. (2014) utilized firm-level data in the U.S. to demonstrate that these nonphysical capitals take an important role in the rise of cash reserves tendency during recent years.

H2: Intangible asset investment is significantly correlated to the level of cash holdings.

Operating Losses, Intangible Assets, and Level of Cash Holdings

Despite there is proof that businesses with a negative NCF have a significant impact on the rise in excess cash financing, another emergent nature to these models is that most observations with low NCF are contributed by high levels of intangible assets. The study of David J. Denis and Stephen B. McKeon (2021) in the period 1971 to 2018 illustrated that types of businesses have transitioned from being undervalued and struggling organizations to becoming highly valued growth enterprises and spending extensively in intangible assets as the prevalence of experiencing negative NCF has increased. In addition, observations for 4000 U.S. firms indicate a shift in the sector composition of those with negative NCF, with a greater number

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of these entities currently located in highly intangible sectors including pharmaceutical, commercial services, and intelligence devices. Specifically, the leading industries maintaining low NCF during the last few years correspond strongly with the promising sectors (healthcare and technology) that Graham & Leary (2017) and Booth & Zhou (2013) indicate as key determinants for the growth in liquid assets retention during and after the 80s.

When average capital reserves have risen, intangibles were added as well (Falato et al., 2020; Begenau & Palazzo, 2016). Also, R&D spending is one aspect of a company that has evolved significantly over time (Brown et al., 2009). Note, by using the Peters and Taylor (2017) measure of intangible intensity, it is figured that prior to 1990, the gap in the amount of money accumulated in high and low intangible enterprises was indifferent, despite substantial disparities in intangible intensity. They find, for instance, businesses with low intangible intensity in 1980 had cash holdings that were 9.6% of assets, whereas firms with high intangible intensity had a 10.8% cash-to-asset ratio. Despite this, the median intangible intensity was over double in the higher nonphysical investment group. These results indicate that intangible assets are not the primary cause of the substantial aggregate capital availability during the previous years. Similarly, until the 1990s, there was little to no distinction when comparing businesses with a negative and positive net cash flow to account for their cash accumulation.

The practical implication of these trends is made clear by the fact that a significant share of the empirical support of high intangible nature for the increment of liquid assets stems from the subgroup of enterprises that have persistently negative NCF. In addition, losses in operations and these nonphysical capitals directly affect one another in a significant manner, which is illustrated as cash amounts have increased the greatest for companies that display both traits. Hence, the next hypothesis is:

H3: The effect on the level of cash balances is stronger for firms with cash flow problems and high intangible intensity.

Negative Cash Flows, Intangible Properties, and Equity Issuance

The lack of available collateral is often stated as a detriment to the viability of financial leverage in traditional capital structure justifications. However, the latest studies by Huang and Ritter (2021) have found that the range of future capital needs plays a crucial role in determining debt-equity proportions for optimal financing, while Lian and Ma (2019) assert that cash flow shortfalls take precedence over collateral limitations in defining aggregate borrowing capacity. They illustrated that transition away from debt financing and toward equity funding across companies with poor earnings is prone to be seen in those with high intangible magnitude, since all these companies are more able to encounter collateral issues that prevent them to take sufficient loans. In addition, the low intangible ratio in a cash-losing company causes it to generate more borrowed money. These results are comparable with those that were found by Huang and Ritter (2021), where they provide credence for the idea that a firm's capacity to secure debt financing is significantly impacted by near-term liquidity demands that are persistent over time.

H4: Cash flow shortfalls and intangible property are positively related to equity issuance decisions.

Research Methodology

Research Design

Quantitative research method is utilized to reach the primary objective of the study that is to examine the

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impact of negative NCF on the levels of cash balances by generating panel regressions of cash holdings as a function of NCF and other relevant variables. The research process consists of the following steps. Firstly, conventional estimation methods of cash balances is supplemented by adding an index of unfavorable cash flow and the association between this factor and the value of NCF/assets to reflect the extent of negative NCFs. Next, the sub-samples will be divided to deduce the impacts between different signs of cash flow companies. After that, along with the negative NCF indicator, an intangible intensity indicator variable and its interaction with that metric are presented. In combination, it can reflect the link between these two factors leading to a significant change in cash holdings. Finally, the relationship between external funding activities and changes in retention is investigated by conducting a panel to overview which sources are used.

Sample and Data Collection

As mentioned previously, the study focuses on studying firms listed on the Ho Chi Minh Stock Exchange (HOSE) with total assets greater than VN 1 billion during the period of 2015 and 2019. Also, Financial institutions and enterprises that are partially or totally controlled by the government are omitted from the data sample because their financial practices vary from those deemed industrial. By using a market price for each observation, it is necessary to filter out any information collected for pre-IPO subjects.

Besides, firms are not included in the sample if they do not have complete accounting records for at least five consecutive years from 2015 to 2019. To further verify the credibility and impartiality of the study conclusion, firms with very high financial performance and other outliers are also removed. The target firms should also demonstrate, via their trading records, that their stocks were continuously traded from 2015 to 2019 without any breaks and without drawing the attention of HOSE. Moreover, the target firms should not be planning to delist if they want their stock prices to remain stable and accurately represent the value of their underlying businesses.

Measurement of Variables

Based on the related studies discussed previously, the formulas for measuring the independent and dependent variables in this research are described as follows.

Table 1. Summary of Variable Measurement

Variable	Measurement
Operating Cash Flow	Operating Cash Flow - CAPX
Intangible Intensity	Cost of intangible assets/ Total assets
Cash Holdings Levels	Cash and cash equivalent of firm / Total Assets
Size	Natural logarithm of total assets
Capital Expenditure	Cost of Capital Expenditure / Total Assets
Industry Cash Flow Volatility	Standard deviation of cash flows is measured for each firm over up to 10 years (minimum 3). Values are averaged based on Fama French 48 industry annually
R&D Intensity	Indicator that takes a value of 1 when [R&D Expense/ Total Asset]>0.02, and 0 otherwise
Market-to-book ratio	(BV of assets – BV of common equity – Balance sheet deferred taxes + MV of equity) / BV of assets

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Leverage	(Long-term Debts + Short-term Debts) / Total Assets
Inventory	Inventory/ Total Asset
Net Equity Issuance	(Equity Sales - Equity Purchases)/ Total Assets
Net Debt Issuance	(Debt Issuance – Debt Retirement)/ Total Assets
Burn Rate	(OCF - Dividends - Capital Expenditures)/ 12
RunAway	Monthly Cash Balance / Monthly Burn Rate

Regression Models

In their most basic forms, three different regression approaches are suitable for the study of panel data sets, which are the Ordinary Least Square (OLS) model, fixed effect model, and random effect model.

Pooled OLS Regression

The Pooled OLS approach stands out because of its straightforward OLS regression estimation. It is commonly recognized that both the time and location aspects are unlikely to be combined in the regression process using the Pooled OLS approach. Instead of using space and time techniques, Thierry (2006) asserts that this methodology allows variables from the same category to be "pooled" or blended to provide an accurate assessment of the parameter. Also, the Pooled OLS regression has various drawbacks despite the well-known benefits. One notable disadvantage is that this technique does not take into account the occurrence of heterogeneity. This indicates that there is no regard for the uniqueness of each firm. As a consequence, the limitations of the Pooled OLS model may be circumvented via the use of fixed-effect and random-effect models. The use of these two models will allow for a comprehensive elucidation of each company's distinctive intercept variability.

Fixed Effect Model

The fixed effect model is established as follows:

$y_{it} = (\alpha + u\ ) + \beta x_{it} + v_{it}$

In the fixed effect model, the intercept variance varies among the sampled firms but not along the horizontal axis of time. In other words, the personality prominent in any organization is only discernible when the company is acknowledged. Brooks, C. (2008) stated that the word "fixed" refers to the characteristic of a cross-section whose values vary with the time variation given by *ut*. Since the fixed effect model is also known as the Least Squares Dummy variable (LSDV) model, it is clear that the fixed effect model is essentially an OLS model that uses dummy variables to adjust for variations across organizations. Despite its benefits, the fixed effect model has certain drawbacks that make it fall short of perfection. As stated before, unanticipated multicollinearity arises when the fixed effect model is used to investigate the cross-sectional dimension of the dependent variables while incorporating the time horizon, leading to unanticipated multicollinearity.

Random Effect Model

The random effect model assumes that the intercept values are constant across firms. Therefore, one alternative method for calculating the intercept value is to take the standard deviation of each company's intercept and add it to the average intercept of all firms in the sample. The value of UI is not predetermined, as it is in the fixed effect model, which is the primary distinction between the two types of models.

Additionally, Green (2008) suggests that there is no correlation between the value of UI and the model

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forecast. Comparatively, the fixed effect model is better applicable to panel data analysis where the sample entities may adequately reflect the complete population. Conversely, the random effect regression model is much superior when it is assumed that the sample entities are drawn at random from the population (Brooks, 2008). The random effect model also yields fewer firm intercepts, making for a more nuanced estimate. Thus, this model uses the General Least Squares (GLS) estimator.

Conclusion

Companies around the world commonly hold optimal cash level to avoid uncertainly, take advantage of current growth opportunities and consequently increase their performance. The study attempts to explore the linkage among cash flows, cash holding level and equity financing of listed Vietnamese companies with total assets greater than 1 billion VND. On the basis of three models namely ordinary least square model, fixed effect model, and random effect model, associations among cash flows, level of cash holdings and equity issuance are examined. It is estimated that cash balance is not persistently maintained at a high level as a buffer for unexpected liquidity demands. Instead, these large funds existed in a short-term period throughout the stock issuance, and subsequently, swiftly deplete the amounts.

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THE EFFECTS OF ENTREPRENEURIAL PLAN AND INTENTION ON INDONESIAN STUDENT'S COMMITMENT IN ENTREPRENEURSHIP: A NEW CONCEPTUAL FRAMEWORK

Antonius Satria Hadi*
Study Program Entrepreneurship, Widya Mataram University, Indonesia
Business School, Universiti Kuala Lumpur, Malaysia

Ilham Sentosa
Business School, Universiti Kuala Lumpur, Malaysia

Rosni Ab Wahid
Business School, Universiti Kuala Lumpur, Malaysia

* Corresponding Author: antonius_satria@widyamataram.ac.id

Abstract
This conceptual paper aims to analyse whether the practice of the entrepreneurial intention affects the entrepreneurial commitment. Another objective of this conceptual article is to provide an alternative framework for entrepreneurial intention affects the entrepreneurial commitment mediated by entrepreneurial plan. Overall, there are three hypotheses proposed by the researchers in this conceptual article. The recommended method to test the conceptual framework is the structural equation model analysis where mediation variables are applied. The validity test shall use confirmatory factor analysis while the reliability test uses Cronbach's Alpha. This article suggests further research for empirical testing by collecting data from respondents which then shall be analysed using a structural equation model.

Keywords: Entrepreneurship Intention, Entrepreneurship Plan, Entrepreneurship Commitment

INTRODUCTION

Entrepreneurship is an important issue in the economy of a developing country. The economic progress or decline of a nation is largely determined by the existence and role of this group of entrepreneurs (Berger et al., 2021). Boutillier (2021) states that the entire process of economic change ultimately depends on the person who causes positive change, namely an entrepreneur. Most companies that are growing and that are innovative show an entrepreneurial spirit. Corporations are trying to encourage their managers to become entrepreneurial people, universities are developing entrepreneurship programs, and entrepreneurs bring

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about big changes in society (Arora & Sharma, 2021).

The success of the development achieved by a country is supported by the existence of entrepreneurs who amount to a minimum of 4% or as much as 40% of the total population. This is the key to the successful development of the Japanese state (Rovanto & Finne, 2022; Nakamura, 2022; Takata et al., 2022; Naiki & Ogane, 2022). Unfortunately, the number of entrepreneurs in Indonesia is still small and the quality cannot be said to be great to support the economy, so this entrepreneurial problem becomes an urgent problem for the success of economic development in Indonesia (Irjayanti et al., 2021; Pramono et al.,2021; Harahap et al., 2022). This phenomenon occurs due to the low motivation and interest of Indonesian students to become entrepreneurs. If the mindset of students is not changed, Indonesia will have many problems, one of which is the narrowing of job opportunities, fewer job opportunities than people looking for work, so many people do not get jobs which results in the number of unemployed, especially intellectual unemployment, is getting bigger and has an impact on economic conditions in Indonesia (Suyanto, 2022; Sadewo et al., 2022; Rizqi, Pratikto, & Kusdiyanti, 2022).

Filion (2021) explains that an entrepreneur is a person who creates a business that is expected with risk and uncertainty to gain profits and develop a business by opening up opportunities. Utilizing the resources needed to become entrepreneurs for students needs to be supported by every university in supporting their interest in entrepreneurship (Raza, Qazi, & Shah, 2018; Wang et al., 2022). Universities need to provide the widest possible opportunities for students to become individuals with reliable integrity who have the ability to work, communicate, work together, and have personalities. Interest in becoming an entrepreneur is defined as a person's desire to work independently (self-employed) or run his own business (Rosyadi et al., 2019; Cai & Liu, 2020; Sampene et al., 2022). The student's intention to become an entrepreneur in the future will lead to the making of an entrepreneurial plan to be committed as an entrepreneur. Therefore, these research questions and research objectives for this paper are shown in Table 1.

Table 1. Research Questions and Research Objectives

Research Questions	Research Objectives
To what extent does entrepreneurial intention related toward entrepreneurial plan?	To examine entrepreneurial intention influences toward entrepreneurial plan
To what extent does entrepreneurial intention related toward entrepreneurial commitment?	To examine entrepreneurial intention influences toward entrepreneurial commitment
To what extent does entrepreneurship plan related toward entrepreneurial commitment?	To examine entrepreneurial plan influences toward entrepreneurial commitment
To what extent does entrepreneurial intention related toward entrepreneurial commitment mediated by entrepreneurial plan?	To examine entrepreneurial intention influences toward entrepreneurial commitment mediated by entrepreneurial plan

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Entrepreneurial Intention & Entrepreneurship Plan Enactment

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Entrepreneurship is a way of thinking, studying, and acting that is based on business opportunities, a holistic approach, and balanced leadership (Doern, Williams, & Vorley, 2019; Olanrewaju et al., 2020; Wadhwani et al., 2020). Other researchers state that entrepreneurship is a dynamic process or a series of activities carried out by entrepreneurs in their efforts to produce and provide added value for certain products or services that have been fought diligently so that they are successful in gaining commercial profits or success (Chowdhury, Audretsch, & Belitski, 2019; Maritz et al., 2020).

The entrepreneurial process demands a willingness to take calculated risks so that they can overcome obstacles to achieve the expected success (Rauch, Fink, & Hatak, 2018; Gieure et al., 2020). In general, entrepreneurs use their ingenuity to take advantage of limited resources. An entrepreneur is someone who develops a new product or new idea and builds a business with a new concept. In this case, it requires a certain amount of creativity and an ability to see patterns and trends that apply to being an entrepreneur (Zhang & Acs, 2018; Ramoglou, Gartner, & Tsang, 2020).

Previous researches state that the goals to be achieved by an entrepreneur are influenced by the need for achievement that encourages individuals to produce the best and usually have initiative and a strong desire to express ideas in their minds, and conveys ideas in order to achieve success (Yu et al., 2020; Wang et al., 2020). An intention is needed for the initial step in starting an entrepreneur. The intention is a person's particular desire to do something or some action, it is the result of a conscious mind that directs a person's behavior (Sun & Gao, 2020; Pandiangan, 2022). According to Hadi, Sentosa, & Ab Wahid (2022) and Kallas (2019) entrepreneurial intention is defined as the tendency of an individual's desire to take entrepreneurial action by creating new products through business opportunities and risk-taking. Entrepreneurial activity is largely determined by the intentions of the individual himself. These entrepreneurial activities include determining an entrepreneurial plan that can be used as a guide to becoming an entrepreneur (Hernández-Sánchez et al, 2019; Urbano et al., 2020; Leitão & Capucho, 2021). A person who wants to become an entrepreneur must have the plan to be able to have a new business. Enactment is closely related to a declaration which is a statement so that the plan enactment itself can be interpreted as a statement about a plan made by a person or organization. Therefore, the entrepreneurship plan enactment is a statement made by themself about the plan to become an entrepreneur (Santos & Silva, 2012; Agustina, 2018). From this description, the first hypothesis proposed is:

H_1: Entrepreneurial intentions has an influence on entrepreneurial plans

Entrepreneurship Commitment

After having a plan to start a business and become an entrepreneur, another important factor that an individual must have in order to start a business is commitment. The entrepreneurial performance will be better if it is based on entrepreneurial-oriented attitudes and behaviors, such as a business plan and a high commitment to entrepreneurship (Nieminen & Hytti, 2016; Sahabuddin, 2018; McDowell et al., 2019). In line with that, the desire to achieve good performance is indicated by the existence of an entrepreneurship plan enactment to become an entrepreneur, which cannot be separated from the role of a strong commitment to become an entrepreneur or entrepreneur. High entrepreneurial commitment is caused by the existence of an entrepreneurship plan enactment and entrepreneurial intention (Sentosa et al., 2022). These two variables

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can be used as a basic approach to understanding who will become entrepreneurs and have entrepreneurial commitments. Meanwhile, the conditions and prerequisites for the growth of a business are conditions related to plans and commitments. As stated by Laguía et al. (2019) that to be a successful entrepreneur, one must have a strong commitment. Commitment is the key to being a successful entrepreneur. Having a full commitment to a business, the prospective entrepreneur must be ready with all their heart and soul in what they are doing and really believe in the product or service produced, and be prepared to work for a long time. Previous researcher stated that there is a relationship between plans and commitment to entrepreneurship (Santos & Silva, 2012; Agustina, 2018; Sentosa et al., 2022).

H_2: Entrepreneurial plan enacment has an influence on entrepreneurial commitment

In line with what was stated by Marcotte (2013) that several things that must be owned to increase the competitive advantage of a country include entrepreneurship which also includes several important factors, namely high productivity, good product quality, a workforce with a high level of education, discipline, creativity, high motivation, capital, adequate facilities and infrastructure, and commitment. All of these competitive advantage factors in the current era of globalization and world free trade have become very important to improve performance and competitive advantage. Commitment to entrepreneurship according to previous researchers is influenced by interests and plans. Based on this explanation, the next proposed hypothesis is:

H_{3a}: Entrepreneurial intention has an influence on entrepreneurial commitment

H_{3b}: Entrepreneurial intentions affect entrepreneurial commitment mediated by entrepreneurial plan

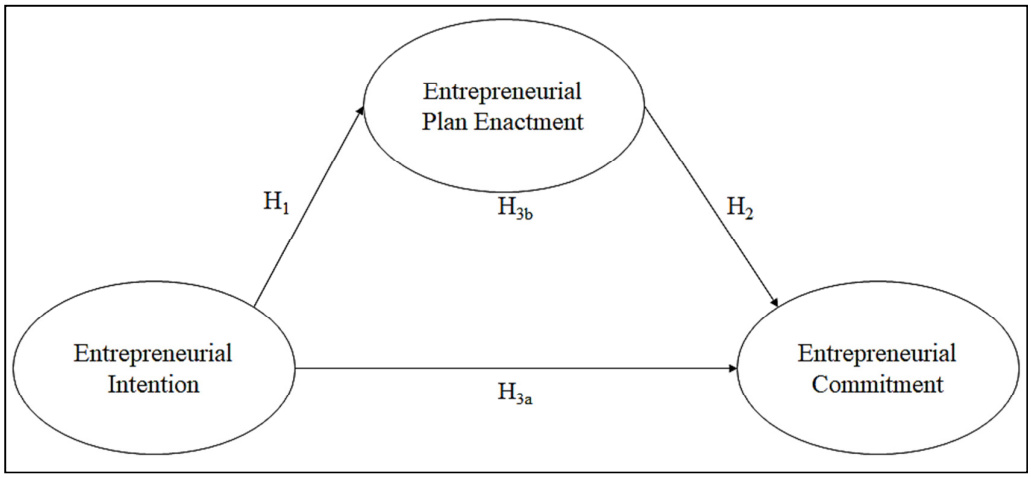

Figure 1. Conceptual Framework

METHODOLOGY

A literature review serves as the foundation of this conceptual paper, ensuring that the findings are relevant to the subject topic. Indeed, we began the literature review by reviewing a significant number of study findings that were relevant to our research question. A literature review is a research method and process that identifies and critically evaluates relevant research, collects and analyzes data from the involved research, and identifies all empirical evidence that meets the pre-specified inclusion criteria for answering a research question or hypothesis (Knopf, 2006).

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Four items related to entrepreneurship intention were adapted and modified from previous researchers (Liñan & Chen, 2006; Bektas, 2011; Peng & Kang, 2012). To measure entrepreneurship plan enactment, four indicators were adapted and modified from Dholakia et al., 2007 and Wu et al., 2016. Furthermore, entrepreneurship commitment was evaluated through 2 items proposed by De Clercq (2009).

To collect information with the aim of later testing the proposed hypothesis, quantitative analysis will be carried out through a structured questionnaire from student respondents in Yogyakarta, Indonesia. Each respondent, as an introduction before starting the survey, received appropriate instructions on the meaning of the question and a brief explanation of the context related to entrepreneurship. The questionnaire is divided into three parts: the first provides information on the research objectives, the second collects socio-demographic data, and the third describes the scale of measurement for the variables in the model.

After the model is determined, the instrument will be validated using confirmatory factor analysis (CFA) and then the structural model will be estimated through partial least squares using Smart PLS 3 software. A variance-based structural equation model will be used because it fits the characteristics of the study and the nature of the data collected. Figure 2 shows a conceptual model created using the Smart PLS 3 software.

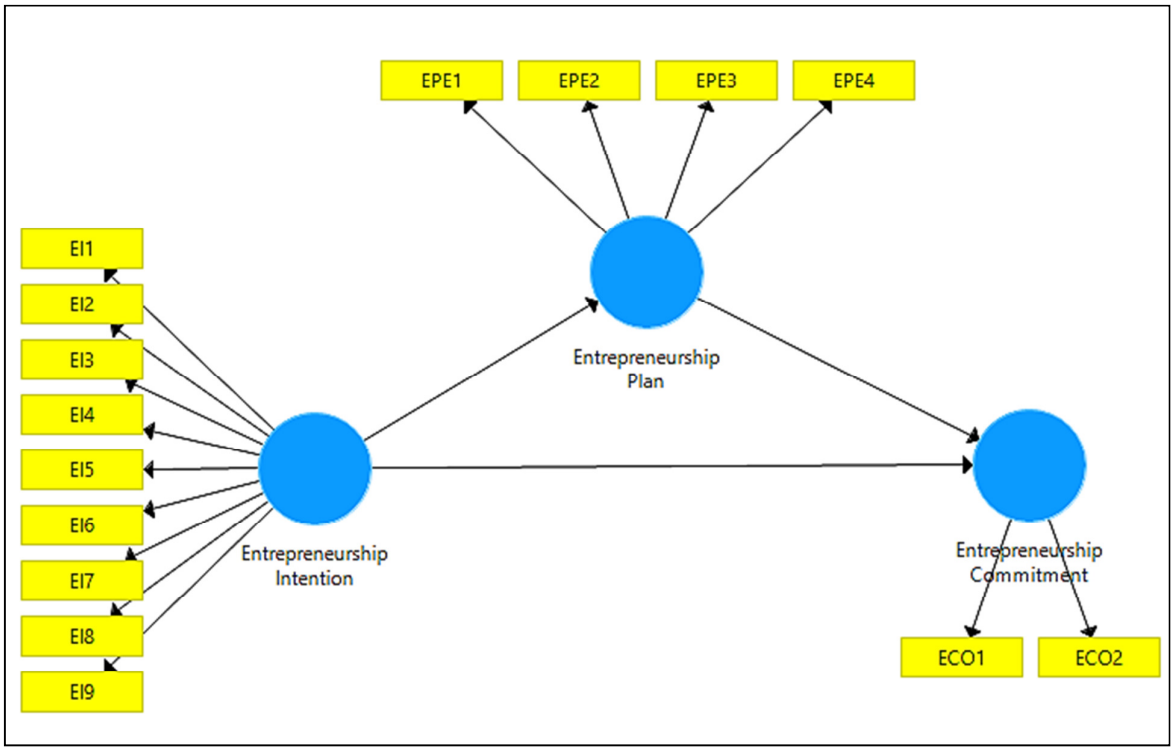

Figure 2. Conceptual Model using SmartPLS 3 Software

CONCLUSION & RECOMMENDATIONS

The entrepreneurial intention and behavior formed among the youth are expected to be a driving force for the progress of economic development. In fact, the presence of entrepreneurship is able to reduce unemployment, reduce poverty, and increase per capita income which has an impact on increasing welfare and increasing regional economic growth. Indirectly, entrepreneurship is one of the determinants of the success of national-scale economic development (Audretsch, 2007; Carree & Thurik, 2010; Kritikos, 2015;

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Mittal & Raghuvaran, 2021). Entrepreneurs play an important role in growing the economy of a nation through the ability of creativity and innovation to produce products or services that are market opportunities. Another contribution from the birth of a number of entrepreneurs is the opening of job opportunities for the community which has an impact on reducing the number of unemployed and reducing the number of poverty rates.

Implementation of ideas and business development is more than just forming interest, but also action or behavior. Empirical research is suggested to be carried out by further researchers in order to be able to show that the entrepreneurship intention and entrepreneurship plan can actually shape student entrepreneurial commitment.

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BFAF25-MACROECONOMIC DETERMINANTS OF BANK'S NON-PERFORMING ASSETS- THE CASE OF BRICS

Vu Tuan Anh
School of EFA, International University, Vietnam National University HCMC
anh.tuan.vu.ueh@gmail.com

ABSTRACT
The issue of non-performing lending is seen as a major threat to the stability of the financial system of a country. Non-performing loans are concepts of credit and interest that no longer have a negative effect on banks' profitability. There are a number of factors, both financial and macroeconomic, affecting non-performing loans. The objective of this research is to study the impact of macroeconomic determinants on non-performing loans from BRICS countries over the 2012-2017 period. The BRICS bloc is considered because several previous studies suggest that non-performing credit problems in inter-country countries also impact trade blocks. Hausman Taylor and Panel EGLS tests are used in this study to consider the influence of NPA variables. The results of this paper indicate that all macroeconomic metrics, including per capita, GDP, interest rates and inflation, have a negative correlation with the NPA. The panel regression test shows that NPA has a significant influence on their per capita, GDP and inflation in the BRICS countries.

Keyword: *Nonperforming Assets, Macroeconomic variables, Hausman Taylor Test, Panel EGLS test, BRICS, Bank.*
JEL classification: *E32, E44, G21, F62*

1. INTRODUCTION

Indeed, banking stability is one of the fundamental preconditions for economic growth in any society, as banks play an important role in allocating equipment-suitable resources to capital-deficient players in the economy of society (Fukuda & Dahalan, 2012). In the last few years of the 20th century, however, the competition between banks was influenced by structural changes in the international financial system and the deregulation and internationalisation of banks' operations. Increased competition among banks has affected banks' credit risk and relaxed borrowing conditions and screening procedures, leading to a decline in bank lending activity (NPLs). In the last decade of this century, prior to the financial crisis, the performance of loan portfolios was relatively stable. Subsequently, the quality of their loan portfolios dropped dramatically. The decline in the quality of the loan portfolios of banks has led to an increase in NPLs. Today, therefore, in both developed and developing countries, the dilemma is almost identical. According to Makri et al, only extreme NPL growth is projected to have a negative effect on global macroeconomic stability over the next century. (Year 2014).

Non-performing loan (NPL) amounts are one of the most important metrics used to measure the

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competitiveness and health of banks. On the other hand, the high level of NPL in the economy is also a sign of the risk of bankruptcy for creditors, leading to a deterioration in the economic climate of the national economy. It is well recognised that NPLs are bad debt because they have very little chance of repayment. The more NPLs a bank has in its accounts, the more likely it is that they will influence its stock price. In the financial crisis, there is plenty of evidence for an increase in NPLs. More than 30 NPL countries (NPLs) were affected by the data in 2014, with more than 10% of their total credit being NPLs and NPLs for 20 of them being greater than 15% of their total credit (World Bank, 2014), (Abdelbaki, 2019)

Loans that do not pay interest and principal for a certain period of time are split into non-performing loans and various countries have different time brackets to identify the loan as non-performing assets. The 90-day cap would be enforced by the BRICS countries, i.e. whether the principle or interest remains consecutively unpaid for three months as non-performing loans are listed. Since they affect the financial system and therefore the profitability of banks, non-performing loans pose a major banking challenge to virtually every country in the world. Banks are considered to be the economy's leading engine, and any bank disturbance also triggers economic turmoil.

In order to protect the interests of all participating agents, the central bank or any banking supervisory authority has a primary duty to set up a stable and effective financial system. The foundation of financial stability is a sound banking system that channels funds efficiently between borrowers and savers. When it comes to prudential banking supervision, banking stress tests are the most useful. Central banks also use NPL modelling with respect to stress testing (Buncic and Melecky, 2012; Marcelo et al., 2008). Therefore, it is critical that the findings of this research emphasise the quality testing of loans with a view to restoring both financial stability and faith in the U.S. financial markets. In addition, it is possible to gain insights into possible levels of problem loans and default probabilities of direct interest for market observers and state and federal administrators, Ghosh, A. (2015).

Total NPLs were relatively low for most countries before the 2008 financial crisis, but increased dramatically during and after the 2008 financial crisis, urging national banking supervisors to intervene in their banking sectors to resolve the rising issue of NPLs. Despite several national policies to reduce the growth of NPLs, including the introduction of strict criteria for bank capital (ECB, 2017), increasing NPLs remain a key concern, raising questions about the adequacy of policy solutions built to mitigate rising NPLs. We argue that a degree of financial growth would provide insight into the continuation of the NPLs (Ozili, P. K., 2019).

A high ratio of NPLs to total loans affects the output of the economy and results in an economy with strong interrelationships between banks and companies being misallocated capital. In turn, macroeconomic conditions affect the seriousness of the NPL problem. Two critical factors arise in the financial crisis: firstly, the rise in NPLs. A high NPL ratio to total loans has many effects on banks' lending activities. If a bank is plagued by high NPLs, instead of investing in fresh credit, it should concentrate on improving asset quality and internal consolidation (Balgova et al., 2016).

Capital shortage, a threat to the sustainability of all economic sectors, has been faced by developed countries, followed by growth and development. Countries have also been developed to remove such defects in assembly and to make use of structural cost savings. It can also speed up the status of nations and boost the

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region's economic situation. A sound financial position, which not only lenders but also depositors need, should be required for any bank, as both players have impacted the BRICS economy. At present, the BRICS nation is undergoing a significant transformation that has paved the way for asset performance and efficiency and profitability. The BRICS has mostly transformed policies to strengthen countries' positions.

The transformation is to reinforce prudential standards and then update payment processes and merge system management, followed by adequacy of capital and accountability of systems, to increase asset performance. From now on, the reduction of the NPA has led the BRIC over the years to improve the processes of credit assessment and, as a result, the growth of the NPA included the need for provisions that reduced overall profitability.

1.1 Nonperforming loan classification in BRICS nations:

A comprehensive view of the loan classification criteria that are adopted by BRICS nations is provided in this section.

Brazil: Brazilian financial institutions are expected to classify their loans into nine levels, ranging from AA to level H, based on the risk pattern of the borrower, the guarantor and the transaction.

- AA-No Arrears at all.
- A-Arrears for 15 days & Provision–0.5%
- B-Arrears for 15-30 days & Provision-1.5 %
- C-Arrears for 31-60 days & Provision-3.0 %
- D-Arrears for 61-90 days & Provision-10%
- E-Arrears for 91-120 days & Provision–30 %
- F-Arrears for 121-150 days & Provision-50%
- G-Arrears for 151-180 days & Provision-70%
- H-Arrears for 180-360 days & Provision-100%

Russia: In Russia loans are classified into five categories based on arrears and defaults

- Quality 1(Standard Loan): Loans which have no credit risk.
- Quality 2(Non Standard Loan): Loans which have moderate credit risk i.e. probability of credit risk it below 20 percent.
- Quality 3(Doubtful loans): Loans with considerable risk i.e. probability of credit risk is between 21 to 50 percent.
- Quality 4(Nonperforming loans) Loans of high credit risk i.e. probability of credit risk between 51 to 100 percent.
- Quality 5(bad loans): No possibility of loan repayment.

India: The asset was first listed in India by A. Ghosh's committee in 1985. The assets were classified during this time in eight categories, ranging from satisfactory to bad and doubtful assets. In 1991, the Narsimham committee noted that our classification of assets does not comply with international norms, recommending that assets be broken down into four broad categories, i.e. Standard assets, default assets, doubtful assets and asset losses

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China: China follows a risk strategy for loan classification, with five large categories:• Pass: This includes those loans which are fully secure and chances of default are nil.

• Special mention: These loans are although secure from borrower's point of view but host of other factors may affect loan repayment.

• Substandard: This category includes those loans where chances of repayments are in question even when guarantee are executed.

• Doubtful: This includes those loans where the repayment can be done in full even when guarantee are executed.

• Loss: In this categories chances of repayment of principle and interest is nil and loan can be categorized as loss asset.

South Africa: Loans that do not yield income over a long period of time are South African non-performing loans. According to West African central banks, the lead time from daily loans to doubtful loans and losses is much longer. Substandard loans are loans that fail to generate principle and interest for over six months. Although the Central Bank of 'Central African States' often uses a different meaning, the loans on which interest and/or principal have been left unpaid for at least three months are not included in that description.

Macroeconomic variables also affect banking profits, such as the rate of growth of the economy, inflation, taxation, unemployment, etc. This paper discusses the impact of selected macroeconomic variables on non-performing loans from BRICS countries. In Brazil, Russia, India, China and South Africa, the BRICS is an important bloc, and this bloc has gained prominence following the publication of Goldman Sachs' 2003 report, which established the bloc as one of the emerging blocs in the world and will contribute to a significant portion of the global economy and trade by 2050. (2018: Singh & Shrivastav). This NPA will hamper the dreams of BRICS development. The purpose of this research is to understand the depth of the issue and the effects of macroeconomic variables such as per capita, GDP, inflation and interest rates on the NPA.

2. REVIEW LITERATURE

A lot of study has been done in the past on loans not being taken out and their macroeconomic determinants, and in this section there is an analysis of some of the earlier studies.

Keeton and Morris (1987), which focused on 2470 U.S. commercial banks from 1979 to 1985, carried out one of the earliest studies on default loans. The findings show that weak economic conditions such as slow GDP and poor performance in the sector affect the credit portfolios of banks.

Sinkey and Greenwalt (1991) attempted to assess the NPL status through internal and external influences on the basis of Keeton's study. The results indicate that default loans are influenced positively by the internal rate and excessive lending.

In addition, Keeton conducted a study to study the credit and NPA scenario in 1999 and found that the status of the NPA was affected by credit growth or bad credit disbursement.

Quagliariello (2007) calculated the macroeconomic and credit shocks of a large group of Italian intermediaries from 1985 to 2002. The results of the study show that economic growth and non-performing loans have an important and inverse correlation, suggesting that the probability of non-performing loans is reduced by the outlook for economic growth.

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Hey, Bourdon,A. T. Jellouli, S., Cow. Study & Jellouli (2009) focuses on bank-specific factors and environmental issues related to lending default in Middle and North African countries that take variables such as the rate of credit growth, the capital adequacy relationship, the actual GDP growth rate, ROA, the total credit ratio of lender reserves, diversification and private surveillance results that show that credit growth rate.

A Greek financial sector analysis was carried out by Louzis D. P, Wouldis A. T and Metaxas V. L (2012), which took into account variables such as Return on Assets, Equity Return, Inflation, GDP growth rate, unemployment rate, and credit rates. The findings showed that ROA and ROE had significant negative effects, while inflation and lending had a major positive impact on NPLs.

A study of determinants that target Indian banking sectors was carried out by Swamy (2012). GDP, inflation, saving growth rate, bank size, loan-to-deposit ratio, etc. are the key variables taken.

Similar research has been carried out with Skarica (2013) in Central and Eastern European countries, examining non-performing loan determinants that take on variables such as gross domestic product, inflation and unemployment, showing that GDP unemployment has a negative, meaningful association with NPL.

Selma, Fathi (2013) carried out research in Greece, Spain and Italy on bank-specific and macro-financial variables showing that loans vary negatively from the growth rate of GDP, the asset income of banks and the unemployment rate.

Viswanadham, Nahid B. (2015) The study of the determinants of non-performing loans in the National Trade Bank took into account the definitive results of variables such as interest rate, GDP, credit operations concentration, credit supervision ability of the bank and economic conditions, suggesting that interest rate, GDP, credit supervision capacity of the bank and economic conditions affect NPL levels. However, the findings have not shown that the concentration of lending activities raises the number of NPLs.

A mixture of nonperforming loans and their macroeconomic determinants is indicated in the above analysis. A positive correlation between default loans and growth rates is indicated by some studies. One of the key gaps in previous research is that no conclusive research is carried out on the BRICS block, and a period of research in previous studies is very old, whereas the study covered the period from 2012 to 2017 to provide insight into the effect of variables such as per capita, inflation, interest rate and growth on non-performing loans in selected countries and the methodology used in the study.

3. METHODOLOGY AMD DATA ANALYTICAL FRAMEWORK

3.1. Analytical Framework

This research focuses primarily on the modelling of panel data focused on the non-performing loan variable and the independent inflation variable, interest rate, and development of the gross domestic market. The study covers the 2012-2017 period and provides all four variables with annual data on the World Bank site. The approach used for analysis is first to understand the type of variables using descriptive statistics, and then to use a curve fit calculation to determine the fit of the variables in the model, and finally to validate the regression model using the tests of Hausman Taylor and Panel EGLS. Regression's equation is as follows:

$NPLi,t = \beta1 + \beta2GDPi,t + \beta4INFi,t + \beta5\ INT\ i,t + + \varepsilon i,t$

NPL: Nonperforming Loans

GDP: Gross Domestic Product

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INF: Inflation rate

INT: Interest Rate

Subscript t correspond to the examined period,

Subscript i correspond to the examined country.

3.2 Objectives of the study

The objectives of the study are

To study the effect of GDP on banks non performing to gross loan ratio of BRICS nation

To find out how the inflation influenced banks non performing to gross loan ratio of BRICS nation

To determine how the interest rate has created an effect on banks non performing to gross loan ratio of BRICS nation

To examine and review the impact of selected macroeconomic factors causing NPAs in the BRICS Nations

3.3 Data sources

Data from a panel of 5 countries over the period from 2000-2016 are used in this paper. The main sources from which data are collected are world development indicator and central bank of respective BRICS countries. The main variables which are used in this paper are Per-capita, inflation, gross domestic product, unemployment, saving rate and nonperforming assets.

4. DATA ANALYSIS AND INTERPRETATION

4.1. Descriptive statistics of percapita

Table 1 Descriptive statistics of percapita

Country	2012	2013	2014	2015	2016	2017
per capita						
brazil	11673.8	11915.4	11870.1	11351.6	10868.7	10888.98
Russia	11621.4	11803.7	11680.6	11325.8	11279.6	11441
India	1475	1550.1	1645.3	1758.8	1862.4	1963.55
south Africa	7475.8	7552	7582.6	7575.2	7519.5	7524.51
China	5336.1	5721.7	6108.2	6496.6	6894.5	7329.09
Mean	7516.42	7708.58	7777.36	7701.60	7684.94	7829.42
Standard deviation	4341.338	4369.394	4254.761	3976.248	3795.129	3780.084

From the table it makes clear that BRICS nations has secured mean value of 7516.42 in the year 2012 while 7708.58 in the year 2013 followed by 7777.36 in the year 2014 and then 7701.60 in the year 2015, 7684.94 in the year 2016 and 7892.42 in the year 2017.

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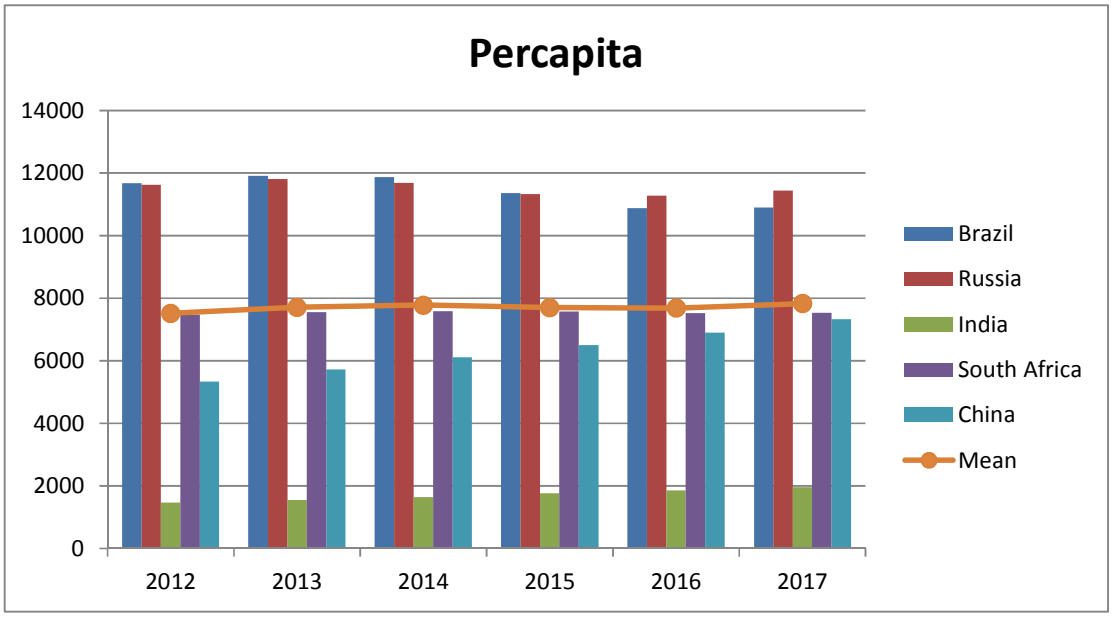

Fig 1 Descriptive statistics of percaptia

4.2 Descriptive statistics of interest rate

Table 2 Descriptive statistics of interest rate

Country	2012	2013	2014	2015	2016	2017
Interest rate						
brazil	10.7	7.75	10	12	14.4	13.8
Russia	5.2	5.5	5.5	16.5	11	10
India	8.5	7.9	7.8	8	6.75	6.25
south Africa	5.5	5	5	5.75	6.25	7
China	6.6	6	6	5.6	4.4	4.4
Mean	7.3000	6.4300	6.8600	9.5700	8.5600	8.2900
Standard deviation	2.29891	1.32269	2.04890	4.65693	4.06131	3.68246

It makes clear that interest rate has secured mean value of 7.3 in the year 2012 followed by 6.43 in the year 2013 and then 6.86 in the year 2014 followed by 9.57 in the year 2015 and then 8.56 in the year 2016 and 8.29 in the year 2017.

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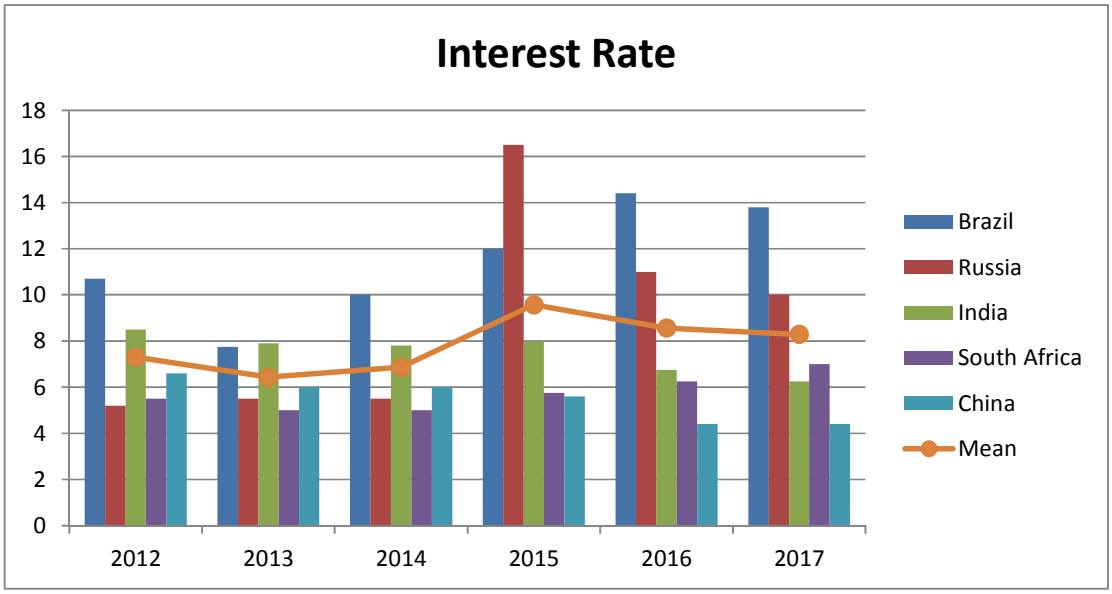

Fig 2 Descriptive statistics of interest rates

4.3 Descriptive statisctics of banks non-performing loans to total gross loans

Table 3 Descriptive statisctics of banks non-performing loans to total gross loans

Country	2012	2013	2014	2015	2016	2017
Banks Non performing loans to total gross loans						
brazil	3.446823	2.857282	2.8548	3.311788	3.916639	3.585719
Russia	0.953674	0.999703	1.248733	1.67388	1.744479	1.744355
India	3.373954	4.027729	4.34585	5.883522	9.185519	9.98
south Africa	6.026646	6.000691	6.730965	8.347232	9.444737	10.00141
China	4.042892	3.641287	3.244847	3.121686	2.857808	2.842
Mean	3.5688	3.5053	3.6850	4.4676	5.4298	5.6307
Standard deviation	1.81366	1.81771	2.03304	2.64616	3.63014	4.03367

From the table it makes clear that mean value of banks non-performing loans to total gross loans has secured 3.56 in the year 2012 followed by 3.50 in the year 2013 and then 3.68 in the year 2014, 4.47 in the year 2015 and then 5.42 in the year 2016 and 5.63 in the year 2017.

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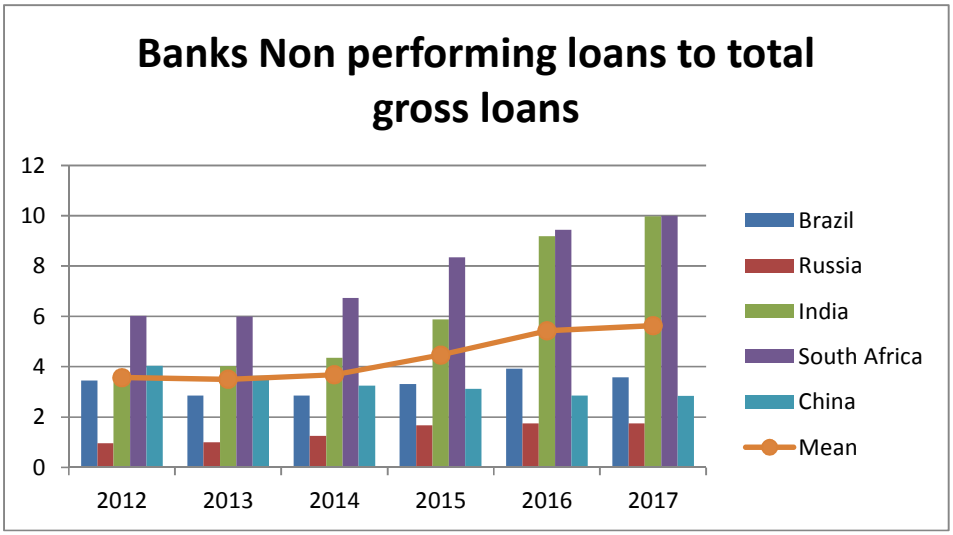

Fig 3 Descriptive statistics of banks non-performing loans to total gross loans

4.4 Descriptive statistics of gdp

Table 4 descriptive statistics of gdp

Country	2012	2013	2014	2015	2016	2017
GDP						
brazil	1.9	3	0.5	-3.5	-3.3	1.1
Russia	3.7	1.8	0.7	-2.5	0.3	1.6
India	5.5	6.4	7.4	8	8.2	7.2
south Africa	2.2	2.5	1.8	1.2	0.4	1.4
China	7.9	7.8	7.3	6.9	6.7	6.8
Mean	4.2400	4.3000	3.5400	2.0200	2.4600	3.6200
Standard deviation	2.49560	2.63818	3.51326	5.27134	4.82214	3.09386

It is observed from the table that GDP was 4.24 in the year 2012 and then 4.30 in the year 2013 followed by 3.54 in the year 2014 and then 2.02 in the year 2015 followed by 2.46 in the year 2016 and 3.62 in the year 2017.

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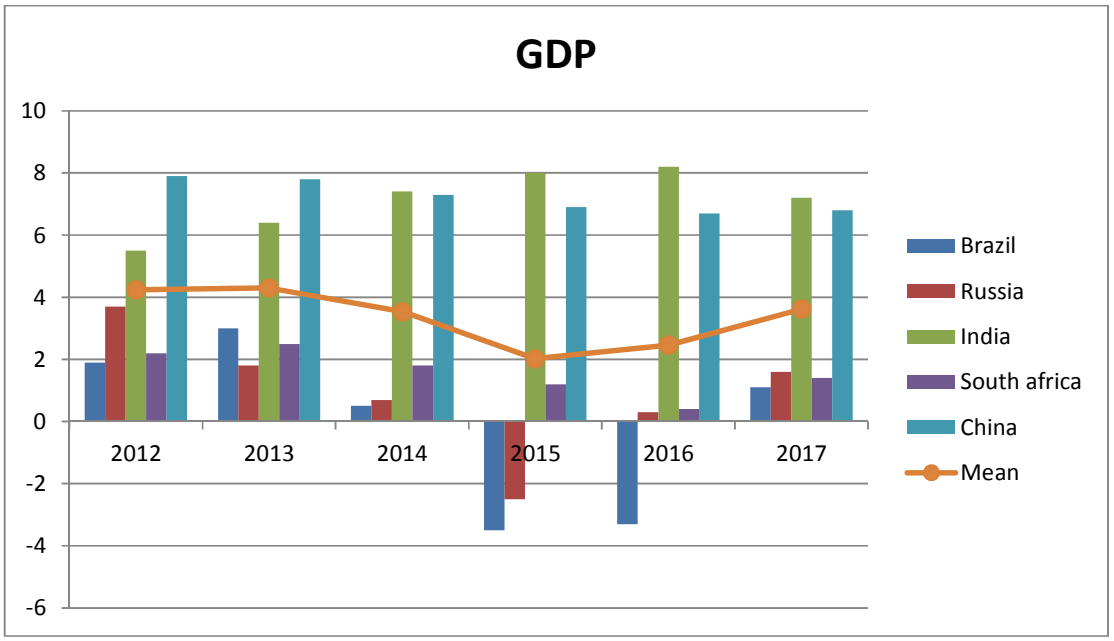

Fig 4 Descriptive statistics of gdp

4.5 Descriptive statistics of inflation

Table 5 Descriptive statistics of inflation

Country	2012	2013	2014	2015	2016	2017
Inflation						
brazil	5.4	6.2	6.3	9	8.7	3.4
Russia	5.1	6.8	7.8	15.5	7.1	3.7
India	10	9.4	5.8	4.9	4.5	3.6
south africa	5.6	5.8	6.1	4.6	6.3	5.3
China	2.6	2.6	2	1.4	2	1.6
Mean	5.7400	6.1600	5.6000	7.0800	5.7200	3.5200
Standard deviation	2.67170	2.43475	2.15523	5.42559	2.57138	1.31415

It makes clear that inflation for BRICS nations was 5.74 in the year 2012 and then 6.16 in the year 2013 followed by 5.6 in the year 2014, 7.08 in the year 2015, 5.72 in the year 2016 and 3.52 in the year 2017.

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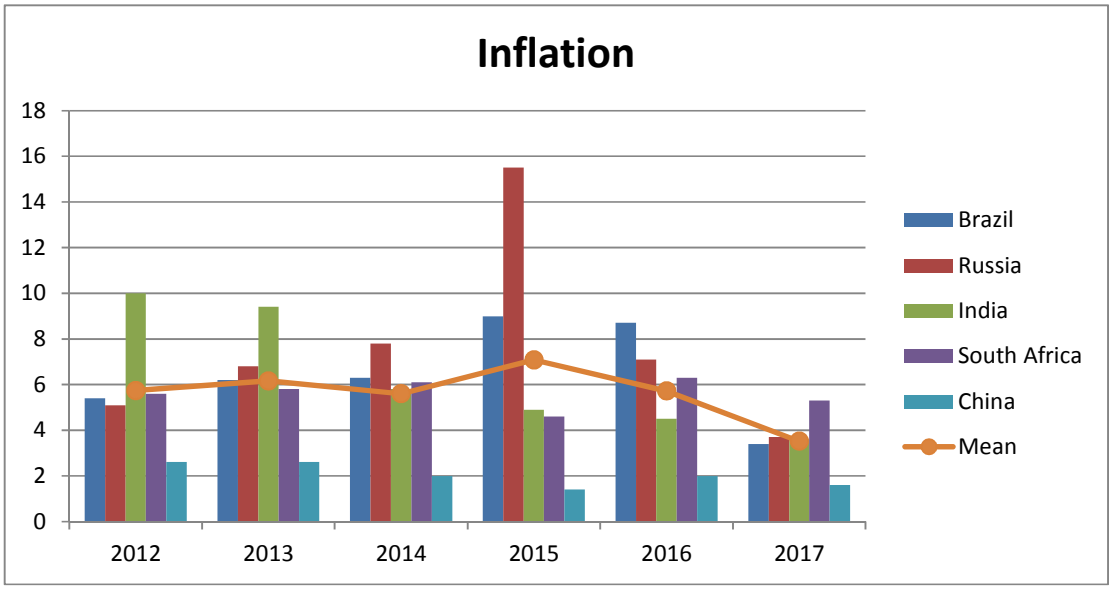

Fig 5 Descriptive statistics of inflation

4.6 Trend models for gdp

Table 6 trend models for gdp

Variable	R^2	D.F	F	SigF	B0	B1	B2	B3
LIN	0.337	4	2.030	0.227	4.377	-0.290		
LOG	0.423	4	2.932	0.162	4.369	-0.917		
QUA	0.626	3	2.511	0.229	6.094	-1.577	0.184	
CUB	0.946	2	11.751	0.079	2.393	3.078	-1.358	0.147
COMP	0.277	4	1.536	0.283	4.388	0.917		

From the trend models it can be clear that cubic model has secured +94% of the variation in GDP of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 27.7%

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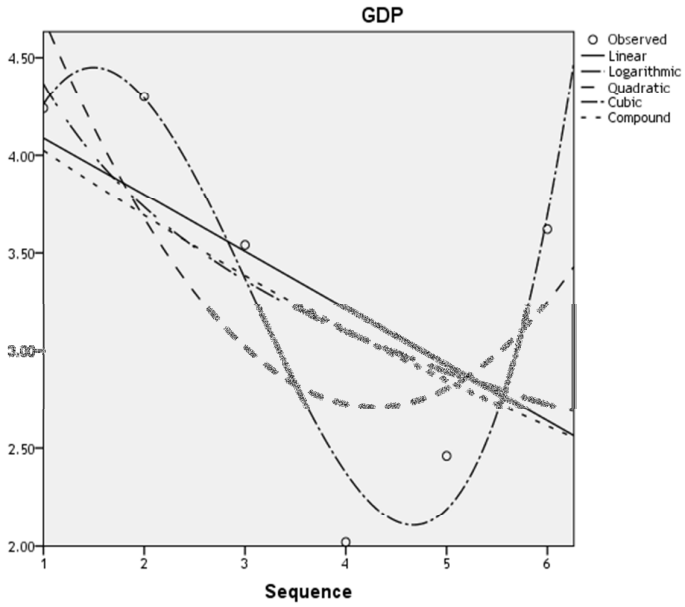

Fig 6 Trend models of gdp

4.7 Curve estimation for inflation

Table 7 Curve estimation for inflation

Variable	R^2	D.F	F	SigF	B0	B1	B2	B3
LIN	0.249	4	1.329	0.313	6.731	-0.313		
LOG	0.118	4	0.537	0.504	6.303	-0.608		
QUA	0.711	3	3.685	0.156	4.014	1.725	-0.291	
CUB	0.868	2	4.390	0.191	7.267	-2.367	1.064	-0.129
COMP	0.303	4	1.736	0.258	7.038	0.933		

From the trend models it can be clear that cubic model has secured 86.8 % of the variation in inflation of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 30.3%

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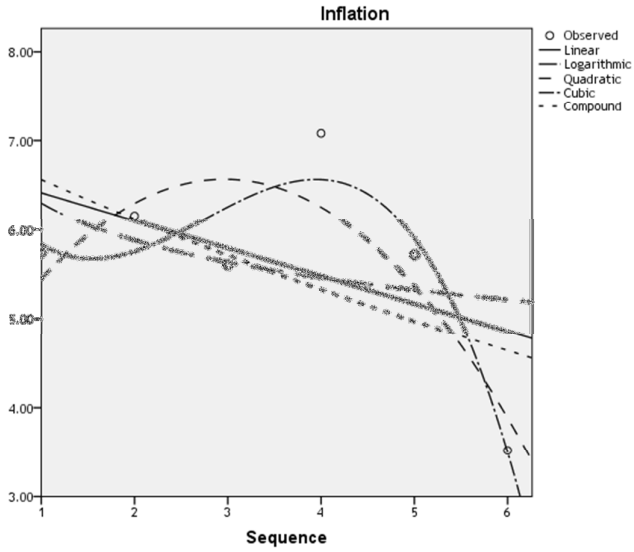

Fig 7 Curve estimation for inflation

4.8. Curve fit estimation for banks non performing to gross loan

Table 8 Curve fit estimation for banks non performing to gross loan

Variable	R^2	D.F	F	SigF	B0	B1	B2	B3
LIN	0.887	4	31.455	0.005	2.695	0.482		
LOG	0.711	4	9.852	0.035	3.046	1.218		
QUA	0.939	3	22.942	0.015	3.436	-0.074	0.079	
CUB	0.987	2	49.563	0.020	4.905	-1.922	0.692	-0.058
COMP	0.894	4	33.856	0.004	2.943	1.114		

From the trend models it can be clear that cubic model has secured 86.8 % of the variation in banks nonperforming to gross loan ratio of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 89.4%

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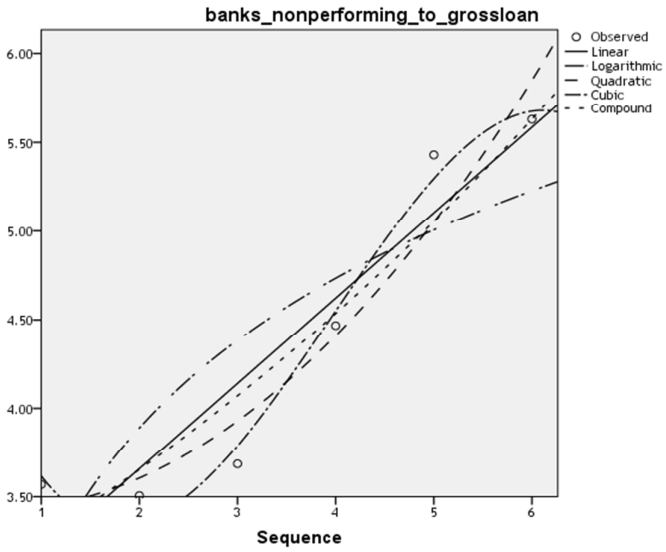

Fig 8 Curve fit estimation for banks non performing to gross loan

4.9. Hausman taylor test

In order to study the relationship between NPA and macroeconomic variables, Hausman Taylor model has been applied. The researcher fixed NPA as dependent variables and the other variables like GDP, interest rate, percapita and then inflation as independent variables

Table 9 Hausman taylor test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	2.765568	4	0.5978

** WARNING: estimated period random effects variance is zero.

Period random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
GDP	-0.718003	-0.944949	0.023511	0.1389
INFLATION	-0.397403	-0.649712	0.032972	0.1647
INT	-0.375780	-0.192633	0.013034	0.1087
PERCAPITA	-0.000746	-0.000932	0.000000	0.1237

Period random effects test equation:
Dependent Variable: BANKS
Method: Panel Least Squares
Date: 05/09/19 Time: 13:59
Sample: 2012 2017
Periods included: 6
Cross-sections included: 4
Total panel (balanced) observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.13886	3.183798	5.697239	0.0001
GDP	-0.718003	0.284827	-2.520842	0.0245
INFLATION	-0.397403	0.260550	-1.525248	0.1495
INT	-0.375780	0.187835	-2.002618	0.0650
PERCAPITA	-0.000746	0.000212	-3.521092	0.0034

Effects Specification

Period fixed (dummy variables)

R-squared	0.760958	Mean dependent var	4.653589
Adjusted R-squared	0.607288	S.D. dependent var	2.960607
S.E. of regression	1.855315	Akaike info criterion	4.368323
Sum squared resid	48.19072	Schwarz criterion	4.859179
Log likelihood	-42.41988	Hannan-Quinn criter.	4.498547
F-statistic	4.951904	Durbin-Watson stat	1.068204
Prob(F-statistic)	0.004002		

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The Results revealed that increment in banks non performing to gross loans will lead to increase in NPA of BRICS nations. The t statistic and probability is highly significant. The reason behind increment in banks non performing to gross loans upsurge the credit worthiness of the companies which improves and nations easily grant loans without seeing other aspects. Macroeconomic variables is negative but insignificant.

4.10 Panel data regression for npa and macroeconomic variables

Table 10 Panel data regression for npa and macroeconomic variables

Dependent Variable: BANKS
Method: Panel EGLS (Period random effects)
Date: 05/09/19 Time: 14:04
Sample: 2012 2017
Periods included: 6
Cross-sections included: 4
Total panel (balanced) observations: 24
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.28580	2.827105	7.175470	0.0000
GDP	-0.944949	0.240031	-3.936771	0.0009
INFLATION	-0.649712	0.186853	-3.477133	0.0025
INT	-0.192633	0.148904	-1.293672	0.2113
PERCAPITA	-0.000932	0.000174	-5.351893	0.0000

Effects Specification	S.D.	Rho
Period random	0.000000	0.0000
Idiosyncratic random	1.855315	1.0000

Weighted Statistics			
R-squared	0.703796	Mean dependent var	4.653589
Adjusted R-squared	0.641437	S.D. dependent var	2.980607
S.E. of regression	1.772815	Sum squared resid	59.71460
F-statistic	11.28624	Durbin-Watson stat	1.136587
Prob(F-statistic)	0.000073		

Unweighted Statistics			
R-squared	0.703796	Mean dependent var	4.653589
Sum squared resid	59.71460	Durbin-Watson stat	1.136587

Hausman test results revealed that fixed effects model is suitable for the study. Hence the variables significant at 7.3%. The coefficient of banks non performing to gross loans has secured positive sign because countries has sanctioned loans to public based on demand without considering macroeconomic variables of the country. Hence this may vary based on banks non performing to gross loans ratio.

5. FINDING

From the table it makes clear that BRICS nations has secured mean value of 7516.42 in the year 2012 while 7708.58 in the year 2013 followed by 7777.36 in the year 2014 and then 7701.60 in the year 2015, 7684.94 in the year 2016 and 7892.42 in the year 2017.

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It makes clear that interest rate has secured mean value of 7.3 in the year 2012 followed by 6.43 in the year 2013 and then 6.86 in the year 2014 followed by 9.57 in the year 2015 and then 8.56 in the year 2016 and 8.29 in the year 2017.

From the table it makes clear that mean value of banks non-performing loans to total gross loans has secured 3.56 in the year 2012 followed by 3.50 in the year 2013 and then 3.68 in the year 2014, 4.47 in the year 2015 and then 5.42 in the year 2016 and 5.63 in the year 2017.

It is observed from the table that GDP was 4.24 in the year 2012 and then 4.30 in the year 2013 followed by 3.54 in the year 2014 and then 2.02 in the year 2015 followed by 2.46 in the year 2016 and 3.62 in the year 2017.

It makes clear that inflation for BRICS nations was 5.74 in the year 2012 and then 6.16 in the year 2013 followed by 5.6 in the year 2014, 7.08 in the year 2015, 5.72 in the year 2016 and 3.52 in the year 2017.

From the trend models it can be clear that cubic model has secured +94% of the variation in GDP of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 27.7%

From the trend models it can be clear that cubic model has secured 86.8 % of the variation in inflation of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 30.3%

From the trend models it can be clear that cubic model has secured 86.8 % of the variation in banks nonperforming to gross loan ratio of BRICS Nation. Based on applying trend models regression coefficient found to be significant at 5% level of significance. The compound annual growth rate of GDP to be 89.4%

The Results revealed that increment in banks non performing to gross loans will lead to increase in NPA of BRICS nations. The t statistic and probability is highly significant. The reason behind increment in banks non performing to gross loans upsurge the credit worthiness of the companies which improves and nations easily grant loans without seeing other aspects. Macroeconomic variables is negative but insignificant.

Hausman test results revealed that fixed effects model is suitable for the study. Hence the variables significant at 7.3%. The coefficient of banks non performing to gross loans has secured positive sign because countries has sanctioned loans to public based on demand without considering macroeconomic variables of the country. Hence this may vary based on banks non performing to gross loans ratio.

6. RECOMMENDATIONS

Countries should be keen on maintain banks non performing to gross loans ratio for which they should assist the head of the banks to be keen on seeing attributes before sanctioning loans to the people or company.

Superior have to monitor the appropriate restructure of banks non performing to gross loan through a strategic option which can keep at stable level

In order to increase countries NPA, they should be keen on restructure credit exposure which can eliminate unnecessary debts to public in future.

It is primary to improve the efficiency of ratios and hence there is no influence on macroeconomic variables on banks NPA.

7. CONCLUSION

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Based on results of Panel data analysis, determinants of banks non performing to gross loan ratio doesn't influence macroeconomic variables. The results show that macro-economic variables got negative sign. But banks non performing to gross loan ratio has secured 7.3% level of significance. Countries should come up with fresh practices of resolving NPA issues because it influence the influence. Continuous education among public and time repayment can eliminate NPA recovery at right time can influence the health of country

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