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IS THE COLOR OF YOUR WATCH STILL GIVING YOU A FITT?

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Abstract: Over the last several years, there has been an explosive proliferation of information systems (IS) in the form of mobile computing (MC) devices, from smartphones to tablets, and presently, even wearable computing technology such as smart watches and garments. As MC technologies continually evolve, users are putting them to work in their daily routines. IS users want to fulfill their desired tasks quickly and efficiently. In order to accomplish this, they must use the navigational tools available on the system's interface. The following research agenda extends the IS research into wearable technology. This research will examine the effect that control tool differentiation has on users' performance, attitude, and future intention to use a MC device, in our case, a smart watch. A 2x2 design will explore seven different hypotheses with the aim of better understanding how cues and size affect user interaction and attitude towards a wearable MC device.

Keywords: cues, Fitt's Law, interface design, mobile computing, smart watch

1. Introduction

Over the last several years, we have witnessed an explosive proliferation of information systems (IS) in the form of mobile computing (MC) devices, from smartphones to tablets, and presently, even wearable computing technology such as smart watches and garments. A recent Gartner report found global smartphone sales reached 968 million units in 2013, a 42.3% increase from 2012 (Gartner, 2014a). Additionally, Business Insider estimated mobile tablet sales would reach over 450 million units in 2015, growing at a 50% annual rate over the next few years due to dropping price points and market penetration in enterprise and education sectors (Gobry, 2012). As MC technologies and services continue to advance

and increase in affordability, users are embedding them more and more into daily work, play, and entertainment routines (Jung, 2014).

IS users want to fulfill their desired tasks quickly and efficiently.   In order to accomplish this, they must use the navigational tools available on the system's interface. The importance of control design to user success requires system designers to consider all aspects of interface design: control tool characteristics, target audience demographics, and even frequency of use, to name a few.   Previous research into Fitt's Law (Fitts, 1954, 1992), which deals with the interaction of movement, distance, and accuracy in activities that require aiming efforts (Soukoreff & MacKenzie, 2004), has looked at a variety of these interface characteristics to determine how they impact user performance, particularly in navigational control. However, the bulk of this research in IS has been done in regards to web interfaces (e.g.: Stevenson, Phillips, & Triggs, 2004; Wan, Deng, Bai, & Xue, 2012) and more recently mobile phones (e.g.: Myung, 2004; Trudeau, Udtamadilok, Karlson, & Dennerlein, 2012; Wobbrock, Myers, & Aung, 2008).

The following research agenda looks to extend the IS research into wearable technology; in particular, smart watches. Smart watches, such as the Microsoft Band, Samsung Gear Fit, and Apple Watch, are a very recent addition to the MC realm. They are one category of wearable electronic devices that include wristbands, fitness monitors, and garments.   A recent report found that over 60 million units of wearable electronics will be sold in 2015 (Gartner, 2014b), and smart watches will make up a large portion of that number. They are, however, extremely small. The screens of smart watches is incomparable to that of computer monitors, and even modern smartphones. Companies that are producing these products are gambling that they will be successful in the marketplace. Therefore, it makes sense to consider the differing interface characteristics (shape, color, location, and size) of navigational control tools in order to determine their impact on user performance and their attitudes toward the device.

2. Research Model and Background

This section presents the research approach and background that will be used in our proposed research. The basic research questions are presented and the specific hypotheses developed to provide support are described.

This research will examine the effect that control tool differentiation has on users' performance, attitude, and future intention to use a MC device, in our case, a smart watch.   The main differentiation features examined will be control color and size.

The basic research questions are as follows:

1. How do control characteristics (color differentiation and size) affect user performance in desired tasks?

2. How do control characteristics (color differentiation and size) affect user attitude about a MC device?

3. How is user attitude towards a MC device affected by user performance on specific tasks?

4. How is intention to use a MC device in the future affected by user performance and attitude on specific tasks?

The research model for this study is shown in Figure 1.   From left to right, control tool differentiation (namely color and size) affects the user's performance, performance affects attitude, which in turn influences behavioral intention.

Figure 1 – Research Model
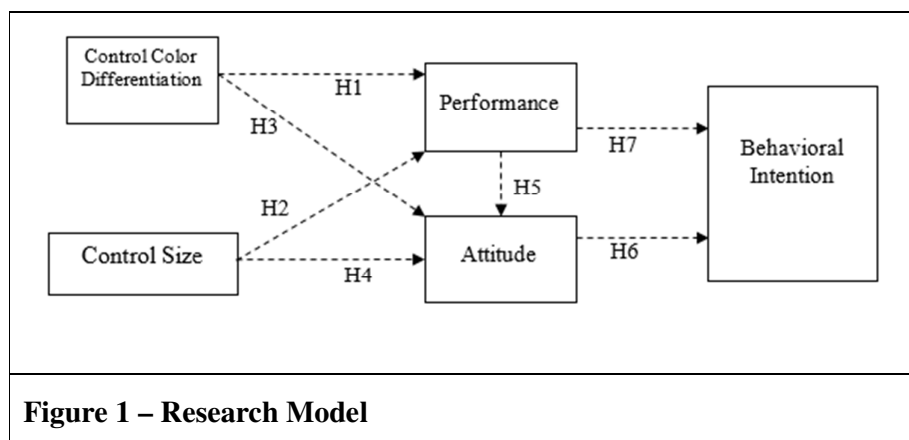
2.1 Effects: Control Differentiation and Size on User Performance
A main idea driving this research is that performance is increased, and attitude is more favorable during search and select tasks, when control tools are differentiated.   This is based on the general principles of cue theory.

Cue theory is used in this research to examine the effects that are observed when cues, such as color and shape, are used to help users distinguish differences on navigation control tools used in search and selection tasks. Cue theory states that individuals gain perception by taking in all broadcasted cues and putting them together as one would do with a puzzle to come up with the desired picture.   Some researchers have compared it to a murder scene investigation where the investigator pieces together all the clues available at the scene to come up with the perpetrator responsible for the crime (Allard, 2001). Cues are used by individuals to see, feel, smell, taste or hear clues and deduce what they mean and what type of response is appropriate.   In this research, cues will be operationalized as a characteristic (color) of the provided navigational control buttons or icons.   It is expected that users will more easily and quickly distinguish between control buttons or icons and select the appropriate one based on this characteristic.

Cue theory predicts that performance is enhanced when cues are provided during decision making situations.   According to cue theory, controls with shape and color differentiation are expected to provide the cues necessary for users to more quickly identify the desired control and should help reduce search time. Cue theory incorporates the idea that when cues are present they enable a user to quickly and easily distinguish between options (Allard, 2001).   This is applicable to this research regarding a search and selection task on a MC device, and it is predicted that performance will be enhanced where

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appropriate cues are available. Cue theory has been extended to include the concept that learning is enhanced when cues are present (Clibbon, 1995)

Prior research has shown that color aids significantly in search and selection tasks on stable and simple system interfaces. For example, studies have been conducted that examined the effect of color differentiation on search and selection tasks (Christ, 1975; Hoadley, 1990; Murch, 1984; Shontz, Trumm, & Williams, 1971). Results have shown that when controls are differentiated by color the selection task is accomplished more accurately and more quickly. Researchers have also found that color differentiation affects information location and selection task outcomes (Smith, 1963; Smith & Thomas, 1964). Cues, such as color and shape, have been shown to be important in identification and selection tasks because they aid the user in quickly and easily identifying their desired target (Douglas & Kirkpatrick, 1996; Nugent, 1994).

Therefore, variability of color in controls is expected to have a greater positive effect on performance than no control color variability based in large part on the cueing effect they offer the user as they recognize, identify and select their desired target. Thus,

H1: A MC device with controls differentiated by color will result in higher user performance than will a MC device with uniformly colored controls.

Size is important in interface design for two important reasons, (1) the limited real estate available on the smart watch screen itself, and (2) the time required to select a target. Fitts' law states that the time to acquire or point to an object is a function of the distance to and the size of the object, that is, as the distance to the target is increased the pointing time increases (Fitts, 1954, 1992). This law further holds that the smaller the target the longer it takes to point to or acquire it. Performance is determined by accuracy and time to achieve the desired task. To illustrate Fitts' Law, consider a target used in archery (Davids, Bennett, & Newell, 2006). A target with a standard-sized bulls-eye placed two feet in front of an archer will result in high performance levels. This high performance level can be attributed to the short distance between the archer and the target, which results in a larger relative target size and a shorter arrow flight duration. A similar target placed further away would result in lower performance levels. This is because the arrow flight duration has increased and the relative target size has decreased.

Fitts' Law applies to timing because it requires a designer to predict how much time will be required for a user to point to and select a target based in large part on its spatial location on the screen and its relative size. The larger the target size, the more quickly a user will be able to point to and select the target. The limited available screen space, optimal tool size, and number of navigation tools available to the user all work in direct contrast with each other. The designer must therefore make choices and balance all of these forces. This may result in users being offered a less than optimal number of navigational tools which will tend to be less than Fitts' law would prescribe.

Fitts' law is fundamental in offering predictions for performance measures on targeting tasks and has been applied to interface design issues in prior research (Nielsen, 1997, 1998). User performance is a function of both the size of the target and the relative location of the target (Fitts, 1953, 1954, 1992). The closer the target to the relative position of the user and the larger the target, the better performance will be (i.e.

less time for users to select the desired control). Thus,

H2: A MC device with larger navigation controls will result in higher user performance than will a MC device with smaller controls.

Attitude and behavioral intention were examined by Fishbein and Ajzen (1975) in their theory of reasoned action (TRA) and later in Ajzen's theory of planned behavior (TPB) (1985, 1987, 1991).

Attitude is generally defined as what people like or dislike. Allport (1935) described it as a favorable or unfavorable predisposition that people have towards an object or in response to seeing an item or class of items (Everard, 2003). Allport (1935) also included a tripartite composition of attitude: affective, cognitive, and conative (behavioral). Rosenberg and Hovland (1960) stated that there are predispositions to respond to a stimuli in one of three specific response types: cognitive, affective, or behavioral (conative). It has been argued that the examination of the link between attitude and behavior using this tripartite definition of attitude is potentially a landmine for researchers (Greenwald, 1989). It is possible with this broad definition to offer explanations for several scenarios involving attitude: overt actions, recall of past overt action, self-report of potential action, self-report of actions given a hypothetical situation. With this multiplicity of interpretations there are too many possible explanations for any set of data (Greenwald, 1989). While no alternative has been offered that has been rigorously tested, it is with caution that we examine attitude and its relationship to the other constructs in this model. Attitude was shown to be a predictor of general intention (Fishbein & Ajzen, 1975), and even more specifically intention to use information technology (Klobas, 1995). When users are presented a confusing and convoluted interface, their attitude is negatively affected (Jones, 1990; Schwalm & Carlson, 1989). When deliberate visual cues are present, the user will have a more positive feeling about the MC device and the interface, therefore,

H3: A MC device with controls differentiated by color will result in more favorable user attitudes than will a MC device with uniformly colored controls.

H4: A MC device with larger controls will result in more favorable user attitudes than will a MC device with smaller controls.

2.2 Effect of Performance on User Attitude

Because the time required (performance) to accomplish an on-line task is directly related to the attitude of the user it is important to keep performance levels high in order to generate positive attitudes (Polak, 2002). In previous research, user attitude has been shown to be positively linked to performance in online search tasks (Everard, 2003; Nielsen, 1997, 1998; Polak, 2002). Because of this relationship, it is therefore proposed that,

H5: A higher level of user performance with the MC device will result in an increased level of positive user attitude.

2.3 Effect of User Attitude on Behavioral Intention

Most research that has shown attitude and behavioral intention is based, at least partly, on Fishbein and Ajzen's TRA (1975) and later on Ajzen's TPB (1985, 1987, 1991). Attitudes about a system have long been used as the equivalent

of a measure of success in IS literature (Davis, 1993; McEniry, 1990) and have also been used to predict a user's intention to utilize the system (Grantham & Vaske, 1985).

Attitude has been examined at many levels in MIS research including at the individual level (Burnes, 1991; Kyllonen, 1988), group level (Caccamise, Hallbert, Harbour, & Francis, 1992; Porter, 1989), and even the organizational level (Burkhart, Hemphill, & Jones, 1994; Mrazek & Rafeld, 1992). At all levels, the results have provided significant support for the predictive ability of attitude to user intention. Since one can use attitude as a predictor of future user behavior (Fishbein & Ajzen, 1975), it is proposed that with more favorable user attitude there will be an increased level of intention to use the system. Therefore,

H6: The more favorable user attitudes towards a MC device, the higher the level of intention to use the device.

2.4 Effect of Performance on Behavioral Intention

MIS researchers Compeau and Higgins (1995) posited direct link between performance and behavioral intention has become a staple in IS research. Also, based in part on social cognitive theory (SCT), Bandura (1977) proposed a link between performance and intention. Further, Compeau et al. (1999) showed (1) performance and (2) attitude as being strong predictors of usage behavior.

Performance has been directly linked to intention in several theories and research papers (Compeau et al., 1999; Polak, 2002). With support for the link between performance and attitude, it is predicted that providing increased levels of performance will result in a greater level of commitment to use the system. Thus,

H7: A MC device that generates high levels of user performance will result in an increased level of intention to use the device, than will one that generates lower levels of user performance.

3. Proposed Methodology

To ascertain the soundness of these seven hypotheses, a laboratory experiment is proposed. The experiment will be a 2x2 experimental design using undergraduate college students. Participants will be undergraduate students from a regional state school in the southeastern United States. Subjects selected for this experiment will range in age from 18-25, both male and female, and must have owned and been regularly using a smart phone or other mobile computing device for at least two years. This will ensure a basic level of familiarity with "smart" technology used in MC devices. The goal of the experiment will be to determine the effect of color and size differentiation on user performance and attitude toward the MC system, in this case, the smart watch. Therefore, study subjects will also be screened to ensure they have not owned or regularly use a smart watch.

During the experiment, study subjects will be randomly assigned to four treatment groups. The four treatments (please see Figure 2) will include interfaces that have control buttons that are: (1) color differentiated/ smaller sized (2) color differentiated/ larger sized, (3) color consistent/smaller sized, (4) color consistent/larger sized. Subjects will be asked to complete a variety of search and select tasks, such as retrieving a text message, entering a date on a calendar, and viewing a photo.

		Color	
		Differentiated	Non-Differentiated
Size	Smaller	Tx Group 1	Tx Group 2
	Larger	Tx Group 3	Tx Group 4

Figure 2: Experiment Design

Performance will be measured by taking the average time for participants to complete each assigned task. The total time to complete the assigned list of tasks is divided by the total tasks completed to arrive at a performance index number. Performance in a specific task is determined using two distinct measures: (1) the number of touches or menu selections required, and (2) the time required from beginning the task to final task completion (Galletta, Henry, McCoy, & Polak, 2003, 2004; Polak, 2002). A fewer number of touches or menu selections will indicate fewer errors made by the user. In other words, the fewer false steps made by the user, the less time the task will take (i.e. increased efficiency). Attitude will be assessed through a previously developed MC application instrument that measures user attitude about the interfaces interacted with in the experiment.

4. Conclusion

The research agenda in this paper will extend the work in the IS discipline regarding cue theory and Fitt's Law. Utilizing a 2x2 experimental design, this research will explore seven different hypotheses with the aim of better understanding how cues and size affect user interaction and attitude towards a wearable MC device, i.e. a smart watch. With the increasing prevalence of mobile technologies, this research could provide valuable feedback for system designers as they further design and develop wearable technology. Aesthetics of a MC device might impress consumers in the short run, but user performance will predict the device's staying power.

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AN ASSESSMENT OF SUCCESS MADE IN LOCAL GOVERNMENT EMPOWERMENT PROGRAMMES AND ECONOMIC EMPOWERMENT OF YOUTH IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE

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Abstract

This study examined an assessment of success made in local government empowerment programmes and economic empowerment of youth. The study adopted descriptive research of the expo-facto type. A sample of 295 participants was randomly selected. Reliable instrument were used to collect data from participants still in business. The data was analysed using descriptive statistics, Pearson product, moment correlation, and multiple regression analysis. The result shows that there was a positive significant relationship between Empowerment Programme and Economic Status. But not with social status. It was also discovered that in reverse empowerment was jointly predicted by economic and social status. But economic status is the only potent predictor of empowerment programme. Among others it was recommended that the federal government should encourage all other non-governmental organisation to also assist in empowering youth in the country.

Introduction

Nigeria like most developing nations of the world is faced with myriad of problems and hares realities which include poverty, unemployment, conflicts and diseases. These situations pose great challenges to the very existence of individuals in most developing nations thereby calling for the training of educated man and women who can function effectively in the society in which they live in. available information by National Universities Commission (NUC) (2004) reiterate the massive unemployment of Nigerian universities graduates in the country. This problem is said to be traceable to the disequilibrium between

labour market requirements and lack of essential employable skills by the graduates (Diejonah and Orimolade, 1991; Dabalen, Oni and Adekola, 2000). This obvious critical skill gaps inhibits the development of youths and the entire development of the nation.

More than half of the Nigerian populations are under the age of 30 according to the National Population Commission (2001). Therefore it can be asserted that the economy of Nigeria is a youth economy. Expectedly, today's youth will become in a short decade tomorrow's parents, leaders, labour force and armies. However, the Nigerian youths are said to be confronted with poverty, unemployment, urbanization, lack of capacity and skills needed to move the economy forward. Poverty which is a force for HIV/AIDS is very common. This is because the youth faces unemployment and lack of necessary productive skills to keep body and soul together. This reality leaves them without any meaningful means of sustainable livelihood. To make ends meet, they simply indulge in prostitution (both male and female).

Mohammed (2004) noted that Nigeria is ranked as the sixth richest nation in the world in terms of crude oil reserve and supply, and the fact that the country ranks among the nations that are blessed in terms of human and material endowment, her citizens are wallowing in abject poverty with little or no economic empowerment for the larger percentage of the populace. The Federal Office of Statistics confirmed that at least seventy million Nigerians now live below the poverty line when compared with eighteen million in the 1980s (Garuba 2006; Patrick 2005). It is also worthy of note that Nigeria remains the only member of the Organization of Petroleum Exporting Countries (OPEC) that is categorized among the world's poorest twenty countries (Adeola, 2001). In a related research on the poverty index in Nigeria.

Okunmadewa (2001) highlighted that Nigeria ranked fifty-fourth with respect to human poverty index (HPI) making her the twentieth poorest country in the World. It is also ranked thirtieth in gender related development index (GDI) while occupying the fortieth position from below in its human development index (HDI). Indeed, the alarming and seemingly uncontrollable high rate of crime and shady deals in the country has been linked to the poverty situation. To buttress this fact, Oludotun (2001) revealed that the increasing rate of crime such as armed robbery, advance fee fraud, corruption, prostitution, nepotism, drug trafficking, cultism and other social vices are definitely the product of persistent poverty in the country. The situation affects sustainable national development adversely.

Previous governments in Nigeria made several attempts to alleviate the poverty situation in this country. For instance, the Gowon's regime initiated the Udoji's Commission to solve the problem of poor wage of civil servants in order to improve their standard of living. The next regime of Murtala/Obasanjo decided to attack the poverty situation through agriculture by initiating the popular Operation Feed the Nation (OFN) programme. This program was re-packaged by the Shagari's regime and subsequently metamorphosed into the Green Revolution Campaign. Perhaps, the regime with the widest approach to poverty reduction is the Babangida's regime. The regime introduced the Directorate of Food, Roads and Rural Infrastructures (DFRRI) in 1986. This was followed by the National Directorate of Employment (NDE) in 1987. The same year, the Better Life Program was launched. The Peoples Bank followed closely in 1989. The Community Bank was also introduced and lastly the Oil Mineral Producing Areas Development Commission (OMPADEC). The immediate past government of Obasanjo also initiated her own programme to eradicate poverty. The first attempt was the Poverty Alleviation Program (PAP) in

the year 2000 and was immediately replaced the following year by National Poverty Eradication Program (NAPEP). The regime also introduced other economic reform programs such as the Mandatory Attachment Program (MAP), the Capacity Attachment Program (CAP), and later the National Economic Empowerment and Development Strategies (NEEDS) (Iba, 2007).

In Nigeria the poverty and chronic youth unemployment are both clearly evident. Although Nigeria is rated the most populous country in Africa, yet its national unemployment rate is around 24%, while the unemployment rate within the age group 15-24 years is around 40%; and that of age group 25-44 years is about 25%; meaning that effectively about 75% of total unemployed population are within age group of 15-44 years. Since youth unemployment is very severe in Nigeria, this alone causing a threat and huge challenges to the nation. The severity of Nigeria's youth unemployment dictates that all available resources be effectively mobilized. Although here are many policies and programs in place to boost up desired economic growth and development, yet the overall condition seems very gloomy unless all avenues can be explored and appropriate measures are taken sooner than later.

The youthful period which is a very critical one that has been noted as an essential time for training in entrepreneurship, provides a positive distractive alternative from the self-destructive and aggressive behaviours that are frequently associated with adolescents and growing up (Woolfolk, 1998). In a study of American adolescents in 1998, it was reported that a good number of the youths had little information about life and life expectations. If this is true youths in a developed nation; what can be said of Nigerian youths? This critical age however is the right time to teach them the concept of entrepreneurship to help them learn wealth creation. The question then is what is entrepreneurship? Entrepreneurship has been defined by various professions to mean many things since the middle age (Igbo, 2006). The entrepreneur has been seen as an actor, innovator or a developer of technology. However, the summary of what entrepreneurship means will reflect the individual's definer's point of view is. Entrepreneurship is the willingness and ability of an individual to seek out investment opportunities, establish and run an enterprise successfully (Inegbehebor, 1987). The entrepreneur is essentially a person who owns or controls a business through which income is gained.

National Directorate of Employment (NDE) (1989) in Onyebueke and Ochonogo (2002) defined entrepreneurship as the art which involves recognizing a business opportunity, mobilizing resources and persisting to exploit that opportunity. According to Gana (2001), entrepreneurship is the ability to seek investment opportunities and establish an enterprise based on identified opportunities. The entrepreneur takes risks, is focused and energized by an inner drive. The ability to develop a new venture or apply a new approach to an old business is sole idea of entrepreneurship (Steinfioff and Burges, 1993). In other words, the individual gives the market place a product or service by using resources in a new way. Esomonu (1998) defined entrepreneurship as the effective manipulation of human intelligence as demonstrated in a creative performance. This singular risk taking act leads an individual to create something of value from practically nothing.

According to Anayakoha (2006), the entrepreneur is one who chooses or assumes risks, identifies business opportunity, gathers resources, initiates actions and establishes an organization or enterprise to

meet such demand or market opportunity. From this definition, the entrepreneur is seen as an independent, self-sufficient individual who is willing to sink or swim with his/her idea. It can thus be asserted that an entrepreneur is a person who in the bid to survive makes profit and owns his/her own business. He effectively utilizes his/her abilities and potentials confidently. He/she takes risks, is focused and is energized by an inner drive. He equally seeks and exploits employment opportunities, applies creativity aggressively, takes initiative as he/she seeks market opportunities.

The entrepreneurs further awakens his ability to maximize his potentials through the discovery of new and existing business ideas as he uses proven principles in managing small and medium scale businesses until they grow. He also creates the platform for the exchange of ideas and training in skill acquisitions. Through the process involved in entrepreneurship, success habits are imparted as the person develops entrepreneurial integrity. Entrepreneurship skills are equally learnt in the process (Anayakoha, 2006). However, in a means to help the federal government the local government in their own little ways have taken steps in empowering their youth by exposing them to entrepreneurial training as well as equipments needed to foster their business. These empowerment programmes cut across both educated and uneducated youths which have gone a long way in reducing crime in our localities. The question thus is, to what extent as this youth been empowered, after each training done at the local government level have they been really able to withstand the challenges of growth and competition? In answering these questions this study examines extent of success made in local government empowerment programmes and economic empowerment of youth.

Purpose of the Study

The main objective of this study is to examine the success gained through local government empowerment programmes and economic empowerment of youth. Specifically it intends to;

1. Examine the numbers of youth that have undergone the local government empowerment programmes in the past three years
2. Examine the entrepreneurial skill with the highest rate of youth attendance
3. There is no significant relationship between Empowerment Programme and Economic Status
4. There is no significant relationship between Empowerment Programme and Social- Status.
5. What is the relative effect of each of the independent variables (Economic Status and Social-Status) on Empowerment Programme?

Research Question

The following are the research questions this study is to undertake.

1. What is the numbers of youth that have undergone the local government empowerment programmes in the past three years
2. What is the entrepreneurial skill with the highest rate of youth attendance

3. What is the relative effect of each of the independent variables (Economic Status and Social-Status) on Empowerment Programme?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant relationship between Empowerment Programme and Economic Status
2. There is no significant relationship between Empowerment Programme and Social- Status.

Research Design

The descriptive research design of the survey type was adopted for this study. This design is appropriate because the researcher intends to describe the success gained by the local government empowerment programme for youth development. More so, the researcher does not have direct control over independent variables because their manifestations have already occurred, or because they are inherently not manipulated.

Population of the Study

The population for this study comprised of all youth who participated in the local government empowerment programmes in Ibadan North-West, local government area of Oyo State.

	Empowerment and Type of Skill gained	No of participants
1	Fashion Designing	75
2	Hair dressing	62
3	POP making	12
4	Carpentry	48
5	Electrical electronics	7
6	Barbing	25
7	GSM repair	13
8	Beads Making	18
9	Wire work making	35
10	Liquid soap making	60
11	Shoe making	8
12	Welding	12
13	Catering	15
14	View center	20
15	Cash gift (10,000 each)	50
Total		460

Sample and Sampling Techniques

Purposive sampling was used to select three years empowerment training participants from the youth empowerment programme started since years 2000.Random sampling was used to select 295 participants from the entire population of participants in Local Government youth empowerment programme.

Participants

This source of data collection was a primary data whereby questionnaires were used.The questionnaire was classified in to three. Section A, B and C;

Section A: Demographic information

This section consist of Age, Qualification, Marital status and gender.

Section B: Social status scale

This scale contains 10 items. It was developed by the researchers. It measures the relationship level of the participant as well as their network system. It adopted a 4-point response format ranging from 4=SA to 1=SD. It recorded a reliability coefficient of 0.80 after the conduction of the pilot study.

Section C: Economic Status Scale

This scale contains 14 items. It was developed by the researchers. It measures the level of self sustainability of the client as wells as ability to cater for one self. It adopted a 4-point response format ranging from 4=SA to 1=SD. It recorded a reliability coefficient of 0.81 after the conduction of the pilot study.

Procedure for Data Collection

Copies of questionnaire were administered on participant at their various business points. Permission was collected from the local government with respect to the support of the youth empowerment coordinator. The participants' details and address was as well collected from the local government. After locating the participants in their business points, they were assured of confidentiality of their responses and as well motivated to respond to the questionnaires. The administration lasted one week and the data collected was subjected to analysis.

Method of Data Analysis

The data was collected and analysed with the aid of statistical packages for social sciences (SPSS) using descriptive statistics, pearson product moment correlation (PPMC) and multiple regression analysis.which was used for the interpretation.

Demographic Analysis

This segment consists of the frequency distributions of respondents in the aspect of age, gender and qualification.

Demographic Variables

S/N	Statements	Options	Frequency	Percentage
1	Gender	Male	126	42.7
		Female	169	57.3
2	Age	Less than 20 years	93	31.5
		20-29 years	158	53.6

		30-39 years	35	11.9
		Above 40 years	9	3.1
3	Marital status	Single	176	59.7
		Married	119	40.3
4	Qualification	SSCE	118	40.0
		ND\NCE	140	47.5
		HND\BSC	37	12.5
5	Which year do you partake in the local government youth empowerment programme?	Before 2011	27	9.2
		2011	49	16.6
		2012	103	34.9
		2013	116	39.3
6	What type of skill did you learn during the programme?	Catering	33	11.2
		Pop making	1	.3
		Computer training	24	8.1
		Shoe making	30	10.2
		Barbing	14	4.7
		Bead making	36	12.2
		Wire works	13	4.4
		Fashion designer	20	6.8
		Tailoring	12	4.1
		Hair dressing	36	12.2
		Pop	11	3.7
		Liquid soap making	22	7.5
		Carpentry	9	3.1
		Welder	12	4.1
		GSM repair	16	5.4
		Make up artist	3	1.0
		Electrical Electrician	3	1.0

The rating of the items of the demographical Variables is as shown below:

Sex: 126(42.7%) were males while their female counterparts were 169(57.3%);

Age: 93(31.5%) were less than 20 years, 158(53.6%) were aged 20-29 years, 35(11.9%) were aged 30-39 years, while 9(3.1%) were above 40 years;

Marital status: 176(59.7%) were single while 119(40.3%) were married;

Qualification: 118(40.0%) had SSCE certificates, 140(47.5%) had ND\NCE certificates while 37(12.5%) had HND\BSC certificates

Which year do you partake in the local government youth empowerment programme? 27(9.2%) partake

before 2011, 49(16.6%) partake in the year 2011, 103(34.9%) partake in the year 2012, while 116(39.3%) partake in the year 2013;

<u>What type of skill did you learn during the programme</u>? 33(11.2%) were Catering, 1(.3%) was Pop making, 24(8.1%) were Computer training, 30(10.2%) were Shoe making, 14(4.7%) were Barber, 36(12.2%) were Bead making, 13(4.4%) were Wire works, 20(6.8%) were Fashion designer, 12(4.1%) were Tailor, 36(12.2%) were Hair dressing, 11(3.7%) were Pop, 22(7.5%) were Liquid soap making, 9(3.1%) were Carpentry, 12(4.1%) were Welder, 16(5.4%) were GSM repair, 3(1.0%) were Make up artist, while 3(1.0%) were Electrical Electrician.

Ho1: **There is no significant relationship between Empowerment Programme and Economic Status.**

Table 2: PPMC showing relationship between Empowerment Programme and Economic Status

Variable	Mean	Std. Dev.	N	r	P	Remark
Empowerment Programme	10.6407	4.3869	295	.127*	.029	Sig.
Economic Status	27.8915	3.2527				

** Sig. at .05 level

It is shown in the above table that there was a positive significant relationship between Empowerment Programme and Economic Status (r = .127*, N= 295, P < .05). It is noted that Economic status had influenced Empowerment Programme in the study. The Null hypothesis is rejected.

Ho2: **There is no significant relationship between Empowerment Programme and Social- Status.**

PPMC showing relationship between Empowerment Programme and Social- Status.

Variable	Mean	Std. Dev.	N	R	P	Remark

Empowerment   10.6407 4.3869

Programme   295 -.093 .112 n.s.

14.4610 2.3956

Social-Status

It is shown in the above table that there was a negative significant relationship between Empowerment Programme and Social- Status (r = -.093, N= 295, P > .05).The Null hypothesis is accepted. This implies that increase in the influence of the youth social status will reduce their engagement in their empowerment skill.

Research Question 1:What is the relative effect of each of the independent variables (Economic Status and

Social-Status) on Empowerment Programme?

Table 4: Relative contribution of the independent variables (Economic Status and Social-Status) on Empowerment Programme.

Model	Unstandardized Coefficient		Stand. Coefficient	T	Sig.
	B	Std. Error	Beta Contribution		
(Constant)	8.310	2.693		3.086	.002
Economic Status	.169	.078	.126	2.172	.031
Social-status	-.166	.106	-.090	-1.564	.119

Table 4 reveals the relative contribution of the two independent variables to the dependent variable, expressed as beta weights, viz: Economic Status (β = .126, P<.05) and Social Status (β =-.090, P >.05). Hence while Economic status was significant social status was not.

Discussion of Findings

The first hypothesis states that there is no significant relationship between empowerment programme and economic Status. The result reveals that there was a significant relationship between empowerment programme and economic Status. This result agrees with Smith (2000) who reported that vocational training significantly correlated with living standard. Likewise Ohize and Adamu (2009) confirmed that youth empowerment scheme (Project YES) has contributed tremendously to fostering of Nigerian nationhood. He also noted that the scheme has succeeded at intervening in the plight of the youths by providing them opportunities for acquisition of vocational skills of varied kinds which makes them not

only self-reliant but also empowered them to be more efficient in the discharge of their responsibilities to the communities and Nigeria at large. Indeed the scheme has succeeded in fostering youths in all ramifications, especially vocational skill acquisition for self-reliance. Similarly, Kuti (2005) revealed that the beneficiaries were able to set up their own businesses after graduation. This is in consonance with the findings of the team of National Media Tour, (Ohize & Adamu, 2009) which discovered that "today, most of the graduates of Project YES in Niger State are not only self-employed but also employers of labor. This indicates that youth who partook in the empowerment programme have significantly gained a higher economic status because they have now been able to vend for themselves and as well live a self reliant life.

The second hypothesis states that there is no significant relationship between Empowerment Programme and Social- Status. The result shows that empowerment programme did not significantly correlate with social status of participants. This implies that empowerment programme has nothing to do with the social status. The result of this finding disagrees with Ohize and Adamu (2009) observed that there was an improved sense of contentment among the participants of Project YES. This was evidenced by their prompt, enthusiastic response on experiences gathered during the training periods, the new change in their socio-economic status as a result of the skill acquired, and the fact that most of them are not only self-employed but also employers of labor. The result of this study also negate Yahaya (2006) who observed that the impact of Project YES goes beyond the issue of poverty alleviation alone because it has also intervened in the educational pursuit of thousands of youths. As such, the youth were opportuned to develop their talents, self-esteem and become useful and acceptable members of the society. The reason for the result of this study could be as a result of result of their educational status as well as the length of the training programme. If participants are already educated, the social behaviour of such may not really change, except for those who have resist socialisation. The length of the programme may not also be long enough to change the social status of the participants Nevertheless, if the economic status of the participants is not buoyant enough their social status may not really change.

Research Question one, examined what the relative effect of each of the independent variables (Economic Status and Social-Status) on Empowerment Programme. The result shows that Economic Status is a significant predictor of empowerment programme except social status. This result partially supports Yahaya (2006) who discovered that as a result of the successful empowerment of youths economically and socially, the Youth Empowerment Scheme (Project YES) has contributed tremendously to fostering of Nigerian nationhood. This implies that the empowerment programme has succeeded at intervening in the plight of the youths by providing them opportunities for acquisition of vocational skills of varied kinds which makes them not only self-reliant but also empowered them to be more efficient in the discharge of their responsibilities to the communities and Nigeria at large.

Recommendation

Based on the findings made so far, the following is recommended;

1. It was observed that some of the youth trained were out of business before three years. This implies business management training needs to be included in the vocational training programme because that is the entrepreneurial part of vocational training.

2. The youth complained of unstable electrical power supply. This indicates that the federal government should rise up to the task of electrical power so as to improve the business status and reduce huge amount of money business owners are spending on into petrol, which will definitely have impact on the price of products and commodity.

3. The federal commet needs to put more effort on monitoring how effect micro finance banks in helping youth whose business is just starting to take advantage of the purpose of establishing theses banks.

4. Guidance and counseling as well should be included in local government entrepreneurial training programmes so that counselors could help youth understand the vocational training that fit their persons.

5. In view of the success story of empowerment programme, governments at all levels should encourage individuals, philanthropists and philanthropic organizations to set up poverty alleviation related NGOs to supplement their efforts in fighting the scourge of poverty in Nigeria. Governments' contribution can be in the form of provision of training centers/workshops and linkages to international donor organizations like the USAID, UNDP, UNESCO, and UNICEF.

6. Counseling sessions should be organized for fewer participants at a time. It should be more private and more confidential. Similarly, referral and follow-up services should be introduced in other to allow for effective counseling for the trainees.

7. The Youth Empowerment empowerment programme should set up offices in strategic places in other to extend her services to the grass roots. This is necessary because under the present arrangement, the bulk of the beneficiaries are youths residing around the local government.

8. Proprietors of the empowerment programme should set up a think tank evaluation committee. The committee should be charged with the responsibility of studying the findings of researches conducted on empowerment programme and similar studies conducted on other poverty alleviation related NGOs. Identified areas of weakness and strength should be critically studied with the hope of implementing the recommendations as a way of improving the programs designed for the trainees.

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INTEGRATING SUPPLIER SATISFACTION WITH CUSTOMER SATISFACTION IN THE PROJECTION AND IMPLEMENTATION OF THE TQM SYSTEM IN MACEDONIAN COMPANIES

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Abstract

The management of suppliers is an important aspect of TQM (Total Quality Management) philosophy. Providing the materials and spare parts for the companies is often the main source of problems for the quality of products. When building partnerships between companies and suppliers for each activity, there must be criteria for both assessing good results for specific and complicated things, specific solutions, or specific requirements. New world trends impose new manner of thinking, working and adjusting within the new flows of the market economy that are consumer-oriented.

This paper is an analysis of the situation in Macedonia's 151 companies in terms of the way the company managed effectively and efficiently the suppliers and raw materials and the way it had built business relationships. This paper provides an analysis for gathering data regarding the contentment of the consumers upon the quality of products/ services. Also, it should point out the measures that need to be taken by the companies in order to improve their contentment. As for the results that have been received from the research, the need of integrating supplier satisfaction with customer satisfaction in the projection and implementation of the TQM (Total Quality Management) system in Macedonian companies is being imposed.

Keywords: management with suppliers, market economy, measuring, customer contentment, quality, TQM system.

1. Introduction

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Global competitiveness in the world imposes a strong race in the economic progress and new values of civilization between the Far East led by China, on the other side is America and Europe - which lost its leadership. Political turmoil in Europe is not ordinary caprices, but more often a consequence of frequently asked question: Where is the European business going? The answer is changes in technology and production, in total quality management in acquiring knowledge and skills for knowledge based development.

Introducing a total quality management (TQM) system should help companies overcome their problems, because according to the requirements of ISO 9001: 2008, not only have to work in a different way but to think in a different way too. It means, reengineering in the companies, a radically new way of thinking and working to improve management of resources, suppliers, equipment (Shiba and Walden, 2002).

2. Literature Review

For many companies the management of suppliers is the first step towards TQM (Total Quality Management), because it will allow the upgrade to ISO 9001:2008 standard with the TQM strategy by improving the quality of organizational processes in terms of: not only the defining, improvement and designing of the process, but also improving productivity and optimizing costs through using quality input materials and building partnerships with suppliers (Genna, 1997; Mitreva, 2009; Koc, 2007).

In order for the quality system is effective and efficient the suppliers are important as a key link in the design and implementation of TQM system (Besterfield, 1994; Wong and Fung, 1999). The procurement of input materials is one of the most important activities for ensuring quality, because the cost of input materials constitutes 50-70% of product cost and quality of incoming materials in large part determines the quality of the finished product (Kanji and Wong 1999). Daily practice of suppliers should not only be the offer a quality product that meets the needs of the client, but they must be more involved in the process of product design and the production process of the client. They need to act preemptively, to be responsible, to correct their mistakes and to amount to any problem relating to the quality that they discover (Nair and Boulton, 2008; Svensson, 2006).

New quality approach demands new activities in the field of education of the employees, implementation of standardization to all processes, introduction of a statistical process control for flawless working, new approach within the analyzes of costs, etc (Mitreva 2010). All of the aforementioned require a scientific, methodological and well-planned approach, as well as persistency and systematical work. At the same time, it the notice a drastic change in the employees' behavior, radical changes within the organizational settlement, clear defining of rights, obligations and responsibilities of each individual and complete orienting towards the desires and necessities of the buyers/ consumers (Feigenbaum, 2002; Wong, 2000).

What exactly the organization performs in order to fulfill the consumers' desires?

Marketing is one of the basic concepts of TQM, and has a special role as a key chain in its designing and realization. The basic function of marketing is getting information about the size, structure and other dimensions for the necessities of the consumers, but also plays a key role within the determination of

quality and its standardization in the quality development, as well as the building of a system for an integral quality management.

Marketing activities are (Feigenbaum, 2002):

- collecting and processing of data for the market and the power of consumers according to the defined standards for quality within the organization;
- participation within the qualitative and quantitative fitting of information into standards, normative and indicators that ought to be measured and precisely expressed;
- determining the distribution channels for products / services in order to fulfill the exact requirements of the purchasers as well as realization of the JIT (Just in Time) policy.

The marketing team should recognize potential buyers through mechanisms for contacts and also should be able to get some specific info (Wong, 2000).

Above all, the information needs to refer to (Oakland, 2003):

- the range and the characteristics of the consumers' needs; the abilities of the company to fulfill those needs to a defined quality level, as well as the limitations and the upcoming issues on the way;
- what the competitive side offers, what is their advantage and what are their abilities and weaknesses;
- rationalizing of the system of information through suggestions and decisions in order to increase the advantage regarding the competition, as well as revitalizing of flows.

Fitting the marketing information into (Cepujonska, 2009) measurable indicators and standards is quite necessary in order to fulfill the demands, but also there is a need of a platform for understanding and cooperation with the other sectors and services within this organization. Therefore, the development of those indicators and standards enables a measuring and following of the accomplished quality, reaching an acceptable level of quality in all sectors, as well as removing of all the defects and futilities.

Collecting data for consumers' contentment regarding quality of products / services should indicate what companies need to undertake in order to improve the level of contentment. Complaints, questionnaires, debates, and interference in the design are main indicators.

All of the aforementioned statements open dilemmas such as:

- whether Macedonian companies are prepared to place themselves at the global market;
- are they able to create values and build business culture as a response of the development of the competitiveness and fast adaptation of needs and desires of the consumers;
- whether they have built a system of measurement of contentment by setting measurable dynamic standards;
- whether they are prepared to accept the TQM philosophy.

3. Methodology

The analysis in this paper is a segment of the general survey of the current situation in Macedonian companies in the field of design and implementation of quality system, analyzed through the four pillars of the house of quality at which tip is the top management, and at its basics are measurement, evaluation, analysis and comparison of quality /low quality (Mitreva, 2011). The house of quality holds four subsystems: internal standards, methods and techniques non–defect work, education and motivation and cost analysis of quality.

The current situation is analyzed trough the criteria for getting the European Quality Award: leadership, policy and strategy, management staff, resources, processes, buyer satisfaction /customer, employee satisfaction, impact on society, business results. Macedonian companies were evaluated trough these criteria as they competed for the European Quality Award.

Particular attention is paid to the collection of input data in the survey. Studies are done with a questionnaire sheet and custom views of the real situation in Macedonian companies. Analysis of the findings made by the algorithm for evaluating and determining the "age", i.e. the development of Macedonian companies at the pillars of the house of quality (from young and underdeveloped systems to mature and developed system, and in reverse order) and the perception of deviations subsystems of the TQM system, through the symptoms of "health" of the quality system. Pareto analysis is used for frequency analysis and participation of individual responses.

151 Macedonian companies from different economic sectors participated in this research, and to be more representative the survey accounted for the size of company, headquarters (city) and economic activity.

4. Results and Discussion

One of the criteria for receiving the EQA (European Quality Award) is the way the company managed effectively and efficiently with suppliers and raw materials and builds business relationships.

Our research pointed to poor cooperation with suppliers, lack of nurturing business relationships, lack of mutual trust and respect and so on.

Asked whether their company requires specification of the quality of incoming materials, *only 31% of the surveyed companies are always looking for specifications on the quality of incoming materials*, *and not only when doubting the quality*.

The business partnership between companies and suppliers requires confidence and adequate integration in terms of generating improvements and development of new values.

Asked of the way the supplier of input materials in their company is selected, the data show that the respondents:

- 92% of them, *the choice of supplier is made on the basis of quality, delivery date, price and reliability of the material supplied, contradicting the previous answers, where only 31% of them said they always require the specification of material they buy*. If the quality of incoming materials is not defined, it cannot be said that good business relations with suppliers exist;
- 8% of respondents said the choice is made on the one that will offer only quality products.

In terms of building cooperation with suppliers, the data suggests:

- 79 respondents, or *52.3%, have reported to have long-term cooperation with suppliers* and nurture partnerships with them;
- 34 of them, or 22.5% that providers treat them as a reserve option, building uncertainty and discontinuity in the quality of the business cooperation;
- 27 of them, or 17.9% are in constant search for new suppliers, not taking into account the building good relationships with existing ones, to foster cooperation and to engage in all activities towards the improvement of the business results of the company;
- 11 of them, or *7.3%, they show distrust towards relationships*.

The provision of materials and spare parts for the companies is often the main source of problems with quality of products. The quality of the products will depend largely on the quality of materials offered by the supplier, thus building partnership with them is necessary. The supplier should be treated as an introduction to the manufacturing process and many authors all share the common opinion about the necessity of building partnership relations with suppliers as well as their motivation for the necessity of fulfilling the expectations of customers.

Steps such as timely delivery of raw materials without defects, can greatly improve the quality of products as *"the first pad"* to provide good quality to the end customer and forming teams to improve the quality of its products and services in which the providers of materials are also participating.

To this purpose we analyzed the suppliers of the Macedonian companies in terms of whether if they apply methods and techniques of quality in their companies and if they guarantee the quality they deliver to the customer.

The methods and techniques for providing quality are instruments for implementing activities to improve quality and are an integral part of quality management according to defined policy objectives and responsibilities of the company, and create comparative advantages in the market.

To come to the conclusion whether the suppliers of Macedonian companies have established effective control processes in achieving the defined quality at the lowest cost of operation, the question was asked: What controls the quality of products / services practice?

- 113 suppliers *are reported to have quality control*;
- 48 suppliers apply *linear control*;
- 107 of them *have 100% control*;
- 29 apply *statistical process control*;
- providers in 137 suppliers *have 5 - 15% of their daily production returned for finishing.*

Macedonian companies have unenviable product quality level due to poor management of business processes, ineffective control, with a % of defects even greater than allowed. Technical and technological equipment of Macedonian companies is close to a satisfactory level and to some extent satisfies current requirements of customers /users. *The problems stem mainly comes from poorly organized business processes and inability to meet required quality standards.* Here, the same technology

creates lower realization business results. The reasons are not only lack in modern technology but also in weak managerial skills of managers, insufficient qualifications and fulfillment of employees, the quality of running the business processes. The linear forms of running the company (in certain stages), are mainly applied, and are known for higher costs of operation. Due to lack of access to statistical data processing, quality assessment and transfer of information, our companies are facing a lot of problems in the performance of domestic and foreign markets.

This paper also presents an analysis regarding the condition of Macedonian companies through one of the criteria for receiving a European Quality Award: measurement of the contentment and the manner of gaining data for their desires and needs (Mitreva, 2011).

In order to assure whether selected companies have collected and processed the data for the market and the power of consumers according to the defined standards for quality within the organization, the following question is: ***how the companies are informed regarding the needs of their customers?***

- 60% of the respondents answered that they become informed *through sales/ offer analysis;*
- 20% of them become informed through *analysis of a questionnaire;*
- 3% *of them do not take this question into account;*
- 17% of them have listed other issues, such as *direct contact with the consumers and searching for an optimal and acceptable solutions.*

The weak interaction between the costumers and the service providers is an alarming fact, since it refers to the weak function of the marketing services. The nonexistence or the malfunctioning marketing services of the Macedonian companies deprives them from acknowledging this fact and providing the market needs. Therefore their adjustment towards for fulfilling them is question as well.

Following the question oriented towards the Macedonian companies whether they have any demands on behalf of the consumers upon they are unable to respond to, the following data has been obtained.

- 59% of the respondents answered that they *can entirely respond to the consumers' needs;*
- 41% of the respondents answered that they *are unable to do it.*

The reasons refer to the lack of technical support and unreal demands of the consumers, as well as requests for deadlines and deliveries that are shorter than the optimal.

Macedonian companies use questionnaires, direct interviews, participation of the **consumers** into working teams, counseling, etc. This is in order to measure the content or discontent regarding their products in a very small portion. The data gained by answering the question about ***how do the companies get informed that their products/ services do not fulfill the expectations of the consumers, is as follows:***

- 35.7% of the respondents have announced that they get the *info from the complaints;*
- 23.8% of the respondents have announced that they get the *info from their profit* (depending upon whether it is reduced or increased);

- 16.7% of the respondents have announced that they get the *info* through the *analysis of a conduced questionnaire;*
- 14% of the respondents have announced that they get the *info* from *reports done by the service for quality control;*
- 4.7% of the respondents have announced that they get the *info* from *following the competition* and
- 4.7% of them *have claimed other, i.e. the direct contact with the consumers helps them reveal whether their expectations have been fulfilled or not.*

Those results have shown a weak usage of the questionnaires in order to measure the level of content or discontent. In order to improve its products/ services, it is the most important for the company to interpret correctly the well-intentioned objections or complaints from the consumers and to practice a continuous tracking of their contentment that would result into a priceless source of information for business analysis as well as their managing.

In order for a company to be successful into gaining info regarding its position and the position of its products on the market, it is necessary to collect and adequately value the data and the parameters of the consumers in several terms. This regards the companies' products/ services, consumers' experience and expectations from the product/ service, their level of content and the usage of products.

In order to foresee the efforts of Macedonian companies regarding the contentment of consumers through improvement of the business processes, product/ service etc, the following question was raised: *have they introduced some improvements of the processes of business or changes that would significantly influence the content increase and therefore the increase of the business results during those last years? Here is the data:*

- 34.3% of the respondents have announced that they have introduced new technology;
- 31.4% of the respondents have *introduced new products/ services;*
- 17.1% of the respondents have *realized improvement of the marketing concepts and strategies;*
- 14.3% have made significant improvement of the business processes or organizational methods;
- 2.8% have claimed that the most influential step taken was their proactive reaction within the working of the companies.

The problems within each Macedonian company origin from its weak marketing approach (only 17% of them have accomplished an improvement of marketing concepts and strategies), incorrectly organized business processes (only 14% have made a significant improvement of the business processes or organizational methods) as well as from the inability to fulfill the demanded quality standards.

The reasons of the bad competitive level of Macedonian companies are not only a shortage of modern technology but poor abilities of the managers, qualifications and the fulfillment of the employees, quality for dealing with business processes, no habit to listen the consumers comments, desires etc.

The requests for high quality of products/ services impose not only a supply of new equipment but

adjusting the desires of the consumers into real standards, too. In this way, the priority is given to the consumers' needs gained at each useful source of information and then methodically analyzed and processed into details that would help the design and improvement of processes, all in order to meet the necessities.

The competitive advantage of the Macedonian companies is being presented through their ability to meet the needs and desires at a faster pace than the competitive side. In order to gain that, the company needs to be exposed to learning and to implement the knowledge which would present a fluid mixture of different experiences, values and information in order to have an expertise inspection which would enable the evaluation as well as accepting of the new knowledge and information.

5. Conclusion

Analyzing the results of the survey we come to the conclusion of the need of Macedonian companies for the management of suppliers due to market pressure on the as the main driving force, which will lead to: increasing the ability to work and compete on the market, the need for expansion and maintenance of existing markets, increasing the satisfaction of customers / users, suppliers and improving marketing activities.

Lately there are more businessmen and managers of private companies who want to be able to operate with international standards and strategic connections in the West. To maintain the global market, Macedonian companies must make every effort in products / services that are competitive in the market and which most meet and exceed the needs of customers / users.

To achieve sustainable development, Macedonian companies should be exempt from building criteria for selection of suppliers and proactively focus on developing long-term relationships with clients, providing technical support for training to improve processes, product quality and productivity of providers.

The application of TQM strategy in companies in the world means to manage the company's suppliers together to identify problems, optimize inventory, to reduce and recycle waste, to conserve the global non-renewable sources versus the previous case with the design and implementation of ISO 9001 : 2008 standard, where the selection is performed and documented according to specific criteria, activities and other specified requirements arising from the ISO 9001 standard, given in the kind of question.

According to gained results and the aforementioned goals of the research, it has been confirmed that the Macedonian companies do not take proper care for product/ service quality, insufficiently pay attention to consumers, do not practice continuous education, as well as make poor innovational investment. Also, there are a small number of companies that actually have built a quality system, have paid sufficient attention towards the employees, the delivering team and the communities. There is also a lack of usage of SPC (Statistical Process Control) and the teamwork has been considered as a step back to the past. In one word, **TQM philosophy** is unknown in Macedonia (Mitreva, 2011)**.**

In order to implement the TQM strategy, it is necessary to invest in education and trainings of the employees, reengineering of the business processes as well as a permanent improvement of the quality system. Strong competition can be survived only by those who are well organized, who own qualified

working capital, those that invest into education and training of employees, who invest into improvement of the business processes and the organization innovativeness. Modern market conditions, besides fulfilling the desires and needs, impose an analysis of the position of competitive sides and their strategy.

Marketing activities within the companies should orient towards enrichment of the assortment and product/ service quality, determined position on the market and gaining better cooperation with foreign partners. The way that leads towards improvement of quality of processes and services at domestic companies should be sought into *the application of adequate methodology for designing and implementing the TQM system* (Mitreva, 2011).

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ASSESSING ACCESS TO FINANCE FOR TOURISM DEVELOPMENT: ENTREPRENEURIAL APPROACH

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Abstract

Macedonia is a small open economy that is challenged by various policies and measures in the line of enhancing its competitiveness. Being focused on becoming a recognizable country with favorable business climate, Macedonia is faced with numerous and complex limiting factors. This paper intends to assess the access to finance as one of the most profound causes that inhibits tourism development. The paper elaborates the case of Krusevo, as one of the most developed winter tourism centers in Macedonia. The objective is to identify the major problems caused by lack of access to finance for further tourism development, by employing the entrepreneurial approach. A survey is conducted among managers/owners and employees of travel agencies and tourism service facilities as the main representatives of tourism supply side. The overall conclusion is that the destination is faced with serious obstacles in terms of providing finance for tourism development.

Key words:

Entrepreneurship; Access to finance; Tourism development; Macedonia.

1. INTRODUCTION

In the last few years, Macedonia has made significant progress in improving the business climate, which was recorded in the studies of the World Bank , the World Economic Forum , the International Monetary Fund and the International Labour Organization. But the improvement of the business climate is a process that needs to be improved and perfected all the time.

Organization of Employers of Macedonia (ORM) and Business Confederation of Macedonia (BCM), with support from the International Labour Organization (ILO) implementing a project for improving the environment for sustainable growth of enetrprises.

The study ,,Enabling Enviormet for Sustainable Enterprise" was intended to determine the key areas that limit the business - climate in Macedonia and to make recommendations for improvement (,,The enabling environment   for Sustainable Enterprise in Macedonia", 2013:9).

The World Bank`s *Doing Business* study provides a quantitative assessment of the overall business environment and the protection of property rights for the small and medium enterprises (SMEs) analysing the regulations that affect 11 areas of a company`s life. Based on the latest data for 2012, the Macedonian economy is ranked 23rd place in terms of ease of doing business out of 185 economies around the world.

On the other hand, the quality of the regulatory framework is low, as it was assessed by the Index of quality of the regulation of the World Bank.

Macedonia has identified tourism as one of the areas for regional and overall economic development. The objective of this paper is to assess the access to finance that Krusevo is faced with, as one of the most developed winter tourism centers in Macedonia. In particular, the paper attempts to explore and identify the major problems caused by lack of access to finance for further tourism development, by employing the entrepreneurial approach. The paper is structured in several parts. After the introductory part, the paper is organised as follows: Section 2 provides a brief overview on literature addressing the issue of entrepreneurship and tourism development. Section 3 poses some stylized facts on access to financial services in Macedonia. Section 4 provides some stylized facts on current tourism development in Krusevo. Section 5 explains the applied methodology, while Section 6 encompasses the analysis, results and

discussion of the research.   Concluding remarks and the future challenges are presented in the final section.

2. LITERATURE REVIEW

In the Republic of Macedonia, mostly frequent form of financing is the self-financing, while investing in business is a rare practice for several reasons: the factors that determine businesses that will achieve cost investments, can not know for sure until the entrepreneurs gain finance and do not use the opportunities because they can not take place without the investment of someone's capital (Arow, 1974:1-10).

If an entrepreneur has no proprietary technology or reputation for building successful businesses, then the investor needs to decide on the business by small group of evidence, making the financing risky (Bhide, 2000). Investors their decisions to fund carry on their own perception of attractiveness and profitability of the businesses (Wu, 1989).

Investors require additional garantee, or something valuable that can be sold if the business failed (Blanchflower, D. and Oswald, A. 1998). The need for narrow specialization of investment, each concentrate as small investments at the early development of the companies and to other larger and subsequent investments (Barry, 1994).

There is a large body of literature that investigate factors that influence tourism development, and ask why some tourism areas develop more than others (Raina & Agarwal, 2004). Likewise, a focus is put specifically on the less developed world and by arising many assumptions about the role of tourism in development and, in particular, highlighting the dilemmas faced by destinations seeking to achieve development through tourism (Huybers, 2007; Telfer & Sharpley, 2008). Some authors even endeavor to a critical approach within a multi-disciplinary framework to relook at the complex phenomenon of tourism development (Babu et al, 2008; Ramos & Jimènez, 2008).

Furthermore, some authors underscore the significant opportunity for product development as a means to rural diversification (Bessière, 1998). Others examine the contemporary issues and reasons for tourism

development as a strategy for urban revitalization (Pearce & Butler, 2002) as well as for providing the basis for a better informed integration of tourism in regional development strategies (Sharma, 2004). Moreover, some discussions are towards various policy innovations as activities by regions in terms of tourism development considering continuous growth within the sector (Giaoutzi & Nijkamp, 2006). Additionally, as tourism and regional development are closely linked, regions and local authorities play a key role in the formulation of policy and the organization and development of tourism (Constantin, 2000).

3. SNAPSHOT ON ACCESS TO FINANCIAL SERVICES IN MACEDONIA

Financial services are crucial for growth potential of tourism entities, which contribute to tourism and overall development of the country. Yet, the affordability and access to finance in Macedonia is rather a slow-developing issue. Table 1 poses an indicator for access to financial services in the past several years, based on domestic credit provided for privately owned enterprises, in selected countries. It is noticeable that despite the improvement in the availability of domestic credits, the growth is extremely modest and by far lowest comparing to some countries in the closest region.

Table 1. Indicator for access to finance by domestic credit (% of GDP), 2010-2012

Country	2010	2011	2012
Croatia	69.3	70.8	68.0
Serbia	53.2	51.0	53.9
Slovenia	94.4	90.0	87.1
Macedonia	*44.5*	*45.1*	*47.3*

Source: World Bank, (World Development Indicators).

A positive approach may be seen in the analysis of the Credit Depth of Information Index (CDII) which measures the rules affecting the scope, accessibility and quality of credit information available by public of private credit registries. Table 2 presents that the availability in Macedonia is rather highly ranked comparing to the selected countries from the closest region. Namely, Macedonia has the highest rank in

2011 and 2012 pointing to improved availability of credit information.

Table 2. CDI index in selected countries, 2010-2012

Country	2010	2011	2012
Croatia	4	5	5
Serbia	5	5	5
Slovenia	4	4	4
Macedonia	*4*	*6*	*6*

Source: World Bank. (World Development Indicators).

The access to financial services in Macedonia has been already evaluated by pool of national experts (Table 3). It is interesting to conclude that despite the lower average score comparing to Slovenia and even when compared to Croatia, still many activities need to be improved in terms of perception of government subsidies, business angels, venture capital, initial public offerings (IPOs), etc.

Table 3. National experts' attitude on access to finance in selected countries, (1-5 mark)

Item	Croatia	Slovenia	*Macedonia*
Sufficient equity-based funding	2.18	2.28	*2.11*
Sufficient debt funding	2.58	2.33	*2.86*
Sufficient government subsidies	2.73	2.89	*2.61*
Sufficient funding from private individuals	1.82	2.26	*2.12*
Sufficient venture capitalist's funding	1.8	2.37	*1.53*
Sufficient funding from IPOs	1.78	1.66	*1.64*
Average	2.15	2.30	*2.15*

Source: GEM. (2012)

Upon the presented data, one may note that the firms' growth is mostly based on self-financing. In this line, two out of five firms state that they do not have debt, and nearly three out of five firms prefer equity reserves or new own equity (OEM, 2013:32).

4. TOURISM IN KRUSEVO – REGIONAL AND LOCAL ASPECTS

Krusevo is a municipality located in the south-west part of Macedonia within the Pelagonia Region by covering 191 km^2 surface and 9,684 population. One-third of the population is a working age, out of which only 1,848 are employed. Krusevo encompasses only 4.1% of the surface of the Pelagonia region and 4.2% of total population of Pelagonia region with a density of 50.7 inhabitants/km2.

The regional context includes data specifics for Pelagonia region. This region has 3,322 rooms, which is 12.4% of total rooms in Macedonia, and 10,001 beds representing 14.2% of all beds at national level. In 2013, 70,312 tourists visited the region, which represents 10% of total tourists visiting Macedonia. Almost three-quarters of it (49,635) are domestic tourists, thus representing 16.4% of domestic tourists visiting Macedonia. Only one-quarter of the tourists that visited this region are foreign tourists (20,677), which is only 5.2% of total foreigners at national level. In 2013, the region had 162,752 registered overnights, representing 7.5% of Macedonia's total overnights. In this line, 112,637 are overnights by domestic tourists, which is 8.8% of national tourism market. The foreign visitors have 50,115 registered overnights, which is only 5.7% of national tourism market. The average length of stay in Pelagonia region is 2.3 days for all tourists (lower than Macedonia - 3.1 day), whereas, the domestic tourists stay the same as foreigners - 2.3 days (State Statistical Office, 2014).

Based on tourism data, Krusevo has strong and dominant position in the regional frames, only in terms of domestic tourists, who are almost ten times more compared to the foreigners. The destination encompasses nearly half of total tourist arrivals coming to Pelagonia region (55.1%), whereas 74.1% of total domestic arrivals (36,799) and only 9.5% of total foreign arrivals (1,969). In the same line, the destination encompasses half of total nights spent in the region (54.9%), whereas 72.1% are overnights of

domestic tourists (81,184) and 16.3% are overnights of foreign tourists (8,147). However, one must note that the above noted figures do not present the real picture of tourism statistics. Namely, the problems are located within the private accommodation facilities where it is often a case when the guests are not registered, or the guests are registered, but their overnight is not registered, or even the worst scenario when the room-renters are not registered as official tourism subject within the local tourism market. Therefore, a large part of more than 200 private accommodation facilities with approximately 1,300 beds is in a process of categorization. The situation is clear with the hotel accommodation capacities, where within three hotels, the destination encounters 422 beds, and additional 150 beds in the Youth dormitory "Sula Mina". The food and beverage capacities have approximately 800 seats.

Interesting remarks may be driven in term of the average length of stay in Krusevo. In this line, total tourists who visit the destination stay in average 2.3 days, which is exactly as the average of Pelagonia region. Yet, one must underline notable differences in the length of stay among domestic and foreign tourists. Namely, domestic tourists stay in average 2.2 days (the same as the average of the region). This is almost two times lower compared to the average of foreign tourists who stay 4.1 days (higher than the region average and the national average as well) (State Statistical Office, 2014).

5. METHODOLOGY

The study involved a field survey conducted in July 2014, by applying a self-administered questionnaire which was distributed among the managers/owner and employees in travel agencies and service facilities (accommodation facilities as hotels, motels and private villas, as well as catering facilities as restaurants and taverns). The respondents were well informed about the aims of the survey ahead of time in order to avoid any attempt to manipulate the survey process and possibly bias the results. A total of 170 questionnaires were distributed in Krusevo, out of which 113 were usable (the rest were incomplete), yielding an overall response rate of 66.5%.

As in Getz (1992), the survey sample was selected based on the assumption that the respondents were

tourism-knowledgeable and engaged in tourism process at the local or regional level. Generally speaking, respondents were asked to determine, on an ordinal scale, the destination's level of tourism development by assessing the issue of access to finance. In this line, the respondents were asked to choose between the options of "not present," "present in low/medium/high intensity," and "I do not know". The intention was to evaluate and identify potential obstacles and limits for further tourism development of the destination. Due to lack of standardization, limited reliability, and scarce measurement, simple tests were applied by processing with the SPSS.

6. ANALYSIS, RESULTS AND DISCUSSION

This section presents the key findings upon the summarized survey results (Fig. 1), which give an in-depth conclusions concerning the access to finance issue. It is visible that the limitation of the access to finance presents enormous destructive symptom for a slow-down in the supply side when referring tourism development.
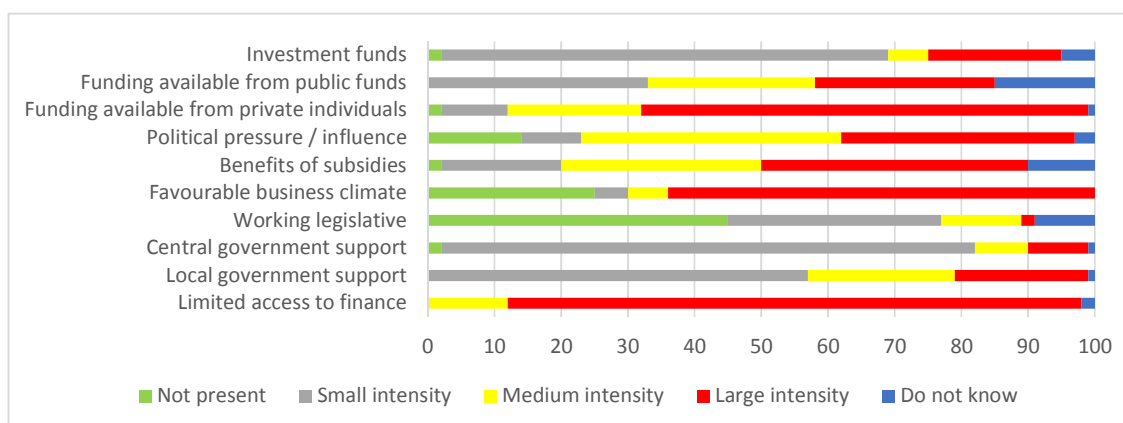
Figure 1. Summarized survey results

The following indicators were most commonly selected, with between 70% and 98% of respondents denoting presence at a medium to high level of intensity:

1) limited access to finance; 2) funding available from private individuals; 3) favorable business climate; 4) political pressure / influence; and 5) benefits of subsidies. Four-fifths of respondents identified the

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'local government support' as being of medium significance. The results also reflected significant variation in respondents' attitudes toward the indicators regarding the 'investment funds', 'funding available from public funds', as well as the 'central government support', which most probably stems from different understandings of the issues. Nonetheless, it is interesting to note that the 'working legislative' as significant factor for sustainable tourism development was generally indicated as "not present" by large number of respondents, which does not, however, detract from the importance of being a factor that may profoundly affect entrepreneurial development of tourism entities.

7. CONCLUSION

Furthermore, the overall conclusion is that Krusevo, despite the identified potentials and the current achievements of tourism development, needs to undertake some strategic long-term covered interventions particularly in the line of supporting and enhancing the access to finance of tourism enterprises. It is detected that the interventions in this manner may address tourism market players, employees in tourism in general, as well as the local population. Namely, all assessed indicators can be understood as possible symptoms, to varying degrees, of a potential slow-down in the development stage or the onset of decline in further tourism development in Krusevo.

The research supported already known statement that the access to finance is always the top problem for doing business in Macedonia. Along with the unqualified workforce (12.5%), inefficient administrative procedure (11.4%), the limited access to finance (17.1%) is stated as the most profound limiting factors for creating and supporting favorable entrepreneurship in Macedonia (WEF, 2012). Furthermore, the paper argues necessity of applying joined efforts of all key-players, i.e. the Government, the business sector as well as the civil society, to contribute in creating competitive economy as a precondition for tourism development.

Supporting and sustaining the current tourism development of Krusevo requires government intervention in a number of ways, particularly by the government should develop a comprehensive program for the

development of entrepreneurship which will provide innovative financing for start-up businesses, including seed funding. The financial support and advisory services together, should be an integral part of the agency business support that will maintain close cooperation with representatives of entrepreneurial organizations, banks and NGOs. Helping businesses should be performed significantly faster and cheaper to break down existing stereotypes about failure. Furthermore, the private sector for the development of businesses should continue to promote and coordinate with key institutions such as the Employment Agency, the Ministry of Economy, etc.

This article underscores the importance of continuous, systematic analysis of tourism sector as a factor to be considered by all actors responsible for creating development strategies in Macedonia. This research may be enhanced by broadening it with additional significant indicators to better assess the destination's tourism development. The research may be improved by expanding the number of indicators that are relevant to tourism development, as well as by employing multiple expert models and entrepreneurial approaches. Yet, besides the limitations of the scope of the research, this article poses relevant conclusions upon which serious measures and activities may be initiated for supporting tourism development in Macedonia.

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MARKETING MANAGEMENT IS A TRUST WORTHY PARADIGM

OF CORPORATE BRANDING

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ABSTRACT:

Management is always the finest art to drive a series of Manpower through all the best possible resources just according to particular rules and regulations to promote and enrich the corporate endeavor within a short period of time. As per this perception Marketing Management is one of the very promising ingredients for popularizing the organizational potentials into the Global market shortly. Marketing Management is a significant business paradigm to highlight the realistic implementation of Marketing art and the destined Marketing activities. On the other hand it is a great activity and function of planning, leading, motivating, inspiring and promoting the various sight of an Organization. Furthermore it is a great art of satisfying customers as a hole.

KEY WORDS:

  A. Global Marketing Activities, B. Marketing art for promotions, C. Comprehensive relation with Corporate Branding.

INTRODUCTION:

Successful marketing concept means selling the entire finest potential of an organization. So that it shall be really conducive for the market to understand that, what does that very organization do and how does it progress within a short while? In the same light both psychological and physical factors are equally highlighted of Marketing Management to let their consumer know that, how significant that organization is and how that is related to huge corporate branding and moreover how magnificently that very brand does draw the best attention and assurance from the customer to enhance the requisite business volume.

FINDINGS:

Marketing Management is having an essential role to bring the most endearing quality and all the clients together. Because this very strategy does attract the corporate branding and it does emphasis up on the core need of any client and the great availability of all the best possible resources.

REFERENCE: 1 (www.emeraldinsight.com)

Title: The use of Marketing Concepts in Library Services: A literature review.

Author: Emmarouel Garoufallou(Department of Library Science and Information systems in Alexander Technological Educational Institute of Thessaloniki, Greece).

ABSTRACT:

PURPOSE: "marketing supports the reaching of organizational goals by focusing on the identification and satisfaction of customer's need. Thus it can also contribute considerably in achieving the objectives of non-profit organizations such as Libraries. The purpose of this paper is to provide an overview of the literature or the incorporation of Marketing notions and the implementations of marketing techniques in Library Management. It reviews definitions, present different opposing views, marketing issues. Social media and web 2.0 and opinions on the adoption of Marketing in a non-profit organization environment and examines different successful examples of Marketing implementation, concentrating on the gains resulting from such a move".

MARKETING OBJECTIVES:

It is one of the noted parts in an organizational context. That signifies the Marketing objectives, which consists of both short term and long term. It focuses the value of an organization.

- **Co-ordination:** It denotes the harmonious effect of any organizational activities, which is very relevant for a significant movement like product planning, branding and product development etc.

- **Planning:** It is really important to design the entire Marketing structure within a while. If the planning are good then any marketing proposition can be successful and advantageous for the entire Marketing segment.

- **Direction:** Any Organization should have a proper direction. So that, it shall be absolutely conducive to reach the organizational goal through all the best Marketing amenities.

- **Control:** It signifies the effectiveness for a successful Marketing plan to be properly implemented. Standard evaluation is always measured correctly to find out the real organizational matrix in deed.

CORPORATE BRANDING:

Corporate Branding is the most vital key of symbiotic organizational progress in all the regards. It is a great determinant to highlight the name of a company. It is basically used for corporate brand equity and a huge recognition in deed. Without this brand organization cannot move properly and cannot have the requisite popularity as a hole. It definitely evaluates the products and services and on the contrary corporate identity and culture. Corporate Branding I not limited for a specific company name but for company logo, tagline, punch line and the advertising strategy as well.

The brand should be very significant and very easy to remember. Moreover it should be

very attractive for the customers. So that, it is very encouraging for the organization to familiarize the brand loyalty in all the regards.

Corporate Branding is having the potential to make a product very successful. If the brand image is good then there are huge possibilities to enhance the organizational goodwill.

BRANDING STRATEGY:

A successful branding strategy helps the product to be really established in the markets with the great advantages. So these strategies are really identical to establish a very nice image of the products and the organization as well.

- **Iconic Brand:** It is very useful to develop the self confidence of customers.

- **Attitude Brand:** It is a great determinant to create an absolute image and the largest feeling of a product.

- **No Brand Branding:** The product is made unorthodox through the absence of this branding.

- **Derived Branding:** The destined component of any product is confident enough to be drastically furnished into the Market through the brand loyalty.

REFERENCE: 2 (www.ajbmr.com)

The effectiveness of Corporate Branding strategy in multi-business companies:

Masume Hosseinzaden Spanri:

Faculty Member (Business Management)

Alzahra University, Iran. (September-2011)

"There are various decisions to be made that are complex in nature deeply affect the SBUS performance and their core directions are strategically important. Strategic decisions, which are fundamental and developmental decisions as a part of the strategy process. (Eisenhardt and Zbaracki, 1992) are same choices having chain consequences at the corporation casually, whose involvement level must be carefully controlled by corporate managers. They are difficult to define and also to access in terms of performance. They are inter connect with other decisions in the corporation and have high ambiguity and uncertainty. (Wilson,2003).

The corporate brand is a valuable asset that encompasses the vision, core values, image and actions of the corporations. The corporate brand increases its profitability and sales reduce its costs and create a unique position in the market place, if it is based on a well-run promotion campaign following on effective corporate branding strategy (Hatch and Schultz, 2001: Aaker, 2004). Consequently, one crucial decision in multibusiness corporations should access weather the selected strategy effectively meets the intended outcome".

PROSPECT OF CORPORATE BRANDING

As per American Marketing Association (AMA) brand is itself an image, concept and name to establish a product in a different die mention. It is not about to reach our target market and to enhance the business, but it is about to have best business prospect ever and to move for solution.

A. Objective of a good brand:

- Conveys the impressive message.

- Attracts the customer's attention.

- Changes the customer's desire

- Enhances the business popularity

- Gains the brand loyalty.

It is very true that, customers do realize the essence of brand and they do convey an astounding conception about the product. So it is really very important to make an unbreakable image to the customer's community and to enhance the significant business fusion.

CORPORATE SOCIAL RESPONSIBILITY

CSR is a very essential more and a decision maker for any customer to purchase a product in a reasonable rate at the tough market condition. As per the modern scenario corporate responsibility and corporate reputation do lead the brand equity. Apart from that, CSR is a real motivator for brand leadership and skilled training to select a specific product and to decide the best branding strategy of the same. In that case any efficient community might be executed to find out the need of CSR and to innovate the most lucrative planning of customer orientation and to hold the great goodwill of the product in the market through a beautiful strategy in deed.

REFERENCE: 3 (www. brandchannel.com)

According to Rachel Simmons (Social Brand Capital: The Loyalty Nucleus of Corporate Social Responsibility)-

"A new era of social consciousness is evolving throughout the world. People are embracing a new level of commitment to one another and to the environment, not just to themselves. This spirit is creating a significant change among stake holders (Customers, Employees, Suppliers) who are looking to brand for defining their role within society and for a purchase to count for something more than just an acquisition.

Over the last 20 years, we have shifted from functionally centric brands to emotionally centric brands to value centric brands. Today brands must be inspirational in a socially

responsible way. It is no longer enough for brands to define themselves in terms of what they are: They must take a statement- environmentally, culturally and socially about what they want to be. The evaluation in the key attributes of leading car brands exemplifies this trend. We have gone from quality, value and safety (VOLVO) to design and personality (VOLKSWAGWEN Golf) to fuel efficiency friendly (Prius). Some drivers use their car as a visual declaration about their concerns for the environment. As a Toyota Prius and recently stated "Green is the new black".

CONCLUSION:

Brand is an encyclopedic image in the real organizational context to promote a product for the popularity, sustainability, celerity and elasticity of demand throughout the year and to win the cut throat competitive market   very strategically to entrench the new innovation and to survive as an astounding calendar year example as well.

REFERENCE:

- The use of Marketing concepts in Library Science: A Literature Review,

Author: Emmarouel Garoufallou(Department of Library Science and Information systems in Alexander Technological Educational Institute of Thessaloniki, Greece). 4-6 November, 2009.

- The effectiveness of Corporate Branding strategy in multi-business companies:

- Masume Hosseinzaden Spanri:

- Faculty Member (Business Management)

- Alzahra University, Iran. (September-2011)

- Rachel Simmons (Social Brand Capital: The Loyalty Nucleus of Corporate Social Responsibility)-

WEBSITE REFERENCE:
- **www.emeraldinsight.com**

- **www.ajbmr.com**

- **www. brandchannel.com**

IMPACT OF SERVICE AND FOOD QUALITY ON CUSTOMER SATISFACTION AMONG GENERATION Y FOR THE FAST FOOD RESTAURANT IN MALAYSIA

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Abstract

The drive of this study is to contribute to the literature of service and food quality significance in fast food restaurant industry of Malaysia. The study is carrying out from the viewpoint of fast food restaurant industry and the customers' satisfaction among generation Y in Malaysia. Three variables have been examined to demonstrate the significance of service quality and food quality on customer satisfaction. The outcomes ratify the importance of greater corresponding service and food standards in fast food restaurant industry.

For food quality factor, all respondents are agreed with statement. Findings from 1000 respondents of Generation Y showed that two factors significantly influenced customer satisfaction. This research would be valuable in the improvement of a more comprehensive model to simplify a better understanding of customers' satisfaction among generation Y on fast food restaurant in Malaysia; these findings would deliver a better comprehension of Malaysian customers' satisfaction and help design more effective

marketing strategies.

Key Words:

Service Quality, Food Quality, Customer Satisfaction, Fast Food Restaurant, Franchising, Generation Y, Malaysia.

INTRODUCTION

The main focus of this article is to observe the relationship of service and food quality that importance to fast food restaurant industry amongst generation Y studying adults in Malaysia. According to Teresa Sohoch (2012), the Generation Y is born from 1980 to 1996. Generation Y prefers flexible schedules and a better work - life balance. In addition, the Generation Y is motivated, achievement – oriented and confident.

Thus, increasing personal income and urbanization of Malaysian population has created changes in the customer lifestyle. Customers are demanding for more variety and quality of food they consumed and are increasingly exposed to western food cultures. Customer are also experiencing a busier pace of life and creating demand for more processed foods that are convenient to prepare rather than traditional cooking. These situations make the customers to choose the fast food product in the market.

  A fast food restaurant is characterized as quick services of franchise restaurant chain, which supplied the food quickly after ordering and minimal service offering for dining and takeout facilities. Fast food also refers to food that can be prepared and served quickly. Fast food restaurants usually have a walk up counter or drive-thru window where you order and pick up your food. Typically fast foods sold in a restaurant or store with preheated ingredients and serve to the customer in a packaged form for take away. Customers are generally price sensitive towards purchases of food but those from the middle to high income group are willing to pay more for the quality foods. According to Namita Jain (2010), fast food is often the default choice. Not only is it convenient and easy to grab, it's also tasty and cheap. And fast food joints also serve as great teenage hangout places. Fast food is also popular nowadays because it is cheap, fast, and tasty and advertisers make it seem healthy, so naturally it seems like a no brainer. Fast food restaurants are very popular because they serve filling foods that taste good and don't cost a lot of money.

However, fast food is usually cheap because it's often made with cheaper ingredients such as high fat meat, refined grains, and added sugar and fats, instead of nutritious foods such as lean meats, fresh fruits, and vegetables. Most fast food and restaurant chains offer free nutrition information online. Use a search engine to find the company's web page. There is usually a link to the nutrition section on the home page where you will find nutrition facts, including fat, cholesterol, sodium, protein, calories, and more. Many of these menus are now interactive as well, so you can preview your plate and modify it to be more nutritious. Take a look at this information to help you make healthier choices when eating out. If you

don't have time or access to a computer, many restaurants offer nutrition pamphlets in the restaurant or have a way of pointing out healthier options on their menus.

Based on the research conducted by ACNielsen Online Consumer Survey (2004) of fast food customers in Asia Pacific, Malaysia was ranked second place from the top 10 countries that are choosing fast food at least once a week with 59% after Hong Kong 61%. This percentage is counted among of the 10 countries like Philippines, Singapore, Thailand, China, India, U.S, Australia and New Zealand. According to this study, it was found that there are five conditions that cause customers to choose the fast food:

1. The increase number of young people who did not like traditional way of cooking and accept the concept of fast food.
2. More affluent life from the environment.
3. Changing more lifestyle by eating out and has become a habit when have free time.
4. Changes to freedom and the role of women most of them work.
5. The change in family structure that has the force of high expenditure on food.

Research Questions

Based on the research background and to achieve the research objectives, this study seeks to address the following research questions   :

What is the relationship between service quality and customer satisfaction?
What is the relationship between food quality and customer satisfaction ?

Research Objectives

The objectives of this study are :
To describe the relationship between service quality and customer satisaction .
To determine the relationship between food quality and customer satisfaction .

Significance of the study

This research will show and expose on factors affecting consumer satisfaction on purchasing fast food and find out whether this factor are really affecting the consumer satisfaction on purchasing fast food. Franchise fast food right now is one of the good business opportunity and very competitive business in the global market. So, these businesses can be comparative between franchise companies with others company. Based on the results of this study is showed that the study should be done and it is consistent with the purpose of this study to understand about customers satisfaction of a society on the process of making the decision to choose a product or service.

2.0 THE REVIEW OF LITERATURE

Definition of Term

Some important terms appearing repeatedly in this study are briefly defined as follows:

Purchase decision process by which consumers identify their needs, collect information, evaluate alternatives and make the purchase decision. These actions are determined by psychological and economic factors, and are influenced by environmental factors such as cultural, group, and social values.

Franchising may be defined as the business opportunity by which the owner (producer or distributor) of a service or a trademarked product grants exclusive right to an individual for local distributor and sale of the service or product, and in return receives a payment or royalty and conformance to quality standards.

Fast food means processed food prepared quickly by service providers and served by customer self-service. Fast food refers to food that can be prepared and served quickly. Fast food restaurants usually have a walk up counter or drive-thru window where you order and pick up your food.

2.1   Customer Satisfaction

Customer satisfaction is the state the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. The achievement of customer satisfaction leads to company loyalty and product repurchase. Customer satisfaction was perceived differently by a number of the scholars in their previous studies, and it has been evaluate in indifference manners. Research efforts on customer satisfaction can be categorized into two perspectives. Yi (1990) divided customer's satisfaction into reluctant satisfaction obtained from consumer experience and interim satisfaction in the middle of the evaluation process. Customer satisfaction as the function of expectations met and perception of discrepancies, suggesting a discrepancy paradigm. Customer satisfaction can be defined as a psychological response caused by experiences associated with the purchase of products or services.

2.2 Fast Foods

There is probably no universally accepted definition for the term "fast foods". Used loosely and in a wide sense, it can be taken to mean meals that are served on demand and made available in a short time. The fast pace of life today, combined with easy access to fast food and high exposure to fast food advertising and marketing, means fast foods are often chosen over foods that are prepared at home. Fast foods are often higher in fat, sugar and calories. Defining fast food or take-away food outlets can be difficult. Much of the research and policy in this area only considers individual foods. The 'allowable proportion of unhealthy foods on a menu' for example, has not been defined and today traditional fast food outlets are broadening their menu to include healthy eating options. However, there is a growing interest in the use of zoning to restrict fast-food outlets to protect and promote community health. Ministry of Health of

Malaysia has defined "fast foods" as "foods that are prepared in large quantities, following standardized procedures and served rapidly in restaurants commonly known as fast food restaurants, which usually advertise their services through the electronic and print media".

2.3 Service Quality

Service quality is the most researched area of services marketing (Fisk, et al., 1993). The concept was investigated in an extensive series of focus group interviews conducted by Parasuraman, et al. (1985). They conclude that service quality is founded on a comparison between what the customer feels should be offered and what is provided. Service quality often makes the difference between a successful and unsuccessful business. In fact, service quality has become the great differentiator, the most powerful competitive weapon and the most service organization possesses in business. Quality is defined as "conformance to specifications", but this phrase sometimes can be misleading. Quality as conformance to customer specification is the customers" definition of quality which is important to business to consider and deliver.

Researchers such as Garvin (1983), Holbrook and Cofman (1985) and Zeithaml (1996) have emphasized the difference between the objective and percieved quality. For example, Holbrook and Cofman (1985), noted that consumera do not use the term of quality in the same way as researchers and marketers, who define it conceptually. The conceptual meaning distinguishes between mechanistics and humanistic quality. Mechanistic (quality) involves an objective aspect or feature of thing or event while humanistic (quality) involves the subjective response of people to object and is therefore a highly relativistic phenomenon that differs between judges (Holbrook and Cofman, 1985).

3.0 THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY

3.1 Theoretical Framework
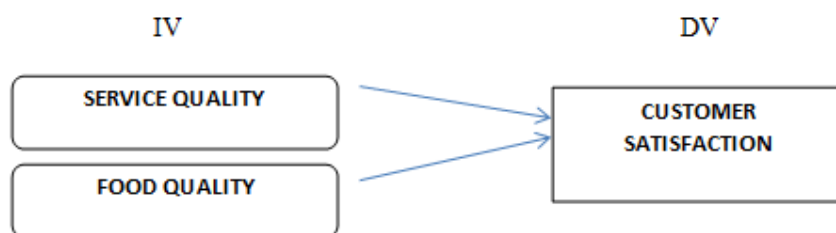
3.2 Research Methodology

This study is based on responses from 1,000 undergraduates at 20 of Malaysia institutions and universities. This research is quantitative, that is, according to Hopkins (2000) is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. On the other hand, the qualitative research is broadly based on the ideals of positivism

where is assumes that „reality" is out there waiting to be discovered and that universal laws of nature operate according to rational, logical reasoning. In the research, all of responses or reply was limited to rating system on a five-point „Likert Scale" to measure the degree of factors affecting customer satisfaction on purchasing fast food. A total of 1,500 questionnaires were distributed among randomly the randomly selected respondents. However only 1,000 questionnaires were collected back, which made up 95% of total questionnaires distributed were satisfactorily completed and tested by using the Statistical Package for Social Sciences (SPSS) software. The questionnaire was divided into three parts. All the questions were designed to be close-ended for easy analysis of the feedback. The question consists of three sections of questions. There are section A, section B and section C, in the questionnaires. Section A, measurement used is nominal scale which is split data into mutual exclusive and collectively exhausted categories. It is designed to gather respondent demographic details such as gender, age, come from, course taking in Malaysia while section B is about factors of customer satisfaction in choosing fast food which respondents need to circle the appropriate answers provided. Section C measurement used is ordinal scale, the respondents" selection which measure two major items. The purpose of the questionnaires is to obtain the major information which is described in part C such as food quality, and restaurant service. Scale that will be used is categorical scale in section C, which the respondents is asked to tick one answer from question 1 to question 21 at the space provided. The respondents were asked to indicate their degree of agreement or disagreement on several features, a five point lanker – type scale will be used with 1 = "strongly disagree" to 5 = "strongly agree". The populations of this study are among student that refers to generation Y those studies in local universities in Malaysia.

4.0 FINDINGS

4.1 Food Quality
Figure 4.1 The food is served hot and fresh
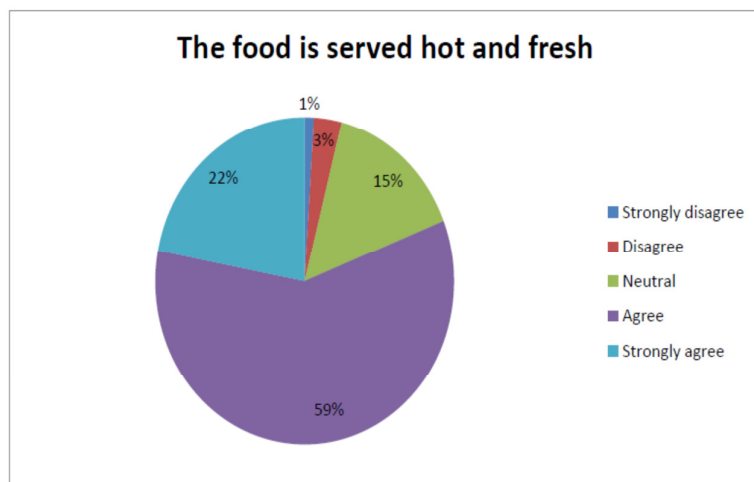
Figure 4.1 summarized the aspect of quality concern on the food is served hot and fresh. Total of 82% agreed that the food is served hot and fresh. Mean for this is 3.98 with standard deviation 0.765.

Figure 4.2 The menu has a good variety of items
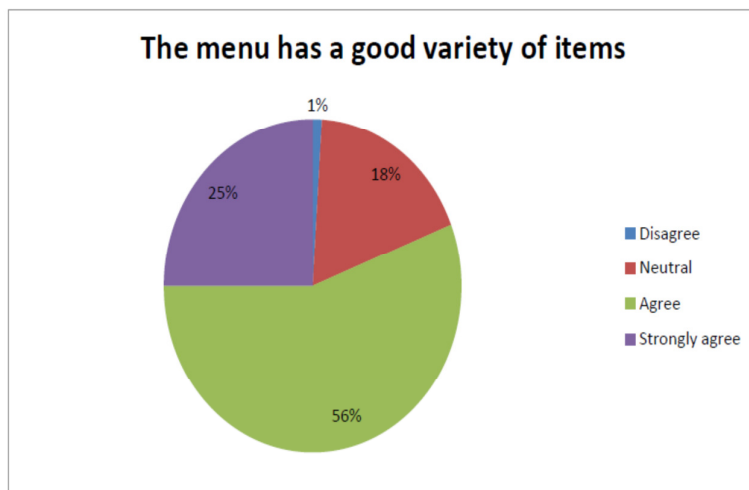
The figure above show the aspect of food quality of the menu has a good variety of items. From the table, 81% was agreed with this report tracked by 18% said it is neutral. The means of this question is 4.05 with standard deviation is 0.687.

Figure 4.3 The service is excellent
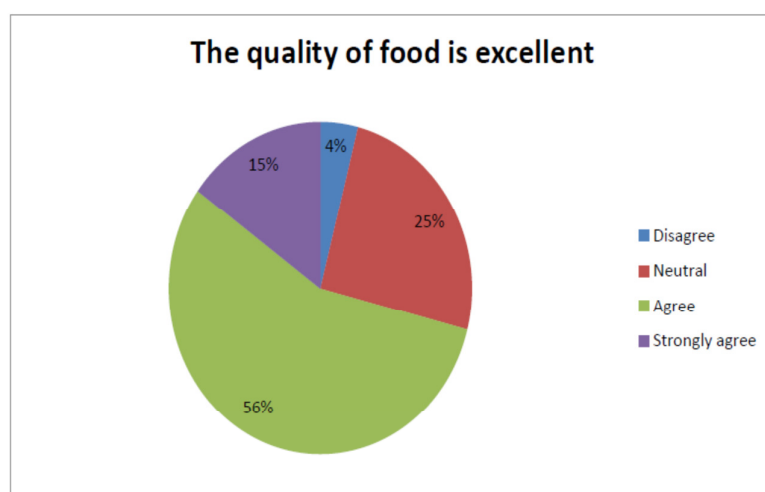
The figure summarized the aspect of food quality whether the quality of food is excellent. 71% agreed that quality of food is excellent. 25% said it is neutral and 4% was disagreed with this statement. Mean of

the quality of food is excellent 3.82 and standard deviation is 0.730.

Figure 4.4 The food is tasty and flavourful
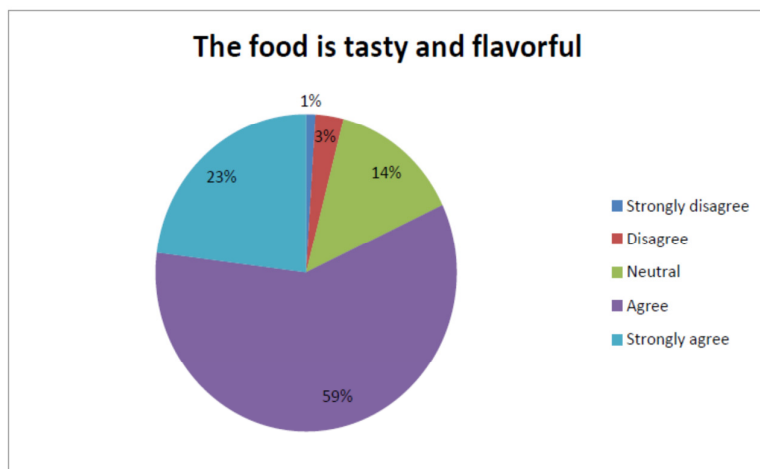
The figure brief on the food is tasty and flavorful. 82% of respondents agreed with this statement and 1400 respondents (14%) with neutral. Only 400 respondents (4%) not agreed with this statement. The means of this statement is 4.20 and standard deviation is 0.765.

Figure 4.5 Fast food restaurant encourage people to eat their food
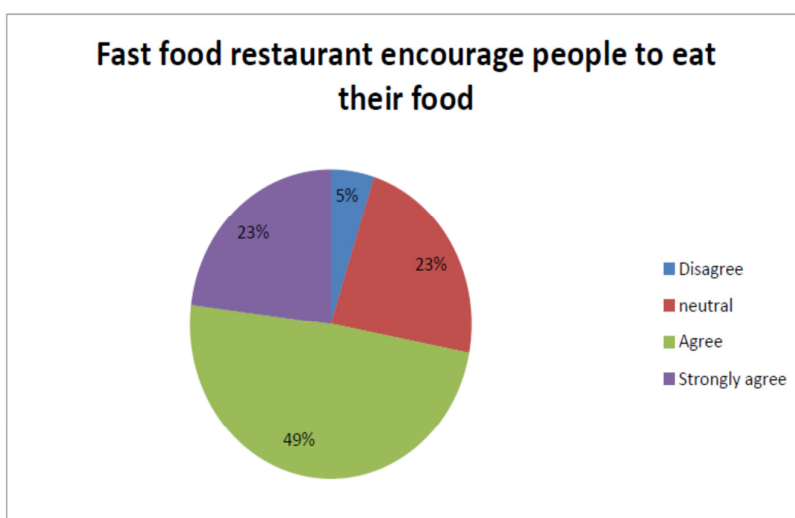
The figure shows the result fast food restaurants encourage people to eat their food. 720 respondents (72%) was agreed with this statement, 230 respondents (23%) think that is neutral and only 50 respondent out of 1000 disagreed with this statement. The means of total respondents is 3.90 with standard deviation

is 0.810.

Summary of Dimension in Food Quality

As a conclusion, students observed the fast food restaurants' food quality based on the five dimensions which are the food is served hot and fresh (Mean 3.98 with standard deviation 0.765), the menu has a good variety of items (Mean 4.05 with standard deviation is 0.687), excellent service (M = 3.82; SD = 0.730), food is tasty and flavourful, the means of this statement is 4.20 and standard deviation is 0.765 and Fast food restaurant encourage people to eat their food dimensions (M = 3.90; SD = 0.810).   Tasty and flavourful of food was the most important element in how a customer perceived the food quality in relative to other dimensions. In addition, all the dimensions had standard deviations lower than 1.000 which means the students' perception of food quality towards these five dimensions was not widely scattered. However, the overall average mean score of 3.99 showed that the overall qualities provided by fast food restaurant in Malaysia are favourably perceived by their customers among generation Y.

4.2 Service Quality

Figure 4.6 Order was correct and complete
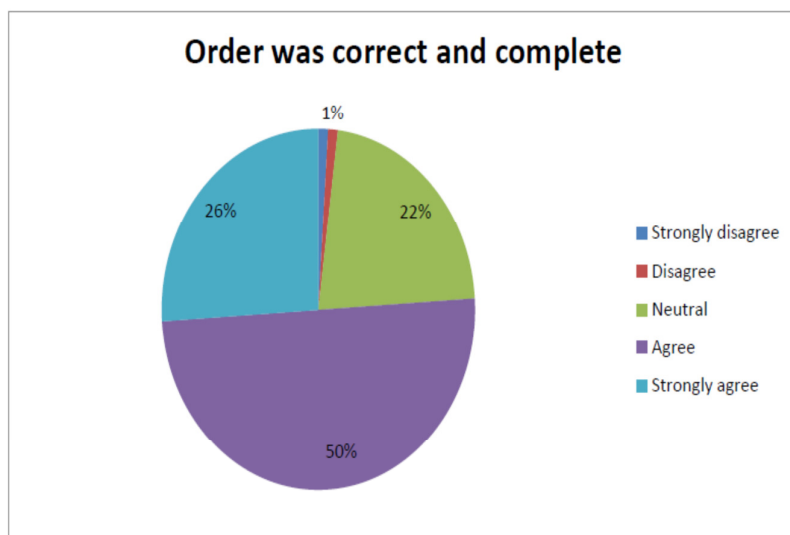
The figure above express the outcomes of restaurant service statement whether food order was correct and complete. It is about 760 respondents (76%) was agreed that the food order was correct and complete. 220 respondents (22%) is neutral reaction and 20 respondents (2%) was disagreed with this statement. Means of total respondents is 3.99 with standard deviation is 0.785.

Figure 4.7 I was served promptly
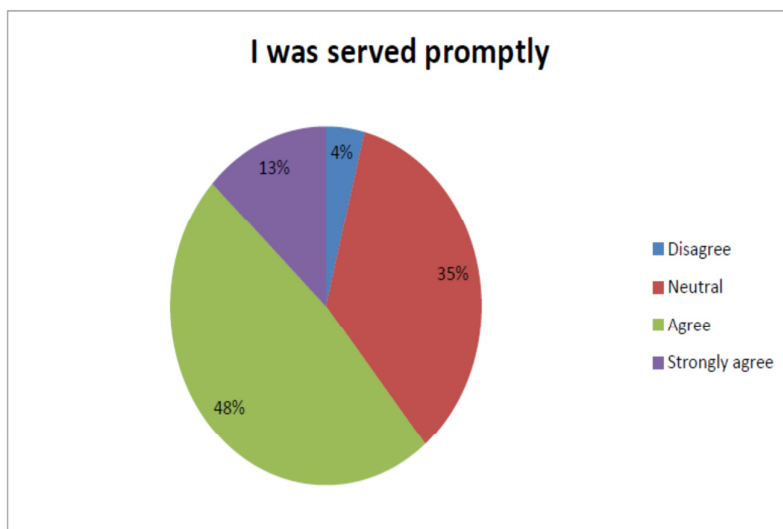
The figure above shows whether restaurant served promptly their service. 610 out of 1000 respondents (61%) was agreed that they was served promptly. Next, 350 respondents (35%) response it is neutral and 40 respondents disagreed with this statement. The means of all is 3.70 with standard deviation is 0.745.

Figure 4.8 Employees are patient when taking my order
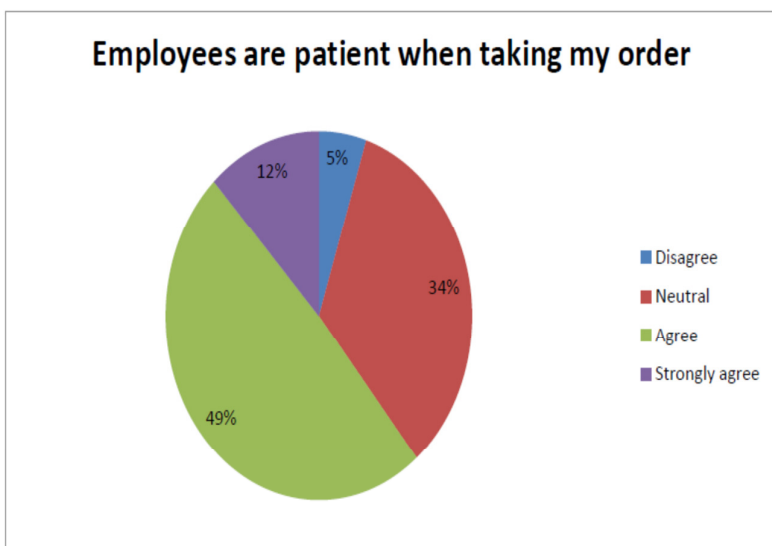
The figure shows the results of statement employees are patient when taking order. 610 respondents (61%) was agreed that they received good treatment from employee. 340 respondents (34%) said it is neutral and only 50 respondents (5%) was disagreed with this statement. The means of this result is 3.68 and the standard deviation is 0.750.

Figure 4.9 Availability of sauces, utensils, napkins, etc. was good
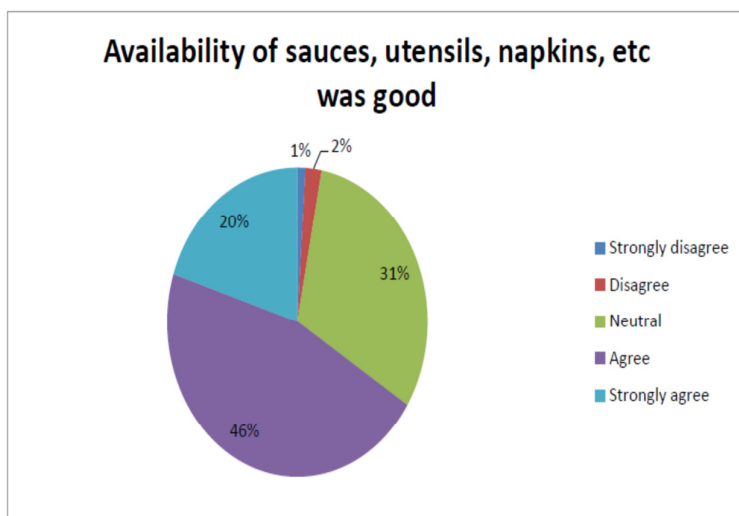
The above figure summarized on statement availability of sauces, utensils, napkins, etc was good. 660 out of 1000 respondents (66%) agreed with this service provided. 310 respondents(31%) just saying it is neutral and 30 respondents (3%) disagreed. The total means of this statement is 3.82 and the standard deviation is 0.809.

Figure 4.10 The service is excellent
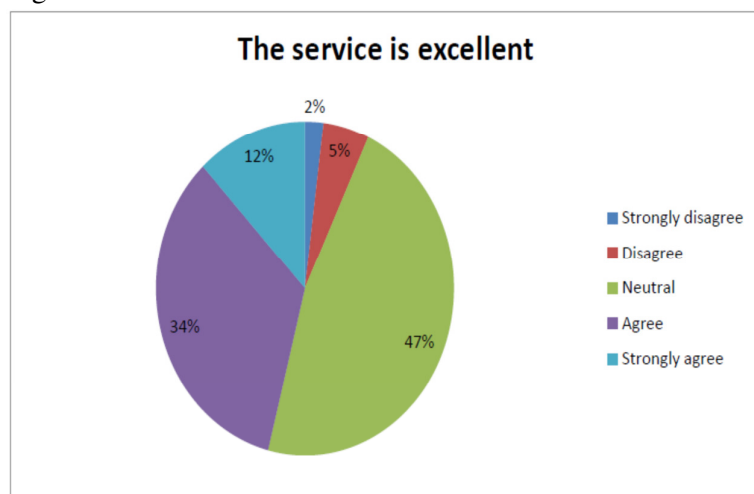
The figure 4.10 above shows the results whether the service is excellent. Based on the table 470 out of 1000 respondents (47%) thick for neutral, otherwise 460 respondents (46%) agreed with that fast food they have been visit provided excellent service. Respondents disagreed with this statement is 70 (7%). Means for this statement question is 3.49 and standard deviation is 0.847.

Summary of Dimension in Service Quality
As a conclusion, students observed the fast food restaurants' food quality based on the five dimensions which are the order was correct and complete (Mean is 3.99 with standard deviation is 0.785), served

promptly by the employees (Means is 3.70 with standard deviation 0.745), employees are patient when taking order (M = 3.68; SD = 0.750), Availability of sauces, utensils, napkins, etc., The total means of this statement is 3.82 and the standard deviation is 0.809 and service dimensions (M = 3.49; SD = 0.847). Taking order was correct and complete was the most important element in how a customer perceived the service quality in relation to other dimensions. In addition, the overall average mean score of 3.736 showed that the overall services are favourably.

4.3 Descriptive statistics and correlations

Table 1. Descriptive statistics and correlations

		FQ	SQ	CS
Pearson Correlation	FQ	1.000	.554	.746
	SQ	.554	1.000	.635
	CS	.746	.635	1.000
Sig. (1-tailed)	FQ	.	.000	.000
	SQ	.000	.	.000
	CS	.000	.000	.

Table 1 shows the results of the Pearson correlation coefficient analysis on the associations between food quality and service quality on customer satisfaction. At the 0.01 significant levels, customers' satisfaction according to food quality had the strongest correlation with customer satisfaction where its "r" value was 0.746.   Although service quality showed it had the lowest correlation but this is significant because of the p value was smaller than 0.01.

4.4 Multiple regression results on dependent variable

Table 2. Multiple regression results on dependent variable

| Model | | Standardized Coefficients | | | | |
		Beta	t	Sig.	R^2	VIF
1	(Constant)		1.988	.050		
	FQ	.728	2.122	.000	.626	1.596
	SQ	.675	5.971	.000	.576	1.736

Multiple linear regressions were used to recognize the most main variable that influenced the customers' satisfaction of fast food restaurants. The significant level of 0.01 was used. As seen in Table 2, food quality (Beta= 0.728, p = 0.000) was considered as a strong variable that significantly and positively influenced customer satisfaction among generation Y in fast food restaurants. The value of R^2 (0.626) implied that this model explained about 62.6% of the total variance in food quality. The independent variables included the two factors which were quality of food and quality of service. As shown in the table, all the two independent variables were positively and significantly affected on customer satisfaction. In overall, food quality was the key factor in deciding the customer satisfaction towards fast food restaurants in the context of Malaysian public university students.

5.0 DISCUSSION AND CONCLUSION

5.1 Discussion

The research finding according to the objectives of this study on factor affecting consumer satisfaction on purchasing fast food among universities's student.

5.2.1 Relationship between Demographic Characteristics and Customer Satisfaction

The result for this relationship is presented as follows:5.2.1.1 Age
Age limit has no relationship on customers" behavior on time of visit, number of members in a group people visiting the restaurant and amount of money spending to buy fast food. The way people live can determine by internal factors (personality, values, emotions and memory) and external factors (cultures, age, friends, family and subculture).

5.2.1.3 Origin
There is a relationship between consumer come from and customers" behavior in time of visit, amount of money spending on fast food and number of members in a group to visit. This finding support the understanding of differences among consumers in urban and suburban and the role of culture states that culture represents the common values, norms and behaviors of a particular group. Besides, culture is

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learned, shared, multidimensional and transmitted from one generation to the next generation. Understanding cultural differences is important in service marketing because of its effects on the ways that customers evaluate and use the services.

5.2.1.4 Education Level

There is no relationship between educstional level and customers" behavior in time spend, time of visit, amount of money spending on fast food and number of members in a group to visit. These findings conclude that education level influences what one can purchase by partially determining one"s income and occupation. It is also influences how one think, makes decisions and relates to other.

5.2.2 Relationship between Food Quality and Customer Satisfaction

There is a relationship between food quality and customer satisfaction in choosing to purchase fast food. This findings support with food quality of tasty and flavorful; and quality on food is served hot and fresh because on customer behavior by respondent's state that why they are choosing to buy fast food is because of it is quick and delicious.

5.2.3 Relationship between Service Quality and Customer Satisfaction

There is a relationship between services provide by fast food restaurant and customer satisfaction where customer almost agreed with food order was correct and complete. So, they were received excellent service also from menu on board was easy for them to read. It is relate to customer behaviour on the time that normally they buy or eating at fast food restaurant which is during lunch hour. Because of excellent service that restaurant provided customers are served in quickly time.

5.3 Factors Affecting

For food quality factor, all respondents are agreed with statement. Most of percentage that they agreed with all statement is above 50%, where the highest agreed by respondents is the food is served hot and fresh (82%). The next factor is restaurant service. Overall the respondents agreed with the service provided like 76% agreed that the food order was correct and complete. It shows that the service by fast food restaurant is good.

5.4 Recommendation

For further study on this topic, the researcher suggested that the study on factors affecting customer satisfaction on purchase fast food should be extended by comparing the results of this findings with the existing customer satisfaction studies by using the research conceptual behavior in term of frequency of re-visit at fast food restaurant.

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A STUDY ON THE RELATIONSHIP OF EMPLOYEE SATISFACTION VIZ-A-VIZ   ATTITUDE AND PERCEPTION OF THE EMPLOYEES TOWARDS THE ORGANIZATION

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Abstract – Researchers have tried to establish a relationship of employee satisfaction viz-a-viz with their attitude and perception about the organization. There were total 101 permanent employees and around 1000 contractual workers working in the plant. The scope of the research included employees across all levels including contractual workers. Out of the total strength of the sample taken were 40% respondents. The research was conduct in Uttar Pradesh. The research was made by the survey in accordance to the convenience of the employees. Therefore, the sample type is convenience sampling. Co-relation test was applied to see the relationship.

Introduction

Employee satisfaction is the terminology used to describe whether employees are happy and contented and fulfill their desires and needs at work. Many measures purport that employee satisfaction is a factor in employee motivation, employee goal achievement, and positive employee morale in the workplace. Employee satisfaction is a measure of how happy workers are with their job and working environment. Business performance are expected to increase as more satisfied employees will increase a company's

competitiveness, and they will be   better able to recognize opportunities and threats, and better leverage limited resources to maximize the company's profit.

Employee satisfaction survey provides a channel for employees to communicate their view on a wide range of issues in total confidence.Various variables responsible for employee satisfaction has been discussed such as Organization development factors, Job security factors, Work task factors, Policies of compensation and benefit factor and opportunities which give satisfaction to employees such as Promotion and career development.The employee satisfaction survey helps the companies to determine their employees think, and to identify employees needs and concerns so that improvement can be made and stronger teams can be formed.

Employee satisfaction involves not only efficient usage of human resources, but also preservation and securing vital company information. Satisfaction lowers fluctuation of employees, positively influences productivity indicators, and thus overall company output. Therefore it supports long-term stability and competitiveness. The problem with evaluating and interpreting gathered knowledge is that it can be greatly influenced by subjective evaluator criteria.

Factors contributing to employee satisfaction include treating employees with respect, providing regular employee recognition, empowering employees, offering above industry-average benefits and compensation, providing employee perks and company activities, and positive management within a success framework of goals, measurements, and expectations.

Other intangible benefits include the reinforcement of company goals and values, better internal and external communication, a positive working and social environment, an improved company image and increased employees loyalty.

Employee satisfaction is the term used to describe a situation when employees are satisfied and contented with his job and the office environment. Employee satisfaction refers to the employee's sense of well-being

within his or her work environment. It is the result of a combination of extrinsic rewards, such as remuneration and benefits, and intrinsic rewards, such as respect and appreciation. Positive changes in the HRM systems and the way in which managers and supervisors interact with staff on personnel issues can increase the level of employee satisfaction. While a high level of employee satisfaction cannot be absolutely tied to higher levels of retention, motivation and performance, a low level of employee satisfaction is a definite source of low levels of performance.

 Research indicates that employees' level of satisfaction with their work stems from how they perceive five components of their work environment:

1. Employees perceive they are being treated fairly

2. Employees understand what they are expected to do on the job

3. Employees feel they get adequate feedback on their performance

4. Employees feel their work is meaningful and valued by the organization/institution

5. Employees feel they have opportunities for career development
Researcher has taken the employees perception towards the organization and has tried to connect the satisfaction.

Importance of Employee Satisfaction

Employee Satisfaction is of utmost importance in any organisation be it small or large. Thinking that employee satisfaction is important only for the employee then it is not right. It is equally important for the organisation for which the employee is working as well. The following points will show the importance of employee satisfaction easily.

As businesses grow in size and revenue, they face the inevitable challenge of breakdowns in communication between departments and between managers and employees. The lack of consistent communication creates a "silo effect" between departments, and creates formidable stratification between managers and their team members. Typically, such organizations fall prey to a culture of bureaucratic top-down communication; while this worked in smaller companies (where much of this communication was face-to-face), today's organizations must discover ways to convert this one-way communication into a bidirectional channel for employees to provide their feedback to management.

• *In light of the organisation:*

1. It enhances employee retention and the company does not need to train employees repeatedly.

2. The overall productivity of the company is increased and it assists in achieving the goals of the company.

3. When employees are satisfied with their job they deal with customers in a better manner and thus customer satisfaction is achieved to great extent.

4. It helps the company in getting better services and products from its employees.

5. Money spent on training new candidates and recruitment of new candidates can be saved extensively.

• *In light of the employee:*

1. When the employee gets satisfactory services from the company initially, he tends to believe that same treatment would be offered in long run.

2. Employee would start taking interest in his work instead of worrying about other issues.

3. The employee starts feeling a sense of responsibility towards the organisation.

4. He deals with customers in a better way and builds strong relations with them.

5. They would try to produce better results in order to get appreciation from the company.

Factors Influencing Employee Satisfaction

Various factors exist in an organisation that contributes to area of employee satisfaction. Following are listed factors affecting employee satisfaction. They are:

• The brand name of the organisation is of utmost importance to the employees and it is considered when employee satisfaction is considered.

• The aims and objectives of the organisation where an employee works are likely to affect employee satisfaction.

• Salary and wage is one of the most important factors behind employee satisfaction. The salary should always be in accordance to the position of the employee in the company.

• Rewards and penalties are other important things that affect level of satisfaction of an employee in his job.

• The kind of treatment given by the supervisor to the employee largely determines his satisfaction level. It is always desired to treat employees in a good manner.

• Working methods of the organisation determines the satisfactory level of an employee. It is true that every organisation has its own working methods but some freedom should also be given to the employees.

• It is essential to check that the personality of the employee matches the type of job being allotted to him.

• Expectations of the employee should also be in accordance to the level of organisation in which he or she is working.

In order to execute well-informed business decisions, managers need more than a ledger of numbers to understand what is really taking place "on the front line." The employees who work day to day with the customers can provide invaluable feedback drawn upon first-hand experience. Encouraging bidirectional communications in this matter can create an organizational culture that breaks down silos and fosters teamwork between management and their staff.This type of employee-centric culture has an effect that extends beyond the internal sphere of an organization – it can actually affect a company's bottom line with a direct and noticeable impact on profits. Take, for instance, the average annual turnover rate in India. Depending on the industry, this can range from 15-40%.

With that in mind, consider also that it costs 10 times more to hire and train a new employee than it does to retain one. Furthermore, extensive research has shown that motivated and satisfied employees tend to contribute more in terms of organizational productivity and maintaining a commitment to customer satisfaction. Satisfaction is infectious – and it indeed permeates across the employee-customer boundary, where revenue and brand image are continuously at stake. This white paper will demonstrate the significance of employee feedback and how companies can successfully implement a program to positively

influence both organizational culture and ultimately bottom line profits.

Employee's Perception

Employee perception is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. Perception is not necessarily based on reality, but is merely a perspective from a particular individual's view of a situation. In dealing with the concept of organizational behaviour, perception becomes important because people's behaviour is based on their perception of what reality is, not on reality itself; the world as it is perceived is the world that is behaviourally important. Human nature can be very simple, yet very complex too. An understanding and appreciation of this is no pre-requisite to effective employee perception in the workplace and therefore effective management and leadership. There is a known fact that without perception, nothing can be done in an organization and for doing any task we need a perception which is accepted by all the employees in an organization. It is the key for the manager to make her team work and get the better output for the organization. The perception helps each and every individual in the organization to carry the things in different ways as the organization needs different perceptions to make successful results.

In employee relations, perception is as important as reality. What the employee perceives is generally what the employee believes and acts on. Employee perceptions are shaped by many factors, prominent among them organizational roles, supervisory styles, and communication styles. Employee perceptions cannot be ignored, even when they are known to be incorrect, because they are factual to the employees. Further, perceptions can be controlled to a considerable extent through effective supervision. The supervisor needs to become aware of the power of perception, learn what circumstances are likely to cause incorrect perceptions, learn how to manage employee perceptions to the extent possible, and always approach perception as the perceiver's reality.

Individuals' perceptions can be vastly different. These differences can be due to

various life experiences, levels of education, and personal factors such as attitudes, interests, and motives. Therefore, by definition, individuals' perceptions are neither right nor wrong.

In an organization, the individuals' occupations or positions can further influence these perceptions. For example, the persons in various employment categories may perceive the same process, such as safety, totally differently:

•Safety professionals

•Labour Relations

• Managers

• Supervisors

• Operations

•Employees

• Human Resources

Therefore, one of the major goals of a perception survey is to align the perception of safety along the same lines for all organizational members.

Attitude of the Employees

A predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation is called the attitude of the employees ,Attitude influences an individual's choice of action, and responses to challenges, incentives, and rewards (together called stimuli).

Four major components of attitude are:
 (1) Affective: emotions or feelings.
(2) Cognitive: belief or opinions held consciously.
(3) Cognitive: inclination for action.

(4) Evaluative: positive or negative response to stimuli.

A job attitude is a set of evaluations of one's job that constitute one's feelings toward, beliefs about, and attachment to one's job. Overall job attitude can be conceptualized in two ways. Either as affective job satisfaction, that constitutes a general or global subjective feeling about a job, or as a composite of objective cognitive assessments of specific job facets, such as pay, conditions, opportunities and other aspects of a particular job. Employees evaluate their advancement opportunities by observing their job, their occupation, and their employer.

Research demonstrates that interrelationships and complexities underlie what would seem to be the simply defined term job attitudes. The long history of research into job attitudes suggests there is no commonly agreed upon definition. There are both cognitive and affective aspects, which need not be in correspondence with each other. Job attitude should also not be confused with the broader term attitude, because attitude is defined as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor, whereas job attitude is a particular instance as an entity.[1] In the definition above, the term "job" involves one's current position, one's work or one's occupation, and one's employer as its entity. However, one's attitude towards his/her work does not necessarily have to be equal with one's attitudes towards his/her employer, and these two factors often diverge.

The Importance of Positive Work Attitude

People want to be around those who make them feel better about themselves. Employees with positive attitudes tend to be more productive employees because they always see the accompanying opportunity with every challenge. Things are seldom as bad as you think they are: Research shows that only eight percent of the things we worry about are worth being concerned about. People with positive work attitudes know this, therefore they do not waste time worrying, and they expend their energies on more positive

activities. There are several benefits to having a positive work attitude, and many ways to cultivate a positive work attitude.

LITERATURE REVIEW

Job satisfaction is the employee's general feeling about the job or the constellation of attitudes toward various aspects of the job. From this definition, it is clear that this attitude is affected by the nature of the job, which the employee performs, as well as by the work environment where s/he works. However, these factors are not the only source of job satisfaction. Specifically, the employee's individual characteristics are often a significant determinant of their job satisfaction.The aim of this paper is to analyse employees' job satisfaction with regard to the following individual characteristics: gender, age and education. Empirical research was conducted on a sample of 4,430 employees. The research instrument was a questionnaire. The collected data were analysed by the usual statistics methods, supported by the SPSS program.The results showed that there was a difference in job satisfaction between men and women. Namely, it was found that women were more satisfied at work than their male colleagues. Additionally, due to the employees' age, the differences in job satisfaction were also detected. Specifically, cyclic movement of job satisfaction was discovered. This means that in some periods of employees' life job satisfaction increased while in some period it fell, and in some it increased again. Furthermore, where the level of education was considered the results of this study showed the more educated employees were more satisfied at work. (Bakotic, Sep 2014).Research has shown that job satisfaction is determined by both cognitions about the job and affect at work. However, findings from basic and applied attitude research suggest that the extent to which attitudes are based on affective and cognitive information is contingent on stable individual differences, in particular need for affect. Based on current conceptualizations of job satisfaction as an attitude toward the job, we hypothesized that job satisfaction depends more on affect and less on cognitions, the higher a person's need for affect is. To test these hypotheses, two correlational studies (N = 194 university employees; N = 134 employees from various organizations) were conducted as well as an experimental study was conducted in which the salience of positive versus negative job cognitions was varied.

Results supported our hypotheses. We discuss theoretical and practical implications of these differences in affective and cognitive underpinnings of job satisfaction.

(Christian & Ziegler, Feb 2014)Turnaround process in an organization results in changes in almost every aspect of working. Empirical approach based quantitative analysis of a case study undertaken at Bharat Pumps and Compressors Limited (BPCL), a public sector organization in India, that underwent turnaround successfully, is presented here. Change outcomes in the organization directly affecting the employees were identified in the study and employee perception on effectiveness of these changes was also studied. These change outcomes were identified as: enhancement of employee involvement, improvement of various organizational processes and systems, improvement of work environment and improvement in performance management process of employees. The study indicates that though change effectiveness is perceived as positive by different levels of employee, there were significant differences between higher and lower levels of employees. Based on the findings, the paper identifies lessons for policy makers and change agents in transforming companies in the context of emerging markets such as India. The paper offers an in-depth analysis of successful transformational change practices from employees' perspective in a large public sector organization in India.

(Nandan & Verma, Jan-Mar 2013)

This study assessed the longitudinal relationship between perceived fit (i.e., person-organization fit, person-job fit) and affect-based variables (i.e., job satisfaction, negative affect, positive affect) using momentary (i.e., within-person level) and stable (i.e., between-person level) assessments of both sets of variables. In doing so, 3 theoretical models of the perceived fit and work affect relationship (i.e., fit preceding affect; affect preceding fit; reciprocal fit-affect relations) to determine (a) the antecedents and consequences of fit perceptions, (b) whether fit perceptions exhibit meaningful within-person variability, and (c) if direct fit perceptions are simply the result of affect/job satisfaction at work or can influence such work experiences. In addition, we examined whether the relationships between affect/job satisfaction and fit perceptions were homologous (i.e., similar) across the 2 levels of analysis (i.e., within-person and between-person). Results indicated that fit primarily preceded affect and job

satisfaction at both levels of analysis, though some specific relationships exhibited reciprocal causality and others supported affect as an antecedent of fit perceptions. Our findings paint a complex picture of the causal relationship between perceived fit and work affect.

(Gabriel, Diefendorff, Chandler, Moran, & Greguras, Summer 2014)

Among scholars and development practitioners, there is a continuous debate about whether or not employee attitudes can be directly associated with clients' satisfaction and service delivery performance in Non Governmental Sector (NGO). It has been endeavoured to find out the linkages between employees' attitude, beneficiaries' satisfaction and service delivery performance empirically in this paper. Findings of the study indicate that employee satisfaction, leadership and motivation have a positive statistical relationship. However, employee attitudes cannot be linked to clients' satisfaction. Results also reveal that there is a positive correlation between clients' satisfaction and service performance. Moreover this study also throws light on the drawbacks of NGO led service delivery process. (Baruah & Barthakur, Jul-Sep 2012)

The service sector confronts a plethora of demographic realities. This paper hones in on one of these, that of generational challenges, to inform owners and managers of approaches to improve the attraction, motivation and retention of Gen Y employees. This paper provides an introductory overview of a large-scale study into generational differences in employee attitudes and reports on the preliminary data analysis of a survey of over 900 hospitality employees in Australia. A thorough literature review informed a survey which sought employee opinions on a range of attitudinal measures. A key finding from the data analysis is that Gen Y employees score lower on those measures where higher scores are seen more favorably (e.g., job satisfaction, engagement, commitment), while conversely, Gen Y employees display higher scores on the constructs that an organization would hope would be lower (e.g., turnover intentions). The paper concludes with eight specific workplace practice suggestions to managers regarding Gen Y and suggestions for future research.

(Solnet, Kralj, & Kandampully, Jul 2012)

Research Methodology – Researcher has done this research in an electrical company in UP. The objectives of my study was

1. To study the relationship between satisfaction level of the employees and perception of the employees about the company.
2. To study the relationship between satisfaction level of the employees and attitude towards their work.
3. To study the relationship between perception of the employees and attitude towards their work.

SCOPE OF THE STUDY

1. To measure employee's satisfaction level at the company.
2. To study employee perception towards company.
3. To distinguish the attitudes of employees towards their work at company.

There were total 101 permanent employees and around 1000 contractual workers working in the plant. The scope of the research included employees across all levels including contractual workers. Out of the total strength of the sample taken were 40% respondents .A sample of 40% or more provides an accurate analysis of the data being collected. The research was conduct in Sahibabad Plant. The research was made by the survey in accordance to the convenience of the employees. Therefore, the sample type is convenience sampling. Where, Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

Hypothesis-

1. There is a relationship between satisfaction level of the employees and perception of the employees about the company.

2. There is a relationship between satisfaction level of the employees and attitude towards their work.

3. There is a relationship between perception of the employees and attitude towards their work.

Data Processing and Analysing

Data, which is gathered by administering questionnaires, was processed in simple manner to determine the level of satisfaction among employees. Every response was assigned some score based on this overall satisfaction level was determined. Data collected is carefully tabulated and analysed by using satisfaction methods   .

Limitation of the Study

The study is conducted only in one plant. Due to the limitation of the time, the research could not be made more detailed study. Due to the confidentiality of some information, some of the respondents did not reveal accurate responses. Some of the replies of the respondents may be biased.

CORRELATION AMONG DIFFERENT PARAMETERS

Correlation between Perception & Attitude

Correlations

0		Perception	Attitude
Perception	Pearson Correlation	1	.304
	Sig. (2-tailed)		.056
	N	40	40
Attitude	Pearson Correlation	.304	1
	Sig. (2-tailed)	.056	
	N	40	40

Coefficients[a]

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.978	.783		3.805	.001
	enthusiastic changes	.244	.151	.261	1.617	.114
	changes being implemented	.110	.143	.125	.774	.444

a. Dependent Variable: Perception

Null hypothesis = H_o: $U_0 \leq 3$ i.e. there is no correlation between perception and attitude

Alternative hypothesis = H_1: $U_1 > 3$ i.e. there is correlation between perception and attitude

Interpretation and Analysis: -

While calculating the data, it shows that employees are enthusiastic about the change in the organization and employees personally committed to the changes being implemented in the organization (which are part of attitude parameter) equals to .558 (0.114 + 0.444) or 5.58%. It clearly shows that p>5%, null hypothesis is

rejected because perception is more depended then attitude factors.

Correlation between Satisfaction and Attitude

Correlations

		Satisfaction	Attitude
Satisfaction	Pearson Correlation	1	.166
	Sig. (2-tailed)		.306
	N	41	40
Attitude	Pearson Correlation	.166	1
	Sig. (2-tailed)	.306	
	N	40	40

Coefficients^a

Model		Un standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.967	1.168		2.539	.015
	enthusiastic changes	.126	.229	.092	.550	.586
	changes being implemented	.072	.216	.056	.332	.742

a. Dependent Variable: Satisfaction

Null hypothesis = H_o: $U_0 \leq 3$ i.e. there is no co relation between satisfaction and attitude

Alternative hypothesis = H_1: $U_1 > 3$ there is co relation between satisfaction and attitude

Interpretation and Analysis: -

While calculating the data, it shows that employees are enthusiastic about the change in the organization and employees personally committed to the changes being implemented in the organization (which are part of attitude parameter) equals to 0.1228(0.586+0.742) or 12.28%. It clearly shows that p>5%, null hypothesis is rejected as satisfaction factor is more depended then attitude factors.

Correlation b/w Satisfaction & Perception

Correlations

		Satisfaction	Perception
Satisfaction	Pearson Correlation	1	.221
	Sig. (2-tailed)		.170
	N	40	40
Perception	Pearson Correlation	.221	1
	Sig. (2-tailed)	.170	
	N	40	40

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.222	2.020		.110	.913
	y1	-.328	.268	-.225	-1.221	.231
	y2	.672	.228	.457	2.954	.006
	y3	-.179	.281	-.123	-.637	.529
	y4	.190	.267	.129	.711	.482
	y5	.236	.239	.162	.987	.331
	y6	.505	.736	.108	.686	.497

a. Dependent Variable: Satisfaction

Null hypothesis = H_o: $U_0 \leq 3$ i.e. there is no co relation between satisfaction and perception

Alternative hypothesis = H_1: $U_1 > 3$ i.e. there co relation between satisfaction and perception

Interpretation and Analysis: -

While calculating the data, it shows that 6   factors of perception i.e. management believes that employees are the most important asset of our firm, management encourages creativity, innovation, and continuous improvement, employees are constantly watched to assure that rules and procedures are followed, Organization does an excellent job of keeping employees informed about matters affecting employees,   organization leadership has made changes, which are positive for employees and upper management understands the problems you face on your jobs equals to 2.076 (0.231 + 0.006 + 0.529 + 0.482 + 0.331 + 0.497) or 207.6%. It clearly shows that p>5%, null hypothesis is rejected.

SUGGESTIONS

1. Company should increase the tenure of the employees and reduce attrition rate because only 37% employees are working with the company for the past 5 years and should find out the reason why employees are switching over their jobs.

2. Company should see that why only 10% of employees feel that upper management understands the problems faced by them in their jobs.

3. Company should also see why employees are dissatisfied when they think about their job and the work environment in future with the company. What are the reasons behind it?

CONCLUSION

From the analysis, I conclude that the job provides an opportunity to the employees to excise his/her skills and knowledge. At times there is a considerable flexibility in coordinating with work and they are satisfied with the existing inter personal relationship and with upper management.

From the analysis, it was also observed that there is a scope of improvement of employee's satisfaction with the working conditions among employees of the company.

Finally, I would like to conclude that the employees who are working in company in Sahibabad plant are satisfied with their work and the management.

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FARMER'S EDUCATION IMPACT ON FARMER'S WEALTH IN

BANGLADESH

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Abstract

The impact of farmers' education is examined with a view to evaluate the actual situation of farmers' education in Bangladesh. Fifty samples were collected from two sub districts of the Gazipur district in Bangladesh. The selection of the study sites and collection of the samples were done purposively. It is cleared from that study that education is necessary for farmers to raise their wealth. Results were derived through regression analysis. The study has also shown that size of family, years of farming experience contributed significantly to the wealth accumulation of farmers.

Keywords: Education, farmer, wealth, Bangladesh.

Introduction

It is well known that nation's educated workers, due to their greater potentiality, can catch up technologies rapidly (Andaleeb 2002). Recognizing this, like other continents during the last decades, investment of developed countries in their education systems were the largest determinants of economic growth (ibid). However, this interpretation is not always appreciated adequately by many lower development countries like Bangladesh. Owing to lack of work based education, the education arena is not so developed in Bangladesh. Although agriculture is the main stream of her economy, education for scientific method of agriculture is still felt necessity in this country. It means that lack of productive education is too acute in her agriculture. Studies of farmers' education are found in Murphy et al (1997), Yang (1997), Joliffe (1998) and Taylor et al (2000), Haq (2012),Haq (2011) and Haq et al (2003) and Haq et al (2003). Most of the previous experiments are relevant with farmers' education and productivity except Murphy et al. (1997) which partially recognized the impact of education of farmers on their wealth. Therefore, it is evident that studies of farmers' education impact on farmers' wealth are scant. It is noted that education of farmers increases wealth (Murphy et al. 1997) as education is an indispensable element for economical and social progress.

Most of the villagers of Bangladesh are not educated and live on subsistence farming. Without education, it is difficult for them to gear up wealth generating works. With this regard, the present study is conducted. The results will be useful for the development of education in Bangladesh or elsewhere.

Various approaches and data were used in the former studies. However, it is not easy to pinpoint the

sources of the differences in the previous studies because of their model specifications. The present study recognizes universities, farm research institutes and industrial area in the selection of the study site. The importance of these infrastructures can be found in Andaleeb (2002) and Begum (1998). Paying attention to these infrastructures, the current study differs profoundly from others reported in the relevant literatures.

Methodology

The wealth of a household is widely determined by wide variety of factors both technical and social (Murphy et al. 1997). Among the social factors, individual and family characteristics are also important. Their impacts are again affected by infrastructures facilities in the area and local institutions, as assumed in Rahman (1999). In the present exercise all these factors could not be taken into account as relevant data were not available. Explanatory variables were reviewed from the existing literatures. They are the actual size of the cultivated land, that is the farm size (FS), number of family earners (FE), family size (FM)farm operators' farming experience, that is, years of rice cultivation (EXP), the number of times extension contacts (ET), total income (TNC), and per unit of rice production (YD) other than the education years of farm operator (ED). The estimated equation of household wealth is as *WEL = f(ED, TNC, FS, FE, FM, EXP, ET, YD).* The ordinary least square (OLS) is used for wealth function.

In order to apply the above mentioned formula, a field survey was conducted in the Gazipur district, located at 30 kilometers in the North –East of Dhaka, the capital city of Bangladesh, between August and September 2001. This area is an average farming district in the central and northern areas of the country regarding productivity, farm size and production conditions. In this paper, two areas Sadar and Sreepur sub districts) of Gazipur district out of five sub districts were surveyed. A total of fifty farms were investigated through pre structured questionnaires. The selection of two sub districts and sample collection were done purposively.

Following is a brief explanation of the survey families. The average age of farm household head is 43.1 years, the number of years of schooling of farm household head is 5.5 years, the farm area is 1.4 ha and the size of family is 7.2 and the number of adult family members is 2.2. As for the contact frequency with extension agents, the average is 0.8 times per year and only 18 families were contacted out of the surveyed families (36 percent). The contacts were particularly low with families whose heads have low education levels; families that have no contact at all formed the majority, as can be seen in table 1. It can be inferred therefore that the lower the education level is, the less contact with extension agents there is.

Table 1: Education Level and Extension Contacts (persons)

Education levels	Extension contacts	No extension contacts	Total
College and over	3(42.86%)	4(57.14%)	7(100%)
High school	7(43.75%)	9(56.25%)	16(100%)
Primary	7(38.89%)	11(61.11%)	18(100%)
Illiteate	1(11.11%)	8(88.89%)	9(100%)
Total	18(36%)	32(64%)	50(100%)

Source: Field survey 2001; Haq 2004.

Results and Discussions

The results of the regression analysis are presented in table 2. As the sample is small, this implication implies that impacts of education and other explanatory variables should be viewed as explanatory and indicative. The adjust R^2 values indicate an excellent fit for the regression equation. The F value is significant at 1 percent level of probability, implying that the specification of the model was reasonably accurate.

Table 2 Regression Estimates with Survey Data

Variables	Wealth		
	Coefficient values	Standard errors	T values P
Intercept	-798.27 0.44	1020.81	-0.78
ED	124.55 ** 2.61	47.69 0.012	
TNC	-0.1548 -0.806	0.19 0.42	
FS	207.75 1.123	184.96 0.27	
FER	-164.65 -0.773	213.10 0.444	
FM	188.17*** 3.133	60.05 0.003	
EXP	28.20 ** 1.92	14.72 0.062	
ET	-667.57* -1.300	513.34 0.200	
YD	0.012 0.088	0.15 0.929	
R^2	0.529		
AR^2	0.435***		
F statistics	5.624		
Probability	0.000085		

***, ** and * indicate level of significance at 1%, 5% and 10% respectively.

Source: Author's calculation from survey data.

Education has significantly positive impact on wealth. It implies that with the increase of the level of education, farmers' wealth increases. This supports Murphy et al. (1997). However, the significance is moderate compared with the other variables of the model which are also found positive and significant.

The general education system of Bangladesh may be cited as an important example to examine the relationship between the farmers' education with wealth. The general education system of the country is completely devoid of any vocational element and vocational education has been completely integrated

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with technical education. Although there is availability of practical work in college and graduate levels, these are on campus oriented and lacking productive work experience (Sofiullah 1996).

The effect of the size of farm is positive. Usually large farmers can produce more crops and also store this crop for a certain period and sell it later at a higher price (Begum 1998). Thus it can induce farmers to raise wealth. However, the effect is weak as the magnitude of the coefficient is not significant. Probably small farmers are also ideal for farm management and can assist to accumulate wealth by increasing farm output.

The effect of total income on wealth is negative. One of the main causes is probably that the income of farmers is not relevant for the wealth accumulation. One reason is that past receipt of costly private credit from shops and money lenders prevents a household from accumulating wealth (Murphy et al. 1997). But the impact is weak since the regression coefficient of total income is insignificant. Thus it can be inferred that higher income can influence the ability of farmers to accumulate wealth by providing them on and off farm employment opportunities.

The number of family earners has negative effect on wealth. But the impact is weak because the coefficient is not significant. Incomes from on and off farm works in the rural or urban areas are inconsistent due to low price of farm products and lack of suitable jobs, high rent of house etc. Therefore numbers of earners of farm families hardly raise their wealth from their earnings whether they live in the rural or urban areas. More in depth analysis is necessary for this.

The size of family has had significantly positive effect on wealth. Probably farm household head wants to accumulate more wealth in order to maintain the large size of family. For example, new house may be built with the increase of the size of family.

The coefficient for the experience of the head of the household is significant at the 5 percent degree of probably (28.20). The accumulate experience of the farmer which is an important variable, is commonly determined either from the years of farming or the age of the farmers. According to several researches, such as Evenson and Mwabu (2001), there is a positive relationship between productivity, income and the amount of technical information possessed by the farmer. Therefore it is expected that the accumulation of farm experience has a great contribution in improving wealth.

The coefficient of the extension contact is negative (-667.57) and weak as the level of significance of the coefficient is very low (20%). It is noted that extension service is necessary to develop specific on and off farm knowledge and skills which can assist to accumulate wealth of farmers. However, the farmers of the study area had no regular relationship with it. It is observed that only 36 percent were provided extension service through extension contacts. Policy makers should take note of this.

Yield means the rice production per unit of farm land. The yield coefficient has positive contribution to raise the wealth of farmers. But the value of coefficient is very low (0.012) and insignificant compared with the other independent variables in the model. The one reason is that the lack of appropriate price of rice in the rural areas of Bangladesh farmers fails to increase their wealth accumulation from the yield of rice.

Conclusion

Diversified results are found in this study. It is observed that extension has negative effect on non

-agricultural income. For agricultural income, however, extension has positive and significant effects. It means that extension is relevant with on -farm work in the country. It is cleared from this study that extension is necessary for farmers to raise total income. Domestic and international donors and experts should also keep their attention for non-agriculture oriented extension consolidating with on- farm work related extension in Bangladesh. Considering the result of this study, policymakers should take necessary steps.

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COMPARING LINEAR REGRESSION AND ARTIFICIAL NEURAL NETWORKS TO FORECAST TOTAL PRODUCTIVITY GROWTH IN IRAN

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Abstract

In the recent years we have seen widespread discussion about productivity. The most common measures of productivity that are widely used by economists and business analysts, are production productivity, labor productivity, industrial workshop productivity and total productivity. The concept of total productivity is defined as real output per unit of all inputs.

Presumably, total productivity growth reflects phenomena such as general knowledge, the advantages of particular organizational structures or management techniques, reductions in inefficiency, and real locations of resources to more productive uses. Given the importance of this concept, in this paper we use a multiple regression equation and an Artificial Neural Network (ANN) model to forecast the total productivity based on three indexes such as labor productivity, production productivity and industrial workshops productivity from 2006 until the 2012 M.D. Then, we compare these two methods according to five criteria and finally we conclude that the artificial neural network model is better than linear regression method to forecast the total productivity but the difference is not very significant. Data that used in this study are several time series which represent production productivity, labor productivity, industrial workshop productivity and total productivity from 1979 until the 2005 M.D. They are published in Statistic Center of Iran.

Keywords: Artificial Neural Network, forecasting, multiple linear regression, productivity

1. Introduction

In recent years, significant advances in faster processing of information by computers and software applications, has led economists to use non-linear models. One of the most famous models in this context, are Artificial Neural Networks (ANN). Neural Network models are powerful tools for data analysis in engineering and computer sciences, medical sciences, basic sciences and in many different scientific disciplines. The ANN models simulate human brain function using mathematical functions and processors

and can model non-linear and unknown relations. Productivity is a subject which is viewed from different dimensions and every day its importance becomes clearer. Due to limited resources and unlimited human needs, population growth and intense competition and brutal in the economy world, improving productivity is not a choice but a necessity. Undoubtedly, economic growth and development effect in productivity growth of different communities. Efforts to increase productivity rates, is efforts to better live and welfare for individuals and society. We must follow the productivity growth to achieve a better tomorrow continually. In today's competitive world, countries will be winners that provide knowledge, insight and productivity in the behavior of their managers and staffs.

This paper compares the performance of multiple linear regression methods with Artificial Neural Networks to forecast the total productivity in Iran. After literature review in first part, we overview the concept of productivity, linear regression methodology and Artificial Neural Network models briefly in second part. In the third part, we use the linear regression and Neural Network to forecast total productivity and we compare the performance of these methods.

In this paper, the research methodology is documental. It's statistical population is industrial workshops with more than ten staffs.

2. Literature Review

In the past two decades, researches have been focused on forecasting using ANN. In this section we discuss briefly some previous studies which conducted comparison between the use of traditional methods and Neural Networks in time series forecasting in several applications, particularly in economic data. ANNs have been widely used for solving many forecasting and decision modeling problems. [Hiew et al., 1992] Investigators have been attracted by ANN's freedom from restrictive assumptions such as linearity that are often needed to make the traditional mathematical models tractable. They have further argued that ANN can easily model both parametric and non-parametric processes and transform the input data automatically. ANNs have been tried out as research tools in several fields. Empirical analysis of the application of the Neural Network in financial time series shows that ANN models have outperformed the traditional time series models in most cases in forecasting. Bosarge (1993) suggested an expert system with a Neural Network at its core. He found significant nonlinearities in different time series and was able to improve the quality of the forecast considerably. [Bosarge, W. E., 1993] Moody, Levin and Rehfuss (1993) have focused on the US aggregate industrial production finding that a Neural Network model outperforms a linear model at horizons of six months and longer. [Moody et al., 1993] Results achieved by, Kuan and White (1994) indicated the possibility of using ANN in economic variables and discussed the usability of traditional models and emphasized the similarities between the two methods. The use of Neural Networks in macroeconomics is still in its relative infancy. The study done by Kuan and White (1994) is probably the first attempt to introduce ANNs to macroeconomic forecasting. [Kuan et al., 1994] A study carried out by Maaoumi, Khontazad and Abaye (1994) applied on a group of 14 different time series in macroeconomics, found that the models and projections performed better using the ANN method. [Maaoumi et al., 1994] Moody (1995) has presented empirical result for forecasting the U.S. index of industrial production and argued that superior performance can be obtained using state-of-the-art ANN models than using

conventional linear time series and regression methods. [Moody, 1995] Kohzadi, Boyd, Kaastra, Kermanshahi and Scuse (1995) applied Neural Networks to forecast the corn futures and found that the forecast error of the ANN model is between 18 and 40 percent lower than that of the ARIMA model. [Kohzadi et al., 1995] Many studies have demonstrated the forecast ability of the traditional Neural Network models. For instance, Wu (1995) applied multilayer feed-forward Neural Networks to forecast Taiwan Dollar/US Dollar exchange rate and the results are better than ARIMA models. The authors, therefore, concluded that the Neural Network approach is a competitive and robust method for the forecasting. [Wu, 1995]

Swanson and White (1997) have investigated the performance of Neural Network models in forecasting nine quarterly seasonally adjusted US macroeconomic time series finding that they generally outperform constant-coefficient linear models. They used ANN approach in forecasting macroeconomic variables and compared different linear and non-linear models by using a large sample size data. They found that the performance of multivariate linear models are marginally better than other univariate models. [Swanson et al., 1997]

Recently, the ANNs have been extensively studied and used in macroeconomic time series forecasting [Zhang et al., 1998], especially the application of back-propagation to Neural Network learning. [Wong, 1990]

Tkacz and Hu (1999) examined whether ANN can be used in modeling the increase in production based on monetary and financial variables. The results indicate that ANN forecasting performances were better than those of the linear models. [Tkacz et al., 1999]

However, few studies report opposite results. For example, Qi and Wu (2003) employed a Neural Network to study the nonlinear predictability of exchange rates for four currencies at the 1, 6 and 12-step forecasting horizons. [Qi et al , 2003] Some studies use economical meaningful variables to improve the forecasting performance of the model. For example, Kumar and Joshi (2003) integrated a microeconomic variable and some macroeconomic variables including interest rate and crude oil price into a recurrent neural network forecasting model to predict the movements of Canada/US dollar exchange rate. The results demonstrate that the new model provides better forecasting performance than regression models, and both macroeconomic and microeconomic variables are useful for exchange rate forecasting. [Kumar et al , 2003]

Mohammadi, Eslami and Dardashti (2005) conducted a study by applying different methods for forecasting spring inflow to the Amir Kabir reservoir in the Karaj river watershed. Three different methods, ANN, ARIMA time series and regression analysis between some hydroclimatological data and inflow, were used to forecast the spring inflow. The performances of the models were compared and the ANN model was found to model the flows better. Thus, ANN proved to be an effective tool for reservoir inflow forecasting in the Amir Kabir reservoir using snowmelt equivalent data. [Mohammadi et al., 2005]

As we have seen through the above literature review, there are many studies conducted comparison between ANN and other traditional methods as regression methods in terms of their performances.

3. Concepts

3.1. Productivity

For the first time the word "productivity" was used in 1776 M.D by a mathematician and economist, called "Quesnay". In 1833 "Littre" defined productivity as "the ability to produce". With starting the scientific management in early 1900, Frederick Taylor researched about enhance the efficiency of workers, division of labor, improvement methods and the standard time. Economic Cooperation Organization Europe in 1950 formally defined productivity as: Productivity is a fraction that is obtained by dividing the amount or value of the production on amount or value of one of factors. [Borckaert, 2003]

Today, improvement of productivity is known as one of the most important strategies for improve the efficiency of economic development, social and cultural rights of different nations. One of the main condition to achieve the proper position in the global competition and increasing people's welfare is success in accelerating the process of improvement of productivity. The years ago in Iran, in line with need for productivity, different motion been done. However, the importance of the industrial sector in economic development and the volume of investments in this sector, issue of improving productivity of production factors in the industrial sector is considered more seriously to provide appropriate fields and conditions for enhance productivity. [Monga, 1999]

Productivity is one of the concepts of economic and management that is defined as "the amount of goods or services which are produced by compared with the cost, energy or work without reducing quality". Productivity is a measure of the efficiency of production. Productivity is a ratio of production output to what is required to produce it (inputs). These definitions are short but too general and insufficient to make the phenomenon productivity understandable. It is most advisable to examine any phenomenon whatsoever only after defining the entity the phenomenon under review forms part of. Then it will be possible to analysis the phenomenon as part of such an entity. Hence, productivity cannot be examined as a phenomenon independently but it is necessary to identify the entity it belongs to. Productivity is a critical factor of production process in one way or another. At the national level, productivity growth raises living standards because more real income improves people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental programs. Productivity growth is important to the firm because more real income means that the firm can meet its (perhaps growing) obligations to customers, suppliers, workers, shareholders, and governments (taxes and regulation), and still remain competitive or even improve its competitiveness in the market place.

It is noteworthy that there is no general definition for productivity, but several definitions of this word is presented. The most practical of them is defined by Iranian National Center for Productivity as "Maximize the using of resources, manpower, facilities and other scientific methods and reduce production costs, expand markets, efforts to increase employment and real wages and improvement of living standards, as it is beneficial to employees and management and society". [Prokopenko, 2004]

Measuring productivity is process which during it productivity indexes are defined and calculated. The Measuring productivity is procurement and development of information to can improve the operation of the facilities and the improvement of growth in production of goods and services at different levels. So the aim of measuring productivity, is develop and apply the economic power to create or exploit

opportunities in the country in various aspects of economic resources. For measure the productivity level in a system, we use the productivity indexes. The general form of productivity indexes is the ratio of output to input for every system. [Sase, 2001], [Sumanth, 1998] The productivity indexes that are used in this paper are labor productivity, production productivity, industrial workshops productivity and total productivity that are defined by Iranian National Center for Productivity as follow:

The labor productivity, defined as the ratio of the firm's value added to its number of workers. It should be noted that labor productivity is an index reflects manufacturing goods or services are provided by employees of an organization. labor productivity show power workers in the production of goods or services. Power of other factors such as capital, natural resources, technology and management is also reflected in this index.

The production productivity, defined as the ratio of the value added to value output.

The industrial workshops productivity, defined as the ratio of the value added to its number of workshops.

3.2 Multiple Linear Regression

Regression method is one of the most widely used statistical techniques. [Mendenhall et al., 1994] If researcher wants to estimate the dependent variable by one or more independent variables, he will use a linear regression model. In statistics, linear regression is an approach to modeling the relationship between a scalar dependent variable y and one or more independent variables denoted X. The case of one independent variable is called simple regression. More than one independent variables is multiple regression.

In linear regression, data are modeled using linear predictor functions, and unknown model parameters are estimated from the data. Such models are called linear models. Linear regression was the first type of regression analysis to be studied rigorously, and to be used extensively in practical applications. This is because models which depend linearly on their unknown parameters are easier to fit than models which are non-linearly related to their parameters and because the statistical properties of the resulting estimators are easier to determine. Linear regression has many practical uses. Most applications of linear regression is forecasting.

Multiple regression analysis is a multivariate statistical technique used to examine the relationship between a single dependent variable and a set of independent variables. The objective of the multiple regression analysis is to use independent variables whose values are known to predict the single dependent variable. The effect of independent variables on the response is expressed mathematically be the regression or response function f:

$$y = f(x_1, x_2, ... x_n, \beta_1, \beta_2, ... \beta_n)$$

(1)

That y is dependent variable, $\beta_1, \beta_2, ... \beta_n$ are regression parameters (unknown!).

The regression model for the observed response variable is written

$$z = y + \varepsilon = f(x_1, x_2, ... x_n, \beta_1, \beta_2, ... \beta_n) + \varepsilon$$

(2)

That ε is error in observed value. To find unknown regression parameters $\beta_1, \beta_2, ... \beta_n$, the method of least squares [Beenstock et al.,1999] can be applied:

$$E(\beta_1, \beta_2, ... \beta_n) = \sum_{j=1}^{n} (z_j - y_j)^2$$

(3)

where $E(\beta_1, \beta_2, ... \beta_n)$ is the error function or sum of squares of the deviations. To estimate $\beta_1, \beta_2, ... \beta_n$ we minimize E by solving the system of equations:

$$\frac{\partial E}{\partial \beta_i} = 0; i = 1, 2, ... m$$

(4)

In this paper we have six independent variable so we use multiple linear regression.

In analysis regression the dependent variable (y) is a function of independent variables and degree of involvement or role of each independent variable in the output (dependent variable) is expressed by the coefficients of variables.

Linear regression can be a method to estimate a set of time series. Dependent variable will be estimated using regression step method. All independent variables will enter to the regression equation. [Balan et al.,1995]

3.3 Artifical Neural Networks

3.3.1 A Brief Exposition

The Artificial Neural Network is an information-processing paradigm inspired by the way biological nervous systems such as the brain process information. It works like the human brain, trying to recognize regularities and patterns in the data. It can learn from experience and generalize based on the previous knowledge. Lately, ANNs have used in time series forecasting in various fields. [Zhang et al., 1998] Some statistical time series methods have inherent limitations, requiring human interaction and evaluation. However, the estimation of ANN can be automated. [Hoptroff, 1993] Moreover, many statistical models must be re-estimated periodically when new data arrive whereas many ANN algorithms learn incrementally. [Widrow et al., 1985] Thus, the ANN method for forecasting and decision making is worthy of ANN is one of the non-linear tools that have been recently adopted in econometrics to forecast macroeconomic variables. It has been popular for its back-propagation learning, which enables the estimation of parameters. The innovation of ANN lies, first of all, in the introduction of hidden layers between the input layer and the output layer. The hidden layers capture all indirect relations between explanatory variables and the dependent variable. Second is the application of the activation function, i.e.

logistic function, which has the ability to approximate any nonlinear function.

3.3.2 Concept Of Artifical Neural Networks

The human brain is formed by over a billion neurons that are connected in a large network that is responsible for thought. An Artificial Neural Network is just an attempt to imitate how the brain's networks of nerves learn. An ANN is a mathematical structure designed to mimic the information processing functions of a network of neurons in the brain. [Hinton, 1992] Each neuron, individually, functions in a quite simple fashion. It receives signals from other cells through connection points (synapses), averages them and if the average over a short of time is greater than a certain value the neuron, produces another signal that is passed on to other cells. As Wasserman (1989) pointed out, it is the high degree of connectivity rather than the functional complexity of the neuron itself that gives the neuron its computational processing ability. Neural Networks are very sophisticated modeling techniques, capable of modeling extremely complex functions. The NN user gathers representative data, and then invokes training algorithms to automatically learn the structure of the data.

The first computational neuron was developed in 1943 M.D by the neurophysiologist Warren McCulloch and the logician Walter Pits based on the biological neuron. It uses the step function to fire when threshold μ is exceeded. If the step activation function is used (i.e. the neuron's output is 0 if the input is less than zero, and 1 if the input is greater than or equal to 0) then the neuron acts just like the biological neuron described earlier. ANNs are comprised of many neurons, interconnected in certain ways to cast them into identifiable topologies as depicted in figure (1).
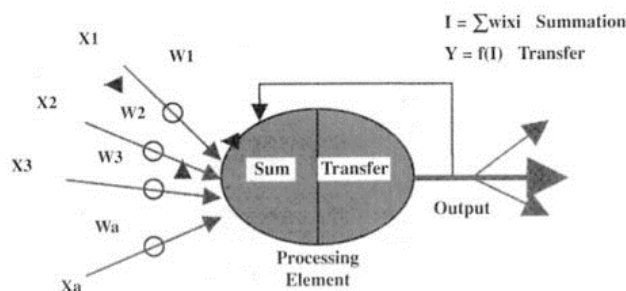
Figure (1): The Basic of Artificial Neuron

Note that various inputs to the network are represented by the mathematical symbol, x(n). Each of these inputs is multiplied by a connection weights w(n). In the simplest case, these products are simply summed, fed through a transfer function to generate a result, and then output. Even though all ANNs are constructed from this basic building block the fundamentals vary in these building blocks and there are some differences.

3.3.3 Architecture Of The Neural Network

Neural Networks are computational frameworks consisting of massively connected simple processing units.

These units have an analog to the neuron in the human brain. One of the most popular NN paradigms is the feed-forward neural network (FNN) and the associated back-propagation (BP) training algorithm. In a FNN, the neurons (i.e. the processing units) are arranged in layers i.e. the input, the hidden ones and the output. Feed-forward ANNs allow signals to travel one way only from input to output. Figure (2) gives a typically fully connected three-layer FNN topology.
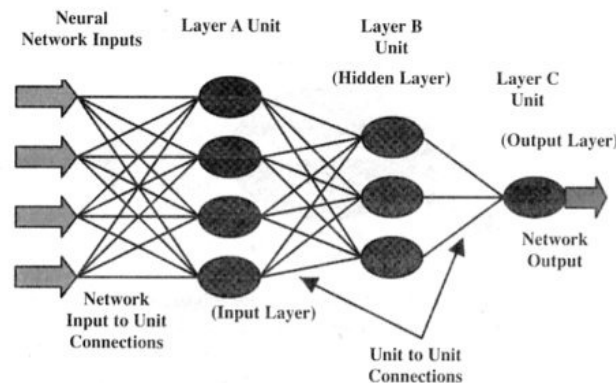
Figure (2): A Three-Layer FNN

This network has four units in the first layer (layer A) and three units in the second layer (layer B), which are called hidden layers. This network has one unit in the third layer (layer C), which is called the output layer. Finally, this network has four network inputs and one network output. Each network input- to-unit and unit-to-unit is modified by a weight. In addition, each unit has an extra input that is assumed to have a constant value of one. The weight that modifies this extra input is called the bias. All data propagate along the connections in the direction from the network inputs to the network output hence the term feed-forward. [Rummelhart et al., 1986]

3.3.4 Networks Layers

The most common type of ANN consists of three groups, or layers, of units: a layer of input units is connected to a layer of hidden units, which is connected to a layer of output units. The activity of the input units represents the raw information that is fed into the network. The activity of each hidden unit is determined by the activities of the input units and the weights on the connections between the input and the hidden units. The behavior of the output units depends on the activity of the hidden units and the weights between the hidden and output units.

3.3.5 Perceptrons

One of the most useful and successful applications of ANN to data analysis is the multilayer perceptron model (MLP). Multilayer perceptron models are non-linear Neural Network models that can be used to approximate almost any function with a high degree of accuracy. [White, 1992] An MLP contains a hidden layer of neurons that uses non-linear activation functions, such as a logistic function. Figure (3) offers a

representation of an MLP with one hidden layer and a single input and output.
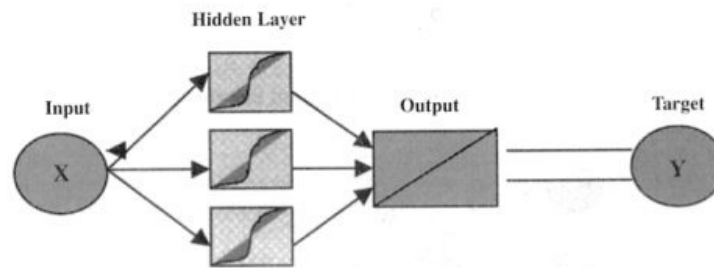
Figure (3): Multi-Layer Perceptron's With Single Hidden Layer

It represents a simple non-linear regression. The number of inputs and outputs in the MLP, as well as the number, can be manipulated to analyze different types of data.

3.3.6 Training Neural Networks

An ANN must be trained before it is actually applied. Training involves feeding the network with data so that it would be able to learn the knowledge among inputs through its learning rule. There are two types of training algorithms: supervised learning and unsupervised learning. In supervised learning, the algorithms alter weights and/or thresholds, using sets of training cases that include both input and target output values. In unsupervised learning, using sets of input training cases, the weights and/or thresholds are altered i.e., output values are not required, and if present are ignored.

3.3.7 Back-Propagation Networks

Though several network architectures and training algorithms are available, the back-propagation (BP) algorithm is by far the most popular. The network is considered a feed-forward and the learning is supervised. Multilayer Perceptrons Neural Networks trained by BP consist of several layers of neurons, interconnections, and weights that are assigned to those interconnections. Each neuron contains the weighted sum of its inputs filtered by a sigmoid transfer function. The error of the output relative to the desired output is propagated backwards through the network in order to adjust the synapse weights. The learning process of BP is actually an error minimization procedure [Rumelhart et al., 1986]. A typical BPN model uses three vectors: input vector, one or more hidden vectors, and an output vector. After the input and output vectors are fed into the BPN model, the network first selects parameters randomly and processes the inputs to generate a predicted output vector. After calculating the error between its predicted outputs and the observed outcomes, the network adjusts the parameters in ways that will reduce the error, generates a new output vector; calculates the errors, adjust its parameters again, and so on. The iteration or learning process continues until the network reaches a certain specified error.

In a general form, the ANN output vector produced by a model or network consisting of r input units, q

hidden units, and one output unit can be written as:

$$F(x,w) = F(\beta_0 + \sum_{j=1}^{q} G(xy_j)\beta_j)$$

(5)

where $F(x,w)$ is the network's final output, F is the activation function for the final step, G is the activation function for a hidden or intermediate unit, $X = [1, x_1, x_2..., x_r]$ is the input vector and

$w = (w_1, w_2,........., w_q, \beta_j)$ is the parameter or weights matrix. Each term w_i stands for a $(r \times 1)$

vector of weights relating the r input variables to one of the q intermediate units. β_j, refers to a $(q \times 1)$

vector of weights relating each intermediate output vector to the final output vector. F and G take the nonlinear sigmoid function.

3.3.8 Neural Networks Model for Time Series Forecasting

Artificial Neural Network models form an important class of nonlinear models that has attracted considerable attention in many fields of application. Researchers are trying to use the ANN as a forecasting tool in several time series data. And this paper will focus on the FNN technique. The ANN forecasting model between the output (x_t) layer and the inputs layer $(x_{t-1}, x_{t-2},..... ,x_{t-p})$ has the following mathematical representation:

$$F(x,w) = F(\beta_0 + \sum_{j=1}^{q} G(xy_j)\beta_j)$$

(6)

Where $j = 0,1,2,...q$ and $i = 0,1,2,....p$ are the model parameters often called the connection weights; p is the number of input nodes and q is the number of hidden nodes. The logistic function is often used as the hidden layer transfer function, that is,

$$g(x) = \frac{1}{1 + e^{-x}}$$

(7)

Hence, the ANN model of (2) in fact performs a nonlinear functional mapping from the past observations $(x_{t-1}, x_{t-2},..... ,x_{t-p}, w)$ to the future value x_t,

$$i.e., x_t = f(x_{t-1}, x_{t-2},..... ,x_{t-p}; w) + \varepsilon_t$$

(8)

Where w is a vector of all parameters and f is a function determined by the network structure and connection weights. The simple network is surprisingly powerful in that it is able to approximate arbitrary function as the number of hidden nodes q is sufficiently large. [Hornik et al., 1990]

3.4. Ways of Comparing Forecasts

In the neural networks, we use terms learning and training to find the values of network weights. We can category the learning situations in two types. These are supervised learning and unsupervised learning. Unsupervised learning or Self-organization in which an (output) unit is trained to respond to clusters of pattern within the input. In this paradigm the system is supposed to discover statistically salient features of the input population. Supervised learning or associative learning in which the network is trained by providing it with input and matching output patterns. These input-output pairs can be provided by an external teacher, or by the system which contains the network (self-supervised). Then weights of network become adjusted using different iteration algorithms that most famous of them is the error back propagation algorithm. So that the error of forecasting become minimized.

To obtain the optimal coefficients network, we must minimize the objective function $E(W) = \sum (y - \hat{y})^2$ that means the sum of squared errors between the target and output values are obtained from the network.

We start with an initial guess for weights W in iteration algorithms. In this case, the optimal set of weights are obtained from follow equal:

$$W(t+1) = W(t) + \Delta W(t)$$

(9)

Which

$$\Delta W(t) = \eta P(t)E$$
$$E = y - \hat{y} \qquad \textbf{(10)}$$

Where y are the measured values, $\hat{y}$ are predicted values, $W(t)$ is current weight in step t and η a scalar between 0 and 1 called the learning rate.

The quality (accuracy) of a model can be estimated by examining the inputs (assumptions) to the model, or by comparing the outputs (forecasts) from the model. Friedman (1953) claims that testing outputs is the only useful approach to evaluating forecasting methods. [Friedman, 1953] Nagel (1963) criticized Friedman's position as unreasonable. [Nagel, 1963] Machlup (1955) goes to the other extremes by implying that the testing of input is the only worthwhile way to test models. [Machlup, 1955] We think it is more reasonable to test both inputs, for improvement of a model, and outputs, for selection of the best model. The objective is to minimize prediction error in test set. In statistics, there are many criteria to quantify the difference between values implied by an estimator and the true values of the quantity being

estimated.   In this paper we use four criteria:

 a) Mean Squared Error (MSE) or Root Mean Squared Error (RMSE)

Mean squared error (MSE) is a risk function, corresponding to the expected value of the squared error loss or quadratic loss. MSE measures the average of the squares of the "errors." The error is the amount by which the value implied by the estimator differs from the quantity to be estimated. The difference occurs because of randomness or because the estimator doesn't account for information that could produce a more accurate estimate. [Makridakis, 1998]

In an analogy to standard deviation, taking the root of MSE yields the root mean square error (RMSE), which has the same units as the quantity being estimated; for an unbiased estimator. [Armstrong et al, 1992], [Lehmann, 1998]

$$MSE = \frac{\sum (y_t - \hat{y}_t)^2}{n}$$

(11)

$$RMSE = \sqrt{\frac{\sum (y_t - \hat{y}_t)^2}{n}}$$

(12)

 b) Mean Absolute Error (MAE) or Mean Absolute Percentage Error (MAPE)

In statistics, the mean absolute error (MAE) is a quantity used to measure how close forecasts or predictions are to the eventual outcomes. As the name suggests, the MAE is an average of the absolute errors. The mean absolute error is one of a number of ways of comparing forecasts with their eventual outcomes. [Hyndman et al, 2005]

The mean absolute percentage error (MAPE) is the mean or average of the sum of all of the percentage errors for a given data set taken without regard to sign so as to avoid the problem of positive and negative values cancelling one another. The MAPE measure is less sensitive to outlier distortions and allows for a direct comparison between different forecasting methods. However, it has a bias favoring underestimates, i.e. a forecast of zero can never have more than 100% MAPE but there is no limit to errors on overestimates. In general a MAPE of 10% is considered very good, a MAPE in the range 20% - 30% or even higher is quite common. [Makridakis et al, 1998]

$$MAE = \frac{\sum |y_t - \hat{y}_t|}{n}$$

(13)

$$MAPE = \frac{\sum |\frac{y_t - \hat{y}_t}{y_t}|}{n} \times 100$$

(14)

c) Theil's U-Statistic

The U-statistic developed by Theil (1966) is an accuracy measure that emphasis the importance of large errors (as in MSE) as well as providing a relative basis for comparison with forecasting methods. Makridakis et al (1998) have simplified Theil's equation to the form shown below:

$$U = \frac{\sqrt{\dfrac{\sum (y_t - \hat{y}_t)^2}{n}}}{\sqrt{\dfrac{\sum (y_{t-1} - \hat{y}_t)^2}{n}}} \qquad (15)$$

Usually, a value smaller than 0.55 is accepted. If U is equal to 1, it means that the proposed model is as good as the naive model. If U is greater than 1, there is no point in using the proposed forecasting model since a naive method would produce better results. It is worthwhile to consider using the proposed model only when U is smaller than 1 (the smaller the better), indicating that more accurate forecasts than a no-change model can be obtained. [Makridakis et al, 1998]

d) Coefficient of Determination (R^2)

In statistics, the coefficient of determination is used in the context of statistical models whose main purpose is the prediction of future outcomes on the basis of other related information. It is the proportion of variability in a data set that is accounted for by the statistical model. It provides a measure of how well future outcomes are likely to be predicted by the model. This is one statistic that measures the accuracy and validity of training and test data sets. it is obtained using the following formula:

$$R^2 = 1 - \frac{\sum\limits_{i=1}^{N} (y_i - \hat{y})^2}{\sum\limits_{i=1}^{N} (y_i - \overline{y})^2}$$

(16)

Where $\overline{y}$ is average of measured values. [Steel et al, 1960], [Wosten et al, 2001]

4. Research Methodology

In this paper we want predict the total productivity. For this propose first we calculate a linear regression equation and then design a neural network model to estimate. Then the efficiency of the two models is evaluated using conventional criteria. It's statistical population is industrial workshops with more than ten staffs. Methods used are:

A) Linear regression method for modeling and analysis of time series. To forecast future values in time series, we will use the SPSS[7] software to find the best equation to fit the time series and get the best possible forecasts.

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[7] Statistical Package for the Social Sciences

B) Artificial Neural Network forecasting techniques for time series. The goal is to predict future values from the time series. For this we will use MATLAB[8] software to generate the best ANN model to predict and get the best results.

For the validation and comparison, we have taken a quantitative measure of network performance called "performance index".

4.1 The Data Which Used In This Research

Due to the lack of official quarterly data and since artificial neural network need data with large samples, we prefer use the data official annual statistics in this study. We used data from the Statistical Center of Iran that are summarized in Table (1). Therefore in this paper, we consider data of labor productivity, production productivity, industrial workshops productivity and total productivity for 27 years from 1979 until the 2005 M.D.

Table (1): Input Data To Forecasting Of Total Productivity

Industrial Workshop Productivity (Thousand Rials)	Production Productivity (Percent)	Labor Productivity (Thousand Rials)	Total Productivity (Percent)	Year
78666	0.4314	854	1.76	1979
189759	0.5131	1209	2.05	1980
103461	0.5172	1602	2.07	1981
111111	0.4689	1430	1.88	1982
129598	0.4692	1616	1.88	1983
139639	0.4743	1694	1.90	1984
145686	0.4797	1710	1.93	1985
141455	0.4812	1685	1.94	1986
128114	0.547	2126	2.16	1987
163664	0.5026	2592	2.01	1988
175736	0.4501	3009	1.82	1989
312430	0.4593	4997	1.85	1990
781388	0.4504	9168	1.82	1991
975289	0.4420	7050	1.79	1992
1290020	0.4359	12204	1.77	1993
1073628	0.3935	16665	1.73	1994
1485516	0.3975	23916	1.66	1995
2099679	0.4185	33204	1.72	1996
2658324	0.4314	42216	1.76	1997

---

[8] MATrix   LABoratory

2948848	0.4221	47676	1.73	1998
5250170	0.4366	65434	1.77	1999
6651069	0.4245	82256	1.74	2000
7888920	0.4247	94099	1.74	2001
6750672	0.4043	104575	1.68	2002
8554320	0.3847	131220	1.63	2003
11132357	0.3723	168356	1.59	2004
12997933	0.3723	196172	1.59	2005

Reference: Statistic Center of Iran

4.2 Calculating Multiple Linear Regression Equation to Forecasting Total Productivity

In this research, we consider independent variables as labor productivity (LP), production productivity (PP) and industrial workshop productivity (IWP), that effect to total productivity. Total productivity (TP) is considered as dependent variable. Since there are three independent variables, therefore we must use multiple linear regression.

We can calculate the linear regression equation, using SPSS software and data that exist in Table 1. Regression linear equation is as follows:

$$TP = 9.314\text{E-7 } LP + 3.315 \text{ } PP\text{-}1.297\text{E-8 } IWP + 0.34$$

(17)

Using this equation, we can forecast productivity for next years. Also we use it to compare performance of linear regression method to other methods as Neural Network.

5.4 Designing an Artificial Neural Network Model For The Time Series

Then we use neural networks for forecasting. Designing a neural network requires choice the number of layers, the number of neurons per layers, and the activation functions. A neural network model with one hidden layer and a sigmoid activation function in hidden layer, and linear activation function in the output layer with a sufficient number of hidden layer neurons is able to approximate any relationship. Usually, the number of neurons of the input layer equals the number of input parameters. We consider $X = (\text{LP,PP,IWP})$, where LP is labor productivity, PP is production productivity and IWP is industrial workshop productivity. These inputs are sufficient for accurate estimates of execution times. The output layer consists of a single neuron that output show TP. There is no general approaches for choice the number of hidden layers and the number of neurons for each hidden layer. Literature shows only specific solutions for each problem to be solved. Solutions are seared by means of empirical testing. Usually it is recommended to start with only one hidden layer, and if the results are not acceptable, the number of hidden layers have to be increased. In our case, we design a neural network model with one layer with Hyperbolic tangent as activation function, it is sufficient. we choose three neurons for this hidden layer. In this model, a linear activation function for output neuron be accepted.

We use the neural network toolbox in MATLAB software, and consider the information in the table 1

to forecast total productivity. Data is divided into three separate sets, the training set, which consists of in-sample data, the validation as well as the test sets, consisting of out-of-sample data. The training set is used to estimate the connection strengths, using the back-propagation method. The validation set is used mainly to find the connection strengths, which enable the error to converge to a global minimum, rather than a local minimum. According to Gonzalez (2000) the validation set contains data that are not used during the training, but which serves as indicator of out-of-sample forecasting accuracy of the network. The test set is used to measure the forecasting accuracy of the network. Data used in this set are out-of- sample data that are not used in the validation set. We consider 80 percent of data as training data, 5 percent as validation data and 15 percent as test data. Number of training iterations will continue until the error is reduced.

The scheme used in this research consisted of a MLP, trained with the back-propagation learning algorithm. In this analysis, the network consists of single input, hidden and output layer. The weighting factors are obtained using the BP algorithm. In the BP methodology a set of initial weights is first chosen at random, after which the network starts the learning process, modifying the weights to reduce the error. The network output is obtained through information sent from the input layer through the hidden layer, facilitated by the activation function. The difference between the predicted value of output and the actual value, called network error, is computed and propagated backwards through the network, layer by layer. The connection strengths are modified in proportion to the error.

We can perform a linear regression between the network outputs and the corresponding targets. The output tracks the targets very well for training, testing, and validation, and the R-value is over 0.98061 for the total response. The result of comparison between output values and target values to forecast total productivity for the test data with neural network models is shown in figure (4).
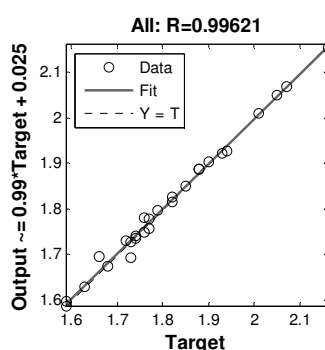
Figure (4): A Comparison between the Network Outputs and the Targets

4.5. Comparison between Linear Regression and ANN Results

The final solution of the two methods are compared based on the five criteria. The result is shown in table (2).

Table (2): Comparing The Artificial Neural Network Model And Linear Regression Model

R^2	Theil U	MAPE	MAE	RMSE	Type of criteria / Type of model

| 0.981 | 0.201 | 0.7 | 0.012 | 0.019 | **Linear Regression Model** |
| 0.992 | 0.127 | 0.5 | 0.008 | 0.012 | **Artifical Neural Network Model** |

Comparison between real data and data obtained from applying both regression and ANN methods from 1979 until the 2005 M.D are shown in figure (5) too.
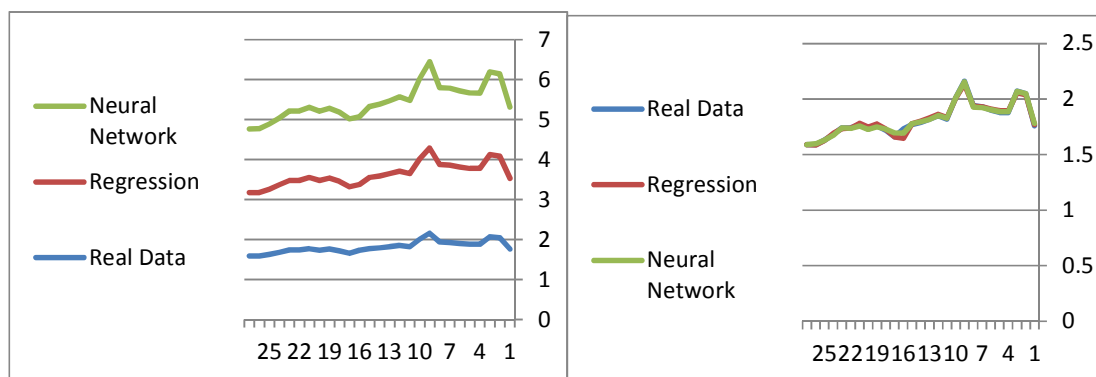
Figure (5): Comparison Between Real Data And Data Obtained From Applying Both Regression And ANN Methods

According to the table (2) and figure (5), we can observe that artificial neural network model is better than linear regression model based on all criteria.

But since this difference is not noticeable, both methods can be used to predict the overall efficiency in 2006 and 2012.

Therefore we forecast total productivity from 2006 until the 2012 M.D. by using regression equation and Neural Network model. The results are shown in the table (3).

Table (3): Forecasting Of Total Productivity from 2006 To 2012

2012	2011	2010	2009	2008	2007	2006	**year**
1.46	1.47	1.49	1.54	1.62	1.61	1.63	**Neural Network**
1.45	1.45	1.49	1.54	1.6	1.6	1.63	**Linear Regression**

Result of forecasting is illustrated in figure (6).
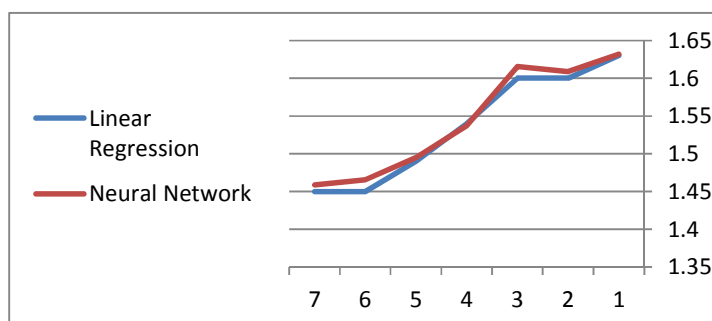
Figure (6) : Total Productivity From 2006 Until The 2012

5. Conclusions

Productivity is improvement and development capabilities and ability to convert input to output in the economy, that include a set of policy and planning activities to prepare materials and activities and products or services. In this paper, we forecast total productivity according to three indexes as labor productivity, production productivity and industrial workshops productivity.

In recent years non-linear relationships between events in real world, has increased using of non-linear models, generally. Using of artificial neural network methodology is growing in various fields as a powerful tool for data analysis and modeling of non-linear relationships. Also a simple neural network model with a hidden layer and a sigmoid activation function in hidden layer and a linear activation function in the output layer is able to approximate any non-linear relationship. Hence, artificial neural networks are considered as a comprehensive estimator.

In this research, first we estimate a linear regression equation for total productivity in Iran, using the data over years 1979 to 2005 M.D. Then we design an artificial neural network model with one hidden layer and hyperbolic tangent activation function in hidden layer and we apply error back propagation algorithm for the same period. Then, the two competing methods were compared with each other based on five different criteria. The results show that performance of artificial neural network model is better than linear regression model, but the difference is not very significant therefor in the next step, we forecast total productivity by using two methods for the years 2006 until to 2012.

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INTERNATIONAL HUMAN RESOURCE MANAGEMENT: A REVIEW PAPER FROM PAKISTANI PERSPECTIVE

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Human Resource Management, IHRM, Recruitment & Selection, Culture, Pakistan.

ABSTRACT

This article provides information about the International Human Resource Management and discusses H.R.M according to the international prospective in Pakistan. In this article it is discussed that how environmental and cultural factors affect the recruitment, selection and industry/employee relation in Pakistan. In the end some managerial implications are made for human resource managers.

INTRODUCTION

Human Resource Management

Human Resource Management is the way an organization manages its staff and helps them develop to achieve its objective effectively *(McCourt and Eldridge, 2003).*Unlike other resources it is not an easy task to manage human resources, because people have emotions, feelings and different values.

International H.R.M

As more market internationalize, more nations become integrated into the international world economy and more business choose to expand their business across national borders, issues around the people management and career development of both international managers and those they manage in international operations became more critical to the strategic planning and operations of the firm *(De Cieri et al, 2005)* .

Culture

Therefore the already difficult task of managing people became more difficult. In order to manage people of a different country it is necessary to understand them. To understand people the starting point might be to understand their culture. Each country has a unique culture having some unique characteristics and if we ignore them in managing people of that culture, there are greater chances that it will result in business failure *(Gerhart and Fang, 2005).*Culture is the drawing force behind the behavior, attitude and beliefs of people *(Warner and joint, 2002).*

In broader sense one might define culture as "the result of human action", *(Berthon 1993, in Warner and*

Joint, 2004). Actions of people are influenced by various factors, including their background, the environment in which they are grown up, their family system etc. All these factors when combined make the culture.

Culture of Pakistan

Religion

Khilji (2002) described Pakistani culture as an amalgam of Islam religion, Indian origins, British inheritance and American influence. Religion plays a dominant role in Pakistani culture and 96% of the total population is Muslim. Religion has influence on society and daily life *(Khilji, 2001).* Pakistan used to be the part of Indian sub-continent before independence; a large number of traditions fundamental to society are similar to Indian society. Islam has brought about some changes in those traditions (Khilji, 2003).

Other Cultures Influence Pakistani Culture

British, who maintained a colony on Indian sub-continent for almost a century, also has influenced Pakistani culture, *(Khilji, 2003).* Other strong influence on Pakistani culture is that of United States (USA) *(Khilji, 2001). Khilji (2004)* argues that since its independence, America has been the key player in the political and other issues of Pakistan. American syllabus is taught in most of the leading Institutes of the country and the graduates of these Institutes has a tendency towards modern American work related values.

We now turn our discussion from general culture to the work related (organizational) culture and values of Pakistani employees.   The reason for studying the national culture first is that, the work related values are significantly influenced by the national culture *(Khilji, 2003).*

CULTURE DIMENSIONS BY DIFFERENT RESEARCHERS

Tayeb (2001) stated that many researchers have tried to measure culture on the basis of cultural dimensions. *Hofsted*e proposed four cultural dimensions to understand a culture. Fiske identified four universal patterns of culture. *Trompenaar's* cultural model consists of seven dimensions and many others researchers have done work in this field. Among the models, *Hofstede's* cultural dimensions are mostly used by researchers while analyzing the national culture.

Hofstede's Cultural Dimension

Hofstede performed a cultural-level analysis with data from individuals of fifty nations and came up with four cultural dimensions, namely power distance, individualism, masculinity and uncertainty avoidance. He calculated scores for each factor and ranked nations along the cultural dimensions *(Au, 1997).* However some researchers have criticized Hofstede's cultural dimensions.

Tayeb's Cultural Dimension

Tayeb's (2001) study of the different models used for measuring culture stated that relying solely on these dimensions will be a mistake in order to understand any culture. Tayeb (2001) argued that national culture

cannot really be simplified and reduced to a handful of boxes into which some nations are placed and from which others are excluded. Within a given culture there are sub-cultures and different groups of people. If we consider this statement for Pakistan it is true as there are many different ethnic groups and having different cultures.

Fang's Cultural Dimension

Fang (2003) analyzed the fifth dimension proposed by Hofstede later on, which he termed as "confusion dynamism" on the basis of Chinese culture and was questioned. Fang (2003) argued that the values used for this study were mostly interrelated but were divided into two opposing poles for analysis which was a drawback of the study. Moreover the sample used for this fifth dimension was different from that used for the first four dimensions. It is also a noting factor that most if not all researchers only use the four dimensions and ignores the fifth one (Fang, 2003).

Gerhart and Fang (2005) in their study of reanalysis of Hofstede's data, stated that the conclusion made by Hofstede i.e. the national differences in culture are larger than the organization differences is called in to question and the reanalysis of Hofstede's original data suggested the other way round. All these studies suggest that although Hofstede's cultural dimensions are mostly used by researcher to analyze different cultures, there are some criticisms about it and one must be very cautious about using these dimensions (Tayeb, 2001).One might argue that all this work is useful to understand some aspects of culture but it might not be a considered a sole determinant to understand a culture. Beside these criticisms, Hofstede's cultural dimensions are mostly used by researchers in their analysis of national and organizational cultures; therefore, we use these dimensions in analyzing the Pakistani culture in this essay.

Pakistani Culture on Basis of Hofstede's Cultural Dimension

If we try to analyze Pakistani culture on the basis of Hofstede's cultural dimensions, Pakistani culture could be regarded as collectivist, high power distance, high on uncertainty avoidance and in the middle of masculinity and femininity index, (Khilji, 2001).this means that there is general unquestioning respect of the authority, people are integrated as cohesive groups and they are emotional (Khilji,2001).there is a collectivist culture in Pakistan because, people live in a family system and are bound to it (Khilji, 2003).Hierarchal differences are learned early in the life as a child is taught to be respectful in relationships and is discouraged from questioning authority (Khilji,2003). The society is divided into elite and non-elite class, a contributing factor to the high power distance in Pakistani society.

After analyzing the Pakistani culture we will now discuss how recruitment and selection and employee relations are shaped by the environmental and cultural context of Pakistan.

Recruitment & Selection in Pakistan

Recruitment and selection is one of the most important functions of Human Resource Management and, must therefore be fair and unbiased, (Benfield and Kay, 2008). McCourt and Eldridge (2003) suggested

three areas that could alter fairness in recruitment and selection. Those areas are Nepotism, Corruption and Discrimination and argued that the extent of these factors will vary from country to country.

In Pakistan the process of recruitment and selection is altered by these factor as well as some other factors. Syed (2003) argued that political intervention, bureaucracy, corruption, elite class domination, weak judicial system, discrimination, quota system are influencing the recruitment and selection in Pakistan.

Government influenced Recruitment & selection

Syed (2003) stated that in Pakistan successive governments have been acting as employment exchanges to provide jobs to their political activists and supporters. A huge work force has been recruited on political basis in violation of merit.

Bureaucracy Affect Recruitment & selection

Bureaucracy also influences the process of recruitment and selection in Pakistan. As argued by Halim (2008) bureaucratic corruption is more in developing and less developed countries. This argument is true while considering the role of bureaucracy in the recruitment and selection in Pakistan. Hussain (1999) stated that Pakistani institutions are dominated by bureaucrats and due to this dominance corruption has increased in Pakistan. This corruption has a significant influence on the recruitment process. This is especially true in the case of public sector organizations like WAPDA, PIA, and Railways etc. In these organizations selection is made on the basis of personal connections even through paying money to get the job. Private sector has also been influenced by the bureaucratic corruption, but to a lesser extent as compared to public sector (Hussain, 1999).

Quota System Affect Recruitment & Selection

Quota system is used in Pakistan to allocate some seats in employment as well as in educational institutes for people with particular characteristics i.e. disabled, foreign seats etc. (Syed, 2003).Quota system is also subject to discrimination in Pakistan (Syed 2003).As Khilji (2002) stated that the elite class uses its power to gain benefits, in the case of quota system it is true, the quota specified for a particular group is filled by the elite group for its own candidates through personal connection rather than, to be filled on merit basis (Syed,2003).

Discrimination in Pakistan

Discrimination is also a very key issue in recruitment and selection in Pakistan. Most significant of those is the gender discrimination. Alam (2009) argued that the number of women managers in insufficient in Pakistan. This is true not only in the case of women managers but also in other professional levels. This is due to the low literacy rate of female in the country and also the male domination in the society. If we compare the fairness in recruitment and selection in UK and Pakistan, it could be argued that like UK there is complete legislation to prevent discrimination in recruitment and selection in Pakistan (Hussain, 1999). But the problem is that unlike UK the judicial system in Pakistan is so weak, political intervened and elite dominated, that these laws are not implemented in time and properly (Khilji 2003).All these practices are embedded in the culture and, due to the elite domination and lack of awareness of basic rights of people (Hussain, 1999). Khilji (2003) states that the Pakistani Government discourages the recruitment of expatriates in local subsidiaries, due to the presence of large, educated and qualified workforce. But beside this there are a large number of expatriates working the country.

RELATIONSHIP BETWEEN EMPLOYER & EMPLOYEE

The relationship between an employer and employee lies at the heart of what make an organization effective (Banfield and Kay, 2008).trade union collectively or individually represents the interests of its members predominantly in the context of employment. The trade union is therefore concerned with the relationship of the employer with their employees (Banfield and Kay 2008). Katz and Alsea (1997) stated that industrial relations vary from country to country and are influenced by various local factors; strategies that motivate workers in one country are sometimes ineffective or irrelevant in another country.

FACTORS AFFECTING EMPLOYER & EMPLOYEE RELATIONS

Government Legislation

Government legislation plays an important role in shaping and regulating the industrial relations within a particular country. In Pakistan industrial Relations Ordinance IRO (2002) is the most important legislation for regulating the employer and employees relations (Baig, 2005).

Political System

The political system of Pakistan is not stable and there is a history of changes in the government and political instability (Khilji, 2004).

Military Generals

The constitution of the country has been dismissed on various occasions by military Generals taking over the government from democratic governments. Due to the dismissal of constitution people even lose their basic right.

Trade unions

There has been inconsistency of government policies regarding trade unions (Baig, 2005). Elites often use trade unions for their own political purpose and not for the good of the working class.

High Power Distance in Society

And as there is high power distance in the Pakistani society people of lower working class usually accepts this (Khilji, 2003). Due to this high power distance and acceptance of hierarchy employees are kept separated from management and top down approach is practiced in most organizations.

High Unemployment:

High unemployment also contributes to the imbalance of power between the employer and employee, due to the fear of losing the job employees usually have an unquestioning attitude towards the management policies (Saddique, et al, 2006).Due to this reason employees and their trade union are not in a strong position to force the management to negotiate with them.

Industrial Tribunals

Moreover as Baig (2005) stated that, although there is provision for industrial tribunals in the IRO (2002) to settle the industrial deputes, the processing time is too long and politically driven that it is very difficult and time consuming for both employer and employee to lodge a case to be settled in the tribunal. This affects both employer and employees.

Unclear Contract of Employment

The main reason for industrial disputes are unclear contract of employment (Baig, 2005), and the lack of employee involvement and participation in management and decision making of the organization (Khilji, 2003).The terms of contract are not clear and often employees do not know about their rights.

Employees are not involved in Decision Making

Due to large power distance and hierarchal structure of the organization employees are kept away from decision making (Khilji, 2003).it could now be stated that, in Pakistan trade unions causes problems both for organizational and individual effectiveness and there is a lack of coordination between management and unions.

Management and Employee Performance

Baycon and Blyton (1999) after their study of UK steel industry worker concluded that there is a direct relation between Management and Union cooperation and employee performance and satisfaction. There is also lack of participatory management in Pakistani organizations. Wu and Lee (2001) study suggested that there is a direct relation between participation of employees in the management and decision making and employee relations. The more the employees are given participation in management the positive will be the effect on employee relations. Employees should be managed directly and given participation in management; this will improve their own performance as well as the organizational performance in operational and financial terms and reduce the need for the unionism (Morgan and Zeffane, 2003).

CONCLUSION:

From above discussion it might be concluded that although there are significant cultural and political effects on the HR practices of recruitment and selection and employee relations in Pakistan, it is not impossible to adopt the fair way of performing these functions. By complying with the fair and unbiased process of recruitment and selection, not only an efficient and effective work force could be achieved but, by introducing cooperation with trade unions, involving employees in management and decision making, Pakistani employees could be managed and motivated in an effective way. Good employee's relation policy will help the International HR manger to retain an effective work force. By applying these fair practices, beside the improvement in performance of the organization, the cost associated with not complying with them could also be eliminated or reduced. These costs might be poor performance of the employees, time and cost associated with settlement of industrial disputes and above all, selecting new effective work force.

Although cultural view might suggest that Pakistani employee will not participate in management and would avoid responsibility. Khilji (2004) in her study found that Pakistani employees are willing to do so by possessing modern work related values. They are aware of the modern management techniques and have the ability to deliver results, if given the opportunity. Those organizations that involve employees in management and decision making are performing better than others. The employees at that organization are also very satisfied with their performance and their management (Khilji, 2004). This suggests that involving employee in management and decision making might be a good way of managing employees in

Pakistan.

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THE ROLE OF AGRICULTURAL EXTENSION ON INCOME IN

BANGLADESH

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Abstract

The impacts of agricultural extension on agricultural income, non agricultural income and total income have been conducted. Results were derived through regression analysis. Fifty samples were collected from two sub districts of the Gazipur district in Bangladesh. The selection of the study sites and collection of the sample were done purposively. It is clarified from the study that agricultural extension has significant contribution to raise agricultural income. However, it is found that the impact of extension service on non agricultural income is negative. It is also found that the regression coefficient of agricultural extension on farm income (175.731) is particularly great compared to the regression coefficients of non farm income (166.381) and total income (63.047) respectively. It is cleared from the study that agricultural extension is necessary for farmers to raise farmers' income.

Keywords: Bangladesh, agricultural extension, farmer, income.

1. Introduction

It is well known that a nation's farmers' acquiring knowledge from agricultural extension services can catch up modern agricultural technologies rapidly. Understanding this significance of agricultural extension services, the realization of agricultural extension services has been increasing worldwide (Owens et al. 2003). However, sometimes this is not adequately appreciated by most policymakers and planners in the less developed countries like Bangladesh. It is noted that agricultural extension services do not work satisfactorily and many farmers hardly ever received any extension services (Rainer et al.1996,

Haq 2011). This means that agricultural extension services in Bangladesh still fail to reach its ultimate goal, which is to increase the farmers' socio-economic betterment. It is notable that agricultural extension services can provide farmers opportunities of productive works and incomes. As the socio-economic improvement is one of the basic goals of agricultural extension services, with the knowledge derived from agricultural extension services, a farm operator may raise his earnings (Haq 2012). Therefore, this study focuses on the impact of agricultural extension services on farmers' income in Bangladesh.

Though some recent studies of farmer' extension are found in Haq (2012) and Haq (2013), it recognized the impact of farmers' extension on agricultural income and crop income only. Various approaches and data were used in the former studies. However, it is not easy to pinpoint the sources of the differences in the previous studies because of their model specifications. The current study differs profoundly other reported in the literature since it includes agriculture income, non-agriculture income and total income.

2. Methodology

The income of a household is widely determined by wide variety of factors both technical and social (Haq 2004). Among the social factors, individual and family characteristics are also important. Their impacts are again affected by infrastructures facilities in the area and local institutions, as assumed in Rahman (1999). In the present exercise all these factors could not be taken into account as relevant data were not available. Explanatory variables were reviewed and their relevant importance can be found from the existing literatures. They are the actual size of the cultivated land, that is the farm size (FS), number of family earners (FE), family size (FMS), farm operators' farming experience, that is, years of rice cultivation (EXP) and the education years of farm operator (ED) other than the number of times extension contacts (ET). The estimated equation of household income is as INC= f(ED, FS, FE, FMS, EXP, ET).

Agriculture income is the gross income. Non Agricultural income mainly came from wage and trade. Total income is total agricultural income plus total non agricultural income. All those are calculated on the basis of one year prior to the survey.

The ordinary least square (OLS) is used for agriculture income and total income. Due to some zero observations, the Tobit model (Quadratic hill climbing), is used for non-agriculture income.

In order to apply the above mentioned formula, a field survey was conducted in the Gazipur district, located at 30 kilometers in the North –East of Dhaka, the capital city of Bangladesh, between August and September 2001. This area is an average farming district in the central and northern areas of the country regarding productivity, farm size and production conditions. There are five sub districts in Gazipur District. In this paper, Sadar and Sreepur sub districts were surveyed. A total of fifty farms were investigated through pre structured questionnaires. The selection of two sub districts and sample collection were done purposely.

Following is a brief explanation of the survey families. The average age of farm household head is 43.1 years, the number of years of schooling of farm household head is 5.5 years, the farm area is 1.4 ha and the size of family is 7.2 and the number of family earners is 2.2. As for the contact frequency with extension agents, the average is 0.8 times per year and only 18 families were contacted out of the surveyed families (36 percent). The contacts were particularly low with families whose heads have low education levels; families that have no contact at all formed the majority, as can be seen in table 1. It can be inferred therefore that the lower the education level is, the less contact with extension agents there is.

Table 1: Education Level and Extension Contacts (persons)

Education levels	Extension contacts	No extension contacts	Total
College and over	3(42.86%)	4(57.14%)	7(100%)
High school	7(43.75%)	9(56.25%)	16(100%)
Primary	7(38.89%)	11(61.11%)	18(100%)
Illiteate	1(11.11%)	8(88.89%)	9(100%)
Total	18(36%)	32(64%)	50(100%)

Source: Field survey 2001; Haq 2004.

3. Results and Discussions

The results of the regression analysis are presented in table 2. As the size of sample is small, this implication implies that impacts of extension contacts and other explanatory variables should be viewed as explanatory and indicative (Haq 2004). The adjust R^2 values indicate an excellent fit for the regression equations. The F values are significant at 1 percent level of probability, implying that the specification of the models were reasonably accurate.

Education has negative but insignificant effect on agriculture income, probably meaning that education is not relevant for farm income. Education has significantly positive impact on non-agricultural income and total income.

The farm size has significantly positive effects on agricultural income and total income. Usually large farmers could produce more rice. They could also store this crop for a certain period of time and sell it later at a higher price (Begum 1998). Thus it can increase agricultural income as well as total income. The effect of farm size for non-agricultural income is negative and insignificant. One of the main causes is perhaps, that the size of the farm may not be an important factor for explaining the non-agricultural income.

The number of family earners has significantly negative effects on agricultural income. But the impacts of family earners on non-agricultural income and total income are significantly positive. It is plausible, since agricultural work on rural farms tends to be low paying (Daily Star 2002). Therefore the more the family earners would be, the higher the off farm work involvement would be. It may help to earn more money, thereby boost the total income as also seen Murphy et al. (1997).

Table 2 Regression Estimates with Survey Data

Variables	Agricultural income	Non agricultural income	Total income
Intercept	92.151 183.025	-1675.235*** 516.351	-1120.446*** 407.863
ED	-6.807 14.714	125.148** 40.750	82.602*** 32.709
FS	405.433*** 59.481	-77.676 163.873	384.674*** 132.551
FE	-188.256*** 66.580	698.432*** 179.523	514.032*** 148.371
FMS	31.297* 19.125	128.363*** 52.609	116.489*** 42.620
EXP	11.151** 5.132	-30.077** 14.611	-13.102 11.438
ET	175.731*** 49.252	-166.381 139.929	63.047 109.756
AR^2	0.70***		0.73***
Log likelihood		-337.515	
F - statistics	20.114***		23.940***

***, ** and * indicate level of significance at 1%, 5% and 10% respectively.

  Italics indicate standard error.

Source: Authors calculation from survey data.

The size of family has significantly positive effects on agricultural income, non-agricultural income and total income. Probably larger families could provide more family labour to agricultural and non-agricultural works to raise total income.

Farm operators' farming experience has a significantly positive contribution to farm income but it has no significant contribution to off farm income. The impact of experience variable on total income is weak as the coefficient is insignificant.

Finally the impact of extension contact is significantly positive on agricultural income, although it has weak effect on non-agricultural income and total income. Accordingly, it is possible to ascertain that the contacts with extension agents contributed to improve agricultural income per unit of farm land. Haq (2012) observed that three contacts or more per year is particularly great compared to one to two contacts per year in Bangladesh. According to Owens at al. (2003), whose research was based on Zimbabwe, a frequency of 1 and 2 operations per year between extension agents and farmers generates a high contribution to productivity. However, a frequency of more than three times per year showed no clear effects. Compared with the results of Owens et al. (2003) in Zimbabwe, the results of the current study suggest that in Bangladesh the higher number of contacts between extension agents and survey farmers seem more effective. This result also agrees with Haq (20011) and Haq (2013). This is apparently because the farmers who have more than three contacts could get case by case, suitable guidance concerning the application of fertilizers or prevention of insects and diseases.

4. Conclusion

Diversified results are found in this study. It is observed that extension has negative effect on non-agricultural income. For agricultural income, however, extension has positive and significant effect. It means that extension is relevant with on-farm work in the country. It is cleared from this study that extension is necessary for farmers to raise total income. Domestic and international donors and experts should keep their attention for non-agriculture oriented extension consolidating with on-farm work related extension in Bangladesh. Considering the result of this study, policymakers should take necessary steps.

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THE EFFECT OF ORGANISATIONAL JUSTICE AND ORGANISATIONAL CITIZENSHIP BEHAVIOURS AMONG PRIVATE UNIVERSITIES IN ENUGU STATE, NIGERIA

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Abstract: The research work focused on the observation of the organizational justice and organizational citizenship behavior among academic and non academic staff of private universities in Enugu state, Nigeria. The results show that there is a significance relationship between the impact of the organizational justice and the organizational citizen behavior. The reliability of the results shows that the responses of the data were at average of 91 to 98 percent reliable. The researcher however, recommends possible ways to remedy the situation.

Key words: Organizational justice, organizational citizen behavior (OCB), Pearson correlation, private university, reliability test and probability values

1. Introduction

In today's educational systems, organisations and institutions are seeking high performance, innovations and flexibility to boost up the economy of the entire world. It can only be possible when organisations and institutions provide their employees with satisfied workplace, fair treatment, remuneration and appraisal for their effective work. These factors help in developing the organisations, institutions and other such kind of work places (Hafiz et al, 2012). Accordingly, an organisation should be capable of shifting its member attitudes and behaviours which act for organisational development from egoistic behaviours. Hence, for increasing the overall effectiveness of the organisations and institutions, organisational citizenship behaviour is one of the factors.

Organ (1988) defines organisational citizenship behaviours as individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the

effective functioning of the organisation. Organisational citizenship behaviours come in a variety of forms such as loyalty, aiding others and organisational compliance (Podsakoff et al, 2000). Cohen and Vigoda, (2000) have identified the importance of organisational citizenship behaviour for all nature of organisations, and try to elaborate the view that it improves the overall firm's performance in a variety of ways. If employees are happy with their work, environment and responsibilities, then they naturally feel constructive for the organisation and give optimistic response. Researchers have identified organisational citizenship behaviours importance and tried to dedicate their attention towards this aspect of employee behaviour for the success and better performance of the organisations (Hafiz et al, 2012). Similarly, organisational justice (OJ) is about the distribution of tasks, property, rewards, sanctions, pay, organisational positions, opportunities, roles, and the like within an organisation, the rules by which decisions concerning these distributions are made and the social norms on which these rules are based (Folger and Cropanzano, 1998). Organisational Justice is important in organisations and institutions because it discloses the fact that equitable treatment with all employees and workers exist which enhances the perception of employees regarding justice (Rorray, 2006).

Nevertheless, educational institutions are the bedrock on which most prosperous nations depend. If people are instilled with better education and skills, they will be better placed to contribute positively to the economy. Against this background, academic and non academic staffs in private universities are currently facing many challenges in form of inadequate infrastructure, lack of enabling research environment, disparity in salary and allowances, inconsistent policy implementation which affects their levels of satisfaction. Despite the numerous research effort on organisational justice and organisational citizenship behaviours among academic staff, there is dearth of research on the subject of interest in Nigeria particularly in private universities in the Enugu State Nigeria; hence the need for the study.

i.   **The objective of this study** is to ascertain the relationship between organisational justice and organisational citizenship behaviours among academic and non academic staff of private universities in Enugu state, Nigeria.

ii. **Hypotheses:** For studying the relationship between organisational justice and organisational

citizenship behaviours, we test the following hypotheses:

Ho_1: There is no significant relationship between distributive justice and OCB.

Ho_2: There is no significant relationship between procedural justice and OCB.

Ho_3: There is no significant relationship between interaction justice and OCB.

2. Review of Related Literature

i.   Organisational Justice: James (1993) defined the concept of organisational Justice as the perception of individuals and groups regarding fair treatment that they received from the organisation and their resultant reactions in behaviours to such perceptions. According to Greenberg and Baron (2009), Organisational Justice is the study of people's perception of fairness in organisation. Organisational Justice is historically rooted in Equity theory. Equity theory according to Adam (1965), states that people undergo cognitive conflict when things go in contrast to their prospect. This theory also states that people engaged in continual social comparison with their referent individuals. Thus they compare the ratio of their ''input and output'' with their referent individuals.

Organisational Justice is a key factor to most successful organisations. In order to keep a satisfied, committed and loyal employee in the organisation, the organisation needs to be fair in its system regarding justice. When employees see themselves as partners in the organisation, they perceive higher level of justice. This is because; employees feel that they are part of the decision making in the organisation. Hence, employees feel that they are part of the organisation, which most time enhances organisational productivity and employee performance. Similarly, when there is free flow of communication in an organisation, the employee feel higher level of justice. Organisational climate and culture can influence organisational justice (Yasar et al, 2014). Deconick (2010) states that the outcome of organisational justice is trust and that commitment tends to increase where there is justice. Issues like allocating monetary resources, hiring employees in organisations, policy making and policy implications that affects decision maker and the people who are affected from such decisions require special attention in respect of justice (Greenberg et al, 2005).

Distributive Justice shows the employees' perception concerning whether benefits are distributed fairly or

not (Folger and Cropanzano, 1998). Greenberg and Baron (2008), states that distributive Justice is that form of organisational justice that focuses on people's belief, that they have received fair amounts of valued work- related outcomes (e.g. pay, etc). Distributive justice requires that rights, benefits and responsibilities are distributed on the basis of skills and contributions. Cropanzano et al (2007), argued that distributive justice is concerned with the reality that not all workers are treated alike, and that the allocation of outcome is differentiated in workplace. Dailey and Kirk (1992) found that employee may rationalize their desire to quit, by finding evidence which illustrates how unfairly rewards are distributed. The main issue in distributive justice is whether gains made are right, appropriate and ethical (Ozen, 2003).

Procedural Justice is defined as fairness issues concerning the methods, mechanisms and process employed to determine outcomes (Folger and Cropanzano, 1998). Greenberg (1996) views procedural justice as the perception of an individual concerning whether the procedures or methods used in the making of a decision about him / herself or a third person are appropriate. Procedural justice criteria include; voice in making of decisions, consistency in applying rules, accuracy in use of information, opportunity to be heard, safeguards against bias. In the cases of procedural injustice, people did not only consider their outcomes as unfair but also reject the entire system by considering that unfair. Consequently, every organisation should maintain procedural justice as a regular practice, because, decisions based on unfair practices were not accepted by employees (Greenberg and Cropanzano, 2001).

Interactional Justice is about how the behaviours of the decision makers are perceived (Bias and Moag, 1986). It is the way recipients of justice are treated by management in terms of immense organisational practices (Cohen- Charash and Speitor, 2001). Interactional justice is also related to proper performance of formal decision making process. However, according to Greenberg and Colquitt (2005), if boss of employee explained the situation and reason of layoff to an employee in a careful and sensitive manner, then it results in a positive feeling in the mind of the leaving employee, as the employee considers that the layoff is fair, and thus, will not sue the organisation for wrongful termination. This shows to a large extent the importance of interactional justice, as the way the organisation treats its employees help project the image and good will of the organisation.

ii. Organisational Citizenship Behaviour: The concept of organisational citizenship was first used in literature by Bateman and Organ (1983); but its link could be found in the Bernard's (1938) ''Concept of Willingness to Cooperate''. According to Bateman and Organ (1983) organisational citizenship entails behaviours like helping colleagues solve job- related problems; accepting orders without resistance; performing unexpected tasks that comes up at inconvenient times without complaining, keeping the working environment clean and tidy, talking positively about the business, organisation and managers. When having conversations with people outside the organisation, creating a work environment where conflicts and distractions are kept to a minimum and protecting organisational resources. Organisational citizenship behaviour shows behaviour which is performed by employees' with their own consent and will for the well being of their organisation, it at last positively affect the organisational performance (Kim, 2006).

OCBs Have Three Basic Characteristics According to Organ (1988), namely:

- The behaviours in question are voluntary.

- They are not directly or explicitly rewarded by the formal reward system of the organisation.

- As a whole, they contribute to the effective functioning of the organisation.

In addition, Bateman and Organ (1983); Smith et al, (1983) has studied the different morale factors of employee behaviour that affects OCBs, in which they found the perceptions of employee's about their supervisor support, job satisfaction, organisational commitment and perception of fairness that have strong influence on employee's attitude. Consequently, Podsakoff et al (2000) summed up the influencing variables of OCB namely; trust in leader, job satisfaction and organisational commitment.

The construct of OCBs from its conception has been considered multidimensional. First, two dimensions were proposed namely; altruism and general compliance (Smith et al, 1983); whereas later studies of Organ (1988) examined the concept under five distinct headings: altruism, conscientiousness, sportsmanship, courtesy and civic virtue. Altruism means that employee's help others with organisational- related tasks or problems. Conscientiousness refers to discretionary behaviour that goes well beyond basic role requirement of the organisation. Sportsmanship implies that employee's have a positive attitude and ability to endure minor

shortcomings of an organisation. Courtesy refers to behaviours that aim at treating people with respect. Civic virtue means that employee's responsibly participate in am and are concerned about the betterment of the organisation. Bolino and Turnley (2003) identified two basic characteristics possessed by OCB which includes:

- It is not reinforceable directly (i.e. not required to be a part of the occupation of the individuals technically).

- They originate from the particular and extraordinary efforts and actions which the organisations expect from their employee's in order to gain access to the success and effectiveness of the employee's.

3. Empirical Reviews on the Relationship between Organisational Justice and Organisational Citizenship Behaviour.

Organ (1988) in his work examined why perceptions about fairness can be linked and correlated to organisational citizenship behaviours. He stressed that attention of employee's will most probably change their OCB if they feel and perceive anything unfair happening in the workplace. Hence, Organ (1990) rightly observed that in creation of OCBs, perceptions about fairness perform a significant role.

Ishak and Alam (2009) conducted a research among non-supervisory employees and supervisors in the banking organisations in Malaysia to see the impact of organisational justice on OCB and effects of leader-member exchange (LMX) as mediator between organisational justices in determination of OCB. Results proved that there was a significant correlation between procedural justice, distributive justice, and only one dimension of OCB that was Altruism. There was contribution of interactional justice in the performance of altruism and consideration through LMX. But the contribution of procedural and distributive justice for performing OCB among employees was not significant. The results of research were consistent with social exchange theory.

Williams et al, (2002) explained that when employees perceives fair treatment from their superiors they will be more inclined to show positive behaviours like OCB and by controlling demographic variables, if employees perceive interactional justice in the organisation they showed behaviours that benefit the organisation. Similarly, Cohen-Charash and Spector (2001) found that there is significant association among distributive justice and OCB; trust in organisation and manager, satisfaction with job, pay, management

counterproductive behaviours like negative emotions and conflicts.

Above all, one of the foremost researchers to investigate on the relationship between organisational justice and OCB is Robert Moorman. Moorman (1991) in his study found that there is a relationship between procedural justice and four of the five dimensions of OCB. Using the social exchange theory, Deluga (1994) rightly states that when employees perceive fair treatment and trust in managers, they perform voluntarily beneficial acts for the organisations that are not their formal responsibilities.

4. Research Methodology

Research methodology is a system of investigating the methods and procedures of acquiring information needed for the research work.

5. Sample and Sampling Techniques

For obvious reasons, the researcher was unable to study the whole population of the academic staff of the private universities in Enugu state; hence the determination of an objective sample size was used. For the determination of sample size, the researcher adopted the formula propounded by Taro Yamane (1964).

$$n = \frac{N}{I+N(e)^2}$$

Where N = population size, I = theoretical constant,

n = sample size,   E = limit of tolerance error

In this study, the researcher used 5% (0.05) as the estimated error.

$$n = \frac{172}{1+172(0.05)^2}$$

$$n = \frac{172}{1+0.43} = \frac{171}{1.43} = 120.28$$

$$n = 120$$

The sample size is 120

7. Method of Data Analysis

The descriptive method of data analysis was used to analyze data generated for the research. This was supported for the research. This was supported by tables showing questions and responses

The data generated for this study were analyzed with appropriate statistical techniques called Reliability test and Pearson correlation techniques. The hypotheses postulated were put in null (Ho). All analysis was done using Minitab Statistical software, version 16.1.

It is the mostly widely used method to measure the extent of relationship between two or more variables and used for both interval and ratio scales. The Pearson correlation coefficient was used to assess the respondent's opinion on the reason of organisational justice and organisational citizenship behaviours among academic and non academic staff of private universities in Enugu State Nigeria. The formular for Pearson correlation coefficient were given below as:

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{[(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)]}}$$

When y < + 0.5, a weak positive relationship exist

When y ≥ + 0.5, a strong positive relationship exist

When y < - 0.5, a strong negative relationship exist

When y ≤ - 0.5, a weak negative relationship exist

When y = + 1, a perfect positive relationship exist

When y = - 1, a perfect negative relationship exist

When y = 0, no relationship exist.

8.   Decision Rule

If the calculated correlations show significant values, the null hypothesis is rejected, given room for the acceptability of the alternative hypothesis.

But if the calculated results show a non significant value, the null hypothesis will be accepted, while the alternative hypothesis will be rejected.

The reliability of the results will be shown in percentage. If he calculate reliability is close to hundred or hundred percent, it shows a close reliability of the data and the results.

9.   Questionnaire Distribution among Academic and non academic Staff of the Universities

Questionnaires were formulated which were used to gather information from the decision makers. It was

formulated in accordance with the hypotheses to solicit response from the target audience. The research conducted was on the topic of "Organizational Justice and Organizational Citizenship Behaviour (OCB) among staff of private universities in Enugu State Nigeria". For each of the following questions, indicate you satisfaction level with the dimension asked: Strongly agree (SA), Agree (A), Undecided (UD), Disagree (D), and Strongly Disagree (DA)

10. Analysis and Presentation of Data Based on Research Question

a. Organisational Justice

Table 1: Distributive Justice

S/No	Investigative Statement	SA	A	UD	D	SD
1	My work schedule is fair	15	9	0	26	70
2	I think that my level of pay is fair	5	21	3	30	61
3	I consider my workload to be quite fair	9	17	1	41	52
4	Overall rewards I received here are quite fair	6	19	6	9	80
5	I feel that my responsibilities are fair	3	9	2	57	49

Analysis of the data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
SA	Pearson Correlation	1	-.341	-.586	-.315	.329
	Sig. (2-tailed)		.575	.299	.606	.589
	N	5	5	5	5	5
A	Pearson Correlation	-.341	1	.614	-.495	.262
	Sig. (2-tailed)	.575		.270	.396	.670
	N	5	5	5	5	5
UD	Pearson Correlation	-.586	.614	1	-.561	.544
	Sig. (2-tailed)	.299	.270		.325	.343
	N	5	5	5	5	5
D	Pearson Correlation	-.315	-.495	-.561	1	-.958[*]
	Sig. (2-tailed)	.606	.396	.325		.010
	N	5	5	5	5	5
SD	Pearson Correlation	.329	.262	.544	-.958[*]	1
	Sig. (2-tailed)	.589	.670	.343	.010	
	N	5	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Reliability

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.341	-.586	-.315	.329
A	-.341	1.000	.614	-.495	.262
UD	-.586	.614	1.000	-.561	.544
D	-.315	-.495	-.561	1.000	-.958
SD	.329	.262	.544	-.958	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	21.800	-9.000	-6.300	-26.200	19.700
A	-9.000	32.000	8.000	-50.000	19.000
UD	-6.300	8.000	5.300	-23.050	16.050
D	-26.200	-50.000	-23.050	318.300	-219.050
SD	19.700	19.000	16.050	-219.050	164.300

Table 2: Procedural Justice

S/No	Investigative Statement	SA	A	UD	D	SD
6	Job decisions are made by the university in an unbiased manner	7	13	4	39	57
7	My university makes sure that all employee concerns are heard before job decisions are made	6	4	5	45	60
8	To make formal job decisions, my university collects accurate and complete information	10	2	8	33	66
9	My university clarifies decisions and provides additional information when requested by employees	4	8	0	29	79
10	All job decisions are applied consistently across all affected employees	11	19	4	60	26
11	Employees are allowed to challenge or appeal job decisions made by the university	8	11	5	40	65

Analysis of the Data Based on Correlations: SA, A, UD, D and SD

Correlations		SA	A	UD	D	SD
		SA	A	UD	D	SD
SA	Pearson Correlation	1	.336	.680	.592	-.721

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	Sig. (2-tailed)			.515	.137	.216	.106
	N		6	6	6	6	6
A	Pearson Correlation	.336	1	-.349	.675	-.723
	Sig. (2-tailed)	.515		.498	.141	.105
	N	6	6	6	6	6
UD	Pearson Correlation	.680	-.349	1	.135	-.195
	Sig. (2-tailed)	.137	.498		.798	.712
	N	6	6	6	6	6
D	Pearson Correlation	.592	.675	.135	1	-.954**
	Sig. (2-tailed)	.216	.141	.798		.003
	N	6	6	6	6	6
SD	Pearson Correlation	-.721	-.723	-.195	-.954**	1
	Sig. (2-tailed)	.106	.105	.712	.003	
	N	6	6	6	6	6

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Item Statistics

	Mean	Std. Deviation	N
SA	7.6667	2.58199	6
A	9.5000	6.22093	6
UD	4.3333	2.58199	6
D	41.0000	10.86278	6
SD	58.8333	17.76982	6

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	.336	.680	.592	-.721
A	.336	1.000	-.349	.675	-.723
UD	.680	-.349	1.000	.135	-.195
D	.592	.675	.135	1.000	-.954
SD	-.721	-.723	-.195	-.954	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	6.667	5.400	4.533	16.600	-33.067
A	5.400	38.700	-5.600	45.600	-79.900

UD	4.533	-5.600	6.667	3.800	-8.933
D	16.600	45.600	3.800	118.000	-184.200
SD	-33.067	-79.900	-8.933	-184.200	315.767

Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
1601.828	160.183	4	2	.006

Table 3: Interactional Justice

S/No	Investigative Statement	SA	A	UD	D	SD
12	When decisions are made about my job, the university treats me with kindness and consideration	4	13	1	17	85
13	When decisions are made about my job, the university treats me with respect and dignity	1	20	6	40	53
14	When decisions are made about my job, the university is sensitive to my personal needs	9	7	3	29	72
15	When decisions are made about my job, the university deals with me in a truthful manner	5	21	0	51	43
16	When decisions are made about my job, the university shows concern for my rights as an employee	3	11	5	45	56
17	Concerning decisions about my job, the university discusses the implications of the decisions with me	11	11	0	61	37
18	The university offers quite adequate justification for decisions made about my Job	17	3	3	47	50
19	When making decisions about my job, the university offers explanations that makes sense to me	9	21	0	31	59
20	My university explains very clearly any decision made about my job	21	4	0	52	43

Analysis of the Data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
SA	Pearson Correlation	1	-.617	-.463	-.261	.326
	Sig. (2-tailed)		.268	.433	.672	.592

	N	5	5	5	5	5
A	Pearson Correlation	-.617	1	-.115	.523	-.657
	Sig. (2-tailed)	.268		.854	.366	.228
	N	5	5	5	5	5
UD	Pearson Correlation	-.463	-.115	1	.167	-.165
	Sig. (2-tailed)	.433	.854		.789	.791
	N	5	5	5	5	5
D	Pearson Correlation	-.261	.523	.167	1	-.980[**]
	Sig. (2-tailed)	.672	.366	.789		.003
	N	5	5	5	5	5
SD	Pearson Correlation	.326	-.657	-.165	-.980[**]	1
	Sig. (2-tailed)	.592	.228	.791	.003	
	N	5	5	5	5	5

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.717	-.457	.392	-.386
A	-.717	1.000	-.030	-.181	.016
UD	-.457	-.030	1.000	-.140	.186
D	.392	-.181	-.140	1.000	-.965
SD	-.386	.016	.186	-.965	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	44.111	-33.583	-7.125	35.556	-38.958
A	-33.583	49.750	-.500	-17.417	1.750
UD	-7.125	-.500	5.500	-4.500	6.625
D	35.556	-17.417	-4.500	186.528	-200.167
SD	-38.958	1.750	6.625	-200.167	230.750

Decision Rule

There is significance values of 0.010 with the decision of disagree and strongly disagree and non significance values of 0.575 with the decision rule of agree and strongly agree. The rule support that there is no significance relationship for distributive justice in organizational justice. However, there is a reliability value of 0.958 with the decision of disagree and strongly disagree and   reliability value of

0.341 with the decision rule of agree and strongly agree.

In procedural justice, there is 0.005 significance levels between disagree and strongly disagree while there is no significance values between agree and strongly agree with a significance level of 0.389. The decision rule support that there is no significance relationship for procedural justice in organizational justice. However, there is a reliability values of 0.954 with the decision of disagree and strongly disagree and reliability values of 0.336 with the decision rule of agree and strongly agree.

Also, there is significance values of 0.000 between strongly disagree and disagree but there is no significance value between strongly agree and agree with a value of 0.090. The analyses support that there is no significant relationship for interactional justice in organizational justice. However, there is a reliability test values of 0.965 with the decision of disagree and strongly disagree and reliability values of 0.717 with the decision rule of agree and strongly agree.

From the results of organizational justice, it shows that there is significance relationship between the organizational justice and the organizational citizen behaviour. The reliability test shows that the significance relationship between the organizational justice and the organizational citizen behaviour was at average of 95.9 percent (%). This thereby rejecting the null hypotheses and accept the alternative hypotheses. This decision rules were made with reliability test and Pearson correlation statistical tool.

b.   Organizational Citizenship Behaviour (OCB)

Table 4: Altruism

S/No	Investigative Statement	SA	A	UD	D	SD
21	I help others who have heavy workloads	51	49	4	9	7
22	I'm always ready to lend a helping hand to those around me	45	54	0	11	10
23	I help others who have been absent	46	53	2	13	6
24	I willingly help others who have work-related problems	53	42	3	14	8
25	I help orient new people even though it is not required	52	45	1	8	9

Analysis of the Data Based on Correlations: SA, A, UD, D and SD

Correlations

		SA	A	UD	D	SD
SA	Pearson Correlation	1	-.952[*]	.564	-.188	-.043
	Sig. (2-tailed)		.013	.322	.762	.945

	N	5	5	5	5	5
	Pearson Correlation	-.952[*]	1	-.401	-.019	-.062
A	Sig. (2-tailed)	.013		.504	.976	.922
	N	5	5	5	5	5
	Pearson Correlation	.564	-.401	1	.124	-.700
UD	Sig. (2-tailed)	.322	.504		.842	.188
	N	5	5	5	5	5
	Pearson Correlation	-.188	-.019	.124	1	-.310
D	Sig. (2-tailed)	.762	.976	.842		.612
	N	5	5	5	5	5
	Pearson Correlation	-.043	-.062	-.700	-.310	1
SD	Sig. (2-tailed)	.945	.922	.188	.612	
	N	5	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Reliability

Item Statistics

	Mean	Std. Deviation	N
SA	49.4000	3.64692	5
A	48.6000	5.12835	5
UD	2.0000	1.58114	5
D	11.0000	2.54951	5
SD	8.0000	1.58114	5

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.952	.564	-.188	-.043
A	-.952	1.000	-.401	-.019	-.062
UD	.564	-.401	1.000	.124	-.700
D	-.188	-.019	.124	1.000	-.310
SD	-.043	-.062	-.700	-.310	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	13.300	-17.800	3.250	-1.750	-.250
A	-17.800	26.300	-3.250	-.250	-.500

UD	3.250	-3.250	2.500	.500	-1.750
D	-1.750	-.250	.500	6.500	-1.250
SD	-.250	-.500	-1.750	-1.250	2.500

Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
90658.845	5666.178	4	1	.010

Table 5: Conscientiousness

S/No	Investigative Statement	SA	A	UD	D	SD
26	I'm one of the most conscientious employees	59	43	3	9	6
27	I believe in giving an honest day's work for an honest day's pay	64	41	1	8	5
28	My attendance at work is above the normal	61	45	4	3	7
29	I do not take extra breaks	47	51	4	14	4
30	I obey the university rules and regulations even when no one is watching	50	48	2	9	11
31	I'm one of the most conscientious employees	54	49	0	8	9

Analysis of the Data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
SA	Pearson Correlation	1	-.925**	-.160	-.703	-.232
	Sig. (2-tailed)		.008	.761	.120	.658
	N	6	6	6	6	6
A	Pearson Correlation	-.925**	1	.118	.501	.241
	Sig. (2-tailed)	.008		.824	.312	.645
	N	6	6	6	6	6
UD	Pearson Correlation	-.160	.118	1	.070	-.423
	Sig. (2-tailed)	.761	.824		.895	.404
	N	6	6	6	6	6
D	Pearson Correlation	-.703	.501	.070	1	-.328
	Sig. (2-tailed)	.120	.312	.895		.526
	N	6	6	6	6	6
SD	Pearson Correlation	-.232	.241	-.423	-.328	1
	Sig. (2-tailed)	.658	.645	.404	.526	
	N	6	6	6	6	6

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Item Statistics

	Mean	Std. Deviation	N
SA	55.8333	6.61564	6
A	46.1667	3.81663	6
UD	2.3333	1.63299	6
D	8.5000	3.50714	6
SD	7.0000	2.60768	6

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.925	-.160	-.703	-.232
A	-.925	1.000	.118	.501	.241
UD	-.160	.118	1.000	.070	-.423
D	-.703	.501	.070	1.000	-.328
SD	-.232	.241	-.423	-.328	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	43.767	-23.367	-1.733	-16.300	-4.000
A	-23.367	14.567	.733	6.700	2.400
UD	-1.733	.733	2.667	.400	-1.800
D	-16.300	6.700	.400	12.300	-3.000
SD	-4.000	2.400	-1.800	-3.000	6.800

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
119.8333	.167	.40825	5

Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig

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6359.286	635.929	4	2	.002

Table 6: Sportsmanship

S/No	Investigative Statement	SA	A	UD	D	SD
32	I'm the classic "squeaky wheel" that always needs greasing	13	13	2	53	39
33	I consume a lot of time complaining about trivial matters	9	13	0	53	45
34	I tend to make " mountains out of molehills"	8	13	2	36	61
35	I always focus on what is wrong, rather than the positive side	12	9	5	57	37
36	I always find fault with what the university is doing	10	13	1	47	49

Analysis of the Data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
SA	Pearson Correlation	1	-.431	.516	.729	-.864
	Sig. (2-tailed)		.468	.374	.162	.059
	N	5	5	5	5	5
A	Pearson Correlation	-.431	1	-.896[*]	-.532	.539
	Sig. (2-tailed)	.468		.039	.356	.349
	N	5	5	5	5	5
UD	Pearson Correlation	.516	-.896[*]	1	.293	-.392
	Sig. (2-tailed)	.374	.039		.632	.514
	N	5	5	5	5	5
D	Pearson Correlation	.729	-.532	.293	1	-.975[**]
	Sig. (2-tailed)	.162	.356	.632		.005
	N	5	5	5	5	5
SD	Pearson Correlation	-.864	.539	-.392	-.975[**]	1
	Sig. (2-tailed)	.059	.349	.514	.005	
	N	5	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.431	.516	.729	-.864
A	-.431	1.000	-.896	-.532	.539
UD	.516	-.896	1.000	.293	-.392

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D	.729	-.532	.293	1.000	-.975
SD	-.864	.539	-.392	-.975	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	4.300	-1.600	2.000	12.400	-17.100
A	-1.600	3.200	-3.000	-7.800	9.200
UD	2.000	-3.000	3.500	4.500	-7.000
D	12.400	-7.800	4.500	67.200	-76.300
SD	-17.100	9.200	-7.000	-76.300	91.200

Table 7: **Courtesy**

S/No	Investigative Statement	SA	A	UD	D	SD
37	I try to avoid creating problems for co-workers	37	58	0	15	10
38	I consider the impact of my actions on co-workers	42	51	2	19	6
39	I do not abuse the rights of others	55	48	1	12	4
40	I take steps to try to prevent problems with other employees	59	41	0	12	8
41	I'm mindful of how my behaviours affect other people's jobs	59	46	4	9	2
42	I do not gossip with my co-worker	48	50	2	13	7

Analysis of the Data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
	Pearson Correlation	1	-.918[**]	.301	-.795	-.623
SA	Sig. (2-tailed)		.010	.562	.059	.186
	N	6	6	6	6	6
	Pearson Correlation	-.918[**]	1	-.163	.532	.433
A	Sig. (2-tailed)	.010		.757	.277	.391
	N	6	6	6	6	6
	Pearson Correlation	.301	-.163	1	-.312	-.808
UD	Sig. (2-tailed)	.562	.757		.548	.052
	N	6	6	6	6	6
	Pearson Correlation	-.795	.532	-.312	1	.489
D	Sig. (2-tailed)	.059	.277	.548		.325
	N	6	6	6	6	6

	Pearson Correlation	-.623	.433	-.808	.489	1
SD	Sig. (2-tailed)	.186	.391	.052	.325	
	N	6	6	6	6	6

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.918	.301	-.795	-.623
A	-.918	1.000	-.163	.532	.433
UD	.301	-.163	1.000	-.312	-.808
D	-.795	.532	-.312	1.000	.489
SD	-.623	.433	-.808	.489	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	84.800	-47.800	4.200	-24.800	-16.400
A	-47.800	32.000	-1.400	10.200	7.000
UD	4.200	-1.400	2.300	-1.600	-3.500
D	-24.800	10.200	-1.600	11.467	4.733
SD	-16.400	7.000	-3.500	4.733	8.167

Table 8: Civic Virtue

S/No	Investigative Statement	SA	A	UD	D	SD
43	I keep abreast of the changes in the university	50	52	1	7	10
44	I attend meetings that are not mandatory, but are considered important	47	61	0	3	9
45	I attend functions that are not required, but help the university	49	56	2	6	7
46	I read and keep up with the organization announcements, memos, and so on	70	39	1	8	2

Analysis of the Data Based on Correlations: SA, A, UD, D, SD

Correlations

		SA	A	UD	D	SD
	Pearson Correlation	1	-.959[*]	.076	.704	-.924
SA	Sig. (2-tailed)		.041	.924	.296	.076
	N	4	4	4	4	4

A	Pearson Correlation	-.959*	1	-.217	-.869	.826
	Sig. (2-tailed)	.041		.783	.131	.174
	N	4	4	4	4	4
UD	Pearson Correlation	.076	-.217	1	.567	-.229
	Sig. (2-tailed)	.924	.783		.433	.771
	N	4	4	4	4	4
D	Pearson Correlation	.704	-.869	.567	1	-.564
	Sig. (2-tailed)	.296	.131	.433		.436
	N	4	4	4	4	4
SD	Pearson Correlation	-.924	.826	-.229	-.564	1
	Sig. (2-tailed)	.076	.174	.771	.436	
	N	4	4	4	4	4

*. Correlation is significant at the 0.05 level (2-tailed).

Reliability

Inter-Item Correlation Matrix

	SA	A	UD	D	SD
SA	1.000	-.959	.076	.704	-.924
A	-.959	1.000	-.217	-.869	.826
UD	.076	-.217	1.000	.567	-.229
D	.704	-.869	.567	1.000	-.564
SD	-.924	.826	-.229	-.564	1.000

Inter-Item Covariance Matrix

	SA	A	UD	D	SD
SA	115.333	-97.000	.667	16.333	-35.333
A	-97.000	88.667	-1.667	-17.667	27.667
UD	.667	-1.667	.667	1.000	-.667
D	16.333	-17.667	1.000	4.667	-4.333
SD	-35.333	27.667	-.667	-4.333	12.667

Decision Rule

Furthermore, from the organizational citizen behaviour (OCB), altruism shows a significance values of 0.013 with the decision rule of agree and strongly agree and non significance values of 0.612 with the decision of disagree and strongly disagree. There is a reliability values of 0.952 with the decision rule of agree and strongly agree and reliability values of 0.310 with the decision of disagree and strongly

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disagree. Consciousness shows significance values of 0.008 with the decision rule of agree and strongly agree and non significance values of 0.526 with the decision of disagree and strongly disagree. There is a reliability values of 0.925 with the decision rule of agree and strongly agree and reliability values of 0.328 with the decision of disagree and strongly disagree. Sportsmanship has its significance value between disagree and strongly disagree with a value of 0.005. There is a reliability values of 0.975 with the decision of disagree and strongly disagree and reliability values of 0.431 with the decision rule of agree and strongly agree. Courtesy has its significance value 0.010 with the decision of agree and strongly agree. There is a reliability values of 0.918 with the decision of agree and strongly agree and reliability values of 0.489 with the decision rule of disagree and strongly disagree. Also, civic virtue has its significance value between agree and strongly agree with the significance relationship of 0.041. There is a reliability values of 0.959 with the decision rule of agree and strongly agree and reliability values of 0.564 with the decision of disagree and strongly disagree.

From the OCB results, it shows that four out of five revealed that organizational citizen behaviour is significance. The result agrees that there is significance relationship in organizational citizen behaviour, thereby rejecting the null hypotheses and accept the alternative hypotheses. This decision rules were made with the reliability test and Pearson correlation statistical tool.

11. Summary of Findings

The research findings show that there is a communication gap between the organizational justice and the organizational citizen behaviour. It could be as a result of injustice in the employee's organization. The communication gap shows that there is a relationship between the effect of organisational justice and the organisational citizenship behaviours among staff of private universities in Enugu State Nigeria. This is because the organizational citizen's behaviour is as a result of injustice of the organizations (i.e. the private universities) whereby the organizational citizens will give inn there best and the organization (i.e. the private university) will still show them no mercy in terms of injustice to their organizational citizens. There is a need for the government to protect the interest of the staff injustice on private universities among so that the staff will give in there best and to limit the brain drain of the staff from the private

university to the public university where they will have there organizational justice. Finally, the research shows that there is a significance relationship between the organizational justice (O.J.) and the organizational citizen behaviour (O.C.B.) which tells that all the three null hypotheses were to be rejected and their alternative hypotheses were to be accepted which states that:

H_1: There is significant relationship between distributive justice and OCB.

H_2: There is significant relationship between procedural justice and OCB.

H_3: There is significant relationship between interactional justice and OCB.

In conclusion, there is need for the government, ASUU, NUC and other high institutional bodies to intervene in the organizational justice of the private university upon their academic and non academic staff in other to enhance the staff behaviour and the organizational justice in a positive way that will optimize the university standard.

The study therefore recommends possible solutions to improve the situation in the private universities in Nigeria.

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THE RELATIONSHIP OF PSYCHOLOGYCAL CAPITAL AND JOB SATISFACTION WITH ORGANIZATIONAL COMMITMENT

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Abstract

The purpose of this study is to assess the psychological capital of staffs of province yazd educational department and its relationship with organizational commitment and regard to job satisfaction as a mediator variable. For this purpose, a questionnaire was developed to measure this variable. After ensuring the validity and reliability of measurement tools by exploratory and confirmatory factor analysis, were distributed among a sample of 150 employees. The research method used is the Pearson correlation and structural equation models. Results indicated that psychological capital have   highly correlated with organizational commitment and job satisfaction of employees and Job satisfaction can put the relative impact on the relationship between psychological capital on organizational commitment The psychological capital as a core construct is a better predictor than either of its components for organizational commitment. In the end, is also provided suggestions for managers to enhance their employee psychological capital.

Keyword: psychological capital, organizational commitment, job satisfaction

Introduction

The word "capital" refers to the value of assets and resources for a special need. However other types of

capital value are worth thinking. These capitals include human capital, social and recently psychological capital which is entirely provided by individuals in the organization in the form of intangible assets and resources. In addition, while social capital, human among the members is slightly different, all members must have a high level of positive psychological capital will be oriented to ensure the success of the organization. In recent years, especially after the introduction of positive psychology-oriented view and view of this tendency psychology to the capabilities and positive qualities in individuals and the importance of positive environment (including positive work environment); It was said that there are only three types of capital have been mentioned and the human experience and job skills and careers have To be successful, administrative organizations, productive and services is not enough but the positive qualities of employees is more important subject. It was here that the fourth type of the capital in organizations as a positive psychological capital rose. Positive psychological capital is positive qualities and abilities of employees, managers and the general atmosphere of organization such as confidence, hope, and optimism and tolerates (Luthans, 2002). While human capital to "what do you know" and social capital "Who do you know" refers, psychological capital in individual attitude towards themselves reflected (Luthans, 2004). Therefore, it is possible to psychological capital as the views to their capabilities in the use of other capitals looked. Today research and discoveries in the field of positivism in work environment as with organizational behavior, leadership organizational and human resource management be corresponding has been done to the context of this research can be primary concept of Positive Psychology by Seligman and Csikszentmihaly knew.

Today most organizations managers emphasis on this issue that job satisfaction and organizational commitment can be with rewarded, promoted, to encouraged work to do so increased. Until now, much research on factors affecting on job satisfaction and organizational commitment have been done that indicate the importance of these two variables in organizational research. Since, according to research, the behavior of employees in the organization can be affected by their intrinsic characteristics and qualities, Being aware of them for organizations managers is necessary. Of course managers do not interest to know characteristics and positive attributes of internal their staff and just are interested in knowing attitudes of

their staff to the organization and level of the satisfaction of their work. But during a lot of research role of positive qualities in employees to improve this attitudes very emphasized. For example results of the investigations Luthans and Youssef (2007) showed that positive psychological capacities of employees considerable effect on the consequences of positive work environment including job satisfaction, work happiness, organizational commitment. In addition Luthans and colleagues (2007) support the impact of psychological capital in improving job satisfaction and performance. On the other hand, Jeffrey and Shahnawaz (2009) found in their study of in many public and private organizations in India that psychological capital has a considerable effect on organizational commitment. This research also attempted to examine the relationship between these three variables and pay to identify the relationship between psychological capital on the organizational commitment of employees, considering job satisfaction as mediator variable.

Although the importance and value of positivism that has been accepted for many years, but in recent years, positivism is an area of attention to for theory building, research and application in psychology and organizational behavior was already taken. With regard to the fact that positive psychology has gained lot hurry, its importance cannot be ignored in the workplace. Scopes and approaches to positivism emerged in the work environment led to the emergence of positive organizational behavior, positive organizational research and psychological capital. About our world in general and specifically requires a balanced approach to that both Positivism and strong points and negativism and our weak points consideration And also try to reinforce strong points and positivism and correct the weak points of and negativism, consensus exists (Luthans and Youssef, 2007).

Luthans (2002) the first definition of a positive organizational behavior presented. He Positive organizational behavior as the study and application of positively point's human resource and psychological capacities that can be evaluated and developed and to improve performance in modern work environment are managed effectively defines. specifically for positive psychological capacities that positive entry conditions to have a positive organization behavior must be positive and theory of broad, fundamental research and assessment is valid and reliable (Luthans, 2002).

Organizational behavior with psychological capacities such as efficiency, hope, optimism and resiliency are collected at the present time researchers and management experts that having them for hold people organization as a competitive advantage and more on investment and research (Luthans and Youssef, 2007). Although the experimental and preliminary findings of different samples the four positive psychological capacity support.but the combination of this capabilities within a structure and their interactions with each other, are opinions of the researchers to attract. And resulted this the structural composition of self-efficacy, hope, optimism and resiliency by Luthans as a measure of comparability and acclaimed for measuring human capital, social, economic introduced (AVI, Luthans and Youssef, 2009). Luthans and colleagues comprehensively defined psychological capital. They expressed psychological capital state of a individual positive psychological capital, which is determined according to the following characteristics.

1) Having confidence in efforts necessary for success in challenge tasks (Self-Efficacy)

2) Create a positive document about success in present and future (Optimism)

3) Being consistent in the path goals and if necessity to change paths to achieve the goals and achieving the success (hope).

4) A further attempt at a breakthrough when surrounded by problems and difficulties or even positive events, progress and more responsibility (Resiliency) (Luthans et al, 2007).

Luthans, Olive et al (2007) believe that psychological capital is positively associated with job satisfaction, organizational commitment and job vitality. In a similar study Luthans, Norman and et al (2007) conducted a strong positive correlation between psychological capital and job satisfaction were observed.

On the other hand we can say that one of the important factors in the proper use of the capabilities of employees according to their job satisfaction. If the employee is not willing to his work and is not duty with interested, it may be that the organization is unable to reach the intended purpose. So paying attention to Job satisfaction discussion in organizations is inevitable. In organizational behavior and management literature, job satisfaction is one of the structures that have been done much research on it and play a very important role in decision of employee to stay or leave their organization. Many

researchers have studied with different approaches to the definition of the structure. In the year (1935) Robert Hapak associated with psychological factors, physiological, social, and Victor Vroom in 1924 in the field of personal psychological tendencies, job satisfaction has been defined. In 1985, Davis Niostorm job satisfaction, set of consistent feelings toward work is introduced. And believes that this feeling when the result that demands, needs, desires and experiences that working time of arrival to the organization itself, is provided through the job (Askarian, 1378: 92).

Create a job satisfaction in the individual depends on the several factors that together lead to are caused the desired result, Lack of a factor can be one among the people dissatisfied with their job (Robbins, 1377: 295). Ladbo suggests that some of these factors are as follows salary and wages, staff, administration, promotion opportunities and the nature of the work Ladbo, 2005). Operating variables such as interpersonal behavior, working conditions, relationships with colleagues, leadership style, material rewards and promotions, is positively associated with job satisfaction among employees (Donovan, Drasgow and Munnson, 1998) Kleinman (1997) adds that people are satisfied with their job when they enjoy their work, realistic opportunities have for advancement within their organization, people who work with them their love, they have an intimate relationship with their supervisor and believe that their salary and wages is fair. Many scholars argue that the construct of job satisfaction that may be affect characteristics of employees   and work factors and dispositional Such as age, education, financial status, years of service are factors that have a significantly impact on job satisfaction (Dhladla, 2011) .

As can be seen in effective factors on job satisfaction and inner qualities role and positive of the employees have been ignored that this study attempts to express positive characteristics of a person such as efficiency, hope, tolerate resiliency can be effective in the job satisfaction of the individual.

In several recent decades organizational commitment has been one of the structures of researcher's interest in organization studies and has been one of the important subjects in the behavioral sciences. organizational commitment seems to be one of the main subjects because it include both behavioral Consequences and   attitudinal Consequences(Kalbrg and Rio, 1992). An individual approach to

organizational have pointing to individual loyalty to the organization and identification with the values it While the behavioral component to repeat of an individual's commitment to the effort spent for their organization and also desire to survive in the organization.(Clayton & Hutchinson,2002).

Most definitions of organizational commitment has been made to know the structure that their employees identity with an organization where they work (Locke, 2001). Lee Organizational commitment is the degree to which an individual accepts the goals and values of an organization and in order to the achieve its goals and values, trying to define (Dhladla, 2011). Motion Sky (2003) states that the concept of organizational commitment refers to amount an employee's loyalty to their organization. It means that the amount of dependence of employee to the organization that his decision will be affected to continue membership in the organization.

Some of the definitions that above-mentioned organizational commitment is considered a one-dimensional concept, but evidence shows that organizational commitment is a complex psychological state that several dimensions. The important multi-dimensional model that most research has been conducted to measure the organizational commitment of employees has benefited Allen and Meyer's model. They model their three-dimensional based on the observed similarities and differences that there was in the one-dimensional concepts of organizational commitment, was created. Allen and Meyer (1991) stated that communication and attachment to employees to their organization with regard to these three components (affective, continuous and normative) can be better understood (Solinger, Van alfen and row 2008). Each of these three components, connects employees to their organization, but they are different their psychological nature (Vandenberg and Tremblay, 2008). Allen and Meyer (1990) state that affective commitment as sense of belonging to an organization that determined through acceptable values of the organization and also by the desire to remain in the organization. This emotional response as well as the continuity of one's identity with the identity of the organization is described (Dawley and et all 2005). Continuous commitment is caused by the individual's willingness to continue the activities in the organization. This dimensions of commitment, also pointed to the benefits that is caused to be committed to the organization, such as pensions, seniority, social status, access to social networks. If a person leaves the organization sees these benefits at risk. Normative commitment are defined as a perceived duty to support the organization and its activities and represents a Feeling indebted and commitment to remain in the organization that people think continue the activities and support the organization. However, the three dimensions of commitment are considered as a psychological state which cause employees dependent and committed to their organization (Solynger, Van Alfen and row 2008).

Research conducted in the field of positive psychological characteristics, to explain the effects of these behaviors on Employee attitudes toward their organization, so this research to examine relationship the Positive behavioral traits with organizational commitment. The research hypothesis is stated as follows:

- There is significant relationship between psychological capital and organizational commitment of staffs of Yazd province educational department.

- There is significant relationship between psychological capital and job satisfaction of staffs of Yazd province educational department.

- There is significant relationship between job satisfaction and organizational commitment of staffs of Yazd province educational department.

- Job satisfaction affects on the relationship between psychological capital and organizational commitment.

- While knowing the main hypothesis, sub-hypotheses of the study are as follows:

- There is significant relationship between self-efficacy and organizational commitment of staffs of Yazd province educational department.

- There is significant relationship between hope and organizational commitment of staffs of Yazd province educational department.

- There is significant relationship between resiliency and organizational commitment of staffs of Yazd province educational department.

- There is significant relationship between optimism and organizational commitment of staffs of Yazd province educational department.

Method of research:

The purpose of this study is to determine the causal relationships between psychological capital and each of its dimensions and job satisfaction with organizational commitment, Therefore, this study is based on the objective of applied research; since the development of knowledge in the fields of psychology and organizational behavior management is based on how to obtain the required data, descriptive and correlational, which in the purpose of this study analysis is based on the relationship between the variables

. The main instrument was collecting information questionnaire which respectively to measure the psychological capital questionnaire Luthans et al(2007) to measure job satisfaction and organizational commitment questionnaire satisfaction and organizational commitment Moghly (2002) and other questionnaires were used in this field. For ensuring validity of the questionnaires, edited their initial are examined several of the experts in the field of organizational behavior and psychology and necessary modifications were carried out on them. Also in order to measure the validity of questions was used the operating credibility. In order to determine the reliability of the questionnaire was calculated using Cronbach's alpha SPSS software which for psychological Questionnaire was achieved 82% and for the questionnaire on organizational commitment 70% and job satisfaction number of 78% . These numbers show that questionnaires of the reliability in other words, the reliability is necessary.

Statistical Society:

This research Statistical Society was the 250 experts of the Education Department of Yazd Province. Experts were selected by random sampling and based on sample formula of limited community size of 150 patients. Then 160 questionnaire were distributed among employees, that the number of 136 were returned, and from this numbers two cases were considered as an outlier data and their standard score of them were higher than absolute value of 3 so were removed from the analysis.

Method of analysis data:

the data analysis is used mainly methods of descriptive and statistical analysis to special correlation analysis and considering that hypotheses test is mainly requires correlation analysis and variables examined are qualitative for test the hypotheses is used mainly of correlation and regression methods including Pearson correlation coefficient and structural equation modeling and also factor analysis.

The main findings of research:

Table 1- describe examples of statistics

education				Years of service					age				Marital state		sexuality		Descriptive dimension of sample
master	bachelor	diploma	diploma	8<	8-6	6-4	4-2	2>	50<	50-41	40-31	30-20	married	single	male	female	
18	101	10	5	87	18	18	4	7	5	51	63	15	129	5	93	41	number
13.4	75.4	7.5	3.7	64.9	13.4	13.4	3	5.2	3.7	38.1	47	11.2	96.3	3.7	69.4	30.6	percentage

As can be seen, the number of 134 questionnaire analyses were, 69.4% men and 30.6% women.

The average age of respondents was 38 years and most respondents had history of serving at least 8 years, and 88.8 percent had a Bachelor's degree or higher, which adds to the credibility of the research.

Before getting into the conceptual model and hypotheses testing, it is necessary to ensure the accuracy of measuring models of psychological capital, job satisfaction and organizational commitment. Then, the measuring models of these three areas are mentioned by confirmatory and exploratory factor analysis

Exploratory factor analysis for job satisfaction questions

Based on KMO, factor analysis suggested when the amount of it is more than 0.6. Also significance of Bartlett's test on error level of 0.05 indicates that there is the possibility of discovering new structures (Palnt, 2001).

According to the table, the KMO value is 0.817, which indicates that data is reducible to a few fundamental factors and infrastructure. Also according to the table, the Bartlett test at a level of 0.05 is significant. That is, on the one hand, there is a high correlation between items within each factor and on the other hand between items of one factor with an item of other factors, there is no the lack of correlation or weak correlation.

Table 2- KMO Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.817
Bartlett's Test of Sphericity	Approx. Chi-Square	327.624
	Df	55
	Sig.	.000

Factors are extracted by using a maximum likelihood (ML) method. The key advantage of this approach is that it allows us to evaluate and be able to determine to what extent the factor solution is capable of reproducing the relations among variables in the data file. This feature plays an important role in determining the appropriate number of factors (Habibpour, Safari, 1388, p 326). In order to classifying items among the factors according to their factor loading should have used the rotation table. Results of factor analysis are shown in below table.

Table 3 - rotation matrix of job satisfaction factors

		Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10	Question 11
factor	1	0.487						0.429	0.532	0.470	0.735	0.489
	2				0.497	0.616	0.560					
	3	0.668		0.616								0.410

As can be seen, the second question can not be placed on any of the factors. So it was removed.

Confirmatory factor analysis for organizational commitment questions

The results of fit model, after reforms, mentioned in Diagrams 1 and Table 1. According to Figure 1, a

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significant number (T) in the range of 2.58 and 4.15 is acceptable. Since the latent variables are scale-free, measuring units for these variables is determined on the basis of manifest variables and the loading factor is proven on a constant number of 1.

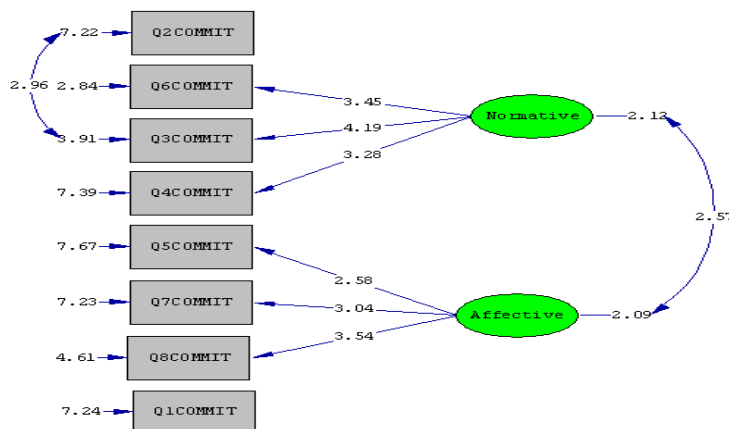For this reason, a significant number of these variables are not shown

Figure 1 - significant numbers of organizational commitment dimensions and items

The fit parameters of model are shown in the table below, the ratio of chi-square with degrees of freedom equal to or less than 1.43 is acceptable 3. Other indicators also show a good fit (p <0.05). So questions of organizational commitment have necessary validity.

Indicators variable	χ^2	DF	CFI	GFI	AGFI	RMR
organizational commitment	25.88	18	0.94	0.95	0.90	0.034

Table 4 - Indicators of organizational commitment model

Confirmatory factor analysis for questions of psychological capital

As shown in Figure 2 (Appendix 1), a number of research questions in the domain are not significant. This questionnaire included questions 5, 6 efficacy dimension and 2, 6 optimism dimension. The amount of Questions R^2 that indicate the proportion of variance, were low (these values were equal to 0.0025, 0.015, 0.018, 0.019.). In

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addition, the indicators do not show a good fit. Chi-square to degrees of freedom ratio is approximately 1.72. The table below shows the summary of results (p <0.05)

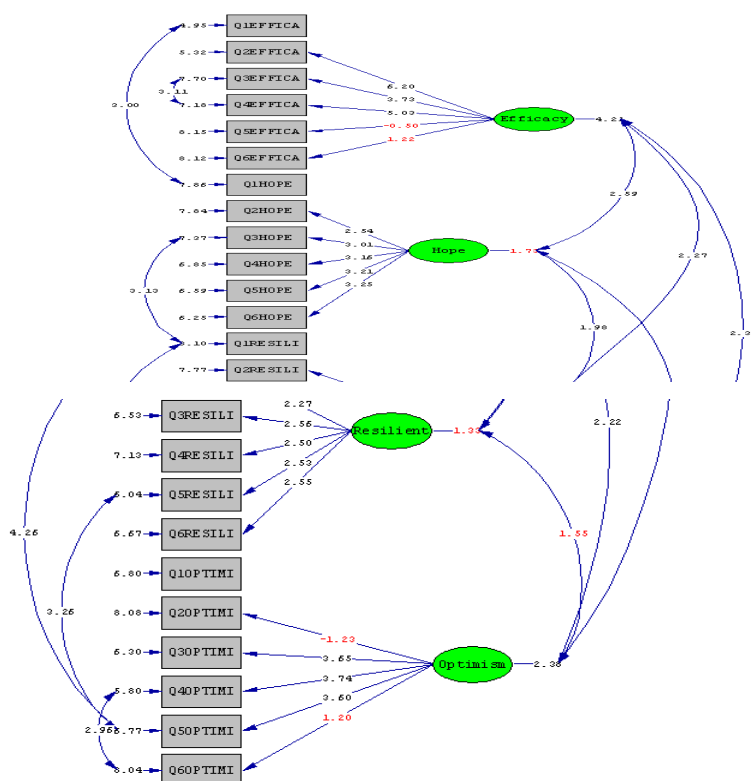**Figure 2 - significant numbers of psychological capital variables**

Indicators . variable	χ^2	DF	CFI	GFI	AGFI	RMR
psychological capital	413.8	240	0.68	0.79	0.74	0.065

Table 5 - Indicators of psychological capital model

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So these questions were excluded from the study, and the model was re evaluated and corrections were applied (fixed the error covariance). The results are shown in Figure 3. As can be seen, except the error in component of the hope and resilience dimensions, all the numbers are in the acceptable range. Except the first question of resiliency and hope that have weak but significant correlation, the rest of the questions are highly correlated. By removing non-significant questions at first step, not only the correlations between dimensions were also modified, but fit indexes also improved. The results are summarized in the table below.
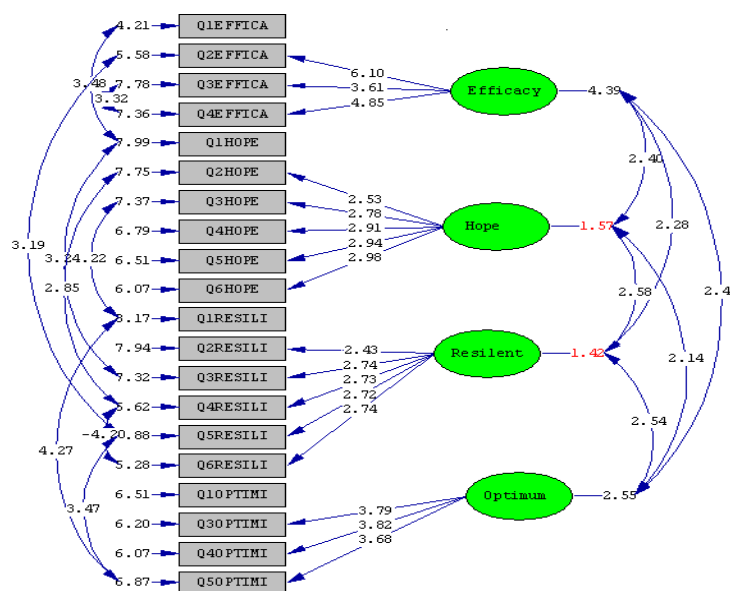

Figure 3 - significant numbers of psychological capital variables (after correction)

Table 6: Indicators of psychological capital model (after correction)

Indicators / Variable	χ^2	DF	CFI	GFI	AGFI	RMR

psychological capital	244.88	154	0.82	0.84	0.79	0.052

Structural equation model and evaluation of the main assumptions

In order to ensure the presence or absence of causal relationships between variables and also evaluate the fitness of observed data with conceptual model, research hypotheses were tested using structural equation model. Software output shows the model is fair (Table 6). All the indexes are standard.

Chi-square ratio to the degrees of freedom is equal to 1.86. In other words, the observed data with the conceptual model is applicable. Figure 5 shows the structure after the reforms. All the numbers are significantly higher than 2.

As can be seen, psychological capital had a significant and positive impact on organizational commitment and job satisfaction (T= 2/4) (confirming hypotheses 1 and 2). Significant positive impact of job satisfaction on organizational commitment was demonstrated (confirming hypothesis 3). In addition job satisfaction had a relative impact on the relationship between psychological capital and organizational commitment (confirming hypothesis 4).
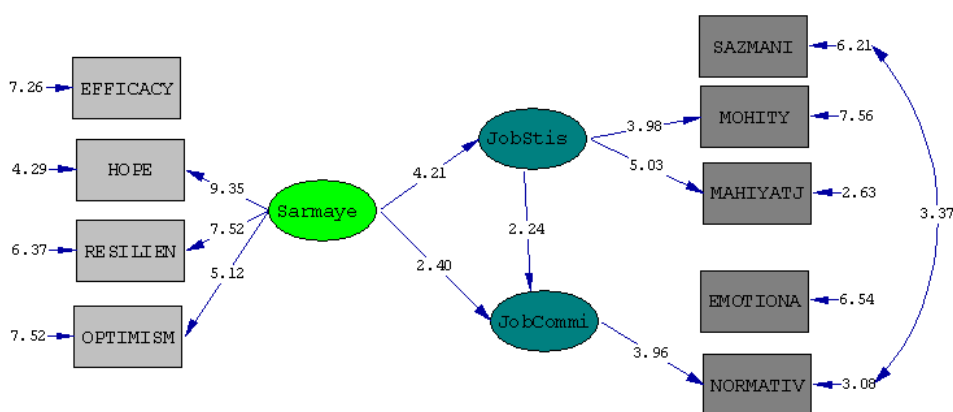

Figure 4 - significant number of structural model

Table 7 - indicators of original model goodness of fit

indicators / variables	χ^2	DF	CFI	GFI	AGFI	RMR
Conceptual model	44.84	24	0.92	0.93	0.87	0.025

As can be seen Conceptual model show the goodness of fit, and the relationships between psychological capital and organizational commitment is significant. The relationship between psychological capital and organizational commitment was approved through job satisfaction.

Correlation

Since the data distribution was normal; the Pearson correlation is used for the initial analysis among variables and dimension.

Table 8- The correlations between the main variables

variables	Mean	sd	1	2
Psychological capital	4.8	0.38		
Job Satisfaction	4.9	0.46	**0.46	
Organizational Commitment	5.1	0.44	**0.39	**0.48

Correlation is significant at the 0.01 level

The results of the above table shows, psychological capital has positive relationship with job satisfaction and organizational commitment. Also there is a positive correlation between job satisfaction and organizational commitment variables (r = 0.48, sig <0.01).

Table 9: Correlation between sub-variables of study

variables	Mean	SD	1	2	3	4	5

self-efficacy	4.8	0.45					
hope	5.1	0.46	0.36^{**}				
resiliency	4.7	0.52	0.31^{**}	0.53^{**}			
optimism	4.5	0.47	0.30^{**}	0.27^{**}	0.20^{**}		
Organizational Commitment	5.1	0.44	0.24^{**}	0.49^{**}	0.24^{**}	0.25^{**}	

Correlation is significant at the 0.01 level

The results of the above table shows, there is positive and significant relationship, however, is relatively weak between each dimensions of psychological capital and organizational commitment.

Conclusions

In this study the correlation between each dimension of psychological capital (self-efficacy, hope, optimism, and resiliency) and organizational commitment was measured and Data indicate that each of them with a confidence level of 95% had a significant positive relationship with organizational commitment. Data analysis shows that psychological capital, job satisfaction and organizational commitment has a significant impact on each other, so this hypothesis was confirmed and used in the model.

This study specifically shows that psychological capital through job satisfaction will lead to organizational commitment. Based on the correlation coefficient and impact coefficient of psychological capital with organizational commitment and comparing it with the effect of correlation coefficients and impact coefficients of psychological capital dimensions with organizational commitment can be mentioned that psychological capital has much more impact on organizational commitment from its dimensions, and has added value. The results of this research are along with the results of Luthans and colleagues (2007) and the AVI, Luthans and colleagues (2009). The evidence shows that staffs at the Education Office of Yazd Province have relatively good psychological capacities and this can be considered as the greatest asset for the organization. Thus, organizations can capitalize on the psychological capital in order to achieve sustainable competitive advantage and improve organizational

commitment for employees.

As stated in the theoretical literature, psychological capital in organizations is an extensible structure and so here are some suggestions for Managers to strengthen psychological capital in the Department of Education:

- Managers by delegating challenging tasks to their employees and help them be successful in doing it, can make employees feeling that with greater effort they successfully accomplish difficult tasks.

- Managers must constantly giving feedback to employees about their progress, and inform them about their success in order to increasingly felt their effectiveness.

- Managers should provide training field by successful people. This can be achieved through cooperation with individuals and establish workshops.

- Honoring successful employees in the Celebration with the presence of all employees can be considered a suitable strategy because employees generally compare themselves with colleagues, and this Social comparison and the progress of others in similar activities is the basis for making judgments about their own abilities.

- Managers must learn targeting skills to their employees and motivate them to offer challenging but attainable goals.

- Managers should provide field that staff involved in organization targeting and fulfill their constructive and helpful comments.

- Managers should not blame their employees or unites because of their failures instead should help them to fulfill their task with hope.

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A STUDY ON THE IMPACT OF GOVERNMENT COMPLEXITY AND REGIONAL GOVERNMENT'S SIZE ON HUMAN DEVELOPMENT INDEX IN NORTH SUMATERA, INDONESIA

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Abstract. This study aims to determine the impact of the government complexity and regional government's size on the human development index in North Sumatera province. This is an explanatory research survey. The variables used in the study are, namely; the government complexity, size of regional government and human development index. Meanwhile, the population involves all the 33 districts/cities in the North Sumatera with a sample taken from a period of 2005-2012 derived using the purposive sampling approach. In addition, The respondents of this study is on the government apparatus who represent the human development programs' planners in several offices involved in the Tanjungbalai city and Asahan, South Labuhan Batu, North Labuhan Batu and Batubara districts with the number of 88 people selected as the sample using the purposive random sampling method. The returned questionnaires were 62 questionnaires. This study is a mixture of quantitative and qualitative studies. The result of the study has revealed that simultaneously and partially that the government complexity and the regional government's size variables simultaneously affect the human development index in North Sumatera.

Keyword: Human Development Index, Government Complexity, Purchasing Power Parity, Population Density and Regional Government's Size.

1.0 INTRODUCTION

Two important factors that are considered to be able to build the human development effectively, are

education and health. Both factors are as a basic human need where they can develop the potential in an

individual. The achievement of good human development must be accelerated to enable each of the

regional governments to obtain optimal results. In addition, the residents should have the opportunity to

realize the knowledge and skills to the availability of jobs, so it can be reflected in productive activities that generate revenue. With the income gained, people can meet their needs by increasing their purchasing power which is then followed with the expectation to improve the quality of life and achieve a decent standard of living. These are related to the human development that is further associated with other terms such as economic development and growth, human resource development, welfare and basic human needs approach. The model of economic growth refers to an increase in the income and national product (GNP); human resources puts human development as the inputs of the production process; welfare approach sees human beings as beneficiaries, rather than as the object of basic changes, that focuses on the provision of needs of goods and services. The human development as a subject and object in life functions to improve the quality of life   and this is termed human construction. The physical and mental development of human resources implies an increase in the capacity of the population base which will then increase the opportunity to participate in the development process.

One way to measure the success or performance of a country or region in the field of human development is by using the human development index (HDI). Both human development and economic growth are closely related.   The achievement in human development requires an   improved economic development that will support the increased productivity by engaging employment opportunities with productive efforts so as to create the increase in income. However, it should be noted that the concept of human development is different from the development attended, particularly for economic growth with the assumption that the economic growth will eventually benefit the human beings.

A study conducted by Georgiou (2008) who examined the entrepreneurship and human development index with a panel data analysis for Western Europe, Japan and the United States of the 1980-2006, reveals that the development of the human development index in Europe and Japan is predominantly driven by the creative industries, economic growth, promotion of exports, improvised education, meeting the needs of customers as well as the provision of better health. The panel data show the dominant influence of the variables' components of the human development index. Meanwhile, Haveri (2006) in his study of complexity in the regional government change finds that the government complexity is the dominant characteristics of the regional government changes and this complexities exist in the setting-up of the limits for the rational reform process and political leadership. The issue of complexity emerges as a major issue in the regional government in Finland. The practical steps are often difficult to be undertaken by government planners for inter-organizational actions. In a complex situation, there are issues that are constantly changing and are inter-dependent. Further circumstances arise due to the differences of preferences. In the regional government change, the complexity, paradox and uncertainty tend to reduce the managerial candidates and expert knowledge, as the rational calculation does not provide any definitive support for decision-making. Rationally from this perspective, the presence of a bright spot where the changes occur depends on the emergence of political leaders who are willing and able to take responsibility for the reform.

A study on the impact of the regional government size is done by Trueblood and Honadle (1994). They

have found that the political process plays a major role in the preparation of planning related to the issue of the development of human resource. Unfortunately, some political parties have emphasized on their own interests rather than to include the human resource factor in the planning preparation of the regional government. In addition, it is revealed that the elements of regional government services are absolutely crucial; the more widened the regional government, the higher form of public service should be provided.

Meanwhile, the findings by Thomas and Boonyapratuang (1993) which discuss that the complexity of the regional governance toward the regional receipts on 14 regions in the state of Texas, establish the results which reveal the insignificant difference in the configuration of the regional government between types of cities and districts. The decision of the regional receipts is also influenced by the configuration of the government type between cities and counties. Such findings have created the policy that is executed in the field of budgeting by the official planners. Thus the governance characteristics play a role in shaping the complexity of the regional government.

A study conducted by Vegirawati (2012) on the effect of the direct spending allocation on the human development quality in cities and districts government of South Sumatera) shows that the direct spending cannot predict the human development index. The results of this study differ from those of the previous study by Christy and Adi (2009) revealing that the capital spending is part of the direct spending that has a significant influence on the HDI. The regional governments should choose programs and activities

that can be used as a tool to improve the quality of human development through the HDI indicators.   The

direct spending is incurred for programs and activities to encourage the improvement of the quality of

human development, while the indirect spending is not directly related to development activities where its

allocation is widely used in financial-oriented development activities such as doctor and teachers' salaries

and other forms of governance administration. Moreover, a study by Badruddin and Khasanah (2011)

concludes that indirect spending has no significant effect on the HDI in the city of Yogyakarta. This

phenomenon raises the question on the amount of the indirect spending allocated, whereby the average is

more than 55% of the overall budget.

The first   two   indicators of the HDI   measure   longevity and health, then the next two indicators

measure the level of knowledge and skills, while the third one measures the ability to access economic

resources in a broad sense. The third indicator is used as the basic component in the preparation of the

HDI. Based on the argument mentioned above, the problem formulation in this study revolves around

whether or not the government complexity and size of regional government have an impact   on the

Human Development Index in North Sumatera province. Therefore, the research is expected to provide

some benefits such as:

a. As a means of analysis of the government complexity and size of regional government which at a

    certain extent would leave an impact on the human development.

b. For the regional government in the long run, this analysis can be used as an evaluation tool to assess

    the effectiveness of the efforts   made in the Human Development Index.

c. For the researchers, it is used as an input for further research, particularly with regard to the supporting factors associated with the HDI that in turn can contribute to the development of the human resource management.

The motivation of this study is expected to provide advice and recommendations regarding efforts to increase the effectiveness of the Human Development Index (HDI) in order to support the implementation of good goverment system.

2.0 LITERATURE REVIEW

2.1 Human Development Index (HDI)

According to Georgiou (2008), the Human Development Index (HDI) is a comparative measure of life expectancy, literacy, education and standard of living for all countries around the world. HDI as a classification is used to assess the status of a country; developed, developing or underdeveloped as well as to measure the impact of economic policies on the quality of life. This index was developed in 1990 by a Nobel Prize winner Amartya Sen and Mahbub ul Haq, a Pakistani economist assisted by Gustav Ranis from Yale University and Lord Meghnad Desai from the London School of Economics, which had further been used by the United Nations Development Program in its annual HDI reports. The HDI has been described as a "vulgar measure" by Amartya Sen due to limitation it sets. This index is more focused on things that are more sensitive and useful than just the per capita income which has been used. The index is also useful as a bridge for the researchers to know the matters in more detail in the human development reports.

The HDI measures the average achievements in a country in three basic dimensions of human

development (Ranis and Frances, 2002)   as   given below:

- Healthy life and longevity as measured by life expectancy at birth.

- Knowledge, that is measured by the literacy rate in adults (two-thirds weight) and a combination of primary and secondary education on the gross enrollment ratio (one-third weight).

- A standard of living measured by the GDP per capita in the purchasing power parity of purchasing power parity in the US dollar.

2.2 The Regional Government Size

In a study of the regional government management revolving aspects like regional finance, political budgets, public service, government investment, development planning, public policy, and social and cultural issues the types of regional governments as a variable is also often included. The type of the regional government itself consists of a provincial government, district, city and village whereby each has given a different impact towards the social phenomenon (Prud'homme, 1995).

The districts and cities have some different characteristics, including:

1. From a regional size aspect, a district of the regional government is relatively wider than the city of teh regional government. Thus, there are many underdeveloped villages found in a district, while to reach equitable development across the regional bigger budget would be essential.

2. From the population aspect, the density of the population in the district is lower than that of the city. This population density creates some problems for regional governments when it comes to the provisions of employment, education, health and the prevention of social issues.

3. With regard to the people's livelihood, the district population is engaged in agriculture, while the urban population is engaged in trade and services. In the regional policy development, the priority of the district government will be different from the city government.

4. From the governance structure aspect, the urban area consists of sub-districts and villages, while the districts can be divided into sub-districts, villages or small communities. The sub-districts and villages are part of a city or district regional government, which converges in terms of policy-making and regional government budget, while the village is an autonomous region in a district which it has its own budget, including sources of income allocated from the district regional budget.

5. From the socio-cultural aspect, residents of the cities have high level of education and better health than those living in the districts. The public service facilities in the cities are also better than the facilities provided in the districts.

6. From the economic aspect, the average GDP in the district is lower than that in the city. This relates to the proportions of regional receipts which can be levied by regional governments. Meanwhile, the economic activities and income in the cities are also greater than those in the districts (Prud'homme, 1995).

All the sixth characteristics stated above certainly do not include all the differences in the two types of

regional governments; cities and districts.

The Regional Government Size may indicate the size of the state Local Government. A large number of residents in an area may reflect budget allocation from the central government for each region in order meet the needs of their respective regions. Local Government which has number of people required to do a lot of good control as accountability to the public (Hartono et al, 2014)
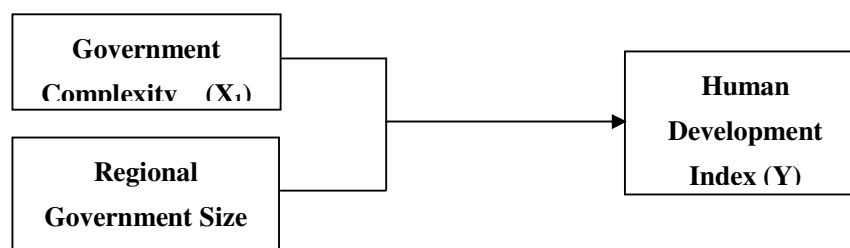
2.3 The Government Complexity

The complexity of the government with the indicator is the number of population. The higher the number of the population, the more important it is to address the needs of the population, with regard to their health facilities, education and employment preparation (Ingram, 1984; Robbins and Austin, 1986). Meanwhile, the greater complexity of government (the population) resulted in the greater push towards the government on the sufficient facilities to improve the people's quality of life. Furthermore, the government has attempted to increase the amount of spending in order to meet the needs of the community and have an impact on increasing the Human Development Index (HDI). The complexity of the government with the population indicators has been mentioned by Ingram (1984) and Robbins and Austin (1986).

From the regional aspect, a regional district government is relatively wider than the city regional government. Therefore, in many districts there are underdeveloped villages, while to reach equitable development across the regions a bigger budget would be needed. The higher the direct budget is

allocated in a region, the better the level of the infrastructure   in that region. The sufficient educational

and health facilities results in the quality of life   for the region. In regard of the population aspect, the

density of the population in the district is lower than the population density in the city. This population

density becomes a constraint for the regional governments as the provision for employment, education,

health and the prevention of social problems has to be laid out. Thus, the allocation of the indirect

spending planned by a region is higher especially the amount of allowances given to paramedics and

doctors from the budgeted indirect spending or the amount of allowances of teachers   in charge of

various activities to improve the quality of human resources in a region.

2.4 Conceptual Framework

Below is the proposed model of the study:

Figure 1. Conceptual Framework

2.5 Hypothesis

The hypothesis of this study is " The Government Complexity and Regional Government Size affect the

Human Development Index in North Sumatera province".

3.0 METHODOLOGY

This study uses an associative-typed research aiming to determine the relationship between two or more variables, where the relationship between the variables analyzed using relevant statistical measures on the testing the hypothesis. Meanwhile, the population in this study includes all the 33 regional government cities/districts in North Sumatera province with a sample taken from a period of years of 2005-2012. Sampling method using purposive sampling criteria.

3.1 Data Collection Method

The data used in this research is to use primary data and secondary data. Tests conducted with the primary data where to look perception planners related government programs The Government Complexity and Regional Government Size Affect the Human Development Index. In addition, secondary data testing with secondary data indicator. Thus researchers tested mixtures. Secondary data sourced from the websites of the Director General of Fiscal Balance of Regional Government (www.depkeu.djpk.go.id). Meanwhile, the data on the Human Development Index of North Sumatera and government complexity were obtained from the BPS (Central Agency on Statistics) of North Sumatera Province. In addition there was a survey and interviews with respondents representing a number of planners of the human development

programs in several   offices in the Tanjungbalai city, South Labuhan Batu, North Labuhan Batu

and Batubara districts totaling 88 (22 x4) people.

3.2 Operational Definitions and Methods of Variables' Measurement

Below is a summary of the Definitions of the operationalization as follows:

Table 1. Variables Operationalization

Variable	Definition	Indicator	Measurement Criteria	Scale
Human Development Index (Y)	A single composite indicator of human development, but emphasized on three most important things such as life expectancy at birth, literacy rate and the average length of the schools as a measure of educational attainment as well as consumption expenditure reflects the purchasing power affordability.	A composite index that includes three fundamental areas of human development; age of life, knowledge, and a decent standard of living.	HDI Point	Ratio
Government Complexity (X₁)	The total population who inhabit in a region. The population is a proxy of the government complexity	The total population in a period of time	Total population in a region	Ratio
The Size of Regional Government (X₂)	The size of government in terms of aspects of land area, population, livelihoods, governance structures, social culture and economy over a territory.	Land area, population, livelihoods, governance structures, social culture and economy	Land area, population, livelihoods, governance structures, social culture and economy	Ratio

3.3 Analysis of the Model

The specification of the model used in this study was adapted from several previous studies by making

adjustments that are considered able to provide better results to explain the determinants of human

development in North Sumatra province. The model constructed is a mathematical function as follows:

IPM = f (The Size of Regional Government/SRG) and Complexity of Government /CoG)..... (1)

From function (1), it can be modified into a multiple regression analysis using the generalized linear

regression method with the consideration that the object of the cross data is greater than the number of

coefficients.

$$Y_1 = a + b_1X_1 + b_2X_2 + \varepsilon .... (2)$$

Where:

Y	=	Human Development Index
X_1	=	The Size of Regional Government
X_2	=	Complexity of Government
b_1, b_2	=	Regression Coeffecient
ε	=	*Error Term*

The model is applied to the SPSS Version 21. The test aims to check whether or not a violation of the

classical assumptions in the model has occurred, which is used as the basis of the multiple linear

regeression. This is done prior to the hypothesis testing.

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1	62	10.00	20.00	16.4677	2.17827
X2	62	10.00	20.00	15.6129	2.48507
Y	62	11.00	25.00	17.5645	3.57872
Valid N (listwise)	62				

Source: Data Output, 2014.

4.0 FINDINGS AND DISCUSSION

4.1 Description of Data

The respondents scattered in the Tanjung Balai city government   total 15 respondents, Asahan District

has 11 respondents, Batubara District has 12 respondents, South Labuhan Batu District has 10

respondents and North Labuhan Batu District has 12 respondents.

4.2 The Analysis of Instruments Measures

4.2.1 The Variable of Government Complexity (X_1)

The results of the questionnaire's validity and reliability of   the government complexity variable (X_1)

can be seen in Table 4 below:

Table 4. Validity Test for Government Complexity Variable (X_1)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
kp1	12.5000	2.254	.641	.594
kp2	12.3548	2.888	.569	.642
kp3	12.2097	3.119	.460	.703
kp4	12.3387	3.375	.440	.713

Source: Data Output, 2014. KP is government complexity indicators.

Table 4 shows that the 4 items' questions of the variable are valid and can be used for the analysis if the

value of *Corrected Item-Total Correlation* is greater than r *product moment* (60-2 = 58) of 0.250. Thus the

items' questions of 1 to 4 all are all valid questions.

4.2.2 The Variable of Regional Government's Size (X_2)

The results of the questionnaire's validity and reliability of the variable the regional government's

size (X_2) can be seen in Table 5. below:

Table 5. Validity Test for Regional Government's Size Variable (X_2)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
upd1	11.5484	4.121	.389	.706
upd2	11.6774	4.288	.513	.645
upd3	11.6774	3.304	.563	.599
upd4	11.9355	3.537	.539	.615

Source: Data Output, 2014. UPD is Regional Government's Size indicators.

Table 5 shows that the 4 items' questions of the variable are valid and can be used for the analysis if the

value of *Corrected Item-Total Correlation* is greater than r *product moment* (60-2 = 58) of 0.250. Thus

the items' questions of 1 to 4 all are valid questions.

4.2.3 The Variable of Human Development Index (Y)

The results of the questionnaire's validity and reliability of the variable, the human development

index (Y) can be seen in Table 6 below:

Table 6. Validity Test for Human Development Index Variable

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
psdm1	15.9839	3.754	.422	.514
psdm2	16.0968	3.236	.574	.418

psdm3	16.0806	4.141	.254	.603
psdm4	16.0323	3.966	.420	.521
psdm5	16.0000	4.328	.168	.649

Source: Data Output, 2014. Psdm is Human Development Index indicators.

Table 6 shows that the 5 items' questions of the variable are valid and can be used for the analysis if the value of *Corrected Item-Total Correlation* is greater than r *product moment* (60-2 = 58) of 0.250. Thus items of 1 until 4 are valid, while the item 5 is invalid because its product moment r value is lower than 0.250. The questionnaire is designed in the Likert scale form. which consists of 5 questions with 5-point interval scale ranging from strongly disagree (1) to strongly agree (5). The variable measured using an instrument that was adopted and developed from Prud'homme (1995) and Trueblood et al (1994).

Reliability test results of the research instruments as follows in Table 7 below:

Table 7. Multicollinearity Test

Coefficients[a]

		Collinearity Statistics	
Model		Tolerance	VIF
1	X1	.878	1.139
	X2	.878	1.139

a. Dependent Variable: Y

Source: Output Result SPSS 21.

Based on the results of the reliability test on the variable Y to 5 items obtained Cronbach's Alpha question of 0.603 or 60.3% so that all questions relating to the Y otherwise reliable. For variable X1 reliability test results in the appendix shows that Cronbach Alpha was 0.730 or 73% so that four (4) questions relating to the X1 otherwise reliable. Further to the reliability test results in Appendix X2 is obtained that the magnitude of Cronbach Alpha is 0.708 or 70.8% thus four (4) questions relating to the X2 otherwise

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reliable.

4.3 Primary Data Analysis

4.3.1 Classical Assumption Analysis

The classical assumptions analysis consists of normality, multicollinearity and heteroscedasticity tests.

4.3.1.1 Normality Test

Based on the test results for normality using the Kolmogorov Smirnov test and by looking at the graph, it is concluded that the residuals were normally distributed. If the probability value Asymp. Sig (2-tailed) on the Kolmogorov Smirnov test is greater than 0.05, it can be stated that the data were normally distributed, otherwise if the probability Asymp. Sig (2-tailed) less than 0.05, thus the data were not normally distributed (Ghozali, 2005).
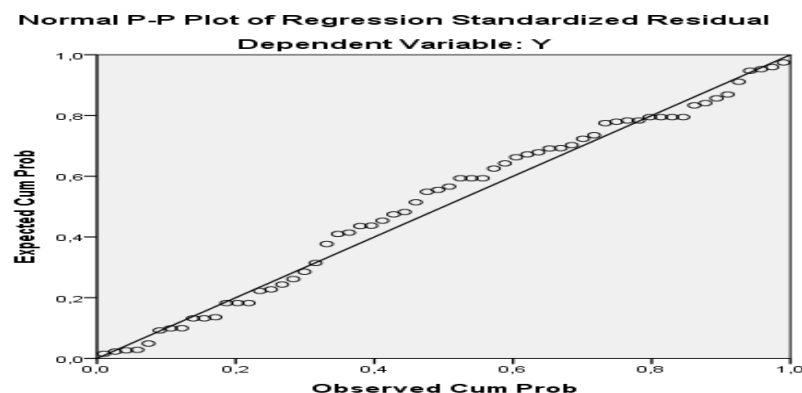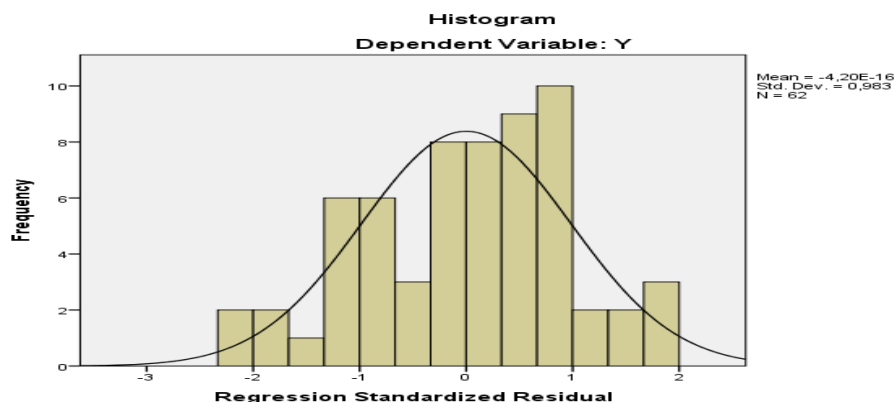

Figure 2. Normal P-Plot of Regression Standardized Residual

Source: Data Output SPSS

Figure 3. Histogram

By looking at the graphs displayed in Figure 2, it can be concluded that the data spread around the

diagonal line, and follow the direction of the corresponding diagonal line. This shows that the data

residuals were normally distributed. Similarly, with the results of the histogram graph in Figure 3, it

shows that the data residuals were normally distributed, as seen from the picture in a bell form that is

almost perfect (symmetrical).

4.3.1.2 Multicollinearity Test

The multicollinearity test aims to see if there is a correlation (or otherwise) between the independent variables in the regression

model. A good regression model should not exhibit any multicollinearity. One way to detect it is by looking at the value of

the Variance Inflation Factor (VIF). According to Santoso (2002), if VIF> 10, the variable has a problem of multicollinearity

with other independent variables.

Tabel 7 : Reliability test with *Cronbach's Alpha*

No	Variabel	Cronbach' Alpha	Keterangan
1	(Y)	,603	Reliable
2	(X1)	,730	Reliable
3	(X2)	,708	Reliable

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As depicted in Table 7, it appears that the independent variables of government complexity (X_1) and the government size (X_2) have VIF below 10 (Ghozali, 2005). This means, the regression that is used for the two independent variables establishes that there is no multicollinearity problem.

4.3.1.3 Heteroscedasticity Test

The test result concludes that the heteroscedasticity does not occur in the regression model. It can be seen from the scatterplot in which the points are spread randomly or that they do not form a specific pattern clearly, and scattered both above and below the 0 on the Y axis (Ghozali, 2005).
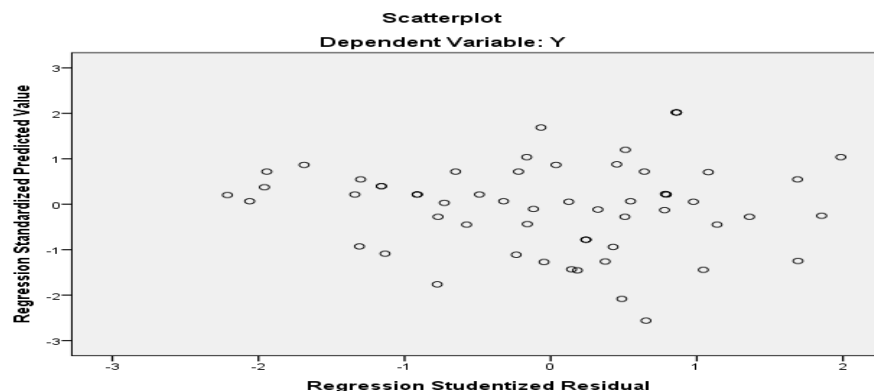

Figure 4. Scatterplots Graph

4.3.2 Goodness of Fit Model Test

The Goodness of fit testing is done to determine the feasibility of a regression model. Having the two

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variables, the feasibility can be seen from the value of Adjusted R Square.

Table 8. Feasibility Model Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.760^a	.577	.563	2.36644	1.237

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

Source: Data Output SPSS, 2014.

As depicted in the Table above, the Adjusted R-square value is 0.563. This shows that 56.3% of government complexity and regional government size variables affect the human development index in North Sumatera. The remaining amount of 34.7% affected by other variables are not explained by the model of this study.

4.4 Hypothesis Test Model

4.4.1 Simultaneous Significance Test (F Test)

The government complexity and regional government size variables simultaneously affect the human development index. The significance of the indicator parameter of coefficient Adjusted R^2 can be tested with the help of the statistical methods of Fisher's test (F test) with a level of confidence of 95%. The criteria apply when the F> F_{table} then Ho is rejected; and if F ≤ F_{table} then Ho is acceptable. This is shown in:

Table 9. Result of Regression (F Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	450.840	2	225.420	40.253	.000[b]
1	Residual	330.402	59	5.600		
	Total	781.242	61			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Source: Data Output SPSS.

As depicted in Table 9, it shows that F value is 40.253 while the F_{table} at the 99% confidence level ($\alpha = 0.01$) is 5.80. This means that the value of F> F_{table} (40.253> 5.80). Thus the Ho rejected, while H1 is accepted.

4.4.2 Partial Significance Test (t Test)

Partially, both variables of government complexity (X_1) and regional government size (X_2) which affect the human development index in North Sumatera is acceptable, as stated in the following Table:

Table 10. t Test

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

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		B	Std. Error	Beta		
	(Constant)	-3.662	2.593		-1.412	.163
1	X1	.435	.148	.265	2.928	.005
	X2	.901	.130	.626	6.926	.000

Source: Data Output SPSS, 2014.

Based on the Table 10 above,   the multiple regression is formulated as follows:

$$Y = - 3.662 + 0.435X_1 + 0.901X_2 + e$$

The multiple regression model means are as follows:

1. A constant value of -3.662, means that if the values of government complexity and regional government size variables are zero, then the dependent variable of human development index will decrease by 3.66 units.

2. The variable of government complexity (X_1) positively affects the human development index with the coefficient value of 0.435, meaning that for every 1 unit increase in government complexity, it will raise the human development index by 4.35 units.

3. The variable of regional government size (X_2) positively affects the human development Index with the coefficient value of 0.901, meaning that for each increase of 1 unit of the regional government size, then it will increase the human development index by 9.01 units.

As   represented   in Table 9, it shows that the variable of government complexity (X_1) (2.928> t_{table} 1.980) affects significantly   the human development index where the value of t> t_{table}. Thus H0 is

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rejected and H1 accepted. In addition, the variable of regional government size (X_2) with a positive direction (6.926> 1.980) significantly affects the human development index in North Sumatera where the value of t> t_{table}. Thus H0 is rejected and H1 accepted.

4.5 Description of Data

Based on the results of the data processing, the statistical description can be seen in Table 11 as follows:

Table 11. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1	200	34542.00	2121053.00	475995.2300	497088.90970
X2	200	10.77	12163.65	2508.2137	2448.90245
Y	200	63.20	78.27	73.0784	2.78794
Valid N (listwise)	200				

Source: Data Output SPSS Versi 21, 2014.

The table shows the variable of government complexity (X_1) with an indicator of the large number of residents. Based on 200 observations from year 2005 to 2012 in 25 districts/cities, the maximum value reached 2,121,053 people and the lowest minimum population of 34,542 people. The average value reached 475,995 people with an average of standard deviation of 497,088 people. The results show a population imbalance occurring among the districts/cities. For the variable of regional government size (X_2) the maximum regional size is indicated to be 12,163 km^2 and the smallest regional size is 10,77 km^2. The average of regional size is 2,508.21 km^2 with an average of the standard deviation of 2,448.90 km^2. Meanwhile, for the variable of the Human Development Index (Y), the highest HDI was 78,27 points, the lowest was 63,20 points and the average HDI was 73,07 points with a standard deviation of 2,78

points.

4.6 Secondary Data Analysis

4.6.1 Classical Assumption Analysis

The classical assumptions analysis consists of normality, multicollinearity and heteroscedasticity tests.

4.6.1.1 Normality Test.

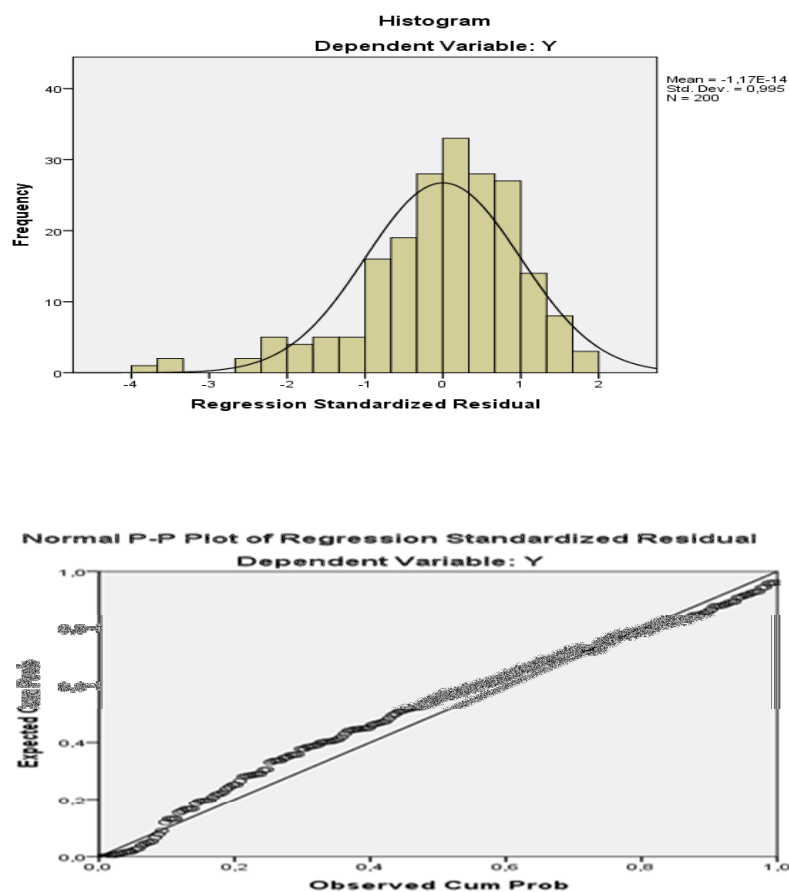**Figure 5. Normal P-Plot of Regression Standardized Residual**

Figure 6. Histogram

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By looking at the graphs displayed in Figure 5, it can be concluded that the data spread around the

diagonal line, and follow the direction of the corresponding diagonal line. This shows that the data

residuals were normally distributed. Similarly, with the results of the histogram graph in Figure 6, it

shows that the data residuals were normally distributed, as seen from the picture in a bell form that is

almost perfect (symmetrical).

4.6.1.2 Multicollinearity test.

Table 12. Multicollinearity Test
Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	,956	1,046
	X2	,956	1,046

a. Dependent Variable: Y

Source: Result Output SPSS 21.

As depicted in Table 12, it appears that the independent variables of government complexity (X_1) and the

government size (X_2) have VIF below 10 (Ghozali, 2005). This means, the regression that is used for the

two independent variables establishes that there is no multicollinearity problem.

4.6.1.3 Heteroscedasticity Test.

The test result concludes that the heteroscedasticity does not occur in the regression model. It can be seen

from the scatterplot in which the points are spread randomly or that they do not form a specific pattern clearly, and scattered both above and below the 0 on the Y axis (Ghozali, 2005).
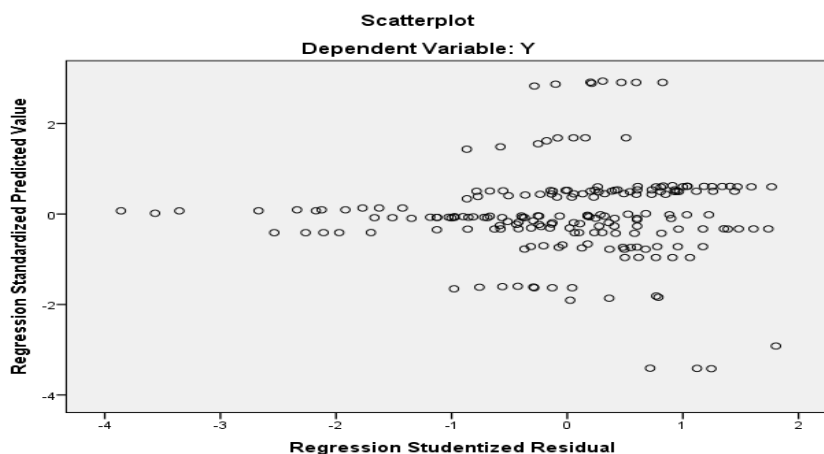

Figure 7. Scatterplots Graph

4.6.2 Goodness of Fit Model Test

The Goodness of fit testing is done to determine the feasibility of a regression model. Having the said two variables, the feasibility can be seen from the value of Adjusted R Square.

Table 13. Feasibility Model Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,384[a]	,148	,139	2,58689	1,496

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

Source: Data Output, SPSS. 2014.

As depicted in the Table above, the Adjusted R-square value is 0,139. This shows that 13,9% of

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government complexity and regional government size variables affect the human development index in North Sumatera. The remaining amount of 86.1% affected by other variables are not explained by the model of this study.

4.7 Hypothesis Test Model

4.7.1 Simultaneous Significance Test (F Test)

The government complexity and regional government size variables simultaneously affect the human development index. The significance of the indicator parameter of coefficient Adjusted R^2 can be tested with the help of the statistical methods of Fisher's test (F test) with a level of confidence 99%. The criteria used are when the F> F_{table} then Ho is rejected; and if $F \leq F_{table}$ then Ho is acceptable. This is shown in Table 14:

Table 14. Result of Regression (F Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	228.419	2	114.210	17.067	.000[b]
	Residual	1318.327	197	6.692		
	Total	1546.746	199			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Source: Data Output, SPSS.

As depicted in Table 14, it shows that the F value is 17.067 while the F_{table} at the 95% confidence level (α = 0.001) is 5.80. This means that the value of F> F_{table} (17.067> 5.80). Thus the Ho is rejected, while H1 is accepted.

4.7.2 Partial Significance Test (t Test)

Partially, both variables of the government complexity (X_1) and regional government size (X_2) affecting

the human development index in North Sumatera are acceptable as stated in   the following Table:

Table 15. t Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	73,434	.297		247.280	.000
	X1	1.367E-006	.000	.244	3.623	.000
	X2	.000	.000	-.352	-5.238	.000

Source: Data Output, SPSS. 2014.

From   Table 15 above,   the formulated equation of the multiple regression is as follows:

$$Y = 73.434 + 1.367E\text{-}006X_1 + .000X_2 + e$$

The multiple regression model means are as follows:

1. A constant value of 73,434, means that if the values of the government complexity and regional

   government size variables are zero, then the dependent variable of the human development index

   will decrease by 73.44 units.

2. The variable of government complexity (X_1) positively affects the human development index with

   the coefficient value of   1,367E-006, meaning that for every 1 unit increase in the government

   complexity, then it will raise the human development index by 0.136 units.

3. The variable of the regional government size (X_3) positively affects the human development Index with the coefficient value of 0,000, meaning that with each increase of 1 unit of the regional government size, it will increase the human development index by 0,00 units.

As depicted in Table 15, it shows that the variable of government complexity (X_1) (3.623> t_{table} 1.980) affects the human development index significantly where the value of t> t_{table}. Thus H0 is rejected and H1 accepted. In addition, the variable of the regional government size (X_2) with a negative direction (-5.238> 1.980) significantly affects the human development index in North Sumatera where the value of t> t_{table}. Thus , H0 is rejected and H1 accepted.

4.8 Discussion

Based on the primary and secondary data, the hypothesis states that the government complexity and size of the regional government affect the Human Development Index in North Sumatera. The results of this study are consistent with the results found by Thomas and BoonyApratuang (1993); Trueblood and Honadle (1994); Haveri (2006) and Georgiou (2008).

In planning its program, the regional government has considered the performance achievement of minimum service standards established in accordance with the legislation. If the human development index is low, it will determine the level of individual well-being, which in turn also determines the level of social welfare in general. The HDI is a way to measure the level of physical and non-physical qualities

of the population.

The extent and magnitude of the regional government influences the shape of the public services provided. The coverage of the physical qualities is reflected in life expectancy; while the non-physical qualities are shown through the length of the average population education and literacy rate. The level of human development achievements has gained the attention of the state officials where the development outcomes can be measured and compared. The index has also been used by the United Nations in setting up a standard measure of human development internationally. This composite index is formed by four component indicators namely; life expectancy, literacy rates, average length of the education and the purchasing power parity (PPP). The indicators of life expectancy reflect the dimensions of healthy living and longevity; the indicators of the literacy rate and the average length of the schools represent the output of the education dimension; the purchasing power affordability indicator describes the dimensions of a decent life. Thus, it has made the HDI to be used as a manifestation in human development whereby it can be interpreted as a success in improving abilities and expand human choices. Contribution of this research are (a) as a means of analysis of the complexity of the Government and the Regional Government size how its impact on human development. (b) for local governments, in the long term, this analysis can be used as an evaluation tool assessing the effectiveness of efforts to improve the Human Development Index (HDI) and (c) this study suggests that further research, particularly with regard to the Human Development Index research on the factors that support for the development of the Human Development Index and thus contribute to the development of Science in Human Resource Management

and Public Sector Government.

5.0 CONCLUSION AND RECOMMENDATION

The conclusions of this research are as follows:

1. Simultaneously, the government complexity and regional government size affect the Human Development Index in North Sumatera.

2. Partially, the government complexity and regional government size affect the Human Development Index in North Sumatera.

3. The results of this study are consistent with the results found by Thomas and BoonyApratuang (1993), Trueblood and Honadle (1994), Haveri (2006) and Georgiou (2008).

Meanwhile, this study has several recommendations which can be considered as follows:

1. The variables' elements of entrepreneurship, advertising-marketing, economic growth, unemployment rate, welfare, living standards, education, health, life expectancy as well as the form of capitalistic system may be worth to be considered in the future on determining the variables of human development.

2. As this study has focused on the problems of the Human Development Index in the East Coast of North Sumatera, we can probably expand the research object to the West Coast of the Northern Sumatera.

The limitations and future directions of this study are:

1. This research was not conducted a study to incorporate elements of variable Entrepreneurship, advertising-marketing, economic growth, unemployment rate, welfare, living standards, education, health, life expectancy, as well as the form of capitalistic system that plays a major role in determining the level of human development.

2. The next model can be compiled with the data panel models (time series cross-sectional).

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MODERN RETAIL EMERGENCE IN RURAL INDIA-THE

PROGRESSIVE WAY

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Abstract

India has 70 percent of its population, 56 percent of its income and 64 percent of its savings coming from its rural areas. Rural development has been the most important task of the government of India. Of late marketers have also started to explore the rural market to expand their territories of sales and meet their corporate social responsibility thereby leading to development of rural India. The rural market is different than the urban market in demographics, consumer behavior, lifestyles and psychographics too. A major challenge in marketing of products in rural India is the distribution of goods. Due to poor road conditions and even no roads to interior villages customers have to visit the nearest town for their necessities. The objective of this paper is to explore the distribution strategies adopted by various companies to meet the demands of the rural customers. An analysis of distribution models developed by ITC, DSCL, TATA, Godrej and others has been performed and suggestions have been made. The contributions of these models towards development of rural India have also been discussed.

Keywords : distribution models, modern retail, rural development

Introduction

The retail industry in India is expected to be worth US$ 1.3 bn by 2020 (RMAI, 2011). Of this, organized retail is expected to grow at a rate of 25% p.a. The Indian rural retail market is currently estimated to be about Rs. 1800 billion and go up to Rs. 2400 billion by 2015 (RMAI, 2011). The marketing scenario in rural India is different from that of urban in demographics, consumer behavior, lifestyles and psychographics. Due to these differences marketers face new challenges in meeting the demands of the

rural customers. The most important of them is the distribution system. Distributing goods to 600,000 plus villages spread over a geographical area of 3.2 million square kilometers with weathered road conditions has become a nightmare for marketers (RMAI, 2011). In rural India availability determines sales volume and market share of a brand as consumers as largely influenced by the retailer and purchase what is available in the local market (Kashyap, 2013).

The major challenges that marketers are confronting in rural distribution are

- Small markets which are large in number and scattered.

- Dispersed population and trade which cause hindrances in distribution of goods.

- Poor connectivity of roads to interior and small villages

- Multiple tiered distribution leading to high distribution costs

- Rural India is deprived of suitable dealers availability

- Villages have low density of shops.

- Inadequate bank and credit facilities to retailers, resulting in poor viability of retail outlets.

- Poor warehousing systems leading to inadequate stocks and storage problems.

- Market is highly credit driven and investment capacity of retailers is low.

- Poor visibility of product on rural shelves as the shelves are not built properly and lighting of the shelves are inadequate.

- Offers and schemes are generally unknown to the retailers and the customers due to poor reach of media.

- Inadequate power supply leading to spoilage of perishable items. (Kashyap,2013)

- Low per capita income of villagers leading to unit purchase of products and commodities.

- Demand of goods is seasonal as 75 percent of the income earned by rural India is seasonal due to agriculture being the major occupation (Kumar et al., 2013).

To overcome the above challenges and issues a proper distribution network customized in accordance to the kind of product and rural area needs immediate attention.

Objective of the study

To explore the distribution strategies adopted by various companies to meet the demands of the rural

customers and abet towards rural development.

Literature Review

Distribution includes the channels and logistics. The evolution of rural distribution channels has been discussed in this section with the emergence of modern retail. Further the contribution of these distribution models and modern retail formats towards rural development has also been analysed.

Evolution of rural distribution channels

The traditional distribution channel includes five layers of intermediaries with level 1 as CFAs and level 5 as Retailers as shown in figure 1.

Level	Channel partners	Market place
Level 1	Company depots/CFAs/Super	National/State
Level 2	CFAs/Redistribution stockists/ Retailers (Modern/Traditional)	Cluster of districts/District headquarters
Level 3	Redistribution stockists/Semi-wholesalers/Retailers	Sub district (Tehsil/Block)/ Feeder town
Level 4	Semi-wholesalers/Retailers/Mobile traders in haat/van	Feeder town/Periodic market
Level 5	Retailers/Vans/Barefoot agents (Shakti dealer)/ Cooperative societies/Government agencies (Fair-price shops)	Large and small villages

Figure 1. Rural distribution channels

Source : Kashyap, 2013.

The following points reflect the scalability and growth potential of rural retail market of all types of

commodities and products in India:

- Average rural annual household incomes will increase at a rate of 3.6% in next two decades will lead to shift of significant number of households from the deprived to the aspirer income bracket (Keshari and Srivastava, 2012).

- Rural per capita consumption of FMCGs will catch up with the current urban levels by 2017 (Neilsen, 2011).

- According to experts, the FMCG sector in the rural area has displayed a growth of 40 % in comparison to 25 % in urban market (Neilsen, 2011).

- Right now, one out of six rural customers has access to organized retailing or distribution. So, rural retailing has tremendous potential for growth. A major part of "Bottom of Pyramid" consumer class resides in rural areas (Neilsen, 2011).

- There is paradigm shift towards higher value consumption among rural consumers like from tooth power towards tooth paste, from local brands towards popular national brands (Neilsen, 2011).

- Rural FMCG landscape will grow from $12 billion in 2011 to $100 billion by 2025 (Neilsen, 2011).

- Though internet penetration in rural areas is very low but concepts like mcash by ICICI bank is providing an impetus to rural retailing as mobile telephony has made its way into rural market (RMAI, 2011).

- Rural areas account for half the total market for television, tooth powder, fans, pressure cookers, washing soaps, tea, salt etc (RMAI, 2011).

Distribution models for rural markets

There are different models for distribution of FMCG and consumer durables which have been further discussed.

Models for FMCGs

Rural distribution models of major FMCG companies can be divided into two generalized models (MART, 2004). The first distribution model (DM1) is advanced in nature where separate channels are used for distribution in urban and rural markets as depicted in figure 2.
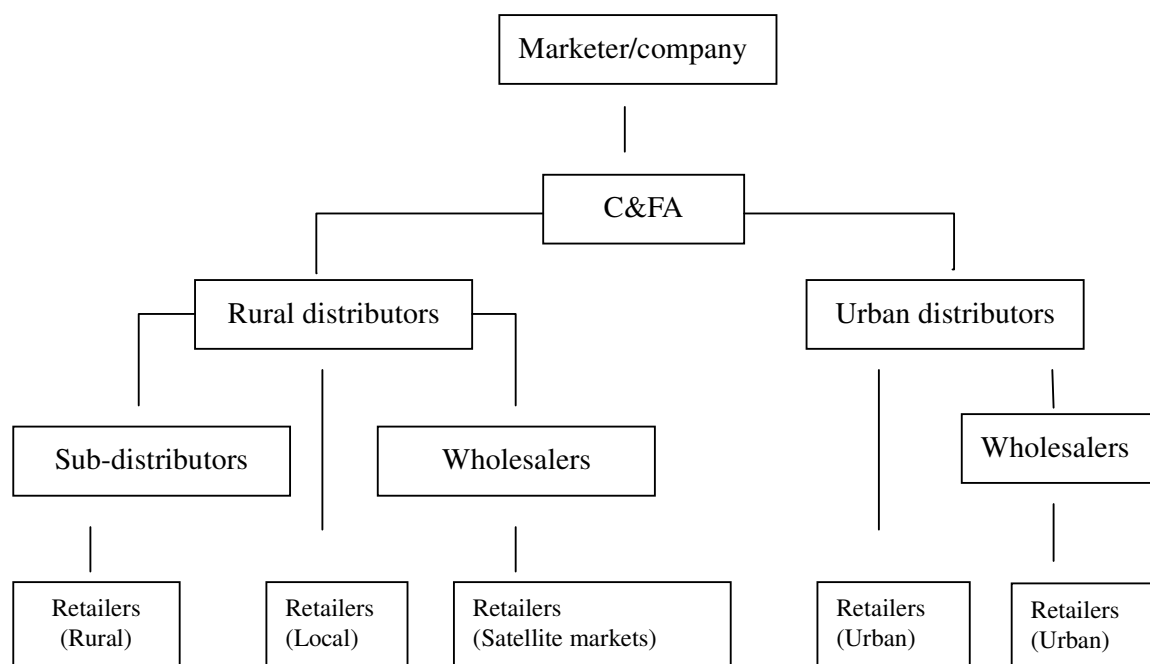

Figure.2: Distribution model 1(DM1)
Source: Kashyap, 2013

The above model has been adopted by players who are well established in the market with a deeper infiltration in rural India. The difference in rural and urban distribution starts with the addition of sub-distributors under the distributors for deeper penetration into villages with 5000 or less population. The wholesalers on the other hand cater to the underserved satellite areas where the company distribution has not yet penetrated. The FMCG giant HUL has adopted DM1 where rural distributors are appointed at district levels. HUL appoints star sellers, basically a wholesaler for every 20-25 villages who have the capacity to invest, has a large rural and satellite network and keep all stocks. For remote villages with less than population of 2000 project Shakti has been introduced under which individual women members of SHGs are appointed as dealers for their own village and five more neighbouring villages. HUL has also

started appointing male members of the villages known as Shaktimans who carry products in their bicycles and move from village to village for sale.

The logistics starts with the distribution of stocks from the manufacturing units to CFA and up to the distributors point at company expense using heavy vehicles by road. The stock from CFA to distributor is transferred on freight-paid basis. The sub-distributors cover the market using a van at the expense of 1-1.5 percent of their business volume. The permanent journey plan (PJP) which is the route plan is framed in consultation of distributors and the sales team to reduce expenses. The PJP is prepared for 6 days in a week keeping in mind the haat days, distance and the number of outlets to be covered and the type of required vehicle. The number outlets covered per day are 30-40 of which 15-20 are successful. The area of distribution per distributor is 50km radius.

Distribution Model 2 (DM2)

DM2 is a conventional model where both urban and rural distribution takes place through the same channels as shown in figure 3. This strategy is adopted by some regional and national players like Priyagold biscuits, Ghari detergent with limited SKUs who generally donot adopt a separate rural strategy.
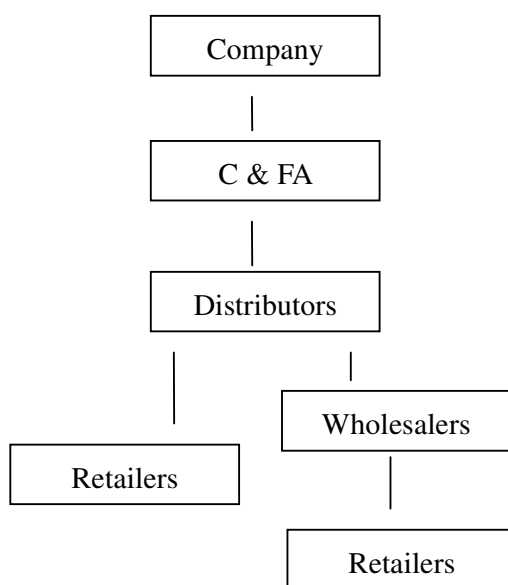
Figure 3. Distribution model 2(DM2)

Source: Kashyap, 2013

DM2 offers better margins to intermediaries as distribution cost is minimized. Distributors and wholesalers take up the responsibility of pushing sales to nearby villages. The stock is dispatched to company depots from where distributors take their share on a freight-paid basis using a heavy vehicle. Matadors and tempos are used for transportation of goods by wholesalers in the rural areas. The area covered by the distributor in DM2 is larger than DM1 which leads to problems in coverage. Priyagold biscuits has adopted order booking policy as the number of assortments is high. Nirma faced problems in adopting DM2 after the increase in its SKUs with toiletries and Nima range of products. It has espoused a variant of DM1 as shown in fig.parallel distribution and sales channel consisting of 2000 distributors and an independent sales force has been set up for Nima range of products. Direct distributors cover 300-400 wholesalers and retailers in district levels whereas sub-distributors work at the tehsil level.
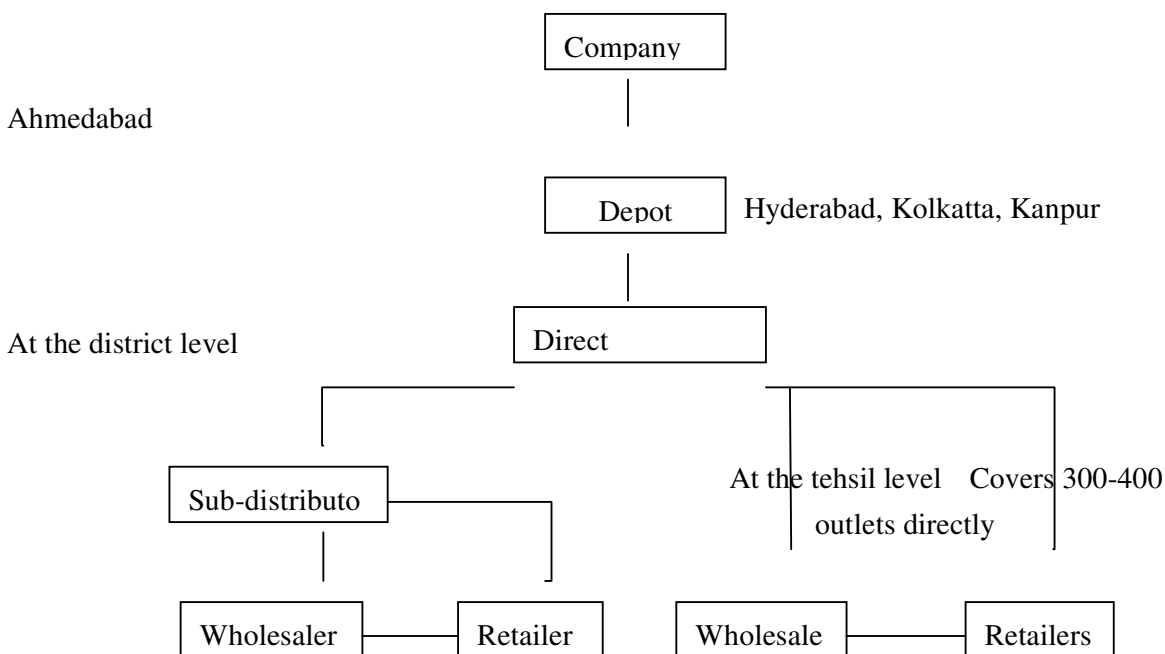

figure 3: Nirma distribution system

source: Kashyap, 2013

Distribution model for durables

FMCG are convenience goods which are necessities of consumers but durables are shopping goods which are bought few in number with infrequent purchases. These include white (refrigerators and washing machines, typically white in colour) and brown (Television sets, audio equipment, and similar household appliances) goods. Two types of models have been used by companies. The traditional model used by companies like Usha internationals and Bajaj Electricals has an undifferentiated approach where both rural and urban markets are catered to by the same distribution intermediaries. The second model has separate channels for urban and rural customers adopted by Philips as shown in figure 4.

Philips which is a 71 year old company manufactures incandescent bulbs. Over 75 percent of sales are from rural market. The product moves from the company depot to urban and rural distributors. Each depot caters to the requirements of one state. The urban distributors take care of 900-1200 retail outlets on a fixed route. Rural distributors cover areas with population of 15000-20000. Villages having less than 15000 populations are dealt by electrical wholesalers.
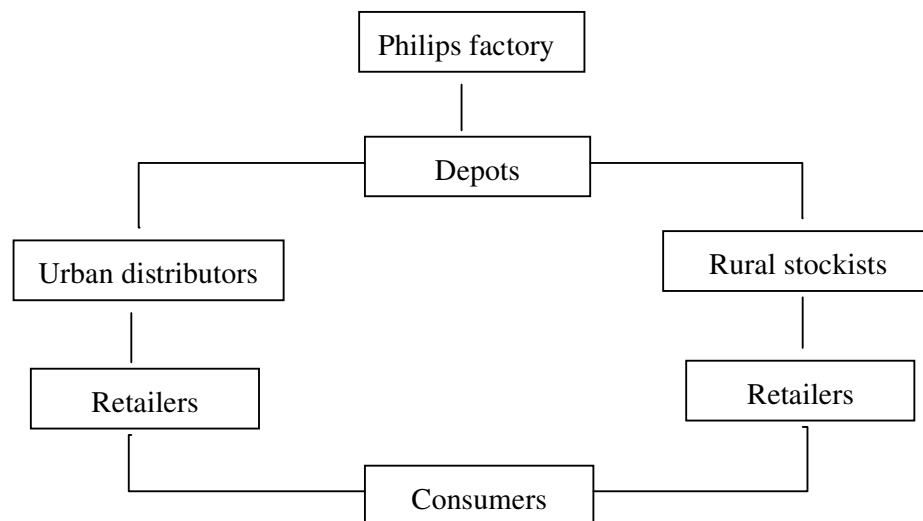
Figure 4.Philips lighting distribution model

LG has achieved the status of market leader in white goods segment by its rural centric service and distribution network. The company tripled its retail and distributor outlets in rural areas from the year 2004 to 2008. LG has a network of 40 branch offices and 65 remote area offices, 230 service centres and 2600 mobile authorized service personnel for villages with less than 10000 residents.

Rural development

Rural development is a dynamic concept concerned with medium to long term changes and adjustments in technology and ecology, economy and society. A large part of rural development is involved in the process of ensuring that the population distribution doesn't get too skewed towards the urban areas. To prevent this analysis of demographic pressures, employment, job creation, and economic development are issues to be discussed at the forefront. Apart from these the quality of life needs to be improved. The world bank has addressed rural development through five areas- fostering an enabling environment for broad based growth, enhancing agricultural productivity and competitive base, fostering non-farm economic growth, improving social wellbeing, managing risk and reducing vulnerability and enhancing the sustainability of natural resources (Wye group, 2002).

Developing rural India by rural centric distribution models

Rural centric distribution models optimize the existing infrastructure and human resources available in rural markets therby creating innovative and cost-effective sustainable business to serve rural consumer needs. These models include both traditional-haats/shandies, cooperatives, PDS and modern approaches-SHG model, youth entrepreneurship model, mobile retailing, petrol pumps and NGOs.

Haats: The survey report of RMAI, 2010 shows that the number of haats in India (43,000) has outnumbered the total number of Walmart stores. The ratio is 1 walmart to 5 haats. The average annual sales from these haats are worth INR 5000 billion. These haats apart from agri products also sell FMCG brands like Lifebuoy, Clinicplus, Colgate, Ponds and Fair and Lovely. The haat vendors generally buy from the nearby wholesalers mostly on credit and sell the products to rural customers.

SHG: Also known as self help group consists of 10-15 women organized by govt or NGOs. SHGs get loans from rural banks to set up income generating enterprises. The project Shakti introduced by HUL has

been successfully running with 7 million groups since the year 2000 when it started in rural Andhra Pradesh. The idea was to create low risk, profitable micro-enterprise opportunities for women who become direct-to-home distributors of HUL's products. The distribution is a 3-tier network with CFA at state level followed by rural distributors at district levels and Shakti dealers (SDs) in remote villages. The SDs are trained and there monthly earnings vary between INR 700 to 2000. Further HUL has introduced Shaktimaans who are distribute products on bicycles in villages with less than a population of 2000.

Vans: Companies like Eveready, HUL and 3A bazaar load vans with stocks and visit villages where they sell the goods at retail price. This mode of distribution is known as mobile retailing.

The public distribution system (PDS): It is a system of distribution of essential commodities to a large number of people through a network of fair price shops (FPS) or ration shops. India has 476,000 FPS of which 380,000 are in rural areas. Marketers like ITC, HUL, TATA, BSNL and LIC sell their products using the PDS (Kashyap, 2012).

Cooperative societies: India has the largest network of cooperatives in the world comprising of more than 500,000 in numbers. 34 percent of fertilizers are distributed by these cooperatives. Warana Bazar, a milk and sugar cooperative society is running successfully in Maharashtra. AMUL and Sri Mahila Griha udyog cooperative societies are successfully running globally (Kashyap, 2012).

Petrol pumps and extension counters: Indian oil corporation's has set up kisan seva Kendra in its petrol pumps. IOCL petrol pumps sell consumer goods, agriculture and banking products besides fuel.

Modern retail development in rural markets

The modern retail development in rural India by the introduction of shopping malls set up by company's like ITC, DSCL, Godrej and Tata. ITC is the initiator in this segment with Choupal Sagar the first rural

mall (kashyap,2012). These shopping malls have led to development of marketers as well as the rural people. Marketers have an increase in sales revenue, profits and customers by exploring the rural markets. On the other hand the rural villagers who were unaware of many advancements and happenings in the world are getting information and understanding the use of technologies in their day-to-day lives.

ITC Choupal Saagar: It opened in 2004 and stands on 8-acre plot with a shopping area of 7000 sq. ft. Farmers can come and sell their produce here and buy products with cash. The footfall is between 400-450 on an average per day. The target group consists of customers using consumer and agri products. The product mix consists of apparel, footwear, toys, games, music, watches, mobile phones, horticulture products, fertilizers, pesticides and motor pumps. The customers are rural and semiurban people with a family income of over INR 10,000 (itcportal.com, 2014).

DSCL Hariyali Kisan Bazaar: Hariyali Kisan Bazaar (HKB) is the largest rural retail chain in India, catering to the household and agricultural needs of shoppers. It has adopted the hub and spoke format of distribution with hub comprising of 4 acre campus with banks, gas station, recreation areas, agri services and one-stop retail shop. The spoke consists of small convenience stores in 4000-5000 sq ft areas located in small towns. HKB offers 50 percent agri products and the rest consumer goods. The average year on growth for the average outlet from year one to year two was 40 percent and from second year 25 percent. HKB has reported revenues worth 1880 million in the first quarter of 2011. DSCL has a presence in the states of Rajasthan, Uttar Pradesh, Haryana, Punjab, Uttaranchal and Madhya Pradesh (Kashyap, 2012).

Tata Kisan Sansar: The Tata Kisan Sansar evolved from Tata Kisan Kendra (TKK) which was setup in 1988 as a one-stop shop for fulfilling the Indian farmer's requirements, from seed sowing to post-harvest activities. In 2002 the TKKs were rebranded as TKS as the focus shifted from products to providing services and knowledge to help the farmer better his crop output. TKS operates in the states of Punjab, Haryana, Uttar Pradesh, Bihar and West Bengal. With more than 800 centres, TKS provide end-to-end agricultural solutions to farmers, while using sophisticated technology such as satellite mapping and

geographical information systems. More than one lakh farmers in 25,000 villages receive benefits through TKS (Agrawal, 2008). By the use of hub and spoke model the supply chain management of TKS has developed the rural famers. The hub acts as the resource centre to cater to the needs of the TKS in the surrounding. Each resource centre supports 20-25 TKS franchisee outlets called distribution centre or spoke covering a radius of 50-60km, where each TKS cater to 30-40 villages covering approximately 13 million acres. The hubs were named as Tata Krishi Vikas Kendras (Economic times, 2005). The word vikas was synonymous with synonymous with value added activities conducted like organization of farmer meets, repository of related agriculture knowledge, soil, water and plant testing laboratory, demonstration farms, input storage house,and also distribution centres or spokes. TheTataKisan Sansars are spread across 68 districts in the NorthZone and 20 districts in the East Zone spanning 4 and 3 states respectively. Presently, there are 32 hubs, which cater to 681Tata Kisan Sansar covering around 22,000 villages reaching out to approx. 2.7 million farmers (Mukherjee, et al, 2012).

Godrej Aadhar: **Aadhaar** is joint venture between **The Future Group** & Godrej Agrovet Ltd which focuses on retail distribution of consumer products for personal and household use in rural and semi-urban India. **Aadhaar** is positioned as a rural supermarket and currently has 66 stores spread over 100,000 sq. ft. across 4 states: Gujarat, Punjab, Maharashtra and Haryana. The **Aadhaar** stores sells food and groceries, apparel, footwear, electronics, services and general merchandise catering to the rural as well as the semi urban Indian customer. Their reach is 50,000 farmers every month, catering to 2000 villages. Godrej plans to set up 1000 store in the next five years. Aadhar has tied up with Eicher motors to provide commercial vehicles and HDFC bank for delivering banking and financial services for rural development. It has also collaborated with Apollo pharmacy and BPCL for providing health care and fuel benefits to rural customers (Business Standard, 2006).

3A Baazar. Paramount Trading Corp (Pvt.) Ltdisone of the renowned and largest exporter of Metal handicrafts in India has launched **3A Bazaar** and taken the initiative of uplifting and empowering Rural India by enhancing reach of Information and quality products. 3A Bazaar is a unique strategy to bring the 1st chain of rural retailing

in India through mobile vans. 3A Bazaar is India's first shop on wheels to start in different villages of JP Nagar. 3A Bazaar offers wide range of products from **Grocery** to **FMCG, Cosmetics, Stationary** and **Women Accessories.**

In the first phase company has started its operations with 5 mobile vans in JP Nagar. Each van operates in villages with population of less than 10 thousand people. Each van is assigned a different route and covers 1.00 Lac to 1.25 Lacs of Rural consumers. The company plans to add another 20 vans by end of FY 2007-2008 (Kashyap, 2012). 3A Bazaar helps consumers to buy authentic and Quality products at a cheaper price at their own doorstep. 3A Bazaar also works towards rural development by educating and exposing new and genuine products to consumers.

Mr. Asad Shamsi MD, 3A Bazaar, said that we have been working for over a year and have conducted numerous research and studies in the rural India. The mobile vans and their products are a result of this research. The product offering has been very carefully selected so that rural consumers will get value for money. 3A bazaar offers its rural customers all the products needed under one roof which means a complete solution to its customers' needs. In the beginning 3A Bazaar comes to its customers doorstep with products like grocery, staples, toys, personal care, health products, confectionery , color and cosmetics , house hold items and stationery required for home that too at a very cheaper price. All products are carefully selected keeping rural customers needs in minds and are stored in warehouse before going into vans. Checks are done in warehouse on daily basis to ensure the freshness of the products and their packaging.   From consumer point 3A Bazaar enhances their saving by minimizing the transit cost which they spend regularly on purchasing the basic necessary products. 3A Bazaar makes life convenient for consumers who have to travel 20-30 kms and spend Rs 30-40 to buy petty products. Now with 3A Bazaar, the rural consumer can be sure of quality and value for money. It   acts as bridge between FMCG companies and the rural consumers. It helps these companies to reach the interiors of India where consumers have access to communications media but not the products thus automatically increasing consumer base for these companies.

Beside this 3A Bazaar also works for rural enlistment and empowerment by following activities like organize

health camps, provide technical expertise to farmers, provide information on education and enhance the savings (www.3Abazaar.com, 2014).

The marketing strategies and the distribution models of the modern retail in rural India has been discussed in the following table 1.

Company retail outlet	Product mix	Target customers	Distribution pattern	Rural development
ITC Choupal Saagar	Apparel, footwear, toys, games, music, watches, mobile phones, horticulture products, fertilizers, pesticides and motor pumps.	Rural and semiurban people with a family income of over INR 10,000.	Hub and spoke	Farmers have one shop solution to sell their produce.
DSCL Hariyali Kisan Bazaar	Agri and consumer goods	Rural Rajasthan, Uttar Pradesh, Haryana, Punjab, Uttaranchal and Madhya Pradesh.	hub (4 acre campus with banks, gas station, recreation areas, agri services and	Banks, gas stations, agri services

			one-stop retail shop)and spoke (convenience stores)	
Tata Kisan Sansar	Agri tools and techniques	Farmers	Tata Krishi Vikas Kendras distribution centre	Agricultural solutions to farmers,using sophisticated technology such as satellite mapping and geographical information systems.
Godrej Aadhar	Food and groceries, apparel, footwear, electronics, services and general merchandise	Rural and semi urban	Retail distribution	Banking, financial services, healthcare and fuel benefits
3A Baazar	Grocery, FMCG, Cosmetics, Stationary and Women Accessories	Rural	shop on wheels	Health camps, technical expertise to farmers

Table 1: Comparative analysis of modern rural retail outlets

The marketing and distribution strategies of companies like ITC Choupal Saagar, DSCL Hariyali Kisan Bazaar, Tata Kisan Sansar, Godrej Aadhar, 3A Baazar have been compared in table 1. The contribution of these companies towards rural development and the product mix, target customers and distribution patterns have been shown. These companies have let a pathway to progress both for rural India as well as for themselves in the following ways.

Marketers have an increase in sales revenue, profits and customers by exploring the rural markets. The rural customers in India outnumber the urban customers leading to a larger market for the marketers. As there is an increase in the number of consumers the sales increase thereby maximizing profits. Since urban markets are saturated with marketers companies can start exploring and developing rural markets for expanding their business and sales.

Rural citizens who were unaware of many advancements and happenings in the world are getting information and understanding the use of technologies in their day-to-day lives. Companies like Tata kisan sansar are using sophisticated technology such as satellite mapping and geographical information systems to provide information regarding weather forecast to the farmers. DSCL hariyali kisan bazaar and 3A bazaar offer expert views on use of seeds, fertilizers, pesticides and other solutions to farmers to increase their yields and have quality produce.

Banking, financial services, healthcare and gas stations establishments by DSCL hariyali kisan bazaar and Godrej Aadhar are generating rural employment and income by marketing activities. These service units require human resources thereby providing employment to rural citizens of India and giving them an opportunity to increase their income levels.

Apart from the above developmental activities companies directly or indirectly are also progressing in the field of agriculture, health, education, infrastructure development and poverty alleviation. Corporate social

responsibility well known as CSR has further instigated the retail companies to uplift the life of rural India by providing certain free services like health camps, mid-day meals in schools and other welfare activities.

Conclusion

Marketers as discussed in the above sections have diverse ways of exploring and penetrating the rural markets of India. They have special distribution strategies   Development of rural India not only involves the development of agriculture, health, education, infrastructure, poverty reduction and employment generation as said by department of rural development, 2014. Along with the government companies have taken up the social responsibility of development of rural India. These companies like HUL, ITC, Godrej and others have generated rural employment by their marketing activities. Their products and brands are being distributed and sold to rural customers by the rural people thereby generating employment, income and making availability of goods easier. This is helping India to progress and compete with other developed countries as most of the people in India live in villages and semi-urban areas, who if developed properly will lead a progressive life.

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INTERNAL CONTROL IN TERTIARY INSTITUTIONS: ENSURING A CONTINUOUS IMPROVEMENT IN THE EDUCATIONAL SYSTEM IN NIGERIA

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ABSTRACT

Severally, the Nigerian educational sector has experienced gaps within its system one of which is due to poor internal controls in place. Lack of effective control has led to varying struggles in the aspects of unqualified teaching staff, ineffective learning by students, and mismanagement of funds and the likes. This study takes a glance at the tertiary educational system in Nigeria, current internal control framework used in tertiary institutions, problems caused by poor internal control system, the way forward and ensuring a continuous improvement in the Nigerian educational sector. Secondary data collection was adopted and used to gather information in this arena. The study guarantees that adoption of an effective internal control system in Nigerian tertiary institutions serves as a means of improving the quality of education in Nigeria. It also enlightens staff in Nigerian tertiary institutions of the major roles played in implementation of an effective internal control system.

KEYWORDS: Nigerian Educational System, Tertiary Education, Internal Control, Continuous Improvement

1.0 INTRODUCTION

The internal control system in Nigeria is not without imperfections (Habib, 2011). The increasing number of well recognized tertiary institutions that has been established over the years has increased up till date with little improvements in their internal control systems. Adetunji (2014) conveyed that the outcome is lack of single set of control policies and procedures which will reduce the possibility of advancing quality management of tertiary institutions in Nigeria. He further argued that tertiary institutions or universities—most especially privately managed—use policies designed by their owners and the government while public only use those by the government authorities. Moreover, it has been confirmed that stakeholders—that is, those affected by the activities of organizations—will be puzzled regarding what is meant to be adopted in determining the economic health and wealth of tertiary institutions. Some stakeholders such as investors will want to be kept in the known as to what return their initial investments have brought in and will be curious to know the benchmark used in measuring credibility of institutions. Students prefer to attend credible universities which they want to boast with in the future amongst peers. Employees want to be guaranteed that there is job security and their monetary pay will not be tampered with. These events will be unattainable if there only exist, insufficient and inadequate control implementation by the organizations.

The Nigerian educational system has just begun its drive to success. Similar to other tertiary institutions, Nigerian tertiary institutions are seeking to improve transparency, compliance and audit functions within the plentiful systems that exists within. This is realizable only if administrators, management and the board are included in this pronouncement (Proviti, 2008). The condition of management and how activities are carried out without adequate and effective controls in place has resulted in concerned parties troubled and at the same time lack confidence in the standing of Nigerian universities. This has also put universities' assets in Nigeria at greater risks because control measures are deficient. The custodians responsible for continuous improvements in the Nigerian tertiary educational system are not contributing as they ought to (Abiola & Oyewole, 2013).   Parents rather spend more on tuition due to confidence and

assurance of getting better quality for what has been paid for or look for alternatives to ensure that their ward pass through education of substance. Such has lead to an unhealthy economy stemmed from inadequate controls put in place from enrolment (admission) stage till output stage (graduation).

Within the aforesaid stages, what lies in between carries more weight vis-à-vis the required internal control policies and procedures to be implemented to ensure a continuous quality in education in Nigerian tertiary institutions. The design of internal control depends on management's routine household activities. Habib (2011) pointed out that an effective internal control system ensures adherence and holds accountable for unacceptable acts at same time appraise and reward for good performance. This theoretical study is aimed at carefully aligning the approved policies and procedure that both private and public tertiary institutions should implement in ensuring that effective controls are in place with improvements in the Nigerian tertiary educational system. The study also serves as an instrument in accomplishing in conjecture, the main parties and custodians perceived as being responsible for the continuous improvement of the educational system in Nigerian tertiary institutions.

1.1 Background of study

Internal control system defined by (Abiola & Oyewole, 2013; Akosile & Fasesin, 2013; Ejoh and Ejom, 2014; Gafarov, 2009) as measures put in place both financial and non-financial to ensure safeguard of assets, detection and prevention of fraud, satisfying the requirements of internal control policies and procedures, and complete accuracy of records. It also warranties organizational objectives are achieved (Habib, 2011). However, there exist various definitions of internal control also known as intra-firm control (Gafarov, 2009). The most common expression and significance amongst these definitions are in the accomplishment of objectives which can be achieved by sanctions (Akosile & Fasesin, 2013), performance appraisals and reward systems and monitoring (Arwinge, 2013). Internal control framework or system encompasses the control environment and control techniques required to satisfy the above objectives. The components of the internal control system of an organization must all be implemented in order to be in inclination with objectives and strategies in order to be able to achieve objectives and goals set put by an organization.

It is essential for every establishment to have a control culture embedded within and otherwise, to ensure policies and procedures are not far from goal achievements. It is also important to have it at the back of our minds that internal control simply proves that no business is without fissures (Oyedeji, 2015) and continuous improvements guarantees bridging such existing gaps. More so, internal control does not only consist of the financial aspect but also the non-financial aspect. An unplanned and unmonitored system within an organization leads to lack of internal control. Amongst the recompensing factors are mismanagement of funds, deviation from control policies and procedures, mishandling of assets, and the likes.

The Nigerian educational system has been striving hard compared to countries like South Africa, China and Republic of Korea. Radwan and Pellegrini (2010) highlighted some reasons why the Nigerian educational system still has quite a long journey to achieving its goal on the global platform. Radwan and Pellegrini added that lack of sufficient funding, low quality and under improved access to relevant updated materials are the root causes of slits in the Nigerian educational system. Inept policies and procedure are absent contributing to delay in the success of the Nigerian tertiary education. Up until now, (Akosile and Fasesin, 2013) opined that the bursary unit also lacks an inbuilt internal control system that is effective. The Nigerian educational system has been experiencing increasing pressure since democracy to step up its strategies. Even with its ever increasing and continuous effort in this regard, the effect is rather minute compared to its neighbouring and immediate competitors and on a wider platform, the global competition.

Transparency is not common in Nigerian tertiary institutions. Students enrol for a specified period and in the end, add more years to what they require. It is now a norm to have extra years added to the predetermined. Lecturers or tuition providers engage in misconduct due to lack of strict sanctions on offenders in accordance to ill acts committed. Students are not allowed to unravel their full potentials because they are petrified of the unfavourable consequences such as delay in graduation or failure. Up until now, students pass rates are determined by the tutor in charge. Payment process is manual considering the quantum of enrolments yearly and the vast opportunities created by technological

advances. Classroom size is large with one instructor who cares less about the knowledge management and creation but cares most about their monthly remuneration. The internal control systems put in place from enrolment to graduation are either a misfit or not in existence.

1.2 Aim

This theoretical study aims to unfold the internal control systems, processes and procedures, in the tertiary institutions in pledging to the continuous improvements in the Nigerian tertiary educational system.

1.3 Research objectives

- Overview of the educational system in Nigeria

- Overview of internal control framework in tertiary institutions

- Problems caused by internal control deficiencies in tertiary institutions in Nigeria

- The way forward for educational system in Nigeria

- Towards continuous improvements in the educational sector in Nigerian tertiary institutions

1.4 Significance of the study

It is important that internal control policies and procedures are implemented using financial and non-financial means in order to enhance transparency by tertiary institutions in Nigeria. Although theoretical in nature, this study will be used as a tool and will serve as guidance in ensuring that custodians (Principal Officers, students, regulatory bodies, employers, parents and the government) and university leaders are aware of their involvement in ensuring advances in the educational system in Nigerian tertiary institutions by means of effective implementation of internal control policies and procedures within. It will also benefit internal control and internal audit professionals within and outside existing Nigerian institutions in ensuring a 'best in class' internal control system in tertiary institutions in Nigeria for a continuous improvement in Nigerian educational system.

2.0 LITERATURE REVIEW

2.1 Overview of the educational system in Nigeria

The educational system in Nigeria, particularly tertiary education, is not one to boast about on the global platform. The number of universities has increased over the years making it quite tasking to keep up with the quantity. The private universities according to (Akosile and Fasesin, 2013) boast of better performance than public universities due to effectiveness and efficiency in operations by the implementation of control not only within but otherwise. Furthermore, the level of tertiary education in Nigeria at a time almost reached its peak and later lost its standing in a short period (Archibong, 2003). Archibong went on further to explain that the reasons for the problems facing the Nigerian education are in light of; brain drain, increased population of student enrolment, exam malpractices, infrastructural problems, inadequate funding and so on.

However, this should not be frightening to Nigerians who are passionate about the development and improvements in the educational system because it has been illustrated by (Adetunji, 2014) that the National University Commission (NUC), in charge of oversight of educational system in Nigeria, has taken it upon itself to ensure that measures are taken to guarantee academic standards in the country. Also, (Archibong, 2003) additional funding has been made to minimise such problems in the nearest future. As for the brain drain problem, students are beginning to perceive that education is fundamental in the development of one's life and career. Hence, although not quite favourable in quantum, more students go extra lengths to further their studies in Nigerian tertiary institutions.

Even so, the conditions of the custodians responsible for the success of the tertiary educational system in Nigeria have been ignored. The inadequate internal control system may be due to certain factors that may prompt them to be alert in ensuring policies are implemented and procedures are followed accordingly. With the increase in number of private universities across the country, it is tasking to determine what policies to be followed. It is required for private universities/polytechnics to follow policies by government regulatory agencies like NUC and also of their owners. On this note, it is rather not persuading enough to outsiders and stakeholders to be able to select tertiary institutions based on credibility criteria. Hence, it is vital to ensure that these custodians are understood (Adetunji, 2014) and

uniform internal control system be implemented. Training will also suffice so that the custodians are aware of the policies and procedures fit for the institution of concern—be it private or public.

A great deal of what is going to be looked at in this study is mainly the internal control system which concerns lecturing methods, teaching materials, classroom facilities, enrolment, examination marking and grading schemes, enrolment criteria and so on. The Nigerian tertiary education system consists of loops within that have negatively affected the growth of the industry internationally. Teaching materials are not up to date leaving students to depend on back dated knowledge (Habib and Jalloh, 2015). Additionally, unqualified lecturers are appointed to teach levels higher than their area of expertise. Some lecturers with diverse areas of expertise in specific fields are reluctant to impact knowledge in students. The learning environment is not suitable enough to produce quality students. It is only fair that internal controls are basic in minimizing such problems.

2.2 Overview of internal control Framework in tertiary institutions

Vanstape (n.d.) stressed that embedded within the internal control system of any organization are series of activities that require human involvement to achieve organizational goals. These activities are innate and designed according to availability of labour within the organization. Internal control system, portrayed by (Abiola and Oyewole, 2013) also known as the internal control framework consists of five components. These include; Control environment, risk assessment, control activities, information and communication and monitoring (Abiola and Oyewole, 2013; Vanstape, n.d.). These components possess their individual functions and components in ensuring an effective internal control system in the Nigerian educational sector. Also to note, these components of the internal control framework are such that neither can be implemented independently nor omitted.

2.2.1 Control environment

The control environment serves as the core of the internal control framework of any institution. Amidst the control framework is the obligated responsibility of the professional to uphold ethical standards and complete integrity which becomes part of their behavioural attributes (Abiola and Oyewole, 2013;

Arwinge, 2013). There should be a control culture within and outside an organization—be it public or private—along with its inclusion of the internal control report in periodical published annual reports for public awareness.

Human resource practices encompass hiring and staffing the right people for the job (Vanstape, n.d.; Abiola and Oyewole, 2013; Arwinge, 2013).The people of an organization are its assets and so employee competency is major in facilitating quality assurance in the organization. It is proper for employees and managers to be kept abreast with the challenges facing its organization. This can be a possibility with continuous training and development of employees in order to educate and enhance skills and knowledge of employees and managers on control measures that yield positive results. Management philosophy is also included in the control environment. That is, code of ethics in a professional and deterrence from fraud, conflict of interests and so on. Organizational structures are concerned with delegation of responsibilities and how they are assigned across the organization. Reporting is not excluded. It is critical to know the lines of reporting. The internal control department is an independent one and should clearly incorporate its line of reporting, to the uppermost level, within the institution concerned (Hightower, 2009).

2.2.2 Risk assessment

Prerequisites of risk assessment procedures are setting of objectives to match risk appetite of an organization, including tertiary institutions. Risk assessment obliges businesses to identify risks. Identification of risks reveals the risk present in all levels of the organization. As well, evaluation of risks is crucial in determining the risk tolerance level of an organization by determining the likelihood of occurrence. Risk management seeks to identify the risk appetite of an organization. Lastly but not the least, is the risk response determines the risk response that is; accept, reject, transfer or minimize risks associated with organizational strategies (Vanstape, n.d.; Abiola & Oyewole, 2013; Hightower, 2009). Monitoring and communication is also included in the risk assessment process. For continuous improvement, monitoring is essential to ensure that organizational objectives are met. Communication of risks identified to all levels is also required (Lam, 2014).

2.2.3 Control activities

(Arwinge, 2013; Vanstape, n.d) exhaustively explained required control activities under the internal control framework. They pointed out that there are policies put forward by top management used in determining the control procedures in an organization. In addition, control activities are present in all levels of an organization. It is important to ensure stringent measures are adopted to prevent a divergence from what management desires. An element of the control actives includes segregations of duties. Risk is present in all activities within an organization, including tertiary institutions. Risk should be managed in this context by allowing separate individuals to be in charge of the specified duties from an array of duties (Arwinge, 2013). This will prevent risk of losing by the owners due to gaps created by over performing individuals. Performance reviews are used to compare targeted performance and actual performance. Besides, control of access to authorised information to guarantee completeness and accuracy in information control is also an element of control activities in the internal control system. Lastly, another component constituent of internal control is monitoring and feedback. At this juncture, management is held accountable for ensuring that any loop-hole in the internal control system of an organization is managed. This process should go on for continuous improvement in tertiary institutions in Nigeria.

2.2.4 Information and communication

Organizational information is precious; hence everything should be done to ensure that it is kept in safe hands. The capability of an organization to grow depends on its information stored in its database. It has been argued that safeguard of organizational data is directly linked to strategy formation. On the contrary, internal control is the foundation of any organization. Technological changes and globalization has made it difficult to maintain data owing to the fact that data can be easily accessible. Management are depending on these data to make judgements that will decide on the faith of any organization. Hence, relevant and reliable information is crucial so as to safeguard assets, prevent fraud, and ensure continued provision of accurate financial information. On the other hand, communication is also crucial. In order to

maintain the economic, efficiency and effectiveness in operations, all transactions must be recorded accurately and without error in a report format. The report should be disclosed in a timely manner to facilitate decision making processes. Internal control responsibilities which employees are required to take part in should be clearly communicated. Communication within should cover the top-down, across the organization and bottom up approaches of organizational communication for effective implementation (Vanstape, n.d.; Abiola and Oyewole, 2013; Hightower, 2009).

2.2.5 Monitoring

Abiola and Oyewole (2013) declared that it is a routine check of the actual performance against the targeted performance. A monitoring culture helps to reveal the gaps and results of continuous improvement of internal control systems, policies and procedures. Monitoring is essential when self assessment activities, control testing or external audits are in progress. Monitoring could be done separately or done as usual. However, if done separately it will be difficult to detect slacks, if any. In the case of control done usually, which occurs in most organizations with rational thinkers present, a continuous exercise will influence the likelihood of achieving the organization's desired objectives. It is important to report any obstacle come across to a top executive higher by a level. There should be a formal system in place for reports to be made which should make reference to the organizational structure of the tertiary institution.

2.3 Problems caused by internal control deficiencies in tertiary institutions in Nigeria

Poor internal control system implementation revealed by (Adetunji, 2014), results to repercussions detrimental to the success of tertiary institutions. One of the lax of a poor internal control system is mismanagement of organization's funds. Graham (2008) gave a scenario of the nephew of a business owner who perceived there was an opportunity to misbehave as a care taker and took up the chance. He was not sanctioned because no effort was made to ensure that suitable controls were in place allowing for an even more confident "criminal-like" feeling towards committing the crime. There was no other

alternative but for the family business to file for bankruptcy. This illustration has depicted that it is important to execute controls even in the tertiary institution and also ensure that there is ongoing monitoring to give surety to uninterrupted improvement. This is so that there will be no room for such immoral activities within the organization.

As aforementioned, there is no one fits all internal control policies between private and public tertiary institutions. It is highlighted however, that tertiary institutions including the privately owned are obligated to adopt the internal control policies by the government in addition to the ones formulated by their owners. This develops to a disconnection in the educational system in Nigeria. It is only meaningful and fruitful to have a single set of internal control policies and procedures which have already been designed by top control giants like Sarbanes-Oxley (SOX) responsible for the formulation of the SOX Act 2002, Committee of Sponsoring Organization (COSO), and Cadbury and also in the Turnbull reports. That being mentioned, it is also beneficial to possess controls suitable for the organizational structure.

Hitherto, most if not all, Nigerian tertiary institutions do not have a system of organized line of reporting. The line of reporting is omitted when there is a familiar connection between the parties involved. The line of reporting in the administrative section in tertiary institutions usually starts off from the Vice-Chancellor who is the Chief Executive Officer of the tertiary institution down to the heads of departments then the lecturers. Furthermore, reporting as a means of internal control in an organization entails effectiveness in financial reporting, operation compliance of processes and policies. Lack of budgetary control, low production standards, inferior standards in financial reporting, poor enrolment processes, ineffective teaching and learning processes are some of the dynamics **of** poor internal control system in Nigeria (Ejoh and Ejom, 2014).

Principal Officers that contribute solely to the development of the tertiary education in Nigeria should also be considered. There are factors that set off that innermost zeal to contribute as they are obligated to. Rewarding financially or otherwise is important in the implementation process. In some cases, it is not all about the money. For this reason, being familiar with the principal officers will aid in rewarding them for performance depending on what they desire. These officers actually feel that they are not permitted in

attending. They prefer to impact positively on the Nigerian economy in any way possible than boast about their responsibilities and duties. This does not imply in any way that these custodians do not carry out their duties.

It is rather unfortunate that there is lack of accountability Graham (2008) in most tertiary institutions in Nigeria. Nigeria itself is known for its reputation for corrupt government. Although, corruption and fraud exists worldwide, Nigeria seems to be bad at managing hers, not excluding her tertiary institutions. Fraud that transpire in tertiary institutions in Nigeria has made known that the system used in selection of staff is inappropriate. More so, the people of an organization are the fuel needed to move it forward. Hence, bad people means bad move and vice versa. The bursary department responsible for disbursement and receipt of university funds from various revenue centres lacks proper internal controls in its operations. Occasionally, funds are received in form of bribery to favour familiar faces while funds that have been received using proper means are kept "under the carpet" leading to fraudulent acts. Ejoh and Ejom (2014) concluded that there is no relationship between accountability control and internal control in Nigerian tertiary institutions. Such vices are difficult to detect because there are no internal control systems in place. Ejoh and Ejom (2014) in their study of measurement of financial performance in Nigeria confirmed that there are no qualified staffs to implement accountability control. The enrolment system in Nigerian tertiary institutions is an unfair system. Selection methods of students who are perceived as being eligible to study in the universities are picked using informal methods. Majority of candidates come from bribed staffs or family and friends who have been employed based on their informal relationships. There are no control measures to ensure efficiency in operations. This has left rooms for misconduct since there is no monitoring in process. In this case, even the monitor needs to be monitored because they are usually convinced to turn their heads against such illegal acts.

Teaching methods and procedures in the tertiary education are not effective. In the western world, students are taught using methods that management perceive as being fit for those groups of students. Lecturers in Nigeria are lean towards adopting methods that are archaic and non-effective. Materials are also not up to date causing the stagnation in growth of tertiary education in Nigeria. Students now travel

out of the country to pay weighty tuition because they have the assurance of getting quality education. This has caused the brain drain problems in Nigerian tertiary institutions (Habib ad Jalloh, 2015).

Corporate governance is not very common in Nigerian as a whole. However, efforts have been made through training, incorporation in curriculum and development to ensure that such is not the case. Even as at that, majority of institutions still fail to weave the corporate governance into their system. With corporate governance, there is a confirmation to some extent that intra-firm controls are in place (Babatunde, 2013). Risk management and internal control play a major role in ensuring that organizations are governed as managed as they should. That is, remuneration of staffs, risk management and the need of risk committee, internal control committee, composition of board of directors and so on. Reporting level are also included in the corporate governance code of conduct.

Lastly, little research has been carried on the effectiveness of the internal control system in tertiary institution in Nigeria. With the incessant changes in the global educational sector, it is difficult to keep up. These changes results to vulnerability. However, changes in the educational system warrants latest phase of designs of internal control systems to fit the operations of Nigerian tertiary institutions. To avoid tertiary institutions from being vulnerable, proper studies should be done to ensure that problems, similar to the ones aforementioned, are mitigated.

2.3 The way forward for tertiary institutions in Nigeria

A study by Proviti (2008) confirms that development of internal control system in the university helps in the achievement of organizational objectives thereby ensuring continuous improvement in the tertiary educational system. This was made possible when the number of staff in the internal audit department were doubled. At times, shortage in staff might results in poor internal control. The reasons for such may be unfair separation of duties amongst employees. Duke University in the United States ensured that there ware continuous improvements in its many systems by continuous monitoring and feedback of results.

The decision making process in tertiary institution is made so as to enhance the growth of such institution. Usually, it is believed that the vice chancellors decisions are final. This is not logical owing to the fact

that decision making in tertiary institutions is not a one man task and must be made with the help of other top management and administrative staff. Adetunji (2014), deduced in his findings that some principal officers where stressing on their roles in the academia and how important it is for them to be included in meetings and decision making processes which will influence growth in the Nigerian educational sector.

Most institutions are fond of adopting internal controls implemented by other sectors such as the service industries. Adeniji (2014) added in his study that to ensure that an application of internal control catapults the Nigerian educational system into global success, internal control ought to be designed to fit the tertiary institutions infrastructure. Public and private tertiary institutions have different facets and hence should be run differently. Although it is a must for private institution to use policies by the government, it is better to also use policies by its owner. Owners also have the right to have a say in their possessions. Public institutions are best managed by government as a platform of providing tertiary education to the development of education in Nigeria.

Babatunde (2013) confirms that internal control assures stakeholders that resources either scarce or in abundance are not wasted. But instead, with the use of stringent intra-firm controls, victory will be achieved. Additionally, students, principal officers, custodians, and the non-administrative staffs are responsible for ensuring that cracks in the Nigerian educational system are mended. This can be done by going extra miles to prevent the root causes of problems such as mismanagement of funds and lack of accountability in Nigerian tertiary institutions.

Good corporate governance according to (Babatunde, 2013) will also suffice. The collapse by reputable organizations was viewed to be caused by poor internal control systems. As a result, new legislations, standards and codes of conducts have been formed. Tertiary institutions in Nigeria should ensure that corporate governance codes of conduct are employed. Corporate governance code of conduct has proven to guarantee success in organizations, locally and globally, if implemented carefully and in the correct manner.

2.4 Towards continuous improvements in the educational sector in Nigeria

The Nigerian educational sector needs improvement. Much has occurred over the years from when education was introduced into the system till date. There is no correlation still between the private tertiary institutions and public tertiary institutions. Differences between both sectors are in terms of factors such as management, policy adoption and eligibility criteria for student admission purposes. The level of transparency more so, is better in private tertiary institutions than public institutions. Since the Nigerian public tertiary institutions are not-for-profit, more effort to mitigate risks associated with poor internal control is required. Internal control is far from being completely adopted in Nigeria even with the fall of Nigerian giants like Power Holding Company Nigeria limited (PHCN), Lever Brothers Nigeria PLC and Nigerian Telecommunications (NITEL) (Babatunde, 2013).

The existing enrolment systems in Nigeria as compared to global standards are without effective control in place. Most tertiary institutions in Nigeria do not have common eligibility criteria. For example, the Joint Admission and Matriculation Board (JAMB) examination has been contributing to the increase in number of un-admitted students yearly which has in turn affected unemployment rate. To overcome these problems, the post University Matriculation Examination (UME) was introduced. However, this was not helpful leading to even bigger problems facing the educational sector in Nigeria. Overcoming problems of this nature will take a lot more than just simply implementation of one policy to achieve continuous improvements in the Nigerian tertiary educational sector.

There are institutions that have not seen the break light of success due to poor or lacking internal control codes of conduct execution within the organization. Graham (2008) granted that some organizations must have claim organizational success with no internal control in place—but these are just a handful. Internal control is needed for the continuous improvement in the Nigerian tertiary educational system for its growth. That is employees need to be trained, managed and involved, ensuring effective learning by students, management of institutional funds and assets, and so on. Internal control serves as a fertilizer to for-profit and not-for profit business towards their differing desired triumphs.

3.0 METHODOLOGY

Theoretical in nature, the study is aimed at analyzing internal control implementation in Nigerian tertiary

institutions and their contributions in the improvement of tertiary education in Nigeria. This study adopted the secondary data collection method which was used in developing a state of the art literature from quality sources such as books and journal articles in arriving at the conclusions made. This in turn facilitated the recommendations made to further ensure continuous improvements in tertiary education in Nigeria.

4.0 ANALYSIS AND DISCUSSION

Interlocking the internal control system to suit the organization is a crucial step to take before implementation. Internal controls are also important in the institution of higher education because of its diverse management structure. The tertiary institution usually consists of the administrative and non-administrative management. Intra-firm or internal control system has been given many definitions, all of which encompass management of assets, fraud prevention and proper accounting records. Internal control if implemented in tertiary institutions in Nigeria facilitates development in the Nigerian educational sector.

The tertiary institutions in Nigeria, both private and public, have differing approaches to internal control implementation. This is due to the fact that private tertiary institutions adopt those policies by their owners and also those by the government because they are obligated to. The NUC, responsible for the oversight of educational standards in Nigeria continuously puts efforts in ensuring that the educational system is being improved.

Inconveniencies such as poor management system, misconducts by principal officers and poor bursary functions are caused by inefficiency and ineffective internal control systems in tertiary education. The internal control system consists of the control environment, risk management, control activities, information and communication and monitoring. All these components play major roles in ensuring that there are improvements in the Nigerian educational system.

In order for the Nigerian educational system to forge ahead, measures need to be taken. Amongst those measures as explained in the study is the segregation of duties amongst the principal officers in Nigerian tertiary institutions. Delegation of duties to academicians for instance, assigning too many classes to one

lecturer than he or she can handle will lead to ineffective teaching by the lecturer and ineffective learning by students. Ineffective learning leads to brain drain. Additionally, misconduct by custodians—mainly the principal officers—because there are no stringent controls as monitoring put in place. Furthermore, little research has been carried out on the reasons affecting the development in the educational sector in Nigeria. Research is meant to satisfy curiosity for the best reasons—one of which is overcoming obstacles. More research should be undertaken on internal control challenges and effects on development of the Nigerian educational sector.

The young Nigerian tutors are the future of Nigeria and therefore valuable assets. Mismanagement of assets bankrupts the system not just financially but also otherwise. More than enough should be done in ensuring that their education is of substance. Up to date teaching methods and materials should be employed. Implementation of internal control systems in Nigeria will ensure that such is achieved.

5.0 SUMMARY AND CONCLUSION

Internal control is important in tertiary institutions in Nigeria. Internal control implemented in other institutions have apparently guaranteed safeguarded assets, avoidance of fraud, ensure that policies and procedures are acted on properly and quality accountability and reporting. Although, there have been some success stories resulting from poor internal control in place in some organizations. These stories only went on for a short term. Continuous improvements can only occur in the Nigerian educational system if there are stringent and effective controls in place. The control framework of the tertiary educational system in Nigeria consists of the control environment, risk management, control activities, information and communication and monitoring. All these components with their constituents facilitate will contribute to the continuous improvements in the Nigerian educational system.

There have been numerous problems in the light of funds mismanagements, ineffective teaching and learning methods, poor bursary functions, misappropriation of assets, and so on resulting to the disturbance of the success towards an educational system of standard. Overcoming these impediments will ensure a successful educational system in Nigeria. It is the job of custodians to sacrifice what needs to be forfeited to achieve a Nigeria filled with literates of quality and hence continuous improvements in

the Nigerian educational sector.

Theoretical in nature, this study can be backed up with scientific research for future developments in the Nigerian educational system. Additionally, a study on a preferred internal control system for implementation in tertiary institutions should be considered. This is due to the large extent of management which exists in institutions of such nature, hence might require a best fit internal control system or continuous improvements as such.

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THE EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON CONSUMER BUYING BEHAVIOR: A CASE OF PAKISTAN

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Abstract

Purpose: The main purpose of this paper is to find out the relationship between corporate social responsibility and consumer buying behavior in Pakistan

Methodology: A total of 250 responses were collected from respondents of twin cities of Pakistan multiple regression was used to investigate the relationship among the variable of study

Results: Results showed that substantial, viable and identifiable consumer group exists that considers a company's level of social responsibility in its purchase decisions.

Implication of Study: For academicians, this research makes a contribution to the understanding the underlying dynamics of the role of corporate social responsibility in consumers' buying behavior. The result of this study indicates that all of the CSR components have a significant relationship with consumers' buying behavior. This research may help managers to make appropriate strategy for initiatives of CSR.

Keywords: Corporate social Responsibility, Consumer buying Behavior, Legal obligation, Ethical obligating, philanthropic obligation.

1-Introduction

Corporate Social Responsibility (CSR) can be defined as a business' focus on the "economic, social and on the environmental goals as a measure of company's success this concept is also known as triple bottom line concept. Measures of a company's success. Over the last a number of decades, a wide range of companies have started to understand that a stress on the "triple bottom line" is not only morally better, but can frequently bring financial rewards as well. The activities of CSR can be a powerful source in holding companies responsible for their environmental and social impacts, and it can also be used as means to enhance the performance of companies.

Bowen (1953) defined CSR as the obligation "to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society". The sight of Corporate social responsibility as a social commitment has been supported in later conceptualizations (e.g., Carroll 1979) and modern marketing researches (e.g., Brown and Dacin 1997;

Sen and Bhattacharya 2001). According to Carroll there are different type's obligations such as economics obligation, which means to be economically viable and more productive, legal and ethical obligation which means to follow the laws and ethical values and philanthropic obligations (give back to society). Many studies have established that Corporate social responsibility programs have a strong impact on consumers' attitudes and behaviors towards products and companies (Berens, van Riel, & van Bruggen, 2005; Sen & Bhattacharya, 2001).Adam smith argued that business owner, in the pursuit of profit will ultimately produce social good. Corporations that do not equip themselves with CSR activities will often be left behind with the increasing global competition and borderless markets, and international corporations with sound CSR activities grow stronger (Altman, 2007). As the education level increases, consumers are made more aware of the need for pro social corporate behavior. A lot of work has been done in Western countries to identify an organization's behavior regarding consumer purchasing decisions. However, not many studies have been conducted in emerging markets, such as Pakistan. This paper will examine the effect of CSR initiatives on the buying behavior of Pakistani consumers.

1.2 Scope of the study

The study is limited to consumer buying behavior and corporate social responsibility initiatives of the corporate. The study is confined to two twin cities of Pakistan Islamabad and Rawalpindi.

1.3 Purpose of the study:

Literature on CSR shows that CSR initiative has an effect on consumer purchase decision. Followings are some objective of the study

1. To find out the relationship between corporate social responsibility and consumer buying behavior in Pakistan
2. To study and examine the current CSR practices being employed by corporations in Pakistan.
3. To check out the level of awareness of consumer about CSR

2-Review of literature

Brown (1997), defined CSR as the obligation "to follow those policies, to formulate those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society". The sight of Corporate social responsibility as a social commitment has been supported in later conceptualizations (e.g., Carroll 1979) and modern marketing researches (e.g., Brown and Dacin 1997; Sen and Bhattacharya 2001). According to Carroll there are different types obligations such as economics obligation, which means to be economically viable and more productive, legal and ethical obligation which means to follow the laws and ethical values and philanthropic obligations (give back to society).Firms as a socio-economic agents have a greatest impact on the environment and accordingly they have a significant part to play for the betterment and sustainability of the environment. Indeed, given the enormous power, position and rights that corporations exercise, inhabit and benefit from society, they expectedly believe in some form of social duties and social responsibilities. (Garriga & Melé , 2004). Corporate social responsibility with perspective of consumer is an emerging trend in the current era and consumers have also started to take interest in the CSR activities of the company. This changing

perspective of CSR, activated the researcher to check either CSR activities have impact on consumer purchase behavior or not if it is influencing the behavior then to what extent? The results of study of Mohr et al.(2001) demonstrated a positive link between CSR activities and consumer behavior. Moreover, the results of the same study also showed that a very little number of respondent don't really think about making CSR as a base for their purchase decision.

Another emerging trend in the 21st century was the focus of CSR from the consumer perspective. The fact that companies began to work and actively participate in projects regarding corporate social responsibility; help the consumer to woke up and show interest in the initiatives of the corporate for the social well being. The researchers were so anxious to know whether CSR activities had influence on consumers buying behavior or not, and if so, in what way and to what extent. In 2001, Mohr et al. studied the relationship between CSR and buying behavior of consumers. The study results showed that most respondents were generally positively disposed to socially responsible companies and also expect companies to be very active in CSR. Furthermore, the results exposed that a small mass of respondents do not think   seriously basing their buying behavior on CSR or did so only sometimes, even if CSR as purchasing criteria did not play a big role in the process of adoption or purchase behavior. However, 39% of respondents were somewhat or much basing your purchase on CSR (Mohr et al., 2001).

In 2005, Becker-Olsen and Hill contributed two studies investigating the role of perceived fit (eg Similarity between corporate mission and social initiative), perceived corporate motive (centered at the other against profits in the middle), and when a notice (proactive versus reactive) in consumer responses to social enterprise initiatives. The intend of the study was to discover the impact of CSR on consumer behavior. The study results showed that an overwhelming majority of respondents believe that companies should engage in social initiatives and 76% thought that these initiatives will benefit companies. About half of respondents said they would refuse the companies who acted irresponsibly, whether reasonable alternatives were available (Becker-Olsen & Hill, 2005).

In 21th century, another relatively new phenomenon within CSR developed and used as competitive advantage. In 2006, marketing and strategy leader Michael Porter and Mark R. Kramer written an article in which they described a framework which can be used by the organizations to see that impact they have on the society, determine which effects to address and then suggest effective ways to do so.CSR, in strategic perspective is a source of a great social progress as corporation use their resources and expertise and insight and activities that benefits the society. (Porter & Karmar, 2006).

In fulfilling the economic responsibility, it is expected that companies working within the framework of laws and regulations as a partial fulfillment of the "social contract" between business and society. Carroll (1991) stated that it is important that the legal responsibility to perform in a manner that is consistent with expectations of governments and laws that comply with various federal, state and local regulations. a successful company should be recognized as one that meets its legal obligations.

Although economic and legal responsibilities represent the ethical standards of equity and justice, ethical responsibility encompasses those activities and practices expected or prohibited by society that expand beyond the limitations of the legal responsibilities. Ethical responsibility embodies those standards and expectations that reflect a concern as consumers, employees, shareholders and the community consider

fair, just, or in accordance with the respect and protection of moral rights of stakeholders (Carroll, 1979) Conchius (2006), meanwhile, said the legal responsibility includes abide by the consumers of products and laws, environmental laws and employment laws while sticking on to the laws and regulations governing competition in the market. However, legal responsibilities do not embrace the whole range of behaviors expected of companies by society. The laws are important, but are often insufficient. First, it is not possible to address all issues and areas that a company may face. Second, laws often the most recent of what is considered proper behavior concepts are left behind, and thirdly, the laws may represent personal interests and political motivations of legislators (Carroll, 1998).

Carroll in 1991 vowed that the activities of the corporations are trusted if they showcase good citizenship and, moral activities. Furthermore he also argued that corporations should also go beyond the business and legal activities (Carroll, 1991).

2.1 Consumer Behavior towards CSR

This paper aims to examine consumers' buying behavior as a result of corporate CSR initiatives. We are interested in examining that whether the purchase decisions of the products and services of consumers in Pakistani are based on corporation's CSR initiatives or not. In addition, we also seek to identify which type of CSR component based on Carroll's pyramid of CSR will have significant impact on consumers' buying behavior.

Several studies have suggested that there is a positive relationship between a corporation's CSR activities and consumers' attitudes towards that corporation and its products (Brown & Dacin, 1997; Creyer Ross, 1997; Ellen, Webb, & Mohr, 2000). Mohr, Webb and Harris (2001) examined and their finding indicated a significant relationship between CSR and consumer responses.

Sen and Bhattacharya (2001) research on reaction of consumers to CSR shows that CSR will directly affect consumers' intentions to purchase corporation's products.

As cited in Pomering and Dolnicar (2008), marketplace polls reported that consumers expect corporations to provide information about what they do, and they will support those corporations that pursue CSR initiatives

3-Research Methodology

The study is deductive in nature. A structured was questionnaire designed, to know the level of awareness and impact of corporation's CSR initiatives on their buying decisions. The survey was conducted in Islamabad & Rawalpindi; responses of 250 respondents were collected from the universities students in the twin cities. We targeted respondents who were seemed to be conscious buyer and hence the sampling technique is non-probability convenience sampling. Cronbach's Alpha coefficient was used to evaluate the reliability of the measures. The Cranach's Alpha coefficient for the independent variables and dependent variable was 0.759.

4-Research Results and Discussions

Table 1:General Awareness On CSR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Well Understood	90	36.0	36.0	36.0
	Moderately Understood	102	40.8	40.8	76.8
	Little Understood	52	20.8	20.8	97.6
	Not At All	6	2.4	2.4	100.0
	Total	250	100.0	100.0	

The results in above table shows that 97.6% of the respondent were aware of the CSR initiatives of organizations

Table 2: Definition of CSR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Addition In Shareholder's Value	23	9.2	9.2	9.2
	Meeting legal Obligations	101	40.4	40.4	49.6
	Contributing To Charitable firms	84	33.6	33.6	83.2
	Doing Community Services	39	15.6	15.6	98.8
	Minimizing Racism and Discriminations	3	1.2	1.2	100.0
	Total	250	100.0	100.0	

The findings in the above table show that most of the respondent were concerned about the legal obligation dimension of the CSR initiative, followed by the contribution to charity and doing some sort of community service was the third most important choice of the respondents

Impact of Perceived CSR Initiatives on Consumer's Buying Behavior

According to the model summary of multiple regressions in Table 3 the multiple R is 0.572.   Because multiple R is positive in value, it shows that there is a positive linear relationship between ethical, legal, economic and philanthropic activities and consumers' buying behavior.

Table 3: Model Summary of Multiple Regressions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
CSR-CB	.573[a]	.329	.315	.36483

a. Predictors :(Constants) CSR: corporate social responsibility components which include ethical, economic, philanthropic, legal. CB-Consumer Behavior

According to the model summary, *R* square is equal to 0.329, which is less than 1. This indicates that there is a weak linear relationship between CSR activities and consumers' buying behavior. Approximately 32.7% of variance in all the CSR components can significantly explain consumers' buying behavior.

An analysis of variance (ANOVA) has been preformed to test whether there is a statistical significant linear relationship between the combination of the four CSR components (Economic, legal, Ethical and philanthropic) and consumers' buying behavior exists or not. According to Table 4, the *p*-value is .000, indicating that the four CSR components significantly influence consumers' buying behavior.

Table 4: ANOVA of Multiple Regressions

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
CSR-CB	Regression	12.149	4	3.036	22.817	.000[a]
	Residual	25.071	247	.136		
	Total	37.220	251			

[a]Predictors (CSR): constant, corporate social responsibility components i.e. ethical, economic, philanthropic, legal

[b]Dependent Variable (CB): consumer behavior

A coefficient table is very much helpful in explaining the relationship between the four CSR components and consumers' buying behavior. Based on the calculated significances in Significance (Sig.) column of Table 5, the *p*-value for each CSR component is less than 0.05, which indicates that all the CSR components have a statistically significant relationship with consumers' buying behavior.

Table 5: Coefficients of Multiple Regressions

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
CSR-CB	(Constant)	1.286	.324	3.968		.000
	Economic	.259	.068	.253	3.776	.000
	Legal	.112	.053	.148	2.087	.038
	Ethical	.166	.068	.170	2.416	.017
	Philanthropic	.168	.055	.211	3.052	.003

a. Dependent Variable: Consumer Behavior
(CB)

In Table 5, the unstandardised beta coefficient is used for the values of the numbers in the linear regression equation. Theory explains that a higher beta value indicates a greater impact of the independent variable on the dependent variable. The independent variable (CSR components) can be ranked according to the magnitude of the beta coefficient to determine which component has the most significant impact on consumers' buying behavior.

The regression model relates Y (the dependent variable) to a function of X (the independent variable) and β (the unknown parameter). It is formulated as Y ≈f(X, β). The multiple regression analyses performed in this study are modeled as follows:

$Y_i = \beta_1 x_{i1} + \beta_2 x_{i2} + \beta_3 x_{i3} + \beta_4 x_{i4}$

Therefore, the multiple regressions line equation for this current study is:

Consumer Behavior = 1.286 + 0.259 Economic Responsibility + 0.168 Philanthropic Responsibility + 0.166 Ethical Responsibility + 0.112 Legal Responsibility.

The results explicitly defines that the economic responsibility attribute has the most significant impact on consumers' buying behavior, as it has the highest beta value, followed by philanthropic responsibility, ethical responsibility and, finally, legal responsibility.

Pakistani consumers seem to view CSR priority differently from other nations. Economic responsibility was still the basic utmost priority preferred. However, they ranked philanthropic responsibility as the second most important responsibility compared with legal responsibility. It is not surprising that Pakistani consumers see corporations' philanthropic responsibility as being

more important than their legal responsibility. Consumers want corporations to contribute their money, facilities and employees' time to humanitarian programs or purposes. Pakistanis have been known as one of the most generous nations in the world. For example, the country's rate of donation and participation in helping the victims of natural disasters in the world has always been very encouraging. In addition, we have always heard that the generous Pakistanis have made financial pledges and contributions to help those in need, they be orphaned children, the poor, accident victims and so on. Although the Pakistani consumers themselves have been very generous, the expectation for business institutions to do the same is unquestionable.

As for complying with rules and regulations, it is not surprising that Pakistani consumers ranked legal responsibility last compared with Carroll's pyramid, which suggested that legal responsibility is the next most important responsibility

Compared with those in developed nations, Pakistanis regard rules lightly, to a certain extent, as we have always heard from the news about how Pakistanis bend and ignore stipulated rules and regulations. Among the most common examples are the bending of traffic rules and regulations promoting environmental protection.

5-CONCLUSION AND IMPLICATIONS

This research makes a contribution to the understanding the fundamental dynamics of the role of CSR in consumers' buying behavior. The findings of this study show that all of the CSR components have a significant association with consumers' buying behavior. However, the limitations of this study must also be considered. The major limitation relates to the sample. With only 250 usable respondents, this sample size might limit the external validity of the findings.

Practitioners should note that this research ropes previous results reported in the literature, signifying that a considerable, viable and certain consumer group exists that considers a company's level of social responsibility in its purchase decisions. Manufacturers and retailers have an opportunity to appeal to this group while simultaneously meeting their business objectives and make contributions to society. The type of CSR activities that should be engaged by the corporations should preferably be based on the priority indicated in the finding of this study, where the economic responsibility attribute has the most significant impact on consumers' buying behavior, followed by philanthropic responsibility, ethical responsibility and finally, legal responsibility. However, companies that promote themselves as socially responsible need to be prepared to deal with criticisms of any irresponsible behavior they are seen as committing, as information travels within seconds in this information technology era. In contrast, companies who disregard expectations concerning social responsibly may risk consumer boycotts as a result of the strengthening of consumers' awareness and rights in today's market scenario.

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THE EFFECTS OF HUMAN RESOURCE PLANNING IN THE IMPLEMENTATION OF OPERATIONAL ACTIVITES IN LARGE SCALE ENTERPRISES

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ABSTRACT

The growth of every enterprise requires careful planning of its human resources. Such task is challenging but should be undertaken by competent personnel to ensure that operational objectives are achieved. This study seeks to assess the effects of human resource planning in the implementation of operational activities in large scale enterprises. Secondary data was retrieved from published materials in the subject matter and analysis was drawn from available facts which disclosed the assessment of skills and competences of existing work force and development of forecasts for the demand and supply of labour. Also, the relevance of recruitment, selection, training and rewarding employees to stimulate performance and the significance of human resource planning towards the effective implementation of operational activities was also established. This study will enable practising managers and human resource specialists in the planning and management of operational activities.

KEY WORDS: Human Resource Planning, Implementation, Operational Activities, Large Scale

Enterprises.

1.0 INTRODUCTION

Human Resources Planning have been a function of management since the origins of the modern industrial organization. Economist Alfred Marshall observed in 1890 that the head of a business must assume himself that his managers, clerks and foremen, division of labour, specialization, organization of management into levels, work simplification, and application of standards for selecting employees and measuring their performance were all principles applied early in industrial management. They were also applied in large non-industrial organizations, including religious, governmental and military organizations. Planning for the staff for work is not a recent notion. During the first part of the century, the focus in manpower planning was upon the hourly production worker. The aim of improving efficiency through work engineering and early industrial psychology application was consistent with the need to improve productivity and introduce greater objectivity to personnel practices. During World War II and the past war years, HRM focus intensified on employee productivity and on the availability of the competent managerial personnel. These needs resulted from a civilian talent shortage in combination with an increasing demand for the goods and services. New technologies and a new awareness of, and interest in behavioural aspects of work also complicated the manpower planning task. The expanded demand for high potential personnel in the 1960s resulted from high technology programs and rapid corporate expansion and diversification. In response, human resources planning practices attempted to balance supply and demand, particularly for managerial, professional and technical personnel (Mahapathro 2010). Human resource practitioners and other contemporary observers of the management science have expressed a growing awareness ever since the 1990s that people represent a key asset in competitiveness. While Western nations have long placed enormous faith in the power of technology to enhance productivity, the fact is that the greatest competitive gains stem from the exercise of human creativity to identify new products and services, find new markets and applications for existing products and services, and make use of the possible gains to be realized from technology. Without the creative application of human knowledge and skill, enterprises would not be formed and would not thrive for long. Human beings thus represent intellectual capital to be managed, just like other forms of capital (Brown, 1998).

Human resource planning is an integral part of business planning. The strategic planning process defines projected changes in the types of activities carried out by the enterprise and the scale of those activities. It identifies the core competences the enterprise needs to achieve, its goals and also its skill and behavioural requirements. Enterprises need to know how many people and what sort of people they should have to meet present and future business requirements. This is the function of human resource planning, or workforce planning as it is sometimes called, especially in the public sector. However, it is not always the logical and systematic process conceived when the notion of 'manpower planning' became popular in the 1960s and 1970s. Human resource planning may be well established in the HRM vocabulary but it does not seem to be embedded as a key HR activity (Armstrong 2010). Human resource planning interprets plans in terms of people requirements, focusing on any problems that might have to be resolved in order to ensure that the people required will be available and will be capable of making the necessary contribution. But it may also influence the business strategy by drawing attention to ways in which people could be developed and deployed more effectively to further the achievement of business goals. As Quinn Mills (1983) wrote in his seminar Harvard Business Review article, 'Planning with people in mind', human resource planning is a decision-making process that combines three important activities: identifying and acquiring the right number of people with the proper skills, motivating them to achieve high performance, and creating interactive links between business objectives and people-planning activities (Quinn Mills 1983).

Implementation of operational activities such as manufacturing/production, distribution, marketing and selling requires a diligent workforce whose efforts should be effectively planned by the human resource department to ensure that enterprises' operational objectives are achieved. Large scale enterprises are clustered with several challenges in environment where they operate since rival firms are also striving for competitive advantage. This thrust for competitive advantage prompts the act of planning for the required number of human resource needed, their skills and competences in order to achieve the desires of such enterprises. The aspect of producing high quality product, distributing such product through effective supply chain management and ensuring that customers are aware about its existence and effort made to

reach them on time, is quite challenging but requires an effective human resource planning system which thrives towards addressing such challenge.

1.1 Research Aim

Large scale enterprises desire the achievement of operational, tactical and strategic objectives which makes them stand as unique institutions in a tough competitive environment. The grandeur of such objectives emanates from an effective and efficient human resource planning that addresses operational activities, which gradually move to tactical and subsequently to strategic. The purpose of this qualitative research is to assess the effects of human resource planning in the implementation of operational activities in large scale enterprises.

1.2 Research Objectives

The research objectives are segmented components that determine to unravel the clustered elements in the aim in a systematic manner in order to critically assess and assemble relevant actualities and build up a structured review process. The research objectives are outline as follows;

- To define human resource management, human resource planning and explain the purpose, benefits and drawbacks of human resource planning.

- To describe the aspect of linking organisational strategy and human resource planning and discuss the steps involved in human resource planning process.

- To describe operational activities such as manufacturing/production, distribution, marketing and selling and their implementation process towards achieving operational objectives.

1.3 Significance of the Study

Achieving successful implementation of large scale enterprises' operational activities requires a pre human resource planning in order to make available, the necessary personnel and skills so as to effect such implementation. The notion of competitive advantage has created diligence in enterprises operations since the business environment is clustered with intense competitive dynamics. High quality employees whose knowledge capital is enriched with both tacit and explicit are a desire of large scale enterprises and a pride of successful organisations. Considering the relevance of this study in the business world, it is noteworthy to large scale enterprises and all business organisations since the implementation of their

operational activities cannot be accomplished without effective human resource planning which makes available competent personnel to undertake such tasks. The study is also important to management professionals, specifically human resource management practitioners as they are the technocrats in managing enterprises' workforce.

2.0 LITERATURE REVIEW

Human resource planning must have been applied in a general sense ever since people have collaborated in working groups. The idea itself is, therefore, certainly not new. The modern version of HR planning as we know it developed from studies carried out shortly after the last war by the Tavistock Institute of Human Relationships in subjects connected with labour wastage and turnover, and from operational research, which was initially concerned with the application of scientific and mathematical principles to solving the operational problems of military and industrial organizations. Inevitably, it was realized that the human resource component of these problems could not be ignored. Thus, in 1967 the Manpower Study Group emerged from the Operational Research Society to become the Manpower Society in 1970. At about the same time, in 1969, the Institute of Manpower Studies, now the Institute of Employment Studies was formed as a research unit. The importance of planning the material resources of an enterprise has never been in question, and much effort has been devoted to optimizing financial and capital resources. Paradoxically, the human resource, which is ultimately the most important and least predictable asset, has not attracted the same level of attention. Despite significant developments and recent changes of attitudes towards HR planning, it continues to arouse some scepticism, maybe because the sceptics believe that a process which ought to be largely common sense has become unnecessarily complicated, or that the many variable factors in an uncertain future make the returns on the investment of effort of very doubtful worth. (Tyson 2006).

2.1.1 Definition of Human Resource Management: Human resource management is the leadership and management of people within an organization using systems, methods, processes, and procedures that enable employees to achieve their own goals that in turn enhance the employee's positive contribution to the organization and its goals. Thus, human resource management is not an end in itself; it is a means of helping the organization to achieve its primary organizational objectives. If employee goals are ignored in

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the system, then worker performance may decline, or employees may even leave the organization. The role of human resource management is therefore critical to the success indeed, even the very survival of the organization (Edvinsson, n.d.)

2.1.2 Definition of Human Resource Planning: Human resource planning is the process of analysing and identifying the need for and availability of human resources so that the organization can meet its objectives. The focus of HR planning is to ensure the organization has the right number of human resources, with the right capabilities, at the right times, and in the right places. In HR planning, an organization must consider the availability and allocation of people to jobs over long periods of time, not just for the next month or even the next year. Additionally, as part of the analyses, HR plans can include several approaches. Actions may include shifting employees to other jobs in the organization, laying off employees or otherwise cutting back the number of employees, retraining present employees, and/or increasing the number of employees in certain areas. Factors to consider include the current employees' knowledge, skills, and abilities and the expected vacancies resulting from retirements, promotions, transfers, and discharges. To do this, HR planning requires efforts by HR professionals working with executives and managers. The HR Best Practices box illustrates how several firms have made HR planning important (Mathis and Jackson, 2010).

2.1.3 Purpose of Human Resource Planning (HRP): The main purpose of HRP is to support the organisation's objective of securing a competitive advantage. Donald Burr, the Founder of People Express, set out a long-term HRP at an early stage of his company's development to stay non-union, pay lower salaries, and have broad job categories and work within teams. This has led the organisation to compete successfully through lower people costs and has given a sustained competitive advantage (Ulrich, 1987). There are four main general objectives in developing an HRP:

- ▪ *Continuity flow***:** To get the right people in the right place at the right time with the necessary skills. This involves policies in respect of recruitment, succession planning and training.

- ▪ *Maintenance:* To retain the stability in the workforce through pay and benefits, and individual career planning.

- ▪ ***Response to change*:** To put into effect changes that comes about from major operational strategies. These can involve re-location, re-training or re-deployment.

- ▪ ***Control:*** To ensure that staffs move in the right direction through the establishment of standards, performance control systems and building long-term employee relationships.

The detail and direction of each of these will be fashioned by the organisation's overall strategic plan. If the strategic plan indicates a development of new products or services, then the continuity plan is crucial in ensuring that staffs are recruited, trained and motivated in time for the launch. If divestment of certain activities is decided, then a strategy and detailed plan needs to be in place to prepare for the change, be it through redundancy or transfer of undertakings. If the strategic plan focuses on increased productivity or improved workforce relationships, then the HRP needs to be in place to accomplish this objective (Stredwick, 2005).

2.1.4 Hard and Soft Human Resource Planning: A distinction can be made between 'hard' and 'soft' human resource planning. The former is based on quantitative analysis to ensure that the right number of the right sort of people is available when needed. The latter, as described by Marchington and Wilkinson (1996), 'is more explicitly focused on creating and shaping the culture of the organization so that there is a clear integration between corporate goals and employee values, beliefs and behaviours'. But as they point out, the soft version becomes virtually synonymous with the whole area of human resource management (Marchington and Wilkinson, 1996).

2.1.5 Benefits and Drawbacks of Human Resource Planning

2.1.6. Benefits

HRP, in both its traditional and more contemporary forms, can be perceived to have a number of distinct advantages. Firstly, it is argued that planning can help to reduce uncertainty as long as plans are adaptable. Although unpredictable events do occur, the majority of organisational change does not happen overnight so the planning process can provide an element of control, even if it is relatively short term. Taylor (2002: 73–74) suggests that in the HR field there is potentially more scope for change and adaptation in six months than there is in relation to capital investment in new plant and machinery. Thus he argues that

many of the assumptions about the difficulties of planning generally are less relevant to HR (Taylor 2002). Other advantages relate to the contribution of planning to organisational performance. For example, the planning process can make a significant contribution to the integration of HR policies and practices with each other and with the business strategy, i.e. horizontal and vertical integration. Marchington and Wilkinson (2002: 280) suggest that HR plans can be developed to 'fit' with strategic goals or they can contribute to the development of the business strategy, but conclude that either way, HRP is perceived as a major facilitator of competitive advantage. Another way that HRP can contribute is by helping to build flexibility into the organisation, either through the use of more flexible forms of work or through identification of the skills and qualities required in employees. IRS (2002c) report that a number of organisations have predicted that jobs are likely to change radically over the next few years and so are using selection techniques to assess core values rather than job-specific skills.

2.1.7 Drawbacks

One of the key problems with planning relates to the difficulties of developing accurate forecasts in a turbulent environment but this does not reduce the need for it. Rothwell (1995: 178) suggests that 'the need for planning may be in inverse proportion to its feasibility', while Liff (2000: 96) argues that 'the more rapidly changing environment, makes the planning process more complex and less certain, but does not make it less important or significant'. Bramham (1988, 1989) states that the process is more important in a complex environment and uses a navigation metaphor to emphasise the point: This metaphor suggests that HRP can make a significant contribution to the achievement of strategic goals but does imply that the destination remains constant even if other factors change. It also suggests that the person responsible for planning has sufficient information on which to make accurate judgements. Sisson and Storey (2000) argue that the planning process is based on two, highly questionable assumptions: firstly, that the organisation has the necessary personnel information to engage in meaningful HR and succession planning; and secondly, that there are clear operational plans flowing from the business strategy. Furthermore, they suggest that business planning is incremental rather than linear and therefore 'the implication is that the would-be planner will never have the neat and tidy business plan that much of the

prescriptive literature takes for granted' (p. 55). Other key criticisms of the process relate particularly to the difficulties of forecasting accurately. Mintzberg (1994) highlights problems in predicting not only the changes to come but also the type of changes, i.e. whether they are likely to be repeated or are a one-off event. Incorrect forecasts can be expensive but accurate forecasts might provide only limited competitive advantage if other organisations also adopt them: Furthermore, Mintzberg (1994) argues that the reliability of forecasts diminishes as the time-scale of projections increases: two or three months may be 'reasonable' but three or four years is 'hazardous'. This is because predictions are frequently based on extrapolations from the past, adjusted by assumptions about the future so there is considerable room for error in both.

2.2 Linking Organisational Strategy to Human Resource Planning: To ensure that appropriate personnel are available to meet the requirement set during the strategic planning process, human resource managers engage in employment planning. The purpose of this planning effort is to determine what HRM requirements exist for current and future supplies and demand for workers. For example, if a company has set as one of its goal to expand its production capabilities over the next five years, such action will require that skilled employees be available to handle the jobs. After this assessment, employment planning matches the supplies and demands for labour and support the people component (DeCenzo and Robbins 2010).

2.2.1 Steps involved in Human Resource Planning Process

2.2.2 Assessing Current Human Resources: Assessing current human resources begins by developing a profile of the organisation's current employees. The internal analysis includes information about the workers and the skills they currently possess. In an era of sophisticated human resource information systems software (HRIS), it is not too difficult for most organisations to generate an effective and detail human resources inventory report. The input to this report would be derived from forms completed by employees and checked by supervisors. Such reports would include a complete list of all employees by name, education, training, prior employment, current position, performance rating, salary level, languages spoken, capabilities and specialised skills. For example, if internal translators were needed for supplies,

customers, or employee assistance, a contact list could be developed. From a planning viewpoint, this input is valuable in determining what skills are currently available in the organisation. This report also has value in other HRM activities, such as selecting individuals for training and development, promotion and transfer. The completed profile of the human resources inventory can also provide crucial information for identifying current or future threats to the organisation's ability to successfully meet its goals. The organisation can use the information from the inventory to identify specific variables that may have a particular relationship, for example, to training needs, productivity improvement or succession planning. An inventory might reveal poor customer service skills, a threat that can adversely affect the organisation's performance if it begins to permeate the entire organisation (DeCenzo and Robbins 2010).

2.2.3 Scenario Planning: Scenario planning is simply an assessment of the environmental changes that are likely to affect the organization so that a prediction can be made of the possible situations that may have to be dealt with in the future. The scenario may list a range of predictions so that different responses can be considered. The scenario is best based on systematic environmental scanning, possibly using the PEST approach (an assessment of the political, economic, social and technological factors that might affect the organization). The implications of these factors on the organization's labour markets and what can be done about any human resource issues can then be considered (Armstrong 2009).

2.2.4 Determining the Demand for Human Resources: The demand for employees can be calculated for an entire organization and/or for individual units in the organization. For example, a forecast might indicate that a firm needs 125 new employees next year, or that it needs 25 new people in sales and customer service, 45 in production, 20 in accounting and information systems, 2 in HR, and 33 in the warehouse. The unit breakdown obviously allows HR planners to better pinpoint the specific skills needed than does the aggregate method. Demand for human resources can be forecast by considering specific openings that are likely to occur. The openings (or demands) are created when new jobs are being created or current jobs are being reduced. Additionally, forecasts must consider when employees leave positions because of promotions, transfers, turnovers, and terminations. An analysis is used to develop decision rules (or "fill rates") for each job or level. For example, a decision rule for a financial institution

might state that 50% of branch supervisor openings will be filled through promotions from customer service tellers, 25% through promotions from personal bankers, and 25% from new hires. Forecasters must be aware of multiple effects throughout the organization, because as people are promoted from within, their previous positions become available. Continuing the example, forecasts for the need for customer service tellers and personal bankers would also have to be developed. The overall purpose of the forecast is to identify the needs for human resources by number and type for the forecasting period (Mathis ad Jackson, 2010).

2.2.5 Predicting the Future Supply of Human Resources: Knowing your staffing needs satisfies only half the staffing equation. Next, you have to estimate the likely supply of both inside and outside candidates. Most firms start with the inside candidates. The main task here is determining which current employees might be qualified for the projected openings. For this you need to know current employees skills sets and their current qualifications. Sometimes it's obvious how you have to proceed. When Google's founders wanted a replacement for CEO Eric Schmidt, they chose one of their own. Sometimes who to choose is not so obvious. Here, managers turn to qualifications (or skills) inventories. These contain data on employees' performance records, educational background, and promotability. Whether manual or computerized, these help managers determine which employees are available for promotion or transfer (Dessler 2013). There is a huge amount of information available to assist in the forecasting external supplies of labour. State and local economic and workforce development agencies typically can provide data on the labour supply availability. The department of labour has data available for virtually any location and publishes annual forecasts of labour supply by occupation, and the Bureau of Labour Statistics provides a wide variety of labour force information that is available online. In addition, various professional organizations regularly analyse labour availability within their respective professions. The availability of external candidates is affected by: Economic conditions, unemployment rates, college and high school graduation rates in the relevant labour market, net migration in or out of the area, relative skill levels of potential candidates in the labour market, competition for labour in the labour market, changes in the skill requirements of the organization's potential job openings (Mahapathro 2010).

2.2.6 Matching Labour Demand and Supply: The objective of employment planning is to bring together the forecasts of future demand for workers and the supply of human resources, both current and future. The result of this effort is to pinpoint shortages both in number and in kind, to highlight areas where overstaffing may exist (now or in the near future), and to keep abreast of the opportunities existing in the labour market to hire qualified employees, either to satisfy current needs or to stockpile potential candidates for the future. Special attention must be paid to determining shortages. Should an organisation find that the demand for human resources could possibly increase in the future, it must be prepared to hire or contract with additional staff or transfer people within the organisation, or both, to balance the numbers, skills, mix, and quality of its human resources. An often overlooked action, but one that may be necessary because of inadequate availability of human resources, is to change the organisation's objectives. Just as inadequate financial resources can restrict the growth and opportunities available to an organisation, the shortages of right types of employees can also act as such a constraint, even leading to changing the organisation's objectives. When dealing with employment planning, another outcome is also likely; the existence of an oversupply. An organisation may have too many employees or employees with the wrong skills. When this happens, HRM must undertake the difficult task of laying off workers. Lay-offs might occur as a result of financial difficulty, mergers, plant closing, offshoring, changes in technology that replace workers or organisational restructuring. It is estimated that over 50 percent of employees have experience layoff due to downsizing or restructuring at some point in their carriers. The decision of who to dismiss is a difficult one. The decision may be based on seniority, job performance, or the position with the organisation. If a union is present, there will usually be an agreement to make the decision based on seniority with the most recent hires being laid off first (DeCenzo and Robbins 2010).

2.2.7 Developing HR Staffing and Action Plans

2.2.8 Recruiting: Once the required number and kind of human resources are determined, the management has to find the places where required human resources are or will be available and also find the means of attracting them towards the organization before selecting suitable candidates for jobs. All this process is generally known as recruitment. Some people use the term 'recruitment' for employment.

Recruitment is only one of the steps in the entire employment process. Some others use the term recruitment for selection. These two terms are not one and the same either. Technically speaking, the function of recruitment precedes the selection function and it includes only finding, developing the sources of prospective employees and attracting them to apply for jobs in an organization, whereas selection is the process of finding out the most suitable candidate to the job out of the candidates attracted. Formal definition of recruitment would give clear cut idea about the function of recruitment. Recruitment is defined as, "a process to discover the sources of manpower to meet the requirements of the staffing schedule and to employ effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient workforce (Mahapathro 2010).

2.2.9 Selecting: The crucial importance of selecting people who can meet the requirements prescribed in the job description and person specification hardly needs to be stressed. It is equally evident that mistakes in selection can have very serious consequences for corporate effectiveness. Such mistakes may adversely affect colleagues, subordinates and clients. Employee incompetence may lead to costly mistakes, loss and waste of valuable resources, accidents, avoidable expenditure on training, etc. Employee selectors face an inevitable dilemma. They have to carry out a vitally important task, but one that is at the same time fraught with problems to which there are either no answers or no easy answers. The abiding problem is the dependence on subjective human judgement. In choosing methods of employee selection the selectors need to find methods which are practicable enough to be used in the short duration and restricted environment of the selection process and which provide the closest possible correlation between the predictor and the criteria for effective performance of the job. There are fundamental requirements by which the effectiveness of all selection methods have to be judged. These requirements are known as reliability and validity (Tyson 2006).

2.3.0 Training: Training refers to a planned effort by a company to facilitate employees 'learning of job related competencies. These competencies include knowledge, skills, or behaviors that are critical for successful job performance. The goal of training is for employees to master the knowledge, skill, and behaviors emphasized in training programs and to apply them to their day-to-day activities. For a

company to gain a competitive advantage, its training has to involve more than just basic skill development. That is, to use training to gain a competitive advantage, a company should view training broadly as a way to create intellectual capital. Intellectual capital includes basic skills (skills needed to perform one's job), advanced skills (such as how to use technology to share information with other employees), an understanding of the customer or manufacturing system, and self-motivated creativity. Companies are experiencing great change due to new technologies, rapid development of knowledge, globalization of business, and development of e-commerce. Also, companies have to take steps to attract, retain, and motivate their work forces. Training is not a luxury; it is a necessity if companies are to participate in the global and electronic marketplaces by offering high-quality products and services! Training prepares employees to use new technologies, function in new work systems such as virtual teams, and communicate and cooperate with peers or customers who may be from different cultural backgrounds (Noe 2010).

2.3.1 Rewarding: The term 'reward management' was first used in 1988 by Armstrong and Murlis to denote the development of a new field or collective set of activities to emerge within the arena of HRM. The new term recognised that static techniques, principally concerned with salary administration, were fast giving way to a more dynamic approach emphasising the use of pay (and other rewards) in a flexible and innovative way with the aim of improving individual, team and organisational performance. The activity 'reward management', has been described as encompassing not only the development, maintenance, communication, and evaluation of reward processes, but also concerned with the development of appropriate organisational cultures, underpinning core values and increasing the commitment and motivation of employees (Armstrong and Murlis, 1998). Today's competitive conditions make it more difficult for employers to acquire and retain experienced and productive talent. The growing awareness that finding, motivating, developing, and keeping employees is a key component of business success has raised expectations for human resource (HR) departments. Today, the HR function is being scrutinized more closely, with expectations that it will make a contribution to the business—just like finance, accounting, marketing, and sales. The reward programs that have been the traditional domain of

HR (e.g., pay, benefits, training) represent a significant and growing investment for an organization. In general, these programs have been managed discretely rather than as part of an overall strategy (Chingos, 2002).

2.3.2 Retention Strategies in Reducing Voluntary Turnover: In any case, given the variety of things prompting employees to leave voluntarily, what can one do to manage voluntary turnover? There is no silver bullet. The manager should understand that retaining employees is a talent management issue, and that the best retention strategies are therefore multifunctional. For example, employees who aren't interested in their jobs, sense that they're not suited for their jobs, or who feel undercompensated are more likely to leave. Employers can only address such issues by instituting effective and comprehensive talent management (recruitment, selection, training, appraisal, and compensation) practices. Put another way, turnovers (both voluntary and involuntary) often start with poor selection decisions, compounded by inadequate training, insensitive appraisals, and inequitable pay. Therefore trying to formulate a "retention strategy" without considering all of one's HR practices is generally futile. Effectively conducted exit interviews provide useful insights into potential turnover problem areas. Many employers routinely administer attitude surveys to monitor employees' feelings about matters such as supervision and pay. Open door policies and anonymous "hotlines" help management identify and remedy morale problems before they get out of hand. Sometimes, analysing the situation leads to simple solutions. For example, Walmart discovered it could significantly reduce voluntary turnover by providing aggressively realistic previews about the job's demands and work hours. Then, having identified potential problems, the employer can take steps to boost employee retention (Dessler 2013).

2.3.3 Implementation of Operational Activities (Manufacturing/Production, Distribution, Marketing and Selling) towards Achieving Operational Objectives

2.3.4 Manufacturing/Production: The traditional view of manufacturing management began in the 18th century when Adam Smith recognized the economic benefits of specialization of labour. He recommended breaking jobs down into subtasks and reassigning workers to specialized tasks in which they become highly skilled and efficient. In the early 20th century, Fredrick W. Taylor implemented

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Smith's theories and crusaded for scientific management in the manufacturing sectors of his day. From then until about 1930, the traditional view prevailed, and many techniques we still use today were developed. Production management became the more widely accepted term from 1930s through the 1950s. As Frederick Taylor's work became more widely known, managers developed techniques that focused on economic efficiency in manufacturing. Workers were 'put under a microscope' and studied in great detail to eliminate wasteful efforts and achieve greater efficiency. At this same time, however, management also began discovering that workers have multiple needs, not just economic needs. Psychologists, sociologists, and other social scientists began to study people and human behaviour in the work environment. In addition, economists, mathematicians, and computer scientists contributed newer, more sophisticated analytical approaches. With the 1970's emerge two distinct changes in our views. The most obvious of these, reflected in the new name-operations management-was a shift in the service and manufacturing sectors of the economy. As the service sector became more prominent, the change from 'production' to 'operations' emphasized the broadening of our field to service organizations. The second, more subtle change was the beginning of an emphasis on synthesis, rather than just analysis, in management practices. These days, organizational goals are more focused to meet consumers' needs throughout the world (Roy 2005).

2.3.5 Distribution: Material distribution is a core supply chain function in most business operations. In the manufacturing industry, it is the movement of raw materials from the vendors' warehouses to factories, and of the finished goods from the factories to the distribution warehouses. In retail, such movements extend from vendors to the retailer's warehouses, and then to the stores. As a large retailer can have thousands of stores, supported by a large number of warehouses, the efficiency of the distribution of merchandise from warehouses to stores is very important and can have a substantial impact on profitability. Transportation management functions address these business needs to move goods and merchandise from one location to another, pay for such moves, buy the required shipping capacity, track the movements of material in transit, and manage the transportation assets if they were owned by the retailer (Sehgal 2009). A distributor is typically an organization that takes ownership of significant

inventories of products that they buy from producers and sell to consumers. In addition to product promotion and sales, other functions the distributor performs are inventory management, warehouse operations, and product transportation as well as customer support and post-sales service. A distributor can also be an organization that only brokers a product between the producer and the customer and never takes ownership of that product. This kind of distributor performs mainly the functions of product promotion and sales. In both cases, as the needs of customers evolve and the range of available products changes, the distributor is the agent that continually tracks customer needs and matches them with products available (Hugos 2003).

2.2.6 Marketing: Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering, and exchanging products and services of value freely with others. Marketing management is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals. Coping with exchange processes calls for a considerable amount of work and skill. We see marketing management as the art and science of applying core marketing concepts to choose target markets and get, keep, and grow customers through creating, delivering, and communicating superior customer value (Kotler 2001). Marketing implementation is the process that turns marketing plans into action assignments and ensures they accomplish the plan's stated objectives. A brilliant strategic marketing plan counts for little if not implemented properly. Strategy addresses the what and why of marketing activities; implementation addresses the who, where, when, and how. They are closely related: One layer of strategy implies certain tactical implementation assignments at a lower level. For example, top management's strategic decision to "harvest"a product must be translated into specific actions and assignments. Companies today are striving to make their marketing operations more efficient and their return on marketing investment more measurable. Marketing costs can amount to as much as a quarter of a company's total operating budget. Marketers need better templates for marketing processes, better management of marketing assets, and better allocation of marketing resources (Kotler and Keller 2012).

2.3.7 Selling and Sales Management: Sales may be an expensive part of the marketing mix, but the sales

function is important for many other reasons than just cost. The field sales force is responsible for managing the personal relationship between the company and the customers. From an integrated marketing communication perspective, salespeople bring the dialogue to life. How they go about their job of selling the product must be consistent with the positioning strategy of the firm and with messages sent through other channels. Salespeople have further responsibilities, such as coordinating the firm's actions in order to satisfy customer requirements and gaining customer information (from their dialogue) and sharing that information so that appropriate product, marketing, and investment decisions can be made. In many cases, salespeople have the field responsibility of deciding which accounts to work with and which accounts to bypass. Other elements in the marketing communication mix do not have the same level of individual dialogue that enables the selling organization to adapt in the same manner as salespeople. Further, the sales force has the responsibility for determining specific account strategy, particularly with respect to how the relationship will be managed. Sales is also responsible for implementing the account strategy and ensuring customer satisfaction (Dwyer and Tanner Jr, 2002).

Our critical examination of reviewed literature disclosed facts about the relevance of human resource planning, and stress the need for such venture before a project could be effectively implemented. Assembled information mentioned key issues that support human resource management practitioners in developing operational, tactical and strategic plans towards the implementation of enterprises activities. The facts gathered disclose inaccuracy in forecasting for the required personnel as the fissure in this study which we seek to discourse.

3.0 METHODOLOGY

Operational activities in large scale enterprises serve as a major contributor towards achieving enterprises' strategic objectives. The growing concern for modern business practitioners and managers of the various functional departments is that human resource planning has a vital role towards the process since the effective implementation of such operational activities is orchestrated by the availability of trained and developed human resources, whose services should be attracted and retained by the enterprises. As a result of the growing concern, this study is built on a qualitative approach which prompts the retrieval of secondary sources published on the subject matter in order to analyse facts extracted to address the

challenges faced in planning for the most precious resource of an enterprise. Analysis will be drawn from available relevant information extracted from marketing, human resource, production/operations management books in order to establish a meaningful conclusion.

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4.0 ANALYSIS AND INTERPRETATION

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Planning is a vital instrument and its significance starts from our personal activities to employment responsibilities. Successful achievement of enterprises operational objectives stem from effective human resource planning, since the implementation of enterprises activities cannot be actualised without the availability of trained and qualified personnel with the skills and competences required to accomplish such tasks. Managing the human resource planning process within the HR department is a critical issue which involves conscious thought in ensuring that the required personnel are available at the right time and in the right places, doing the right thing, which leads to the successful achievement of enterprises objectives. The HRP process is engulfed with the benefits of the availability of qualified personnel with the necessary talents (tacit and explicit) that enable an enterprise to achieve competitive advantage. The major drawback could be inaccurate forecasting which restrain an enterprise from securing the required talents and as a result; achieving effective implementation of operational activities could be a challenge.

Linking organisational strategy to human resource planning is a process that leads to successful implementation of enterprises activities. The action of the HRP proceeds from an existing strategy which gives a clear pathway towards the organisation's direction. The first step of the HRP process requires a careful assessment of the existing workforce, that is, an examination of the current skills and competences available in the organisation. It continues with scenario planning which states the political, economic, social and technological implications on HRP in the business environment. HRP further consider the demand for human resource and the supply of human resources internally and externally. Finally HRP deals with matching labour demand and supply and ensures that supply of labour do not exceed the demand because if it does, it will cause over staffing which will have a negative impact on firms operations. Also, the supply of labour should not be less than the required number of personnel for enterprises activities. The HR staffing plan which involves recruiting, selecting, training and rewarding personnel is also a key issue in the HRP process and HR practitioners must ensure that retention

mechanisms are developed and maintained to prevent turnover.

Implementing operational activities necessitates highly trained and qualified personnel to handle such task. Manufacturing operations are successful as a result of competent personnel involved in the various production processes to ensure that quantity and quality standards are met. Distributing such products encompasses several channels (air, land, sea and rail transportation) and such processes should be manned by diligent workforce to ensure effective and efficient delivery. The marketing aspect of the product reveals its availability and persuades customers through intensive advertising campaign to develop interests in buying. Selling actualise the operation by taking the product to the customer's doorstep (for doorstep selling and some easily conveyed products). Sales force must ensure that their actions are consistent with the organisation's strategy and with the message portrayed about the product in advertising campaign. The aforementioned operational activities can be effectively implemented with the availability of skills and competences required to accomplish such tasks, a process that is addressed by human resource planning.

5.0 SUMMARY AND CONCLUSION

Large scale enterprises realises growth through effective implementation of operational activities, which are managed by diligent personnel made available by human resource planning process. The retrieved secondary data from published books on human resource management and other management disciplines reveals the significance of the subject matter and describes human resource planning as a key component in every enterprise and that its action necessitates growth. Elements in the reviewed literature states that human resource planning cannot be undertaken without the consideration of an assessment of the internal skills and competences in an enterprise and also the development of forecasts for the demand and supply of labour. Evidences also reveals that the availability of trained and qualified personnel can be fetched through recruitment and selection which further requires training and a satisfactory compensation to stimulate performance, retain high quality employees and prevent labour turnover. Operational activities such as manufacturing, distribution, marketing and selling can be successfully implemented as a result of proper human resource planning and also inaccurate forecasting which was initially identified as a fissure in this study has been addressed since accurate forecasting for the demand and supply of

personnel indicates successful implementation of firms' operational activities. In essence, HRP has a positive effect in the implementation of operational activities in large scale enterprises, since it makes available, the required personnel with skills and competences to accomplish organisational objectives. This study emanates from a qualitative research perspective but further study could be undertaken with the subject matter using empirical approach to address specific issues in human resource planning.

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