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Determinants of Bank Profitability

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Abstract. Banks are the most vital financial intermediaries in economy, which has a profitable banking industry; in order to survive undesirable shock as well as subsidize the constancy under the whole economy. However, the main purpose of this research is in the direction of analyzing factors affecting banks' effectiveness all over Pakistan by means of sets of targeted facts and figures of twenty panels from 2005 to 2015. This study is developed with the help of AOLS technique which is used to examine the effect of different factors such as resources, debts, justice, securities, economic growth, price increases, price decreases, and market capitalization on major profitability signs such as (ROA), (ROE), (ROCE) and (NIM). The experimental consequences analyzed solid facts which stated the following conclusion, i.e., internal factors and external factors create an adverse impact on the level of profitability. An outcome by this research is important to different researchers. This research study proposed that by the concentration & reengineering the internal drivers the banks can improve its profitability and performance.

1 Introduction

Profitability demonstrates a connection between a total sum of income which specifies the capacity of a bank in raising its funds to the customers and thereby increasing their profit level (Chatterjee et al., 2014). It also defined as the capability to generate revenue occurring in business transactions in organizations. It also displays the way in which it is competently making profits by using its all existing resources in the market. According to Harvard and Upton, profitability is the the ability of given investment to earn a return from its use.

The profitability of the banks and any other organizations is restrained by expenses and income. Income is the money produced by the organization's activities. Expenses are the cost of resources used up or expended by the organization activities (Davydenko, 2010). The relationship between banks profit and business progression is significantly evaluated with the reliability & stability of different banks rate (Albert, 2015). On a higher level, the money making and productive banks are very suitable in filling harmful situations and can increase the power of monetary organization (Aburime, 2008). According to Athanasoglou et al. (2008) money making and reliable banks should have greater polices to sustain in adverse distresses and complement the stability in an economic organizations. Financial organizations play a vital part in the development of the economy and growth.

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The existence of non-financial banks and financial banks provides efficient cash for investing in the markets to maintain their economic growth & development. Financial banks play a vital role for economic intermediation with the help of gathering & organizing resources for the finance industry projects, which are necessary for financial development of organizations.

The financial banks are appropriate for monetary intermediation, which support private division of investments and promote the entrepreneurs; whereas, monetary organizations integrate with characterized into banking system & non- banking monetary organizations.

According to (Bawumia and Owusu-Danso, 2008), the Pakistani banks calculated 70% of financial region, have a hostile universe impact on the economy. In this study, the word bank profitability is used to rise to bank profitability and performance/growth.

The Pakistani banking sector has faced and observed numerous improvements and reengineering for many years as a consequence of interior and exterior economic growths and tremors. The latest expansions in banking sector are implementation of (IFRS) in link with international standards by the State Bank of Pakistan, with the method of decreasing its total threat.

In most research studies the banking sector has been making more improvements that have altered the investment productiveness; while the classification of finance area that has improved, is motivated by banks liberalization, superior and rivalry (Bawumia and Owusu-Danso, 2008). Therefore, realistic to expect these improvements have been transformed to Pakistani banks and their performance.

The significance of this research study is based on profitability of banks statements consequences that is the main division in the banking sectors. Therefore, these consequences are not only successful for banking sector but also profound for big economy. Secondly, the banks are restructuring an expected distress method and working on their presentation. Finally, banks profitability is more significant due to retained earnings. Bank capitalization provided a scope of protection during declining time period and supporting banks, further resilient opposition to exterior shocks. In this research study we will examine some key determents of banks profitability and the level to which it has an impact on banks factors.

The inspiration of this research study is based on advance recommendation that could be verified & further used for decision making purpose regarding administration organization polices and banks profitability level. This research study also observed the inspecting factors that have an effect on the banking sector's profitability & degree to which the banking sectors profits are affected by these factors are. This recommendation is not only useful for Pakistan banks but also for economies in every Region.

1.1 Background

Profitability is basically an accounting concept that shows the excess of profits over expenses for a quantified era of the moment that characterizes earning of the banking sector for the reason of which they accomplish a variety of actions in the rising financial system of Pakistan. The Profitability of the banking sector is a silent characteristic & support of the argument as knowledgeable of the business individual.

The banking sector of every country acts as a life blood of modern trade & commerce, which provides major source of financing. The increasing phenomenon in the world has made the concept of both financial and non-financial institutions and banks a major part of efficiency and effectiveness. The financial system is dominated by commercial banks in Pakistan. The structure of banking system has made significant changes since 1997.

This research study proposed the determinants of profitability for banks divided into two parts; internal factor are microeconomics and the external factors are macroeconomics. The importance of banks profitability is treasured at the small & higher levels of the economy. This research study also observed the both aspects microeconomic & macroeconomic stability, as well as economic growth.

At the micro-level, profit is the essential requirement of a bank institute and the supply of reserves. In the banking sector, the factors of profitability are well researched. The profitability measurement diverges from study to study. The two main elements of profitability are (ROA), and (NIM).

1.2 Objectives of the Study

The purpose of this research study is to notice the effects of determinants of profitability on banks. According to our study, we can analyze the level of bank information from 2005 to 2015 & considering the method of the panel data regression to discover the connection among main factors in seventeen banks of Pakistan & their special impacts on the high level of bank profitability. Our study varies because we are directing this in the Pakistani environment.

1.3 Significance of Study

The significance of this study will restrict to examine the impact of factors which are internal and external and can influence bank profitability. These factors involve capital adequacy, expenses management, liquidity, asset quality, GDP, size, money contribution, inflation, & banking sector of Pakistan. It confirmed that there are some variables that have an impact on the bank's profitability, but they are not included into project.

Some other banking factors contain unlimited regulation indicator, taxations, political factors, cooperate governance, technology advancement & quality of services. The main vision allowance of projects looks at bank sectors internal and external factors to increase and maintain profitability of banks.

One more probable accumulation on the inspection of alterations in banks Profitability determination of all banks sectors, i.e. small or large or high-profit or low-profit banks. This research study includes a sample of twenty-six banks from the period of 2005-2015.

1.4 Gap Identification

As we observed that there is strong positive relationship between different factors and bank's profitability. This research study used different economics models for profitability of banks. And there is a very limited research study done in the context of the Pakistan banking sector. We have used (LOAN); (CAPITAL); (SIZE) (DEPOSITS) (ROA); (ROE); (ROCE) & (NIM).

2 Literature Review

2.1 Profit Measures and Determinants of Banks Profitability

There are different types of research work done to determine the factors that affect banks profit level. It is most important, while considering bank and its profitability to obtain factors associated with account. For this purpose the detail of factors has been mentioned below, having a substantial impact on banks & profit level.

According to Rasiah (2010) some scholars have mainly focused on factors determining banks profitability and their performance with two different groups. First one is internal factor and second one is external factor of banks. They also argued that price does not change when profitability ratio is used. In fact it is the most appropriate method to determining profitability after properly analyzed. Rasiah (2010) also studied two different types of ratios, e.g. return on equity & return on the asset.

2.1.1 Return on assets (ROA)

The Return on Assets (ROA) an indicator of banks profitability is relative to its total assets. ROA gives idea of how efficient bank management is, using its assets to generate earnings. ROA displays a percentage; if it is higher the ROA is better. The greater level of ROA ratio shows that bank performance is better. Its an important mechanism for profitability in banks & entire banking organization. As compare to some other research study, some scholars work in ROA ratio percentage, which is a suitable measurement for bank profitability.

2.1.2 Return on Equity (ROE)

This ratio provides how efficiently banks handle money management, which contributes to its shareholders. ROE measures the profitability of banks and other organizations. Higher the ROE means banks are efficient in generating income & growth from its equity financing.

2.2 Internal Factors of Bank Profitability

According to Hosni et al. (2011) internal factors of bank profitability usually include those factors which are in control of banks. These factors affect income and price of banks. Many researchers have recognized two types of groups. One is financial statement of variables and other one is non-financial statement of variables. The financial statement of variables is directly connected to the balance sheet & Income statement of banks.

2.2.1 Income

According to Radian (2019), the banking sector produces more income from their assets as compared to non -banking sectors. He further recognized two types of income; Interest & Non interest Income. Interest Income includes rates obligatory on lands, overdraft, & trading money that banks propose to their customers. Second type of Income is non-interest income which includes returns on reserves, brokerage charges, dues, retreats & commission in companies.

Tan and Floros (2012) has observed that the main factor of banks profit is income which comes from interest rate. He also observed that there is approximately 80% income from interest rate. On the other hand, banks embrace bonuses and get benefits from trading security markets.

2.2.2 Loan Quality

The main part of banking sectors is lending money to its borrowers, which serves as one of the major sources of income. Previous studies determined one more elastic resource on balance sheet of banks.

It is clear that when banks offer more loans, they get more profits and generate more revenue through this policy of loan quality.

2.2.3 Deposits

Banks are deeply depending on treasuries that are given by General Community to deposit of funding the lending of money, which is accessible to banks consumers. Additionally, mostly individuals considerate with the intention of loans are not large in demand, As more deposits in banks decline earnings, which are low profit for the banks. According to some other researchers, there is reason for deposit, time, Fixed, Term deposit appeal high interest rate from banking sectors to its depositors.

2.2.4 Capital Ratio

According to Rasiah (2010) the capital ratio is a percentage of banks Capital to its weighted assets. Mostly Banks in undeveloped countries require a large amount of investment because it gives strength to survive in economic crisis & also provide secure shield in situations of insolvency conditions to their investors. Banks on the level of justice decrease their expense on capital gain which has positive effect on profitability of banks. In addition, common banks are insolvencies due to lack of money, which is necessary for banking sectors for greater capital in stress periods.

2.2.5 Liquidity Ratio

Rasiah (2010) stated that for the most part banks are essential with supervisor to grasp a specific level of liquidity resources. They also claimed that if banks gathered sufficient cash in results, they obtain high liquidity, with capability of increasing the raw materials earlier, as compared to other sources, which are capable to assemble and economic obligations. They also observed that there is slow earning on assets and high liquidity on unnecessary reserves. There are negative impacts on banks profitability level.

2.2.6 Non-interest Income

Non-interest Income is the Income embodied from other sources, like earning from loans of banks. The sources of non-interest income are different types, which include fees earned from contribution unit trust service & service charges on the bank's deposit account, etc.

According to Rasiah (2010) old banking businesses as compared to other financial institutions are varying towards the financial globalization & liberalization; due to these reasons banks are able to increase profits and income. The experimental results Krakah and Ameyaw (2010) study observed that the income from non interest is very important element of profitability of Pakistani banks. And according to them, there is always a positive association between banks' profitability and non-interest income of the banks.

2.2.7 Expenses

Torre Olmo et al. (2021) posited that expenses of banks imitate the banks expenditure that is happening during the control of management of banks. This is categorized into two parts, i.e. non- interest expenses & interest expenses. Expenses which are incurred by different banks while making revenue as an Interest which can be paid out to depositor, and called an interest expense.

In contrast, Non-expense Interest includes wages paid to employees, salaries, operating expenses, overhead expenses, & miscellaneous expenses. According to two different researchers Bourke (1989) and Jiang et al. (2003) show a negative relationship between profitability and expenses, which indicates mostly banks having low cost result in high profits.

2.2.8 Taxation

Vong and Chan (2009) separated some variables, i.e. tax variable & those taxes which operate profit before tax. This research study is treated as a unique research study as compared to other researcher work by Gyamerah and Amoah (2015). He postulated that taxes are the expense variable, doesnt matter how they show.

Vong and Chan (2009) claimed that an affirmative association occurs between the profitability and tax. Furthermore, Chioma and Orga (NA); Demirgüç-Kunt and Huizinga (1999); Vong and Chan (2009) specified a positive association between banks profitability and the tax variable.

2.3 External Variables of Banks Profitability

External variables are that factors which affect banks profitability and are not controlled by the management of banks. These are indirect variables that have an extreme effect on the profit level of banks.

As per Krakah and Ameyaw (2010) research study the macroeconomic factors are used to determine the external determinants. This includes GDP, interest rate, competition, inflate rate, size.

2.3.1 GDP

Vong and Chan (2009) investigated that the economic growth is directly determined by GDP which has positive relation with bank profit level. Larger monetary development organizations show large demand for lending money which comes from the result of interest and non interest incomes.

This research study determined that the profitability has directly positive association between two variables which are inconsistent and negative relationship between two variables which are consistent. In conclusion, GDP economic growth has positive relationship with banks profit level, which increases overall level of profitability of banks.

2.3.2 Rate of Interest

Davydenko (2010) believed that bank's interest rate is taken from different factors, consequently net income interest rate having a huge impact on bank profitability level. A change in interest rates has had a greater effect on banks' profit levels. It has a direct relationship with the banks. In other words, there is a direct relationship, i.e. if the interest rate increases, bank's profitability level also increases, and on the other hand if the interest rate decreases the banks profitability level also decreases. Fluctuations in interest rate can be of long term period as well as short term period, depending on the situation.

2.3.3 Rate of Inflation

According to Revel (1979) inflation is one of the main factors that can cause changes in the profitability of the banks. By the definition of different researchers inflation increases the price level in a country. Due to which, when inflation rate increases, banks profitability decreases, having inverse relationship between them. Consequently, inflation creates pressure on bank profitability.

On the other hand when inflation rate decreases, it automatically increases the banks profitability level. Therefore, the current study hypothesize that inflation rate has a negative relation with banks profitability. The inflation rate is a serious problem that can be managed by the government of every country. In case of serious situations, the banks responsibility is to take precautionary steps to maintain banks profitability.

2.3.4 Competition (Market Share/Market Growth Rate)

There are some competitive forces which affect banks profitability level. These are called drivers of opposition. It becomes challenging for a firm to increase its profit level when faced with strong competitive forces. A study by Mill et al. (1986) observed that a strong relationship has positive effects on bank profitability level.

2.3.5 Market Growth

According to Bourke (1989) market growth is a greater way of entry barriers, and barriers are great for banking sector, as they increase profitability level.

2.4 Framework

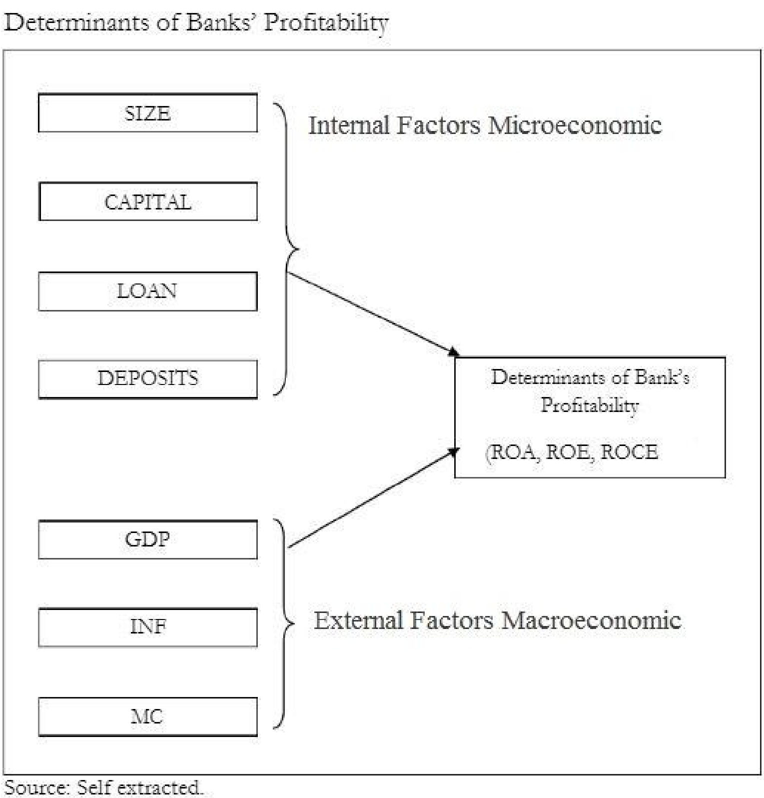

Figure 1: Framework

3 Framework and Methodology

This chapter of research study includes methodology, hypotheses, framework, and measures of variables. The last part of this chapter includes data and sample selection with the tested and verified modes.

3.1 Hypotheses

Based on the objectives and reviewed literature, the hypotheses are as followed:

H_1: There is positive relationship between internal factors & profitability of Banks.

H_{1a}: There is positive relationship between DEPOSITS & profitability of Banks.

H_{1b}: There is a positive relationship between LOAN & profitability of Banks.

H_{1c}: there is negative relationship between CAPITAL & profitability of Banks.

H_{1d}: There is a relationship between SIZE & profitability of Banks.

H_2: There is a positive relationship between external factors & profitability of Banks.

H_{2a}: There is a positive relationship between MC and profitability of Banks.

H_{2b}: There is a positive relationship between INF and profitability of Banks.

H_{2c}: There is a positive relationship between GDP and profitability of Banks.

3.2 Measures of Variables

It includes all the variables that affect the profitability of a bank. They are as followed:

ROA is return on an asset which is calculated by dividing the net income with total assets. Is a ratio identified by dividing the net income over total assets?

ROE is return on equity which is calculated by dividing net income to total shareholders equity.

ROCE is return on capital employed which is calculated by non- mark-up income to capital employed.

NIM is net interest margin and it is a degree of the difference between the interest income produced and interest paid out to their lenders.

SIZE concludes the information that superior banks have better economies of scale as compared to the smaller banks.

CAPITAL is considered as the ratio of equity capital to total assets. The lesser the capital will be more will be the banks profitability.

INF The rate of inflation on banks entirely depends on the inflation rate in Pakistan. Low inflation is not good for country and banks performance. While high inflation creates an adverse effect. Due to this reason, the bank always takes precautionary measures to avoid the risk of bankruptcy.

Market Capitalization (MC) it is measured by adding both debt and equity financing.

3.3 Data and Sample Selection

3.3.1 Survey Design

This section explains that both the external & internal factors have an impact on the banks profitability of Pakistan. In order to achieve the above study goal, the scholar chooses review research as a policy of investigation.

In current study one sample is examined by different tests. Secondly, it provides an opportunity for the examiner to capture the sample database on the experimental figures. And the third one is survey design. This will help it become economically feasible. In other words, it captures a huge quantity of data in a small period of time with very little expense. Consequently, the data for this research study has been composed by using structured biography analyses of banks' financial statements. Moreover, data is based on the cross- sectional survey. This section shows a detailed analysis of survey documents, data analyses, and sample design.

3.3.2 Sample Design

This sample design seeks to explain both internal and external factors that affect the profitability of Pakistani banking system. Therefore, for current study the target population was all banks recorded by SBP and currently operating in a country. Presently, in Pakistan, there are forty-seven banks operating. The banks contain four foreign banks, five Islamic banks, fifteen private banks, four specialized banks, five public sector banks, thirteen microfinance banks, and one development finance institutions.

10 years of data is needed for the study, therefore, most recently established private banks are eliminate from the research work so, the number of banks is decreased to 20. The researchers do not consider the sample size is adequate to make an evaluation of the population because the sample ensures only 45% of the total population.

3.3.3 Data Collection

In this research study to observe the impacts of different factors on banks' profitability, financial statements of banks are reviewed. Study used ten years of data for analysis, i.e. time period 2005 to 2015. Secondary data, collected from the SBP and other related websites of banks was used.

3.3.4 Empirical Model

This research model is used for the purpose of combination of cross- sectional with time series to make it panel data. Ertekin et al. (2019) examined that panel data allows economists & some academics to investigate in details for the results analysis. In this research we used a quantitative and descriptive Measure.

3.3.5 Descriptive Statistics

According to Greene (2008) descriptive statistics is the self- control of quantitatively defining the main features of selected information. Its targets are concluding a set of samples. Some methods are used to define a set of data that measures central tendency, variability and dispersion. Measurement of central tendency consists of maximum, minimum, standard deviation, mean, median, and value for each variable.

3.3.6 Correlation

Correlation is any statistical relationship, either causal or not, between two random variables or two sets of a data sample. It includes dependence or the degree to which two variables have a linear relationship with each other.

3.3.7 Study Model

The simple approximation strategy is to group the observations and apply the regression analysis on the organized sample.

Following is the study model in an equation form

$Y_{it} = \alpha_0 + \alpha_l\ X1_{it} + \alpha_2 X2_{it} + \alpha_3 X3_{it} + \alpha_4 X4_{it} + \alpha_5 X5_{it} + \alpha_6 X6_{it} + \alpha_7 X7_{it} + \mu_{it}$

Where;

Y it indicates (ROA), (ROE); (ROCE) and (NIM) for bank I at time t.

X1 it indicates (SIZE) for bank I at time t

X2 it indicates (CAPITAL) for bank I at time t

X3 it indicates (LOAN) for bank I at time t

X4 it indicates (DEPOSITS) for bank I at time t

This is the best process in which the connection between factors remain constant in the cross sectional method. The data of this research study is regarding the Pakistan banks. We also used an Ordinary Least Square method for analysis.

4 Results

This section is about the results of the research study. This part of research study includes descriptive statistics, correlation, and econometric methods for analysis.

- X 5 it indicates (GDP) for bank i at time t
- X 6 it indicates (INF) for bank i at time t
- X 7 it indicates (MC) for bank i at time t
- i = 1 to 20 banks
- t = 2005-2015
- u= Error term.

4.1 Descriptive Statistics

The Descriptive statistical table shows dependent and independent variables impact on Pakistani banks profitability for the periods of ten years 2005 to 2015 and 832 are interpretation in Pakistan. According to McClendon and Buckner (2007), descriptive statistics table also comprises the mean, standard deviation, median, sample variance, skewness, sum, number of observations, maximum, and minimum for the independent and dependent variables of the model.

ROCE, ROE, ROA, and NIM, all of them have a positive mean values that varies from a low of 0.072 to 27.28. The table also consists of banks with very dissimilar dimensions. Standard Deviation of NIM is 0.025 which represents the observations in data set and closer to the mean value. The uppermost standard deviation for ROCE and ROE is 18.76 and 15.58 correspondingly.

Table 4.1: Descriptive Statistics

	ROA	ROE	ROCE	NIM	SIZE	CAPITAL	LOAN	DEPOSITS	GDP	INF	MC
Mean	1.03	12.24	27.28	0.072	18.54	0.113	0.51	0.798	5.46	9.94	8.74
Median	1.3	15.02	28.02	1.02	18.74	0.101	0.62	0.805	6.12	7.96	8.96
Std Deviation	1.84	15.68	18.76	0.025	1.31	1.032	0.11	0.049	1.47	5.41	0.21
Minimum	-7.81	-73.2	0.61	0.06	15.8	0.03	0.23	0.895	2.71	4.81	8.34
Maximum	3.72	37.59	56.3	0.125	20.36	0.49	0.49	1.689	6.65	20.02	9.15

4.2 Correlation with respect to ROA

There is a larger deviation in data set of ROCE by the different banks sizes. The connections among variables are identified with the help of ROA, ROCE, & ROE. As shown in Table 2, 3, & the 4. The indicated table of this research shows that there is a positive relationship between GDP, INF, SIZE, LOAN, & DEPOSITS. While a negative connection between MC and CAPITAL to ROA.

Table 4.2: Correlation in relation to ROA

	ROA	SIZE	CAPITAL	LOAN	DEPOSITS	GDP	INF	MC
ROA	1							
SIZE	0.378	1						
CAPITAL	-0.521	0.104	1					
LOAN	0.25	0.291	-0.132	1				
DEPOSITS	0.38	0.625	0.287	0.187	1			
GDP	0.396	-0.169	-0.158	0.269	0.148	1		
INF	0.251	0.178	0.006	-0.241	0.042	-0.889	1	
MC	-0.325	0.452	0.289	0.212	0.256	0.235	-0.135	1

4.3 Correlation in relation to ROE

According to this research analysis Table 3 indicates a correlation analysis between ROE and explanatory variables of the research. It shows almost the same results as per with ROA. This is because both profitability & ROA has a positive relationship with each other.

4.4 Correlation in relation to ROCE

In the table 4, it shows that INF and GDP is positively connected with LOANS, CAPITAL, MC, SIZE and DEPOSITS, while negatively related to ROCE. This shows that larger banks have a lower rate of ROCE.

Table 4.3: Correlation in relation to ROE

	ROE	SIZE	CAPITAL	LOAN	DEPOSITS	GDP	INF	MC
ROE	1							
SIZE	0.379	1						
CAPITAL	-0.365	0.365	1					
LOAN	0.652	0.354	-0.132	1				
DEPOSITS	0.369	0.785	0.235	0.187	1			
GDP	0.365	-0.458	-0.158	0.269	0.254	1		
INF	0.125	0.548	0.254	-0.241	0.042	-0.889	1	
MC	-0.265	0.254	0.289	0.171	0.256	0.254	-0.234	1

Table 4.4: Correlation in relation to ROCE

	ROCE	SIZE	CAPITAL	LOAN	DEPOSITS	GDP	INF	MC
ROCE	1							
SIZE	-0.115	1						
CAPITAL	-0.558	0.102	1					
LOAN	-0.326	0.292	-0.326	1				
DEPOSITS	-0.125	0.312	0.256	0.125	1			
GDP	0.012	-0.365	0.236	0.362	0.145	1		
INF	0.115	0.189	-0.362	-0.124	0.01	-0.889	1	
MC	-0.245	0.256	0.365	0.002	0.258	0.254	-0.365	1

4.5 Regression Model

The value of R-squared adjusted is 0.54, which indicates that 54% variation in dependent variable is explained by the independent variables of research. And 46% change in the dependent variable remains unexplained by the independent variables. The value of F-statistic is 4.481, which is more significant invalidating and stability model concern with the research.

5 Conclusion

Current study examined features of Pakistani banks. The data were taken from the period of 2005 to 2015. The factors which were taken are bank's internal and external factors. These factors, internal & external, impact banks profitability level. Hypothesis one examined how microeconomic factors impact profitability of banks. On the other hand, hypothesis two indicated how macroeconomic bank factors have an effect on the banks profitability. This study is basi-

Table 4.5: Regression Model

Variables	Coefficients
SIZE	0.641*
Constant	-12.79*
LOAN	0.234
CAPITAL	-4.56
GDP	0.445*
DEPOSITS	0.141**
MC	-0.16
INF	0.161**
R-Squared	0.63
Adjusted R-Squared	0.542
F-Statistics	4.481*

**significance level at 0.01*
***significance level at 0.05*

cally about the determinations of banks profitability. For this reasons two main determinants are taken, i.e. internal & external determinant of banks profitability. Internal determinants are particular to the banks managers; whereas external determinants are outside of the banks. Both the hypotheses had been accepted.

5.1 Recommendations

1. The capitalization of banks must be stimulated in a way that banks can improve their performance and growth rate.
2. The bank managers must adopt the policies regarding Well-organized & active liquidity management system. Mostly banks are less profitable when they are more liquid. So bank managers should adopt policies accordingly.
3. The credit risk environment in the banks mostly becomes the source of decreased profitability; therefore, bank managers and credit officers should provide policies & strategies that make the environment credit risk-free.
4. Banks should take cooperative & elementary steps for building a capacity of Information Technology (IT) employees to decrease overreliance on foreign advisors, who demand offensive fee for software license and upholding contract.

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Safety Management Practices and Occupational Health and Safety Performance: An Empirical Review

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Abstract. This paper aims to investigate how the relationship between safety management practices and occupational health and safety performance have been examined in the literature, and which future research areas can be recommended. This systematic literature review applied the matrix method to examine major literature in safety management practices and occupational health and safety performance. A total of 24 papers in English peer-reviewed from 21 journals were selected and analyzed. The synthesis of these empirical studies revealed the following: The relationship between safety management practices and occupational health and safety performance has mostly been investigated quantitatively in many countries and sectors; management commitment to safety, safety rules, and procedures and safety training are still most commonly used safety management practices to improve occupational health and safety performance. In this study, research articles were selected only from English journals; therefore, some research articles in other languages might not be included. The findings of this study can be used to develop a safety management model to reduce the rate of injuries, accidents, and near misses in high hazardous risk organizations. Overall, the findings provide Safety management practices overview that practitioners use to manage safety performance. There are only a few systematic literature reviews available on safety management practices, occupational health, and safety performance. This paper is among the first systematic literature reviews to analyze how safety management practices have been associated with occupational health and safety performance and provide potential research avenues.

Key words: Safety knowledge, Safety motivation, Safety management, Near misses, Injuries, Accidents

1 Introduction

Safety management practices enable organizations to reduce the chances of accidents, injuries, and near misses (Vinodkumar and Bhasi, 2010). According to Kirwan (1998), safety management practices are the actual roles in the organization to remain safe. Therefore, it is quite understandable that to ensure occupational health and safety remains the biggest challenge for practitioners and theorists alike (Clarke, 2006; Fruhen et al., 2019; Lestari et al., 2019; Zohar, 2010). According to the International Labor Organization (ILO - 2018) workers around

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the world continue to bear millions of injuries and deaths. However, there are various safety management practices that are used to enhance occupational health and safety performance (Hanafi et al., 2018) and to reduce the rate of accidents and injuries at the workplace (Lee, 2018). The poor conceptualization for safety management practices and interchangeable terms compel for development of a holistic framework that encompasses different aspects of safety management practices (Autenrieth et al., 2016). Besides, in previous research studies, scholars have identified the role of safety management practices to enhance occupational health and safety performance (Almost et al., 2019; Baldassarre et al., 2020; Hanafi et al., 2018; Lee, 2018; Liu et al., 2020; Vinodkumar and Bhasi, 2010; Zimolong and Elke, 2006). However, the rate of accidents, injuries, and health and safety expenses revealed the fundamental concerns for the study designs and safety management models (Alingh et al., 2018; Amponsah-Tawaih and Adu, 2016; Aziz, 1993). Added to this, occupational health and safety-related theories have evolved dramatically and resulted in various safety management practices in the last decade (Zohar, 2000). To date, no successful attempts have been made to create a unified framework for safety management practices and occupational health and safety performance. For example Hanafi et al. (2018); Lee (2018); Vinodkumar and Bhasi (2010); Vredenburgh (2002) conducted a literature review to synthesize literature on safety management practices and occupational health and safety performance. In hazardous organizations, e.g. oil and gas, construction, management needs to adopt a safety management model to reduce the chances of accidents (Amponsah-Tawaih and Adu, 2016). However, the scope of studies (Hanafi et al., 2018; Lee, 2018; Liu et al., 2020; Vinodkumar and Bhasi, 2010; Vredenburgh, 2002) was limited to only safety management practices at the strategic level of the organization. To address these gaps within the literature of safety management practices and occupational health and safety performance, we believe that there is a need to update the systematic literature review.

This systematic review is important because it synthesizes existing body of knowledge and adds structure to the scattered literature on safety management practices and occupational health and safety performance. This paper also makes an important methodological contribution to synthesize the literature from the oil and gas industry where concepts were poorly conceptualized for safety management practices and occupational health and safety performance. This study is also helpful for the management to develop a safety management model to reduce the rate of accidents and injuries, which indirectly contribute to improving occupational health and safety performance.

2 Theoretical Background

2.1 Safety Management Practices

According to Ladewski and Al-Bayati (2019), safety management practices are the functions that are used to manage organizational occupational health and safety performance. However, safety management has gained more attention to reduce the rate of accidents and injuries (Haslinda et al., 2016). According to Dyjack et al. (1998), after 1991, safety management has entered in the third phase. Safety management was introduced in the United States of America (USA), and Henrich is the early adopter to audit the safety protocols at the workplace to inspect the safety rules and procedures (Gilkey et al., 2003). According to Vinodkumar and Bhasi (2010) numerous attempts were made to predict safety management practices. Still, only those practices should include in which employees and employers commonly perceived a safe environment (Hanafi et al., 2018). However, previous studies show that organizations with low accident rates and injury ratio were characterized by employees safety training, management safety commitment, and display of safety rules and procedures (Dov, 2008; Hanafi et al., 2018; Lee, 2018; Vinodkumar and Bhasi, 2010). Lee (2018) highlighted safety training, workers involvement, and management commitment for safety. According to Hale and Borys (2013); Ros and Gustafson (2015) safety rules and feedback are part of safety management to respond to management commitment for safety in the organization. In safety climate investigation Dov (2008) found that management safety commitment plays an important role to maintain organizational safety performance. Fruhen et al. (2019) argued that employees safety behavior must demonstrate to follow safety rules and procedures. Hence, management safety commitment should be an observable activity to maintain safety performance (Almost et al., 2019; Lee, 2018; Vinodkumar and Bhasi, 2010). In the organization, employees need to be active to participate in occupational health and safety training programs (Mazzetti et al., 2020). In addition, safety training improves employees' knowledge and capabilities to identify risk hazards at the workplace (Mazzetti et al., 2020; Teoh et al., 2020). In addition, safety training also helps to minimize accident risk chances and take corrective measures to prevent workplace accidents (Fruhen et al., 2019; Vinodkumar and Bhasi, 2010). The previous studies show that organizations with a low rate of accidents and injuries were found with good safety training programs (Hanafi et al., 2018; Hofmann and Morgeson, 1999; Zimolong and Elke, 2006). According to Vinodkumar and Bhasi (2010) organizations need to conduct systematic safety training programs to improve the health and safety level of employees. Therefore, safety training is considered an important aspect of safety management for newly recruited employees including orientation sessions, buddy practice, emergency action training practice to improve occupational health and safety performance (Kirwan, 1998; Mearns et al., 2003). Regular communication between supervisors and the workforce is effective management practice to improve workplace health and safety performance (Eklof and Ahlborg Jr, 2016; Heaven et al., 2006; Kim and Scott, 2019; Kim and De Dear, 2013). However, in prior studies surveys among various categories of employees show that communication levels among management, supervisors, and coworkers influence safety performance (Chandrasekar, 2011; Mukherji and Arora, 2017; O'Conaill and Frohlich, 1995). Well documented safety rules and procedures and enforcement from supervisors and managers communicate what action employees can take and what actions they cant take to maintain workplace safety (Reason et al., 1998).

Hence, organizations prioritizing to update safety rules and procedures shows the expression to reduce accidents and injury chances (Hale and Borys, 2013). Further, safety rules and procedures are correlated with rate of accidents and injuries based on the previous findings (**?**). Nevertheless, in total quality management models, rewards and incentive practices are acceptable to motivate workers work safely in the organization (Ajmal et al., 2020).

International Standards Organization (ISO) 19001-18001 safety management system works around the world (http://www.iso.ch) as a non-profit organization to improve work practices and standards (Vinodkumar and Bhasi, 2010). It has been demonstrated that companies registered with OHSAS 18001 certification perform better in terms of safety performance (Ajmal et al., 2021). Well-documented safety rules and procedures and their enforcement can improve the safety performance and safety behavior of employees (Glendon and Litherland, 2001). The safety rules and procedures may minimize the causes of accidents and injuries because they give a clear picture of safety improvement practices (Reason et al., 1998). However, employees need authority and empowerment to make decisions that affect the safety performance of individual and group-based decisions (Almost et al., 2019; Hanafi et al., 2018; Liu et al., 2020). In safety management employees involvement in decision making has been reported as negative, particularly in identifying safety problems (O'Conaill and Frohlich, 1995). Management safety commitment provides ultimate support to employees and encouragement to follow the safety rules and procedures (Fruhen et al., 2019). Besides, support from the top management reshapes employees' perception and behavior related to safety performance (Borowski et al., 2020; Feng et al., 2011; Hu et al., 2020). Hence, top management is committed in safety training for employees and job design (Zohar, 2010). In the view of literature, many studies have been conducted on management safety commitment including construction, hospitality and heavy vehicle transport (Almost et al., 2019; Alphs and Anand, 1999; Amponsah-Tawaih and Adu, 2016). According to Fruhen et al. (2019); Gilkey et al. (2003) management safety commitment is an important factor that determines the safety outcome for injuries, fatalities and near misses. Further, organizations need to be aware of the importance of safety management commitment to improve safety performance (Autenrieth et al., 2016). However, employees safety behavior contributes to maintain workplace safety performance and develop safety relationships with coworkers at the workplace (DeVaul, 2013). The previous research studies (Gilkey et al., 2003) found that employees behavior with coworkers helps to report risk hazards and problems that can be the cause of any accidents at the workplace (Apisarnthanarak et al., 2014; Asibey et al., 2019; Autenrieth et al., 2016; Fruhen et al., 2019). Similarly, a safety promotion policy is also part of safety management, including rewards and incentives to report safety hazards and unsafe conditions (Dyjack et al., 1998). These compensation practices also create competition among employees to report unsafe actions of coworkers and safety-related problems (Vinodkumar and Bhasi, 2010). In safety management practices, one of the important factors that have been ignored is the usage of drugs at the workplace (Vinodkumar and Bhasi, 2010). However, drug usage control is not included in management safety practice, but it can be included in the survey instrument (Vinodkumar and Bhasi, 2010). Hence, the way seniors and management communicate with their subordinates, influence their safety behavior, whether to participate or not in the safety process at the workplace. The language used to convey a message often determines whether, the safety process is rejected or accepted (Eklof and Ahlborg Jr, 2016). Nevertheless, safety practices depend on communication practices used in an organization (Gao et al., 2019). A safe work environment provides a sense of commitment and lowers the risk of hazards and injuries (Kim and Scott, 2019). In addition, Management provides an open system and two-way communication information related to risks and hazards to work safely (Kim and De Dear, 2013). Employees contribute effectively and consult which encourages to report hazards, near misses, and injuries (Chandrasekar, 2011). Moreover, in decision making involvement of employees is motivated to work safely (Acar and Acar, 2014; Fruhen et al., 2019; Mukherji and Arora, 2017). According to Vinodkumar and Bhasi (2010) behavioral-oriented technique is used for employees involvement in the decision-making process through upward communication within-group or within the organization. Hence, the level of participation ranges from full participation to no participation. Numerous researchers have noted that communication patterns influence safety-related issues in the organization (Classen et al., 2020). According to Hoffman (1998) people in high uncertainty avoidance societies tend to want to avoid uncertainty and unpredictability. As a result, work environments in such countries try to provide stability and certainty through clear rules and instructions. Communication barriers present a challenge to adopt safety-related communication in the organization (Mehdibeigi et al., 2018). According to Kim and Scott (2019) effective communication may help to reduce hazards risk. The organizations open-door policy for communication facilitates discussion of threats and challenges at the workplace (Arteta and Giachetti, 2004; Whittaker et al., 1994).

Safety commitment has described the involvement of the individual in safety activities to achieve organizational safety goals and improve safety performance at the workplace (Grill et al., 2017; Newnam and Goode, 2019). In the past, many studies have discussed the importance of safety commitment and safety performance (Ajmal et al., 2020). These past studies are showing the importance of safety management practices to manage occupational health and safety performance.

2.2 Occupational Health and Safety Performance

The concept of safety performance focuses on maintaining workplace safety through different interventions (Christian et al., 2009). These interventions are mainly considered safety behavior with coworkers while performing a job task (Huang et al., 2016). According to Townsend and Gebhardt (2006), positive behavior of employee's engagement supports to share safety knowledge with coworkers. Furthermore, the performance of workplace safety is measured to minimize accidents and occupational injuries (**?**). A number of studies addressed that researchers need to point out the factors that lead to serious injuries and accidents and near misses in an organization (Zohar, 2010). However, employees' behavior matters a lot to maintain and enhance safety performance (Hoffman, 1998). According to Miller (2017), safety performance is also associated with an employee's safety compliance and safety commitment in the workplace. While safety behavior indirectly supports the development of a safety culture and enhances safety performance (Grill et al., 2017). Additionally, Neal et al. (2000) argued that safety performance depends on employees' good job performance and safety commitment behavior (Ajmal et al., 2020). In the last decade, numerous studies focus on investigating safety performance predictors. For instance, Bhatnagar (2007); Farndale and Murrer (2015); Ferreira and de Oliveira (2014) found that coworkers' relationships, knowledge of safety, safety commitment level, and leadership are the predictors of safety performance. Safety improvement is a continuous process which improves when organizations take serious initiatives (Pruden and Wadhwa, 2021). However, these initiatives are included in safety training and its implications of learned skills and knowledge (Griffin and Hu, 2013). In the most hazardous workplace, employees face health and safety issues (Neal et al., 2000). However, these types of problems increase the employees medical expenses for health (Classen et al., 2020; Feng et al., 2011; Hu et al., 2020). According to Pinion et al. (2017) safety performance influences employees' retention rate at the organization. Safety performance in an organization depends on employees safety commitment level and engagement with coworkers (Harris et al., 2014). In previous studies related to safety performance and employees' relationships, Ellinger et al. (2014) argued that when employees engage, they share safety information with coworkers. Employees learn through formal safety trainings (Christian et al., 2009). Workers share information at the workplace when they engage to follow the safety rules and procedures (Viitanen and Siljander, 2021). Safety commitment behaviour is the main concern for safety performance (Potdar et al., 2018). According to Ghosh et al. (2014) employees positive safety commitment behaviour encourages coworkers to implement safety measures and follow the rules. Therefore, organizational safety performance is indirectly the result of employees' job performance (Cousins et al., 2019; Feng et al., 2011). Previous studies of Onubi et al. (2019); Vecchio-Sadus (2007) suggest that organizations need to improve measurement of safety performance process because despite ample training for safety yet the employees face accidents and injury problems (Mazzetti et al., 2020). Numerous past studies have addressed that human error and employees' unsafe acts play an important role to increase the number of accidents and injuries rate (Hu et al., 2020; Huang et al., 2016).

2.3 Safety Management Practices and Occupational Health and Safety Performance

Safety management practices have played an important role to improve occupational health and safety performance to reduce the rate of injuries and accidents (Autenrieth et al., 2016). In past researches, several studies have been conducted to understand the correlation between safety management practices and occupational health and safety performance (Ajmal et al., 2020). Earlier scholars emphasized selected safety management practices and didnt include a few more practices to develop a holistic safety management model (Hanafi et al., 2018; Kirwan, 1998; Swuste et al., 2020). In addition, safety management practices and occupational health and safety performance are closely related to maintain safety performance (Fruhen et al., 2019). In recent studies, safety management practices revealed that each practice individually plays an important role to reduce the rate of accidents and injuries (Vinodkumar and Bhasi, 2010). There are implicit assumptions about the relationship between safety management practices and occupational health and safety performance.

In past studies, researchers have used selected variables to develop a framework to investigate the impact of safety management practices on occupational health and safety performance. It is important to systematically study the safety management practices, occupational health and safety performance to understand the relationship between both factors.

3 Methodology

In this study, we applied the most reproducible, scientific, and holistic review method that is used in the research for systematic literature review (Inkinen, 2016) and this method is widely accepted in the research field (Thomé et al., 2016). This research study aimed to synthesize the literature related to safety management practices and occupational health and safety performance. In research, the systematic literature review was conducted in the medical field, but later on, it has been adopted in social sciences, management sciences, and relevant fields (Frangieh and Yaacoub, 2017). This method is more rigorous because it helps to exclude irrelevant content and is more effective as compared to the traditional systematic literature review method (Thomé et al., 2016).

3.1 Search Strategy

Published papers on safety management practices and occupational health and safety performance were identified through exhaustive searches over web of science, Google scholars, ScienceDirect, and ProQuest Database. The researcher used search string techniques to find relevant published papers from the targeted databases. These techniques included Safety Management Practices, Management of Safety, Safety Management Practices and Occupational Health and Safety Performance, Safety and Management to find study-related papers. Afterward, inclusion standards were developed to include papers in analysis qualitative, quantitative, and mixed method approaches on safety management practices and occupational health and safety performance (OHSP). In the preliminary stage, 65 relevant papers abstracts were selected for inclusion, and later on, it was reduced to 41 papers. The remaining studies were read, and 41 papers were excluded because they were not relevant to safety management practices and occupational health and safety performance. For example, the study by Mearns et al. (2003) focused on the offshore environment and overall safety performance. Besides, 41 papers were excluded, including 19 review papers and 13 research papers and 10 were case studies. These excluded papers were out of examining safety management practices and occupational health and safety performance. For example, studies by **?** were conducted on safety management practices and occupational health and safety performance, and these studies are relevant to conduct a systematic literature review for safety management practices. All paper filtering processes were carried out carefully, and 24 relevant papers were selected to include in this study. For cross-check, the references list was also reviewed to find additional articles for further analysis of the study.

3.2 Analysis of the Retrieved Articles

The matrix of the literature review was developed to organize the information of 24 relevant papers from the past studies. In the systematic literature review, relevant information regarding safety management practices and occupational health and safety performance was extracted. The guidelines of the literature review matrix (Lubbe et al., 2007) were used, including the name of authors; region and industry, research methods, and findings are mentioned in Table.1.

4 Findings

This study seeks to provide a comprehensive systematic literature review and examined how safety management practices play an important role in occupational health and safety performance. The synthesis of empirical studies that have been conducted previously revealed the following findings.

4.1 Distribution of Publications

The publications on safety management practices and occupational health and safety performance have been shown in (Figure.1). In an earlier paper on safety management practices and occupational health and safety performance was from Vredenburgh (2002) on the USA health sector.

Table 4.1: Literature Review Matrix

Author	Journal	Region / Sector	Methodology	Findings
Vredenburgh (2002)	Journal of Safety Research	USA / Health care sector	Quantitative/SEM	The company takes financial benefits to reduce the lost time and workers medical expenses
Buwalda et al. (2003)	Journal of safety science	UK / Oil & gas	Quantitate / SEM	Safety management practices help to lower accident rates
Zimolong and Elke (2006)	Handbook of human factors and agronomics	Germany / Manufacturing	Quantitative/SEM Risk assessment index	Management needs to focus on human resource management practices to maintain safety performance
Heaven et al. (2006)	Patient education and counseling	UK / Health care sector	Quantitative / SEM	Employees safety training enhance capabilities to maintain safety outcomes
Fernández-Muñiz et al. (2007)	Journal of loss prevention in the process industries	Spain / Safety risk companies	Quantitative / SEM	Safety management practices individually play a contributory role to maintain workplace safety performance
Vinodkumar and Bhasi (2010)	Accident Analysis and prevention	India / Chemical industry	Quantitative / SEM	Employees need safety knowledge through safety training to maintain safety performance
Hong et al. (2011)	Journal of Occupational Health & Safety	Malaysia / SMEs	Quantitative / SEM / Sample size-50	Employees safety behavior is important apart from safety management practices
Vinodkumar and Bhasi (2010)	Journal of safety science	India / Chemical industry	Quantitative / SEM / Sample size-1566	Safety training is required to impart safety knowledge
Chandrasekar (2011)	International journal of enterprise computing and business system	India / Construction industry	Quantitative / SEM	Environmental factors are important to enhance employees motivation at the workplace
Mitchell et al. (2012)	Accident analysis and prevention	Australia / Transportation	Quantitative / SEM	Audit tools need to improve and measure safety management practices

Author	Journal	Region / Sector	Methodology	Findings
Griffin and Hu (2013)	Journal of safety science	Australia / Occupation-work role	Quantitative / SEM	Safety participation and safety knowledge help to share safety-related knowledge
Hale and Borys (2013)	Journal of safety science	UK	Review	Safety rules and procedures need to be improved to maintain the safety
Mashi et al. (2017)	International business management	Malaysia / Health care sector	Quantitative / SEM	Safety compliance need to be improved via Safety rules and procedures, safety promotion activities
Mukherji and Arora (2017)	Information technology and quantitative management	Case study review	Case study review	Digital communication practices improve workplace safety outcomes
Hanafi et al. (2018)	The European Proceedings of Social & Behavioural Sciences	Malaysia / Construction	Quantitative / Construction industry / SEM	Safety management practices help to reduce accident chances and reduce the risk of hazardous
Lee (2018)	Journal of sustainability	Korea / Various industries	Quantitative / SEM	Monitoring and control is important to maintain workplace safety performance
Hassan and Esmail (2018)	International business and social research	Jordan / Health care sector	Conceptual study	Safety training and safety commitment are the most important management practices to maintain occupational health and safety performance
Almost et al. (2019)	Journal of Occupational Environment	Canada / Health care sector	Multi-method approach/SEM	Selected indicators can play an important role to develop a safe workplace
Ladewski and Al-Bayati (2019)	Journal of safety management	USA / Manufacturing industry	Quantitative / SEM	Safety management practices can help to maintain workplace safety and reduce the chances of an accident
Hassan and Esmail (2018)	Journal of Sains	Jordan / Chemical industry	Conceptual framework	Poor safety performance leads to increase employees safety insurance cost, loss in overall productivity

Author	Journal	Region / Sector	Methodology	Findings
Fruhen et al. (2019)	Journal of safety research	Australia/Mining and construction industry	The exploratory sequential mixed method	Safety leadership helps to promote safety culture
Liu et al. (2020)	Biomed Research International	Ghana / Oil & gas industry	Cross-sectional / SEM	Mediating variables work pressure and skills need to be tested for the results in future
Swuste et al. (2020)	Journal of safety science	Germany/Review	Systematic review / 1988-2010	Analysis of safety management practices help to develop a safety management model
Baldassarre et al. (2020)	International Journal of Environmental Research and Public Health	Italy / Biosciences	Review	Biosensors help to improve occupational health and safety performance in the environmental and agriculture sector

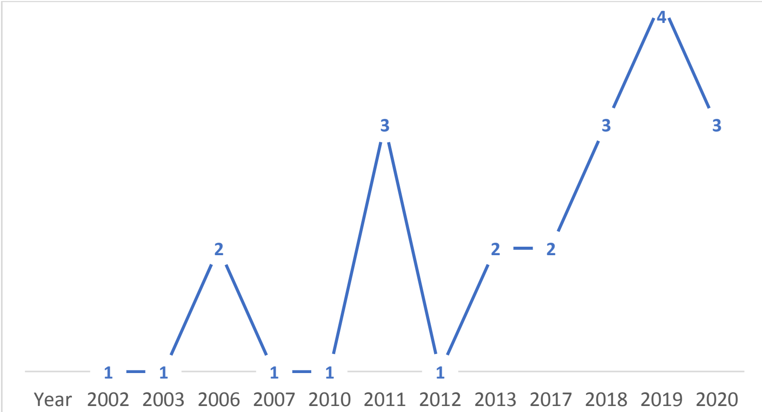

Figure 1: Year-wise Distribution of Publications on Safety Management Practices and Occupational Health and Safety Performance

In this study, quantitative discussed the impact of safety management practices on occupational health and safety management practices. Besides, most publications on safety management practices and occupational health and safety performance were published in (2018,2019) and (2020-September) 3 research papers even though some fluctuation is showing the importance of safety management practices importance and occupational health and safety performance interest for the researchers in future. The current trend from (2019-2020), indicating that more research papers will appear on safety management practices and occupational health and safety performance. Interdisciplinary research on safety management practices and occupational health and safety performance papers have been published in various outlets. Among (n=24) papers (n=13) papers have been published in Scopus journals and (n=11) have been published in ISI impact factor journals. The findings of these research papers also revealed that research on safety management practices and occupational health and performance has increasingly distributed over the range of safety management, health and safety, and social sciences journals.

4.2 Research Context and Methodology

The relationship between safety management practices and occupational health and safety performance was investigated in different industries and regions. The samples of 24 articles were found in 12 countries, in which Australia, UK, Malaysia, India, and the USA top ranking with three papers in each country. This is indicative that studies on safety management practices and occupational health and safety performance have gained attention wide geographically. The above (Figure.1) graph is showing the gradual improvement in research in the area of safety management practices and occupational health and safety performance in different sectors including construction, manufacturing, SMEs, and Oil and gas industry. There are two methodologies that researchers use for the data analysis quantitative and qualitative so, among (n = 24) quantitative approach was accounted (n=14) used structural equation modeling techniques and (n=5) multiple regression data analysis techniques, (n=5) mixed-method approach was used. No case studies approach was found in selected papers for the systematic literature review. 4.3 The relationship between safety management practices and occupational health and safety performance According to the International Labor Organization (ILO) reports every 15 seconds due to work-related accidents and injuries a worker dies. The global gross domestic products 4% impede every year, probably due to 317 million accidents and injuries around the globe (Buwalda et al., 2003). In addition, every year, 2.3 million deaths occur related to occupational accidents and work-related injuries and 6300 employees per day. In developing countries where economic impede is growing upward is an alarming situation for high hazardous industries, e.g. oil and gas, manufacturing, construction (Lee, 2018). Safety Management practices play an important role in safety-critical organizations to manage safety and reduce the rate of work-related injuries (Vredenburgh, 2002). However, safety management practices are the functions to play roles in organizations to remain safe (Ladewski and Al-Bayati, 2019). It is the sub-system of overall organizational safety management and is performed via various safety management practices, including safety training, management commitment to safety, employee safety participation (Kirwan, 1998). According (Fernández-Muñiz et al., 2007; Lee, 2018; Vinodkumar and Bhasi, 2010; Vredenburgh, 2002), high-hazardous organizations focus on safety management practices to enhance occupational health and safety performance. Hanafi et al. (2018) argued that workplace health and safety performance indirectly influence the safety management budget of the organization. However, safety management practices include strategies, policies and rules that are implemented by the organization including employees safety training, employees participation for safety, safety compliance and management commitment for the workplace safety (Hanafi et al., 2018; Jacobs et al., 2015).

Our review shows that the developmental and multifaceted nature of safety management practices is not surprised with a broad range of practices including employee safety training, management safety commitment, safety rules and procedures, employees safety participation, and safety knowledge sharing. The review shows that limited studies have been covered most frequently safety management practices, e.g. management commitment to safety and safety participation rewards (Vinodkumar and Bhasi, 2010). The analysis of this study shows that most papers focused on management safety commitment to reduce the chances of occupational injuries and accidents rate (n = 9). However, employee safety training has also gained attention to equipping employees with safety skills and knowledge (Mazzetti et al., 2020) and (n = 3) papers more focused on employees safety training. The instruments used in these studies were mostly adopted, and our review also found that (n = 4) used different theories for example (Baldassarre et al., 2020; Lee, 2018; Liu et al., 2020). The findings revealed that the number of mediators and moderators have been used to improve the occupational health and safety performance in most risk hazardous organizations. These mediators and moderators were including safety motivation, safety participation, safety behaviour and safety knowledge. In review studies on safety management practices and occupational health and safety performance have received the most attention (Almost et al., 2019; Baldassarre et al., 2020; Hanafi et al., 2018; Mashi et al., 2017). The elicited findings from the 24 papers on safety management practices and occupational health and safety performance showing the relationship in outline a model (Figure.2).

5 Discussion and Recommendation for Future Research

This research aimed to extract and synthesize the literature on safety management practices and occupational health and safety performance. In our review, we have observed that research on safety management practices and occupational health and safety performance has gained attention since last two decades and a plethora of publications show that safety management

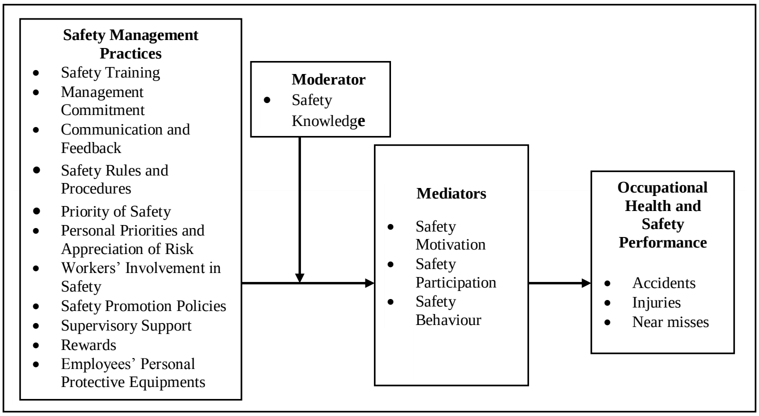

Figure 2: Model of the Relationship between Safety Management Practices and Occupational Health and Safety Performance

practices have been used in a different context and organizational perspectives including construction, manufacturing, and SMEs. Hence, the previous studies show that safety management practices are important to improve occupational health and safety performance (Liu et al., 2020; Vinodkumar and Bhasi, 2010; Vredenburgh, 2002; **?**). However, this study offers new avenues for future research into the area of safety management practices and occupational health and safety performance.

5.1 Research Design Advancement

The analysis of research studies related to safety management practices and occupational health and safety performance shows that in many contexts quantitative approach has been applied. Therefore, to build more useful theories and better insights, more quantitative and qualitative studies are encouraged. We also recommend using the mixed method approach to understand the relationship between safety management practices and occupational health and safety performance. In previous studies, mostly structural equation modeling (SEM) technique has been applied to analyze the data. Still, in the qualitative study, NVivo software can use to analyze the qualitative data of the study. In designing a mixed-method approach, research might pair interviews, surveys to identify the most important safety management practices to analyze the relationship with occupational health and safety performance. This study can be about employees working in high hazardous workplaces in organizational departments, including manufacturing and production.

5.2 Implications for Research and Practice

This study is significant in several ways for practical and theoretical contribution to the existing body of knowledge. From the theoretical perspectives, this study extends the existing literature on safety management practices and occupational health and safety performance. In comparison, past review posits that safety management practices contribute significantly to reduce the accident rate, near misses, and injuries. The current study suggests positive relationships between safety management practices and occupational health and safety performance (Vinodkumar and Bhasi, 2010). Additionally, our review expanded previous literature and provided a detailed conceptual model on safety management practices. Occupational health and safety performance with mediating and moderating variables, as well as this study suggests alternative research avenues for future studies. This review in practical perspective provides overall existing picture knowledge of safety management practices and occupational health and safety performance that will be fruitful for experts to understand the importance of the development of strategies. For example, employees safety training helps to improve employees safety skills and knowledge to perform job-related duties safely. Moreover, management commitment to safety has been found a very important practice to maintain and improve occupational health and safety performance. Besides, both safety managers and the production and manufacturing department should collaborate to foster occupational health and safety performance with safety management practices. Safety managers should build teams to develop a culture for safety-related knowledge sharing and employees safety participation. The management of organizations should update safety rules and procedures to reduce the hazardous risks and chances of accidents and injuries. The department of occupational health and safety should ensure the safety compliance practices that employees are following to maintain safety performance.

5.3 Conclusion

This paper aimed to review the existing literature comprehensively on safety management practices and occupational health and safety performance to recommend for future research directions. The key findings of the research study have emerged that safety management practices have become important in the last two decades and several interesting studies have been conducted in numerous industries. Notably, safety performance is one of the major compelling forces to adopt and implement safety management practices effectively, and most studies have been investigated quantitatively in many countries and sectors. Second, management commitment and employees safety training has been identified as most important to maintain occupational health and safety performance along with safety knowledge sharing. The review also revealed that the number of mediating variables and moderating variables play an important role to build the relationship between safety management practices and occupational health and safety performance. Based on findings and literature review investigation, we provided a nuanced conceptual model showing the relationship between safety management practices and occupational health and safety performance. We also recommended the directions for future research on occupational health and safety performance, and one protentional limitation is all the papers included in this study were written in the English language. In future research studies can include studies from other languages apart from English to know the contradiction related to safety management practices and occupational health and safety performance.

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The Role of Financial Constraints in Business Environment; Evidence from Business Group Affiliated and Non-Affiliated Firms in Pakistan

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Abstract. The main purpose of this study is to investigate the relationship between Cash Flows, Growth Opportunities, Firm Size, Firm Age, Firm Performance, Investment, Financial constraints and Leverage between the B.G AFs and NAFs of Pakistan. Current study consists of the balanced panel data containing 86 B.G AFs vs. 90 NAFs of the Pakistan. This study covers the yearly data period from 2007 to 2017. The findings showed that the cash flows are positively correlated with the return on assets, investments, financial constraints, while leverage is negatively correlated with the financial constraints. The positive correlation between cash flows and return on asset is higher for the B.G AFs, which means the B.G AFs are more profitable than the NAFs. The correlation of cash flows with the investment and financial constraints is positive but lower for the B.G AFs, showing that AFs investment is less sensitive and less financially constrained than NAFs. The inverse correlation between leverage and financial constraints shows that the B.G AFs have easy access to the financial sources. The positive and higher correlation of growth opportunities with cash flows and return on assets shows that the AFs growth is higher than NAFs.

Key words: B.G AFs and NAFs, KSE-100, Financing Constraints

1 Introduction

The economic legal system is not effective because this system cannot shield investor's rights and creates difficulties for companies if they want to raise the external financing. So, the firms are structured into B.Gs to enjoy the benefits of operational and financial inter-linkages. According to previous study on BGs, risk is divided among member firms of the B.Gs and firms to overcome constraints by raising the external capital (Gopalan et al., 2007). B.G AFs can be defined as, if the group firms owned at-least 20% stocks of the other firms, and then the firms whose stocks have been owned are B.G AFs (Claessens et al., 2006). B.G AFs use intra-group loans in time of financial needs (Gopalan et al., 2007). Constraints may be internal (lack of knowledge or poor cash flow) or external (interest rates) that may resist investment purpose.

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Businesses can easily control internal constraints while, it is difficult for firms to control external constraints.

B.G AFs accounting and stock market performance is higher than NAFs and the results showed the positive effect of firm performance on B.G affiliation (Ahmad et al., 2018). The study showed that the B.G AFs face less financing constraints because they have lower investment cash flow sensitivities (Makina and Wale, 2016). The findings suggested that there is a strong positive effect of group affiliation on firms performance than NAFs (Gedefaw Birhanu and Wezel, 2020). The findings suggested that the B.G AFs can easily access the external financing (Jung et al., 2019). The results indicated that the B.G AFs can access in the better way to the leverage opportunities and performed better than NAFs (Purkayastha, 2018). The findings showed the positive relationship between investment, leverage and profitability of B.G AFs (Yana, 2020).

The existing literature could not clearly check the correlation between financing constraints, Investment cash flows sensitivities, firm size, firm age, firm performance, cash flows of AFs and non AFs. Most studies have checked the impact of external factors on Investment. So, our study attempts to check the correlation among different variables (cash flows, growth opportunities, firm size and firm age, firm profitability, investment, leverage and financial constraints) of B.G AFs and NAFs. Our study is significant because it covers the Pakistani B.G AFs and NAFs; however, the majority research has been conducted on other countries not including Pakistan. Our study also compared the results of AFs with NAFs. The problem statement of our study is; What would be the performance of firms when they AFs with a B.Gs vs. when they do not AFs with any business group?

Our study creates new knowledge of relationships between variables and investment as well as profitability of AFs (NAFs). The study covers Pakistani B.G AFs and NAFs. This research is significant for investors, government, managers, policymakers and financial institutions. It provides pro-active suggestions that there is higher probability, which NAFs that will face hurdles in obtaining loans from external markets due to weak financial reputation.

2 Literature Review

The bank B.G AFs are large with a low debt level, because they have a direct and access to the capital market (Malik, 2018). There is a positive correlation between B.G affiliation and ROA that has been empirically supported (Gedefaw Birhanu and Wezel, 2020). B.G AFs have more tendency to finance their investments rather than NAFs (Jindal and Seth, NA). BG affiliation positively influences the ROA (Castaldi et al., 2019). B.G AFs have the highest ROA and Tobin's Q than NAFs (Ahmad et al., 2018).

Member firms of a B.G provide a shield to the B.G AFs and protect them from the external risks. So, the B.G AFs are more profitable and less risky (Lin et al., 2019). FS showed a significant negative effect on ROA, representing that small firms outperform than large firms (Sanan et al., 2019). The result showed that CF negatively affects the investment of B.G AFs, while the cash flow positively affects the investment of NAFs. However, the results are insignificant in both the cases. But the interaction coefficients are negatively significant for B.G AFs only (Mehmood and Farid Hasnu, 2019). The results showed that, B.G AFs significantly affects the firm performance. Additionally, the size and the sales growth positively affected the firms performance (Ahmad et al., 2018).

B.G AF's risk-taking power is less than non-group firms (Subramaniam, 2019). B.G AFs have low investment CF sensitivity (Yeh and Lin, 2020). There exists the inverse correlation between leverage and the performance of B.G AFs (Carney et al., 2011). The study revealed that group affiliation has a direct correlation with corporate (Gupta and Mahakud, 2018). Study revealed negative association between leverage and investment (Ghatak and Kali, 2001).

The results showed that the B.G AFs outperformed NAFs (Ahmad et al., 2018). The findings revealed that the B.G AFs are less financially constrained because these firms have lower investment CF sensitivities (Makina and Wale, 2016). The findings suggested that the group affiliation has a strong direct impact on firm's performance than NAFs (Gedefaw Birhanu and Wezel, 2020). The findings revealed that NAFs are more financially constrained than B.G AFs (Yeh and Lin, 2020). The results of this study showed that the diversified B.G AFs are more profitable and bear less financial constraints (Ellouze and Mnasri, 2020).

The findings suggested that the B.G AFs have easy access to external financing (Jung et al., 2019). The results indicated that the B.G AFs can easily achieve the leverage opportunities and performed better than NAFs (Purkayastha, 2018). The findings suggested a direct association among investment, leverage and profitability of B.G AFs. It shows that the internal capital markets of B.Gs are the main source to decrease the financial constraints of B.G AFs (Yana, 2020). Performance is positively correlated with the group affiliation (Poczter, 2018). The results showed that the NAFs investment decisions are highly sensitive to the cash flow (Kumar and Ranjani, 2018).

A study revealed that there is a significantly direct association between cash flow coefficient and AFs (Lensink et al., 2003). The outcomes showed a direct and significant relationship between cash flows and investments of Group AFs and NAFs (George et al., 2011). They found a direct relationship between investment and growth opportunity of B.G AFs (Shin and Park, 1999). AFs investment is positively correlated with the growth opportunity (Buchuk et al., 2014). The findings showed an opposite correlation between net group financing and performance of group firms. Similarly, group size and group diversification inversely affected the firm's profitability (Kirch and Kabbach-Castro, 2016). There is a direct relationship between firms investment and cash flows of B.G AFs (He et al., 2013). Group affiliation is positively correlated with the firm's value and the firm's performance. Meanwhile, the firm size and the growth opportunity is inversely correlated with the leverage (Ghosh, 2010). Their research showed that the financially constrained organizations can easily get external funds through financial liberalization (Ghosh, 2010). Results showed that the small firms face lower investment sensitivities (Gorodnichenko et al., 2009). Study showed that the group affiliation positively affects the firm's profitability (Ghosh, 2010). In our opinion, the B.G AFs perform better than NAFs. B.G AFs have higher opportunities to grow; they face less financial constraints and fulfill their financial needs through the financial institutions. NAFs are less leveraged due to their weak financial reputation, as the investment in NAFs may be riskier.

2.1 Theoretical Framework

If the firms are financially constrained, they face difficulties obtaining financial assistance from the external sources. Then the companies rely on the internal funds to fulfill their monetary desires. This reflects the pecking order theory that states, if the firm needs financing then it should use internal funding first and then move towards the external funding (Myers and Majluf, 1984). This study suggests that if the impact of cash flow is positive on the investment, then it means that the firm is financially constrained (Saeed and Athreye, 2014). Financially constrained firms face difficulty getting external financial sources. However, the financial need is still there and companies need funds to fulfill their financial needs. It reflects the pecking order theory of capital structure. Pecking order theory was first suggested by Donaldson et al. (1961). Afterward, it was modified by Myers and Majluf (1984) that made it popular. Hence according to this theory, our study suggested that financially constrained firms face difficulties obtaining financial assistance from the outside financial institutions. So, the companies rely on their internal funds to fulfill their monetary desires. Modigliani and Miller (1958) proposed the Trade-off theory; trade off theory states that, if the firm needs funds then it relies on debt over equity in order to avail the tax-shield benefit. This theory guides the companies and suggests selecting debt finance and equity finance to maintain a balance between the costs and benefits (Modigliani and Miller, 1958).

The firms avail debt to meet their financial needs then they pay interest over it. Afterward, firms pay taxes over it. Because interest is tax exempted hence, the firms can enjoy tax shield benefit (Cotei and Farhat, 2009). In the case of B.G AFs, if the relationship between the coefficient of interaction term (2 CFit x BGit) of B.G AFs and the investment or the firm performance is negative, then it shows that the firm is relying on external funds because the firm is financially non-constrained and satisfying its financial needs for funds. This idea is the reflection of trade off theory (Saeed and Athreye, 2014).

2.2 Hypotheses Development

2.2.1 Firm Performance

B.Gs help the AFs to defeat deficiencies in external market and increase their growth opportunities (Lamin, 2013; Purkayastha, 2018). B.Gs help the AFs to perform and survive effectively (Belenzon et al., 2013). Similarly, B.G affiliation assists member firms if the facing diversities in the external surroundings (Gubbi et al., 2015). There is a positive impact of B.G affiliation on the financial performance (Castaldi et al., 2019). Based on the above arguments, we expect that the B.G AFs are more profitable than NAFs so, we propose the following hypothesis:

H1: Higher Cash flows increases the performance of AF's as compared to NAFs

2.2.2 Investment

Investment means how much the firms are sensitive to their investment. Quite a few studies checked the investment-cash flow association for B.Gs of the different countries. The investment of NAFs are more risky than B.G AFs (Subramaniam, 2019). Japanese B.G firms showed less investment CF sensitivities. George et al. (2011) found that the non group firms in the Japan and Korea showed the positive investment CF sensitivity. Kato et al. (2002) showed the minor sensitivity related to the Japanese B.G AFs. Lensink et al. (2003) found that the effect of CF on investment is less than that of NAFs. So for the B.G AFs, investment CF's sensitivity is less than that of NAFs. The above arguments logically lead to our expectation that the B.G affiliation reduces the sensitivity of investment spending to the cash flows. Hence, our second hypothesis is as follows;

H2: Lower Investment of AFs decreases the Cash Flows Sensitivity of AF's than NAFs

2.2.3 Financial Constraints

Financial constraint means the firms face difficulties obtaining loan and access financial market. NAFs bear more financial constraints than B.G AFs (Shin and Park, 1999), and can reach to the external capital markets. The B.G AFs can easily reach to the financial markets (Almeida et al., 2015; Carney et al., 2011; Chang and Hong, 2000; Khanna and Palepu, 2000). Additionally, member firms lend money to the B.G AFs at a rate lower than that of the external financial market (Gopalan et al., 2007; Liebeskind, 2000). Based on the above arguments related to financial constraints, we expect that B.G AFs are less financially constrained than NAFs. Therefore, our third hypothesis is;

H3: Lower Financial constraints increase availability of funds for AF's than NAFs

2.2.4 Leverage

Leverage means the firms can easily obtain loans in the times of financial need. The B.G AFs are having higher leverage relatively NAFs (Mehmood and Farid Hasnu, 2019). B.G AFs have easy access to the external financial markets (Aggarwal et al., 2019). The existence of intra-group debt confirms the B.G member firms to facilitate the financial access. Ghatak and Kali (2001) found that the B.Gs try to find more borrowings. The B.G AFs are more leveraged as they can easily reach to the loan (Carney et al., 2011). As a result we expect that B.G AFs are more leveraged than NAFs and have easy access to the financial sources and capital markets. Therefore, they can enjoy the tax shield benefit. Thus, we proposed our last hypothesis that is;

H4: Higher Leverage increases access to the cheap source of financing for AFs than NAF's.

3 Methodology and Data Collection

3.1 Sample and Procedure

Our sample consists of 176 companies including 86 AFs and 90 NAF Pakistani firms covering 11-year data for the period of 2007 to 2017. Frequency of our data is yearly. Moreover, the source of our data is financial statements of the B.G AFs and NAFs. We categorize our sample in the following two parts; first is the B.G AFs while, the second is NAFs. A Multiple Linear Regression model has been adopted to observe the effects of cash flows, growth opportunities, firm size, firm age and interaction term on the firm performance, investment, leverage and financial constraints.

3.2 Multiple Linear Regression Model

Previous studies suggested that since the B.G AFs help in reducing their financial constraints, these firms face lower investment CF sensitivity. Conversely, NAFs are high risky and face more changing threats thats why study is more emphasized on AFs and NAFs of Pakistan. The study of Mehmood and Farid Hasnu (2019) suggested that if the credit is a main problem for the entrepreneur, then the firm is financially constrained and vice versa. Their results confirmed that the firms having a positive sensitivity of cash holding and cash flows are more likely to be the financially constrained. Furthermore, the results showed that the B.G AFs in Pakistan are less financially constrained as compared to the NAFs.

According to Gohar (2013), in Pakistan the NAFs are less liquid and leveraged than AFs. The results of Malik (2018) showed that the group affiliation is positively correlated with the firm's leverage. Mukherjee and Chanda (2021) concluded that the high leverage is a solution of financing constraints and helps the firms to access the external financial resources. The study of Makina and Wale (2016) showed that the coefficients of the investment and CF are negative. As a result they found that, the B.G AFs are lowered financially constrained and thus, have lower investment CF sensitivities.

The outcomes of Lensink et al. (2003) confirmed the lower correlation coefficient for AFs than for NAFs. It means the B.G AFs are less sensitive of its investments. Investment is a negatively related to the cash flow of B.G AFs (Moyen, 2004). There are four regression models in our research. Regression equations showing the effect of independent variables on dependent variable are as follows, and Table 3.1 is showing the variable's measurement for the Multiple Linear Regression.

$$\mathbf{PerformanceofBG_{it}} = \alpha + \beta_1 (CF_{it}) + \beta_2 (CF_{it} * B.G_{it}) + \beta_3 (B.G_{it}) + \beta_4 (GO_{it}) + \beta_5 (FS_{it}) + \beta_6 (FA_{it}) + \varepsilon_{it} \quad (1)$$

$$\mathbf{InvestmentofBG_{it}} = \alpha + \beta_1 (CF_{it}) + \beta_2 (CF_{it} * B.G_{it}) + \beta_3 (B.G_{it}) + \beta_4 (GO_{it}) + \beta_5 (FS_{it}) + \beta_6 (FA_{it}) + \varepsilon_{it} \quad (2)$$

$$\mathbf{F.CofBG_{it}} = \alpha + \beta_1 (CF_{it}) + \beta_2 (CF_{it} * B.G_{it}) + \beta_3 (B.G_{it}) + \beta_4 (GO_{it}) + \beta_5 (FS_{it}) + \beta_6 (FA_{it}) + \varepsilon_{it} \quad (3)$$

$$\mathbf{LeverageofBG_{it}} = \alpha + \beta_1 (CF_{it}) + \beta_2 (CF_{it} * B.G_{it}) + \beta_3 (B.G_{it}) + \beta_4 (GO_{it}) + \beta_5 (FS_{it}) + \beta_6 (FA_{it}) + \varepsilon_{it} \quad (4)$$

3.3 Variables and Proxies

Table 3.1 shows the proxies of all variables considered in this research. Leverage, Investment, Financing constraints and Firm performance are dependent variables. While Cash flows, growth opportunity, dummy variable and interaction term are independent variables. However, firm size and firm age are control variables.

3.3.1 Dependent Variables

3.3.1.1 Leverage (LEV)

Leverage is measure by the total debt divided by the total assets. Leverage tells us that how much a firm has access to the debt and finance. Indeed, the firm is said to be leveraged if it has a easy access to the finances. The research conducted by Carney et al. (2011) showed that the B.G AFs are more leveraged than NAFs and have easy access to the financial sources than NAFs. Further their outcomes showed that, B.G affiliates use debt (leverage) financing in a better way.

3.3.1.2 Investment (INV)

It is investment in the fixed assets. It is equal to purchase of plant, property or any other fixed assets. Investment is measured by the total assets of current year divided by the total assets of previous year. Gopalan et al. (2007) also used this ratio to measure the investment. It tells us that how much the investment of a firm is sensitive and fluctuates due to the external factors. Identically, quite a few studies analyzed the investment-cash flow relationship for the B.Gs of different countries. The investment of B.G AFs is less risky than NAFs (Subramaniam, 2019).

Japanese B.G firms showed less investment cash flow sensitivities. NAFs in the Japan and Korea showed direct correlation of investments with cash flows (George et al., 2011). Besides this, (Kato et al., 2002) found a minor sensitivity related to the Japanese B.G AFs.

3.3.1.3 Financing Constraints (F.C)

We measured financing constraints by the investment cash flow sensitivity and the formula of investment CF sensitivity is the current year cash flows divided by the previous year investment. The study of Mehmood and Farid Hasnu (2019) described that firms are financially constrained if the firms are highly sensitive to the cash flows. Similarly, Bhaduri (2005) found that the B.G AFs do not face financial constraints. On the other hand, Lensink et al. (2003) have investigated that the B.G affiliation lowers the sensitivity of investment spending to the cash flow. As a result they showed that, higher cash flows coefficient for standalone companies represents that the firm is financially constrained. The study of Ayyagari (NA) revealed the negative relationship between the financial constraints and the firm growth because relaxing financing constraints results in promoting firm's growth.

3.3.1.4 Firm Performance (ROA)

Firm performance is measured by the Return on Assets (ROA) that is equals to the Earnings Before Interest and Taxes divided by the Total Assets. Ahmad et al. (2018) adopted the same procedure to measure the firm's performance. B.Gs facilitate the AFs to overcome the external market deficiencies and increase their GO (Lamin, 2013; Purkayastha, 2018). Additionally, the B.Gs facilitate the AFs to compete effectively and survive (Belenzon et al., 2013; Estrin et al., 2009). Since, B.G affiliation facilitates the member firms if the firms face changing in the external environment (Gubbi et al., 2015). There is a positive effect of B.G affiliation on the ROA (Castaldi et al., 2019).

3.3.2 Independent Variables

3.3.2.1 Cash Flows (CF)

Cash flows can be calculated as Earnings Before Interest and Taxes (EBIT), Depreciation and Amortization. Mehmood and Farid Hasnu (2019) have investigated that firm's investment is very CF-sensitive. Therefore, cash flow is measured as (EBIT+Depreciation)/ Total Assets. By following the methodology adopted by Lensink et al. (2003), we use cash flows as a proxy for internal funds.

3.3.2.2 Growth Opportunity (GO)

Growth opportunity is measured by the natural log of current year's sales divided by the previous year's sales. Bhaduri (2005) concluded that the financially constrained firms face limited growth opportunities. Results of Ayyagari (NA) showed that 1 unit increase in the financial constraints leads to 8-10% reduction in the firm's growth.

3.3.2.3 Dummy Variable

The value of dummy variable is 1 if the firms are AFs with a B.G and 0 otherwise. We can get Interaction term by multiplying the cash flows with the dummy variable. Ayyagari (NA) suggested that the B.G AFs outperform than NAFs. Similarly, Khanna and Palepu (2000) found that the group affiliation helps the firms to reduce financial constraints.

3.3.2.4 Interaction Term

We get an Interaction term by multiplying the cash flows with dummy variable (CF X Business Group). The study of Saeed and Athreye (2014) found that if the relationship between coefficient of interaction term (2 CFit x B.Git) of B.G AFs and investment and firm's performance is negative. It means that the firm is relying on external funds because firm is not financially constrained and satisfying its financial needs for funds. This idea is the reflection of trade off theory. Furthermore, Mehmood and Farid Hasnu (2019) have found that the coefficient of cash flows interacting with the B.G dummy is negative but statistically significant.

3.3.3 Control Variables

3.3.3.1 Firm Size (FS)

Firm size is calculated by taking the log of total assets. Firm size has widely been studies in the previous studies. Mehmood and Farid Hasnu (2019) suggested that the FS increases as the firm grows older and is closely related to the firm's profitability. Generally, it is expected that firms large in size have more access to the internal finance as compared to smaller firms.

3.3.3.2 Firm Age (FA)

Firm's age is the number of years since the firm is incorporated. Current year minus incorporation year is the formula to calculated firm's age. Identically, Mehmood and Farid Hasnu (2019) found that the older firms are more profitable as compared to younger firms. Similarly, VLACHVEI and NOTTA (2008) examined Greece firms and found that the coefficient of age is positive and significant. Additionally, Loderer and Waelchli (2010) studied the US COMPUSTAT Industry Segment between 1978 and 2004 to investigated how age affects a firms financial performance. They have found that age progressively impairs performance.

4 Results

Data is categorized into two parts. Fist part contains data of Pakistani B.G AFs that are 86 in number, while second part contains data of NAFs that are 90 in number. We compared the summary statistics of AFs and NAFs. Afterward, we checked the correlation and multicollinearity among different variables. Hausman test has been applied to check that either fixed effect model is appropriate or random effect model. Hausman test showed the probability value of 0 each time, hence we used fixed effect model. After that, according to the Hausman test, the Multiple Linear Regression analyses have been made by using fixed effect model to examine the relationship between Independent and Dependent variables. The correlations among the variables suggest that B.G affiliates are younger, larger, and more diversified than standalone companies. Descriptive Statistics, Correlation matrix, Multicollinearity test and Multiple Linear Regression Analysis has been presented.

4.1 Descriptive Statistics

Table A presents the descriptive statistics of 86 AFs and 90 NAFs for the years 2007-17. Our results are consistent with the studies of George et al. (2011). The performance of B.G AFs is better than the NAFs and B.G AFs are more profitable than the NAFs. This result confirms our first hypothesis that, higher cash flow increases the performance of AF's than NAF's. These findings are similar with the results of the study conducted by Ahmad et al. (2018).

The result of descriptive statistics implies that the investment sensitivity of B.G AFs is less than NAFs; as we measured the financing constraints through investment cash flow sensitivity. Thus, the average financial constraint of B.G AFs is 0.03, which is less than that of NAFs (0.15). Hence, B.G AFs face less financial constraints than stand alone firms.

On average, the AFs companies are significantly higher leveraged (0.30) comparatively NAFs (0.26) that means the B.G AFs have more access to the capital markets. However, the AFs tend to have higher cash flows (0.07) than NAFs (0.05). Descriptive statistics indicate that on average, the AFs have higher growth opportunities (0.02) than NAFs have (0.01).

Table A shows that on average, the AFs size is 3.51 that is greater than the NAFs size (3.27). Hence, the firms large in size have more access to internal finance as compared to the small firms; so, B.G AFs have more access to the internal finances. Furthermore, the B.G AFs are almost three years older (38 years old) than NAFs (35 years old). The findings of Lensink et al. (2003) showed that the small firms are more financially constrained than the large firms.

4.2 Correlation Matrix

In Table B, the correlation results show that ROA is positively correlated with INV (0.230), F.C (0.255), CF (0.325), GO (0.332) and FS (0.212) of the B.G AFs and NAF'S. It confirms our first hypothesis that states that higher Cash flow increases the performance of AF's than NAF's. In other words, the B.G AFs perform better than the NAFs. In both cases, ROA is positively correlated with INV, F.C, CF, GO, and FS. It means the investment opportunity, growth opportunity; cash flows, its size and its financial constraints also increase. B.G AFs are less financially constrained as compared to the non AFs. However, the investment and the growth opportunity of B.G AFs are higher than the NAFs. More the firm will be profitable, lower will be its reliance on the debt (leverage). For AFs, Firm's age (-0.016) has a negative impact on firm's profitability as well as on Firm's leverage. This finding is consistent with the results of the study conducted by Almeida et al. (2015). While for the NAFs, Firm's age has a positive impact on the firm's performance. These results are supported by the studies of Ahmad et al. (2018); Gedefaw Birhanu and Wezel (2020).

The correlation between the cash flows and investment is positive in the case of AFs and NAFs. However, this correlation is much lower for the B.G AFs (0.157) as compared to the correlation for the NAFs (0.181). This finding supports our second hypothesis, i.e. Lower Investment of AFs decreases the Cash Flows Sensitivity of AF's than NAFs. Less CF Sensitivity for the B.G AFs shows that the B.G AFs have better access to the internal funds as compared to the non AFs, as we have used cash flows as a proxy for internal funds. This finding is same with the results of the study conducted by the Lensink et al. (2003). For AFs, the investment is positively correlated with F.C (0.025), GO (0.231), FS (0.162) and FA (0.019). The investment is negatively correlated with the firm's leverage (-0.161). Same findings have been shown for the NAFs. It shows that better the investment of firm, higher its growth opportunity, its financing constraints and its size will be. Negative relationship between firm's leverage and the investment shows that, more the investment of a firm will be sensitive, lower will be its access to the capital markets. These results are consistent with the studies of He et al. (2013). The AFs financial constraints and the firm's size are less than NAFs. In other words, the B.G AFs are less financially constrained and are smaller in size than the NAFs. However, the growth opportunity of the B.G AFs is higher than the NAFs. These results are consistent with the study of Makina and Wale (2016).

4.3 Multicollinearity

The correlation coefficient between all variables is less than 0.5, indicating that multicollinearity is not an issue that we need to address in the regression analysis. And our results are also supported by the study of Castaldi et al. (2019); Ellouze and Mnasri (2020); Yana (2020).

4.4 Performance of AFs and Non AFs

In the Table 3.2 Panel A, Multiple Linear Regression analysis has been performed to check the impact of Independent Variables on ROA and to test our first hypothesis that states, the Performance of B.G AFs is better than NAFs. We used Return on Assets to measure the firm's profitability. The reason why ROA is used as measuring firm profitability is that ROA avoids misrepresentations in measuring the performance because of firm's financing decisions and it captures the profitability of the firm as a whole.

The results illustrate that B.G AFs are more profitable while, the NAFs are less profitable. In the Table 3.2 Panel B, the coefficient of cash flows for the B.G AFs is 0.9511 and is significantly positive. But for the NAFs, CF Coefficient is 0.9323. Higher the growth of a firm, more profitable it will be. So, B.G AFs have higher GO and are more profitable as compared to NAFs. According to the prior research, firm size is significantly negative in the case of B.G AFs indicating that the larger firms under perform. Identically, this is consistent result with the study of Sanan et al. (2019). Moreover, the B.G AFs are more profitable as compared to NAFs. Similar results are found in the studies of Ghose and Kabra (2017).

The results demonstrate that older firms are more profitable as compared to the younger firms. This result is consistent with the study of Mehmood and Farid Hasnu (2019). A negative value of the coefficient of interaction term (-0.5375) states that, the firms rely on external funds and firms are not financially constrained. Generally, this reflects the Trade off theory that states the negative relationship between interaction term (2 CFit x B.Git) of B.G AFs and firm performance means that firm is not financially constrained (Saeed and Athreye, 2014). Hence, all variables are significant at 5% significant level in the case of AFs. Likewise, for all variables of NAFs, the P-value is significant and less than 0.05.

4.5 Investment of AFs and NAFs

Our second hypothesis states that Lower Investment of AFs decreases the Cash Flows Sensitivity of AF's than NAFs. Table 3.3 Panel A and Table 3.3 Panel B display the Multiple Linear Regression results estimated using the ordinary least squares estimation method (OLS). Similarly, in the Table 3.3 Panel A, the coefficient of constant for B.G AFs is -0.1144 that is a negative value. It exhibits that the sensitivity of investment is less for AFs. While, the coefficient of constant for the NAFs is 0.2053 that is a positive value that states the sensitivity of investment is more for NAFs. Additionally, the results propose that the NAFs are more financially constrained than AFs. Because, the B.G AFs enjoy the benefit of internal capital market as well as B.G AFs have good reputation.

In the Table 3.3 Panel B, the investment of NAFs is more sensitive. Indeed, our results are the reflection of Pecking order theory stating that, if the cash flow coefficient for a firm's investment is positive, then it means that the firm is financially constrained. Hence, our results demonstrate that the B.G AFs are not financially constrained (Saeed and Athreye, 2014). All things considered the findings suggest that the growth opportunity has a significant positive impact on the firm's investment because the investment has easy access to the internal funds (cash flows). These findings are similar to the results of Almeida et al. (2015).

Results state that the firm size has significant positive impact on the firm investment. The results of the study by Gupta and Mahakud (2018) supported our findings. Moreover, the firm's age has a significant negative impact on the AFs and Non-AFs investment. We can see that, the interaction term of B.G AFs has a significant positive impact on the firm investment. Additionally, all variables (Cash flows, interaction term, growth opportunity, firm size and firm age) reported a significant relationship with the investment of B.G AFs and NAFs. Furthermore, these findings are consistent with the studies of George et al. (2011); Saeed and Athreye (2014).

4.6 Financing Constraints of AFs and NAFs

The key difference between the AFs and NAFs is due to financing constraints. Nevertheless, the results supported our third hypothesis, i.e. Lower Financial constraints increase availability of funds for AF's than NAFs. Indeed, our findings are consistent with the studies of He et al. (2013).

In the Table 3.4 Panel A, Our Multiple Linear Regression analysis in the case of AFs, illustrates that the B.G AFs are less financially constrained as compared to the NAFs. Comparatively, these findings are similar to the results of Saeed and Athreye (2014). Accordingly, In the Table 3.4 panel B for the NAFs, the positive sign of CF coefficient value (0.0401) displays that the B.G AFs are more financially constrained (FC). It states that B.G AFs have higher GO than the NAFs. Indeed, the growth opportunity of B.G AFs is higher than the NAFs.

So, firm size has a significant negative impact on firms financing constraints. On the other hand, only firm age is insignificant in the case of B.G AFs while cash flows, interaction term, growth opportunity and FS are significant. We can see that only the growth opportunity is significant in the case of NAFs while other variables are insignificant.

4.7 Leverage of AFs and NAFs

Our fourth hypothesis states that the Higher Leverage increases access to the cheap source of financing for AFs than NAF's. In the Table 3.5, Panel A, the coefficient of c for B.G AFs (0.4016) is greater than the coefficient of c for NAFs (0.3597). In other words, the B.G AFs are more leveraged than NAFs and have easy access to financial debt as well as they can avail the tax shield benefit as stated above in the trade off theory (Modigliani and Miller, 1958). Furthermore, the results demonstrate that if the B.G AFs are more leveraged then their GO will decrease by 0.0077 units because, too much reliance on the debt is not good for the firms. Hence, our finding are supported by the study of Ghosh (2010). FS has an inverse impact on the firm's leverage in the case of AFs and NAFs. Thus, these findings are supported by the results of Ghosh (2010).

As shown above, Cash flows, interaction term, growth opportunity, firm size and firm age are insignificant in the case of B.G AFs while only cash flow of NAFs is insignificant. However, Growth opportunity, firm size and firm age are significant in the case of NAFs.

5 Discussion

Our findings demonstrate that the cash flows of B.G AFs have a negative impact on the firm investment indicating that the B.G AFs are not financially constrained. Similarly, the investment of B.G AFs would be less risky than NAF (Subramaniam, 2019). Simultaneously, the Japanese B.G firms exhibit a lower investmentcash flow sensitivity (George et al., 2011). In the meantime, the studies of Shin and Park (1999) found that non group firms in Japan and Korea exhibit a positive sensitivity of investments to the cash flows. Afterward, Kato et al. (2002) found a significantly lower sensitivity associated with the Japanese B.G AFs.

Generally, the results of NAFs display that there exists a positive relationship between NAFs and investment. It implies that the NAFs are financially constrained. B.G AFs enjoy the advantages of internal capital markets (Almeida et al., 2015; Carney et al., 2011). Moreover, the other firms in the group can lend B.G AFs and charge a rate less than that is charged by the external finances (Gopalan et al., 2007).

Basically, this research has been conducted to compare the performance of AFs and NAFs in Pakistan. As shown above, our findings confirmed that the B.G AFs are more profitable and have higher growth opportunities as compared to the NAFs. Furthermore, the B.Gs help the B.G AFs to overcome external market deficiencies by increasing their growth (Purkayastha, 2018). In addition, the B.Gs assist the B.G AFs to compete effectively and survive (Belenzon et al., 2013). Indeed, the B.Gs affiliation provide facilities to its member firms while facing the diverse changing in the institutional environment (Gubbi et al., 2015) and enables the member firms to efficiently react against the threats in the market. Hence in brief, there is a positive effect of B.G affiliation on the financial performance (Castaldi et al., 2019).

Fundamentally, the NAFs are more financially constrained than AFs. In fact, the B.G AFs are high leverage as compared to the NAFs (Mehmood and Farid Hasnu, 2019). Moreover, the member firms of a B.Gs have access to the intra-group loans and external capital markets (Ghatak and Kali, 2001). Subsequently, Majumdar and Sen (2007) found that the B.Gs tend to seek a relatively higher amounts of institutional borrowing.

5.1 Conclusion

In this paper, we compared the Performance, Investment, Financing Constraints and Leverage of AFs and NAFs in Pakistan. Our results supported our hypotheses. First, findings suggested that B.G AFs are more profitable than NAF'S. Second, AF's have higher growth opportunities as compared to the NAFs. Third, results show that NAFs are more financially constrained and have higher cash flows sensitivities than AF's. This suggests that AF's have easy access to the external findings. Moreover, it was established that the AF's leverage ratio is higher than the NAFs, demonstrated that the B.G AFs are more leveraged than NAFs and have easy access to financial debt. The study sheds new light on the profitability of AF's and NAF's, and presents a better perceptive of investment and fund raising in these firms. Our study proposes that growing firms and less financial constrained firms are better attraction for the foreign direct investment in Pakistan. By using the results of our study, Policy-makers can make strict policies to improve the financial conditions of NAF's in order to facilitate the NAF's access to financial markets.

5.2 Policy Implications and Guidelines

The findings of this study have important implications and guidelines for the readers, the policymakers, the management and the financial sector of Pakistan. Significantly, this study prospects the factors affecting the governance and the performance of business groups. By identifying the factors, practitioners can find guidelines for operating and controlling structures, resources and governance practices corresponding to their own positions as directors, managers, shareholders, investors or policymakers. Additionally, the B.G AFs have been found to have political implications and policy influence on their financing choice by removing the market distortions, keeping others on a disadvantage.

Previous studies could not check the relationship between the variables of B.G AFs vs. NAFs. Our study implications are important for future empirical research and help the researchers to relate financial constraint status with firms directly. Hence, our study implications can be useful for the corporate managers of B.G AFs as well as NAFs as they can make their policies and corporate investment decisions accordingly.

Investors can enjoy the benefits from this study and can take guidelines regarding fundraising and investment projects. Firms managers can get the guidelines from our study regarding cost of financial constraints and benefits of non-financially constrained firms. So, they can make corporate strategies according to it. Our research investigated that the B.G AFs attract the investors.

Thus, the findings of our study have implications for the corporate managers to plan appropriate investment policies so that the corporate investment and performance can be improved. With the help of findings of our study, the corporate managers of AFs and NAFs can find out the different possible factors influencing the performance of firms. Similarly, these findings will also help the management to understand and demand for the more effective corporate governance mechanisms to be implemented.

Policy distortion theory explains the ability of B.Gs to influence the policymakers. Consequently, Policymakers are recommended enhancing regulative structure and its implementation. Furthermore, Policymakers must consider the financially constrained firms and make policies to help such firms to reduce financial constraints and improve their access to external funds. The findings of our study have shown that the B.G AFs are less financially constrained as compared to the NAFs that imply the Pakistani government should provide a good governance and a healthy investment scenario in a country that attract the foreign investors. Indeed, the most of the NAFs are under the control of local government and their performance is poor in the terms of investment and cash flow sensitivity. In short, the Government can modify their investment plans in order to meet the cash flows on time.

5.3 Limitations and Future Research

As was previously stated, the research has been conducted to compare the performance, investment behavior, leverage, and cash flow sensitivity of AFs vs. NAFs in the Pakistan. Though, the results of previous studies strongly supported to the findings of our study. Our study is limited to the Pakistani Firms. As, the sample size of our study consists of 176 firms that is small. Future research can be conducted by taking large sample from the different countries.

Conversely, the study can be conducted by taking the different sample period and different variables.

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Appendix

Table A: Descriptive Statistics

	Mean		Median		Max		Min		SD	
	Aff	Non-Aff	Aff	Non-Aff	Aff	Non-Aff	Aff	Non-Aff	Aff	Non-Aff
ROA	0.04	0.01	0.03	0.02	0.69	0.86	-0.97	-2.75	0.12	0.21
INV	1.11	1.21	1.06	1.09	4.18	3.02	0.39	0.05	0.23	0.32
F.C	0.03	0.15	0.00	0.00	0.80	0.94	-0.88	-1.90	0.11	0.18
LEV	0.39	0.26	0.37	0.24	3.27	2.56	0.00	0.00	0.22	0.34
CF	0.07	0.05	0.06	0.06	0.73	0.86	-3.33	-2.68	0.17	0.21
GO	0.02	0.01	0.04	0.03	1.42	1.10	-1.72	-2.83	0.20	0.28
FS	3.51	3.27	3.50	3.32	5.07	4.77	1.46	0.06	0.58	0.66
FA	38.73	35.06	36	29	104	157	13	3	15.59	19.47

Notes:

a) Figures are for total 176 firms covering the period of 2007-2017
b) ROA consists of EBIT/Total Assets. INV is the Total Assets it / Total Assets it-1.
c) INV CF Sensitivity is the measure of Financing constraint and its proxy is CF it/ Investment it-1.
d) Leverage is measured by Total Debt/ Total Assets. CF is measured by (EBIT + depreciation) ÷ TA.
e) Growth Opportunity is measured by the Natural Log of (Current Year Sales ÷ Previous Year Sales).
f) Firm Size consists of log of total assets. Firm Age is the number of years since its incorporation date.

Table B: Correlation Matrix

Correlation Matrix of Affiliated firms

Variables	ROA	INV	F.C	LEV	CF	GO	FS	FA
ROA	1							
INV	0.230	1						
F.C	0.255	0.025	1					
LEV	-0.431	-0.161	-0.055	1				
CF	0.325	0.157	0.246	-0.258	1			
GO	0.332	0.231	0.112	-0.085	0.263	1		
FS	0.212	0.162	-0.042	-0.069	0.204	0.060	1	
FA	-0.016	0.019	-0.104	-0.062	-0.021	-0.020	0.098	1

Correlation Matrix of Non-Affiliated firms

Variables	ROA	INV	FC	LEV	CF	GO	FS	FA
ROA	1							
INV	0.205	1						
FC	0.463	0.054	1					
LEV	-0.045	-0.034	-0.003	1				
CF	0.174	0.181	0.463	-0.032	1			
GO	0.115	0.199	0.088	-0.007	0.115	1		
FS	0.446	0.180	0.319	0.041	0.429	0.113	1	
FA	0.009	0.027	-0.027	-0.077	-0.001	0.003	0.061	1

Notes:

a) Table 4.2 shows correlation for 86 affiliated and 90 non-affiliated firms for the period of 2007-2017.
b) ROA is the firm performance consists of EBIT/Total Assets.
c) Investment (INV) is the Total Assets $_{it}$ / Total Assets $_{it-1}$.
d) Leverage (LEV) is measured by Total Debt/ Total Assets.
e) Financial constraints (F.C) is measured by Investment CF Sensitivity and its proxy is CF it/ INV it-1.
f) Growth Opportunity (GO) is measured by the Ln of (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (F.S) consists of Log (total assets).

Sr. #	Variables	Abbreviation
1	B.G AFs	B.G AF
2	AFs	AF
3	NON- AFs	NAF
4	B.G AFs	GAF
5	Business Group	B.G
6	Cash Flows	CF

Sr. #	Variables	Abbreviation
7	Growth Opportunity	GO
8	Firm Size	FS
9	Firm Age	FA
10	Leverage	LEV
11	Investment	INV
12	Financing Constraints	FC
13	Firm Performance	ROA

Table 3.1: Variables and Formulas

Variables	Formulas	References
Leverage (LEV)	Total Debt / Total Assets	(Gupta & Mahakud, 2018) (Almeida et al., 2015) (Buchuk et al., 2014) (Ghosh, 2010)
Investment (INV)	Total Assets it / Total Assets it-1	(Gopalan et al., 2007)
Financing Constraints	Investment CF Sensitivity = (CF it / Investment it-1)	(He et al., 2013)
Firm Performance	(EBIT ÷ Total Assets)	(Ghose Biswajit & Kailash Chandra Kabra, 2017)
Cash Flows	(EBIT + depreciation) ÷ TA	(Almeida et al., 2015).
Growth Opportunity	Ln (Current Year Sales ÷ Previous Year Sales)	(Ghosh, 2010)
Firm Size	Log of Total Assets	(George et al., 2011) (Gupta & Mahakud, 2018) (Ghose Biswajit & Kailash Chandra Kabra, 2017)
Firm Age	Current Year - Incorporation Year	(George et al., 2011) (Gupta & Mahakud, 2018) (Ghosh, 2010)
B.G Firm	Dummy Variable	(George et al., 2011) (Gupta & Mahakud, 2018) (Majumdar & Sen, 2006)
Interaction Term	CF X Business Group	(George et al., 2011) (Gupta & Mahakud, 2018)

Table 3.2 (Panel A): Performance of AFs

B.G Affiliated Firms
Dependent Variable ROA

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary	Chi-Sq.Stats	Chi-Sq.d.f.	Prob.	
Cross-section random	97.399448	5	0	
Cross-section random effects test comparisons:				
Var	**Coe ff**	**S.E**	**t-Stats**	**Prob.**
CF	0.9511	0.9522	0.0013	0.9759
Int. Term	-0.5375	-0.5480	0.0013	0.7759
GO	0.0937	0.0876	0.0000	0.0310
FS	-0.1081	0.0051	0.0003	0.0000
FA	0.0047	0.0000	0.0000	0.0000
Var	**Coeff**	**S.E**	**t-Stats**	**Prob.**
C	0.2070	0.0461	4.4864	0.0000
CF	0.9511	0.1063	8.9482	0.0000
Int. Term	-0.5375	0.1078	-4.9861	0.0000
GO	0.0937	0.0118	7.9322	0.0000
FS	-0.1081	0.0174	-6.2071	0.0000
FA	0.0047	0.0009	5.1268	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.7222	Mean DV		0.0384
Adj R²	0.6930	S.D. DV		0.1174
S.E. of reg	0.0650	Akaike info crit		-2.5369
Sum sq res	3.6148	Schwarz crit		-2.0702
Log L.H	1290.97	Hannan-Quinn criter.		-2.3591
F-stats	24.70	Durbin-Wat stat		1.2597
Prob(F-stats	0.0000			

Fix Effect Model

Dependent Variable: ROA				
Method: Panel Least Squares				
Date: 04/10/19 Time: 15:08				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 86				
Total panel (balanced) observations: 946				
Dependent Variable: ROA				
Var	**Coeff**	**S.E**	**t-Stats**	**Prob.**
CF	0.9511	0.1063	8.9482	0
Int. Term	-0.5375	0.1078	-4.9861	0
GO	0.0937	0.0118	7.9322	0
FS	-0.1081	0.0174	-6.2071	0
FA	0.0047	0.0009	5.1268	0
C	0.2070	0.0461	4.4864	0
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.7222	Mean DV		0.0384
Adj R²	0.6930	S.D. DV		0.1174
S.E. of reg	0.0650	Akaike info crit		-2.5369
Sum sq res	3.6148	Schwarz crit		-2.0702
Log L.H	1290.97	Hannan-Quinn criter.		-2.3591
F-stats	24.70	Durbin-Wat stat		1.2597
Prob(F-stats	0.0000			

Notes:
a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is also independent variable that is measured by the Natural Log of (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

Table 3.2 (Panel B): Performance of NAFs

Non- Affiliated Firms
Dependent Variable: ROA

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary	Chi-Sq.Stats	Chi-Sq.d.f.		Prob.
Cross-sect rand	20.408471	4		0.0004
Cross-section random effects test comparisons:				
Var	**Coe ff**	**S.E**	**t-Stats**	**Prob.**
CF	0.9323	0.9494	0.0000	0.0005
GO	0.0062	0.0037	0.0000	0.0451
FS	0.0211	0.0121	0.0000	0.1929
FA	-0.0011	0.0001	0.0000	0.0228
Var	**Coeff**	**S.E**	**t-Stats**	**Prob.**
C	-0.0696	0.0231	-3.0197	0.0026
CF	0.9323	0.0097	96.3676	0.0000
GO	0.0062	0.0053	1.1612	0.2459
FS	0.0211	0.0076	2.7871	0.0054
FA	-0.0011	0.0005	-2.0966	0.0363
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.9597	Mean DV		0.0064
Adj R^2	0.9555	S.D. DV		0.2111
S.E. of reg	0.0446	Akaike info crit		-3.2942
Sum sq res	1.7785	Schwarz crit		-2.8291
Log L.H	1724.61	Hannan-Quinn criter.		-3.1173
F-stats	229.22	Durbin-Wat stat		1.7656
Prob(F-stats	0			

Fix Effect Model

Dependent Variable: ROA				
Method: Panel Least Squares				
Date: 04/10/19 Time: 16:31				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 90				
Total panel (balanced) observations: 990				
Cross-section SUR (PCSE)				
Dependent Variable: ROA				
Var	**Coeff**	**S.E**	**t-Stats**	**Prob.**
CF	0.9323	0.0116	80.1804	0.0000
GO	0.0062	0.0036	1.7214	0.0855
FS	0.0211	0.0080	2.6473	0.0083
FA	-0.0011	0.0005	-2.1241	0.0339
C	-0.0696	0.0301	-2.3130	0.0209
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.9597	Mean DV		0.0064
Adj R^2	0.9555	S.D. DV		0.2111
S.E. of reg	0.0446	Akaike info crit		-3.2942
Sum sq res	1.7785	Schwarz crit		-2.8291
Log L.H	1724.61	Hannan-Quinn criter.		-3.1173
F-stats	229.22	Durbin-Wat stat		1.7656
Prob(F-stats	0.0000			

Notes:

a) Figures of Regression Analysis are for 90 non-affiliated firms over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is also independent variable that is measured by the Natural Log of (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

Table 3.3 (Panel A): Investment of AFs

B.G Affiliated Firms
Dependent Variable: Investment

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq.St at s	Chi-Sq.d.f.	Prob.
Cross-sect rand		91.250548	5	0
Cross-section random effects test comparisons:				
Var	Coeff	S.E	t -Stats	Prob.
CF	-0.4745	-0.3107	0.0404	0.4149
Int . Term	0.4086	0.4283	0.0418	0.9232
GO	0.1806	0.2405	0.0002	0.0000
FS	0.5613	0.0519	0.0032	0.0000
FA	-0.0194	0.0002	0.0000	0.0000
Var	Coeff	S.E	t -Stats	Prob.
CF	-0.1144	0.1539	-0.7428	0.4578
Int . Term	-0.4745	0.3546	-1.3380	0.1813
GO	0.4086	0.3597	1.1360	0.2563
FS	0.1806	0.0394	4.5846	0.0000
FA	0.5613	0.0581	9.6564	0.0000
C	-0.0194	0.0030	-6.3834	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.2245	Mean DV		1.105576
Adj R²	0.1429	S.D. DV		0.23433
S.E. of reg	0.2169	Akaike info crit		-0.127104
Sum sq res	40.2404	Schwarz crit		0.339655
Log L.H	151.120	Hannan-Quinn criter.		0.050774
F-stats	2.750	Durbin-Wat stat		2.009594
Prob(F-stats)	0.0000			

Fix Effect Model

Dependent Variable: INVESTMENT				
Method: Panel Least Squares				
Date: 04/10/19 Time: 16:13				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 86				
T otal panel (balanced) observations: 946				
White period standard errors				
Var	**C oeff**	**S .E**	**t-S tats**	**Prob.**
CF	-0.4745	0.0354	-13.3875	0.0000
Int . Term	0.4086	0.1200	3.4047	0.0007
GO	0.1806	0.0788	2.2931	0.0221
FS	0.5613	0.1049	5.3495	0.0000
FA	-0.0194	0.0041	-4.7142	0.0000
C	-0.1144	0.2763	-0.4139	0.6791
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.2245	Mean DV		1.1056
Adj R²	0.1429	S.D. DV		0.2343
S.E. of reg	0.2169	Akaike info crit		-0.1271
Sum sq res	40.2404	Schwarz crit		0.3397
Log L.H	151.120	Hannan-Quinn crite		0.0508
F-stats	2.750	Durbin-Wat stat		2.0096
Prob(F-stats)	0.0000			

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

Table 3.3 (Panel B): Investment of NAFs

Non -Affiliated Firms
Dependent Variable: Investment

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary	Chi-Sq.Stats	Chi-Sq.d.f.	Prob.	
Cross-sect rand		73.198069	4	0
Cross-section random effects test comparisons:				
Var	Coeff	S.E	t-Stats	Prob.
CF	0.1902	0.1710	0.0016	0.6286
GO	0.1503	0.1912	0.0001	0.0001
FS	0.4216	0.0564	0.0022	0.0000
FA	-0.0140	0.0003	0.0000	0.0000
Var	Coeff	S.E	t-Stats	Prob.
CF	0.2053	0.1524	1.3467	0.1784
GO	0.1902	0.0639	2.9740	0.0030
FS	0.1503	0.0352	4.2730	0.0000
FA	0.4216	0.0500	8.4343	0.0000
C	-0.0140	0.0033	-4.1931	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.2232	Mean DV		1.1053
Adj R^2	0.1426	S.D. DV		0.3180
S.E. of reg	0.2945	Akaike info crit		0.4829
Sum sq res	77.6988	Schwarz crit		0.9479
Log L.H	-145.04	Hannan-Quinn criter.		0.6597
F-stats	2.77	Durbin-Wat stat		2.1737
Prob(F-stats)	0.0000			

Fix Effect Model

Dependent Variable: INVESTMENT				
Method: Panel Least Squares				
Date: 04/10/19 Time: 16:47				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 90				
Total panel (balanced) observations: 990				
Var	**Coe ff**	**S.E**	**t-Stats**	**Prob.**
CF	0.1902	0.0639	2.9740	0.0030
GO	0.1503	0.0352	4.2730	0.0000
FS	0.4216	0.0500	8.4343	0.0000
FA	-0.0140	0.0033	-4.1931	0.0000
C	0.2053	0.1524	1.3467	0.1784
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.2232	Mean DV		1.105
Adj R^2	0.1426	S.D. DV		0.318
S.E. of reg	0.2945	Akaike info crit		0.483
Sum sq res	77.70	Schwarz crit		0.948
Log L.H	-145.04	Hannan-Quinn criter		0.660
F-stats	2.77	Durbin-Wat stat		2.174
Prob(F-stats)	0.0000			

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

Table 3.4 (Panel A): Financing Constraints and AFs

B.G Affiliated Firms
Dependent Variable: Financing Constraints

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq.Stats	Chi-Sq.d.f.	Prob.
Cross-sect rand		23.977989	5	0.00
Cross-section random effects test comparisons:				
Var	Coeff	S.E	t-Stats	Prob.
CF	-0.0326	0.0452	0.0026	0.1310
Int. Term	0.1192	0.0615	0.0028	0.2718
GO	0.0329	0.0313	0.0000	0.6894
FS	-0.0513	-0.0198	0.0006	0.1786
FA	0.0001	-0.0007	0.0000	0.5516
Var	Coeff	S.E	t-Stats	Prob.
CF	0.1982	0.0674	2.9419	0.0034
Int. Term	-0.0326	0.1552	-0.2100	0.8337
GO	0.1192	0.1574	0.7576	0.4489
FS	0.0329	0.0172	1.9072	0.0568
FA	-0.0513	0.0254	-2.0189	0.0438
C	0.0001	0.0013	0.0659	0.9475
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.3645	Mean DV		0.0276
Adj R^2	0.2976	S.D. DV		0.1133
S.E. of reg	0.0949	Akaike info crit		-1.7803
Sum sq res	7.7039	Schwarz crit		-1.3135
Log L.H	933.06	Hannan-Quinn criter.		-1.6024
F-stats	5.4480	Durbin-Wat stat		1.6255
Prob(F-stats)	0.0000			

Fix Effect Model

Dependent Variable: Financing Constraints				
Method: Panel Least Squares				
Date: 04/10/19 Time: 15:11				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 86				
Total panel (balanced) observations: 946				
White period standard errors				
Var	**Coeff**	**S .E**	**t-S tats**	**Prob.**
CF	-0.0326	0.0172	-1.8932	0.0587
Int. Term	0.1192	0.0286	4.1722	0.0000
GO	0.0329	0.0140	2.3467	0.0192
FS	-0.0513	0.0260	-1.9764	0.0484
FA	0.0001	0.0013	0.0694	0.9447
C	0.1982	0.0914	2.1684	0.0304
Effects Specification				
Cross-section fixed (dummy variables)				
R^2	0.3645	Mean DV		0.0276
Adj R^2	0.2976	S.D. DV		0.1133
S.E. of reg	0.0949	Akaike info crit		-1.7803
Sum sq res	7.7039	Schwarz crit		-1.3135
Log L.H	933.06	Hannan-Quinn criter		-1.6024
F-stats	5.4480	Durbin-Wat stat		1.6255
Prob(F-stats)	0.0000			

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation

Table 3.4 (Panel B): Financing Constraints and NAFs

Non-Affiliated Firms
Dependent Variable: Financing Constraints

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq.Stats	Chi-Sq.d.f.	Prob.
Cross-sect rand		191.993762	4	0
Cross-section random effects test comparisons:				
Var	Coeff	S.E	t-Stats	Prob.
CF	0.0401	0.2607	0.0003	0.0000
GO	0.0273	0.0198	0.0000	0.0754
FS	-0.0375	0.0454	0.0005	0.0002
FA	-0.0010	-0.0004	0.0000	0.6934
Var	Coeff	S.E	t-Stats	Prob.
CF	0.1874	0.0726	2.5815	0.0100
GO	0.0401	0.0305	1.3165	0.1883
FS	0.0273	0.0168	1.6317	0.1031
FA	-0.0375	0.0238	-1.5766	0.1152
C	-0.0010	0.0016	-0.6375	0.5240
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.4718	Mean DV		0.0312
Adj R²	0.4170	S.D. DV		0.1837
S.E. of reg	0.1403	Akaike info crit		-1.0006
Sum sq res	17.6254	Schwarz crit		-0.5356
Log L.H	589.292	Hannan-Quinn criter.		-0.8238
F-stats	8.6049	Durbin-Wat stat		1.8213
Prob(F-stats)	0.0000			

Fix Effect Model

Dependent Variable: Financing Constraints				
Method: Panel Least Squares				
Date: 04/10/19 Time: 15:17				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 90				
Total panel (balanced) observations: 990				
White period standard errors				
Var	**Coeff**	**S .E**	**t-S tats**	**Prob.**
CF	0.0401	0.0862	0.4649	0.6421
GO	0.0273	0.0165	1.6587	0.0975
FS	-0.0375	0.0306	-1.2251	0.2209
FA	-0.0010	0.0025	-0.4043	0.6861
C	0.1874	0.0910	2.0596	0.0397
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.4718	Mean DV		0.0312
Adj R²	0.4170	S.D. DV		0.1837
S.E. of reg	0.1403	Akaike info crit		-1.0006
Sum sq res	17.6254	Schwarz crit		-0.5356
Log L.H	589.292	Hannan-Quinn criter		-0.8238
F-stats	8.6049	Durbin-Wat stat		1.8213
Prob(F-stats)	0.0000			

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation

Table 3.5 (Panel A): Leverage and AFs

B.G Affiliated Firms
Dependent Variable: Leverage

Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq.Stats	Chi-Sq.d.f.	Prob.
Cross-sect rand	28.917	5	0

Cross-section random effects test comparisons:

Var	Coeff	S .E	t-S tats	Prob.
CF	0.0082	-0.0159	0.0023	0.6129
Int. Term	-0.1652	-0.1742	0.0024	0.8540
GO	0.0069	-0.0047	0.0000	0.0189
FS	0.0064	0.0099	0.0010	0.9119
FA	0.0029	0.0000	0.0000	0.1039

Var	Coeff	S .E	t-S tats	Prob.
CF	0.1746	0.1017	1.7170	0.0863
Int. Term	0.0082	0.2343	0.0349	0.9722
GO	-0.1652	0.2376	-0.6954	0.4870
FS	0.0069	0.0260	0.2658	0.7904
FA	0.0064	0.0384	0.1660	0.8682
C	0.0029	0.0020	1.4434	0.1493

Effects Specification
Cross-section fixed (dummy variables)

R^2	0.6162	Mean DV	0.2987
Adj R^2	0.5758	S.D. DV	0.2200
S.E. of reg	0.1433	Akaike info crit	-0.9564
Sum sq res	17.559	Schwarz crit	-0.4897
Log L.H	543.38	Hannan-Quinn criter.	-0.7785
F-stats	15.2497	Durbin-Wat stat	0.9394
Prob(F-stats)	0.0000		

Fix Effect Model

Dependent Variable: Leverage
Method: Panel Least Squares
Date: 04/10/19 Time: 15:21
Sample: 2007 2017
Periods included: 11
Cross-sections included: 86
Total panel (balanced) observations: 946
White period standard errors

Var	Coeff	S .E	t-S tats	Prob.
CF	0.0545	0.2242	0.2431	0.8079
Int. Term	-0.2250	0.2271	-0.9907	0.3221
GO	-0.0077	0.0256	-0.3000	0.7643
FS	-0.0125	0.0230	-0.5432	0.5871
FA	-0.0012	0.0010	-1.1738	0.2408
C	0.4016	0.0880	4.5661	0.0000

Effects Specification

	S.D.	Rho
Cross-section random	0.1419	0.5092
Period fixed (dummy variables)		
Idiosyncratic random	0.1393	0.4908

Weighted Statistics

R^2	0.0935	Mean DV	0.2987
Adj R^2	0.0789	S.D. DV	0.1467
S.E. of reg	0.1408	m squared resid	18.4255
F-stats	6.3946	bin-Watson stat	0.7996
Prob(F-stats)	0.0000		

Unweighted Statistics

R^2	0.0997	M ean DV	0.2987
Sum squared resid	41.1836	Durbin-Watson stat	0.3577

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
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c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

Table 3.5 (Panel B): Leverage of NAFs

Non-Affiliated Firms
Dependent Variable Leverage

Hausman Test

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary	Chi-Sq.Stats	Chi-Sq.d.f.	Prob.	
Cross-sect rand	191.99376	4	0	
Cross-section random effects test comparisons:				
Var	**Fixed**	**Random**	**Var(Diff.)**	**Prob.**
CF	-0.0546	-0.0767	0.0003	0.2183
GO	0.0838	0.0585	0.0000	0.0000
FS	-0.1867	-0.0282	0.0013	0.0000
FA	0.0179	0.0011	0.0000	0.0000
Var	**Coeff**	**S .E**	**t-S tats**	**Prob.**
CF	0.3597	0.1436	2.5047	0.0124
GO	-0.0546	0.0602	-0.9069	0.3647
FS	0.0838	0.0331	2.5281	0.0116
FA	-0.1867	0.0471	-3.9639	0.0001
C	0.0179	0.0031	5.7025	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.4751	Mean DV	0.3748	
Adj R²	0.4206	S.D. DV	0.3645	
S.E. of reg	0.2775	Akaike info crit	0.3639	
Sum sq res	68.9795	Schwarz crit	0.8289	
Log L.H	-86.1208	Hannan-Quinn criter.	0.5407	
F-stats	8.7194	Durbin-Wat stat	0.7656	
Prob(F-stats)	0.0000			

Fix Effect Model

Dependent Variable: Leverage				
Method: Panel Least Squares				
Date: 04/10/19 Time: 15:17				
Sample: 2007 2017				
Periods included: 11				
Cross-sections included: 90				
Total panel (balanced) observations: 990				
White period standard errors				
Var	**Coeff**	**S .E**	**t-S tats**	**Prob.**
CF	-0.0546	0.0602	-0.9069	0.3647
GO	0.0838	0.0331	2.5281	0.0116
FS	-0.1867	0.0471	-3.9639	0.0001
FA	0.0179	0.0031	5.7025	0.0000
C	0.3597	0.1436	2.5047	0.0124
Effects Specification				
Cross-section fixed (dummy variables)				
R²	0.4751	Mean DV		0.3748
Adj R²	0.4206	S.D. DV		0.3645
S.E. of reg	0.2775	Akaike info crit		0.3639
Sum sq res	68.9795	Schwarz crit		0.8289
Log L.H	-86.1208	Hannan-Quinn criter.		0.5407
F-stats	8.7194	Durbin-Wat stat		0.7656
Prob(F-stats)	0.0000			

Notes:

a) Figures of Regression Analysis are for 86 affiliated over the period of 2007-2017.
b) Firm performance (ROA) is dependent variable and comprises of EBIT/Total Assets.
c) Cash Flow (CF) is independent variable and is measured by (EBIT + depreciation) ÷ TA.
d) Interaction Term (Int. Term) is independent variable and measured as CF x Dummy Variable.
e) Dummy variables is 1 if firm is affiliated to a business group, and 0 otherwise
f) Growth Opportunity (GO) is IV, measured by the Ln (Current Year Sales ÷ Previous Year Sales).
g) Firm Size (FS) is a control variable and consists of log of total assets.
h) Firm Age also control variable and calculated as the number of years since its incorporation.

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Business Motives among Students: A Qualitative Appraisal of Drive Theory

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Abstract. The main purpose of conducting this exploratory qualitative research was to determine the nature of drive theory among business students, where drive is a motivation for some behavior based on a biological need. The target population of our study was the university-level business students. We used the existing literature on drive theory for the development of interview protocol. After the finalization of the interview protocol, six semi-structured interviews were conducted with the business students enrolled in different programs with different fields of specialization. The data were analyzed using ATLAS.ti version 8. We found that business-related motivation was created by six drivers including aggressiveness, acquisition, achievement, social recognition, personal goals and desire for power.

Key words: Business students, Qualitative Research, Drive Theory

1 Introduction

Researchers of the field suggest that the individuals behavior is always guided by specific drives or emotional needs, which are usually the consequence of our evolutionary inheritance (Nohria et al., 2008). The drive theory maintains that individuals are motivated to perform specific actions to minimize the internal stress as a consequence of unfulfilled bodily needs. This theory is beneficial in comprehending only such behavior that contains a substantial biological element, such as physical needs and desires. Thus the motivation of individuals in the face of a physical need may be termed as a drive.

Individual behavior can also be explained through a drive, habit, and a set of other factors as well as incentives (Hull, 1943; Spence, 1956). That is, an individuals motivation towards the execution of particular behavior is dependent on the extent of bodily requirements multiplied by the intensity of appropriate patterns of behavior backed up by certain rewards (Weiner, 2010). Additionally, Lawrence and Nohria (2002) claimed that nature of an individual plays a significant role in shaping the choices they make in their everyday life. The researcher argued that the human drives to comprehend, bond, defend, and acquire.

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Motivation is defined as a driving force behind an individuals actions of all types (Rabideau, 2005). Drive refers to stimulation that arises from within the organism on the frontier between the mental and the somatic ... a measure of the demand made upon the mind for work in consequence of its connection with the body(Freud, 1957). Several researchers contributed to the drive theory differently. Drives were conceived in evolutionary circumstances (Freud, 1957, 2021). Freud (1920) suggested the presence of aggression and libido drives originating from fundamental biological instincts of death and love.

The disciplines of sociology, psychology, decision making and economics all together hold a common aspiration to understand the fundamental disposition, character, or temperament of human nature. Such an enormous consideration of multidisciplinary attention towards the determination of who we are indicates the tremendous consequences of this endeavor (Steel and König, 2006). Luckily, the latest cross-disciplinary researches in domains like biology, neuroscience, evolutionary psychology have also enabled us to discover more about the human brain (Nohria et al., 2008).

The issue with drive theory is that the behavior of an individual is not always stimulated by physiological needs only. For example, people can also eat when usually they are not even really hungry (Ondabu, 2014). Motivation, attitudes, and intentions are discussed quite extensively in the existing literature; however, very little attention has ever been paid to the applicability of drive theory to business world (De Jorge-Moreno et al., 2012). Despite the fact that some studies have tried to explore the connections of drive theory in business fields; for example, the motivation of women to start businesses in developed and emerging economies (Solesvik et al., 2019) and examining the role of culture on the motivational behaviors of women entrepreneurs in Mongolia (Aramand, 2013). Jones and Paulhus (2011) claim that exploration of attitudes and motivation towards entrepreneurship among students is yet to be explored area with regards to understanding the nature of drive theory.

Furthermore, researches were also conducted to investigate the entrepreneurial orientations, entrepreneurial intentions, and entrepreneurial desires of business students (Elenurm, 2012; Gelaidan and Abdullateef, 2017; Palalić et al., 2017), experiences of business graduates while seeking admission in offshore MBA programs and how these MBA programs had met their needs (Ly et al., 2015), different factors determining the intentions of the student to study at universities (Watjatrakul, 2014) and new theory on incubation business was also developed using the social mechanisms approach (Ahmad, 2014).

Genoveva and Kartawaria (2020) found the factor that most influenced the business orientation is culture. Ran and Shi (2020) discovered that business students have a strong sense of opportunities and can grasp them and they may also choose to commence a business because of the temptation of resources and situations as compared to students from other majors. Attitude to sustainable development is more favorable among business students as compared to the nationwide sample. Soomro et al. (2020) found a positive and significant impact of Perceived feasibility, Perceived Desirability, and self-efficacy on Entrepreneurial intention among business students of Pakistani universities.

Bask et al. (2020) found that business students got higher scores on openness to change and self-enhancement, and lower scores on self-transcendence and conservation. Also, Jena (2020) examined the impact of attitude towards entrepreneurship education on entrepreneurial intention. Mahendra et al. (2017) found no direct relationship between entrepreneurial education and entrepreneurial intention among students of faculty of Management, Faculty of Economics. Entrepreneurial education takes part as an antecedent variable that contributes to affect directly on both entrepreneurial attitude and entrepreneurial motivation, and its impact indirectly on entrepreneurial intention.

Review of the literature suggests that no such research was conducted on determining the driving forces that motivated the students throughout their business program. Therefore, the purpose of this study is to determine the nature of the drive theory of motivation in business students in Pakistan, specifically in the context of Baluchistan. In other words, the basic objective of the current study is to explore substantial factors, other than physiological factors, that functioned as a driver or motivator for business students, which enabled them to remain committed and paved their path towards the achievement of academic excellence in the business program.

2 Methodology

This study aimed at conducting narrative qualitative research to determine the nature of drive theory among business students by using the semi-structured interview method. We tried to narrate the nature of drive theory with the perspective of business students only. The target population for this study was the university-going business students. Overall six interviews were conducted from business students enrolled in different programs with different fields of specialization.

2.1 Interviewees

According to the purpose of the current study, the target population was business students with the sample size of total six business students, as it is sufficient to conduct in-depth interviews from the participants within in the range of 5 to 50 for qualitative study (Dworkin, 2012). Later, by means of convenience sampling method, we conducted six interviews of business students enrolled in different programs with different fields of specialization areas at Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS). Overall, six interviews were conducted with 3 boys and 3 girls to maintain balance among gender opinions as well. We tried to take interviews from senior students like MBA and MS students because they have more experience regarding different motives, to get primary information on the subject under study. The participants were enrolled in MS, BS, and MBA with different areas of specialization.

2.2 Instrument

The authors developed an interview protocol to collect data from business students. The interview protocol was developed in accordance to the basic drives of an individual which has previously been studied in literature. The researchers also highlighted some probes in our interview protocol to get further information about the participant. They conducted tape recording interviews and transcribed them into ATLAS. Ti 8 and ended up creating six major categories. The above-mentioned software assisted the researchers in the process of coding, creating categories, and finally converting categories into a major theme.

2.3 Interviews and Transcription

We conducted face-to-face interviews, where we as interviewers introduced ourselves, research purpose, its objectives, and its importance. Participants were ensured that their data will be kept confidential as per the demand of each interviewee. Participants were inquired with several questions relative to drive theory systematically in the reasonable length of minimum 25 minutes of lengths. Further, it was ensured that the collection of data must be relevant to drive theory by reviewing literature as well. Finally, the researchers converted interviews into transcription then sent the file into ATLAS Ti 8.

2.4 Analysis

ATLAS Ti 8 software was used for the generation of different types of categories for current study. Firstly, the authors transcribed all the interviews that were conducted through the utilization of semi-structured interview protocol and recorded at minimum time duration of 25 minutes. Later, thorough reading and re-reading of the transcribed semi-structured interviews resulted in the development of different networks with various themes and further in the formation of six major categories. Following were the six major identified categories of the current qualitative research:

1. Acquisition motives
2. Achievement motives
3. Power Motives
4. Passion motives
5. Personal motives
6. Social motives

3 Results and discussions

The majorly identified categories of our study are discussed in the following section:

3.1 Acquisition Motives

Most of the business students took secured admission in the relative business program for acquiring a business degree and later the utilization of this business degree in the successful implementation of their business startup and for seeking a job in the corporate sector. A student reported, I want to seek a job in the corporate sector that would lead towards the enhancement of my marketing skills as well. Another stated,

I will utilize my degree for seeking a particular job and if I do not get the opportunity of doing a job then I will prefer to open my own business. I want to utilize the skills that I have attained in this program to its fullest. Concerning the scope of the business program, most of the students took admission in the business program for acquiring employment opportunities with highly attractive salary packages due to its rising scope in the market, skills, and abilities required for the implementation of their business idea and unique identity in this society. Our claim was supported by a student by saying, I would prefer to select the job that is offering me a highly attractive salary because I do not think that I will be satisfied with selecting the mediocre level of job with an average salary.

Others wanted to contribute to society and get the opportunity of utilizing their inborn personality traits in this field, which was otherwise not possible in other fields of study. A student reported,

I will utilize this degree to seek a job as well to open a business of my own. I would like to become a lecturer because I think it is the best way to contribute to this society. I am also planning to execute my own business in a standardized economy.

3.2 Achievement Motives

Students enrolled in the business program also worked hard towards the achievement of something better for their self-satisfaction in the program.

I want to perform better for my satisfaction. I feel bad about scoring less in exams. I do not prefer to study more or to stay awake until late nights or even my parents do not pressurize me for getting good grades but when I fail to achieve good grades then I feel bad when I do not get for what I studied.

Most of the business students worked effortlessly to achieve higher grades, while others worked towards the attainment of their CGPA within the specific range of not going below 3CGPA or above 3.5 CGPA. Another interviewee showed her concern by saying,

My cravings for achieving good grades never ends specifically when once you achieve something bigger than you work more towards its attainment for time and again. Sometimes when I fail to attain the desired results then I work harder to rectify my mistakes for next time.

These business students were also involved in the gradual acceptance of challenging tasks to outperform others. They also preferred to take feedbacks from their concerned teachers to achieve perfection in their work with rectifying their mistakes leading towards the achievement of relevant skills and continuous improvement. A student stated, I take feedbacks from my concerned teachers and friends for the rectification of my mistakes and to seek appreciation from them regarding my work. Another mention,

I appreciate taking feedbacks regarding the performance of my tasks. I feel bad in situations when the teacher does not give me any feedback after the deliverance of my presentation as well because I want to know that what were the mistakes that I committed and how can I rectify my mistakes. Therefore, for me, feedback matters a lot to know where I am standing.

They also preferred to take seek assistance from their family in making major decisions of their life more specifically in selecting the particular field of study.

3.3 Power Motives

Business students also exhibited the need for the attainment of power in relative group assignments, projects, tasks, and in seeking any employment opportunity as well. One student backed up this finding by saying, I want to perform as a group leader because I want people to follow me not that I am going to follow people. Another interviewee also quoted, Yes, attainment of power is very necessary to influence others in every sphere of life. Most of these students preferred to perform the role of a leader in the execution of particular group tasks. These students were quite successful in attaining power motives, as they were also performing the role of group leaders of their final case study project and research project as well. They were also involved in the execution of effective leadership styles and the management of conflicts such as the creation of a friendly environment and distribution of work according to the competency of their group members.

In terms of seeking employment opportunities, some wanted to apply for a mediocre level of job to get the basic level of understanding regarding the execution of the particular job and later to utilize this practical knowledge for performing higher-level jobs effectively. One of the students supported our claim by saying,

I think I will start with mediocre job rank first. I would like to first attain a basic level of understanding from lower ranks job then only I would be able to perform in a higher executive-level job.

However, some students wanted to initiate business individually while others wanted to initiate business in partnership with their friends that will eventually result in the creation of diverse business expertise and synergy among the group.

3.4 Passion Motives

Business students were usually faced with pressure and stress regarding their coursework. Their main motive was to transform their failure into their success. They felt the burden of assignments, quizzes, and projects and they are efficiently involved in coping up with such situations. When they felt stress first they tried to relax for a couple of hours and seek peer support. As one of our interviewees expressed, "I prefer to stay in the company of my friends to cope up with stress rather than stay in isolation.

They tended not to give-up and tried to self-control them that they can get done their projects and assignments on time. One of our interviewees supported this claim of ours: However, if that stressful situation has occurred due to delayed work then I try my best to complete that task first even if I had to make sacrifices I will go for it. They were also involved in following effective stress management practices through physical and mental exercises. Some of the business students seek motivation through changing their stressful environment by doing drawings, coloring, and listening to music as well.

I have researched a lot on overcoming the stress and anxiety in life. I succeeded at determining the solution for relieving stress by doing both physical and mental exercises. I usually follow the technique of doing drawings, coloring my notes, work on changing environment, do excessive walk, seek help through music and acquiring 20 minutes sleep in between any tasks relieve my stress and anxiety.

3.5 Personal Motives

Business students were inclined to consider personal motives towards the achievement of their goals. One of the interviewees stated,

My habits are studying or giving time to family and learning business in spare time which will help me in achieving goals. I love to spend time in the library but I don't have enough time for it so I have made up a library for myself at home.

Most of the students developed time management, consistency habits, excessive reading habits, and searching for new information that helps them to accomplish their goals. Whereas, there are some obstacles like societal influence, family conflicts, and participation barriers, which hindered students to achieve their goals but most of the students were motivated enough to handle such barriers with the help of time management and consistency habits. A student reported,

Other than this family conflicts influence in achieving goals because I have to give time to family, job, and learning of business so it's tough for me to give time each of them so for all this one needs to do time management. If you do time management then you have control over the conflicts, and I try to solve family conflicts but somehow these factors affect my goals.

The existence of negative societal influence resulted in the de-motivation of some girls but in response, girls were quite motivated to achieve their goals and they did not want to sacrifice their performance level. One interviewee stated that she wants to achieve her goals and help her parents not to make them feel the necessity of having a son. This claim was supported by one of the female students who reported,

There are some societal pressures which might influence my productivity but I do not let them affect my studies. Being a family with no brother to earn, pricks me sometimes but this factor also motivates me to do something big so that my family would not feel the necessity of having a son to serve them.

3.6 Social Motives

Along with the attainment of academic excellence, some business students also emphasized the fulfillment of social motives such that they tried to get themselves more involved in social and co-curricular activities arranged by the university. Their indulgence in social activities and co-curricular activities enabled them to develop links with other resourceful individuals. As one interviewee stated,

I prefer to participate in social or group activities conducted by the university because one should not limit himself/herself to studying few books only. One should seek to interact with people then their skills would be polished and developed and they can gain relevant experience as well.

The development of excessive social interactions also strengthened their choices of giving more importance to human relations. Most of the students also avoided switching groups for the attainment of both monetary and non-monetary benefits. They preferred to stay with their group and help them in maximization of resources through teamwork. One of our interviewee compiled

I will prefer to stay with the familiar group with least resources and expertise because you can work better with the individuals you know and in a familiar group people know each other skills and competency level which is a quite potential thing to do and through teamwork, even the scarce resources can be utilized to its fullest. Yet another stated,

Whenever shifting is concerned for attaining something more beneficial so I would definitely go for selecting the group with maximum resources but if it is about maintaining my relationships then I will not switch groups and its unethical as well. I will give more priority to humans rather than monetary benefits.

4 Discussion and Conceptual Framework

Based on our results and the review of existing literature we argue that the motives highlighted as the business-learning drivers can be associated in a more meaningful manner (Casciaro, 1998). Starting our discussion from the personal and social motives, we suggest that the personal motives depend upon the social motives of the students as it is the society that shapes personal inclinations. Growing up in the society, people have certain social motives like affiliation, aggression, altruism, comfort and approval, which could work as driving force for activation of personal motives (Casciaro, 1998). The personal motives lead person in certain way to act in different pattern based on the influence taken from social motives (Sears, 1951). The object of getting something desirable like incentives, reward, success, and encouragement are considered best examples of personal motives triggered by social motives. The personal motives generally result in development of sense of acquisition within society that could build up aggression motives and lead the people in particular direction. People have strong acquisition motives that could only be possible to achieve through passion or aggression motives (Sears, 1951; Specht et al., 2014). Notwithstanding, we propose that students personal motives are embedded in their social motives.

The common examples of acquisition motives could be earning wealth, capture strong social position, successful personality and looking unique in the society (Carlson and McChesney, 2015; Michalos, 2008). In other ways, it can be said acquisition motives lead to certain satisfaction level by achieving power, position and other desirable objects in the society (Specht et al., 2014). In class-based society, people have high degree to power motives that could satisfy their achievement motives but through taking basic input from social, personal, aggression and acquisition motives. We argue that students get motivated by the acquisition of high wealth and income that can make them better-off in the society (Davies et al., 1995; Helmreich et al., 1978; Kerckhoff, 1976; Michalos, 2008; Wilson, 1997). Therefore, we suggest that acquisition motives are outcomes of the personal motives of students. Thus, we propose a relationship between personal and acquisition motive such that former determines the latter.

Talking about personal values in the society, people can form instrumental and terminal values to move towards achievement motives (Sears, 1951; Specht et al., 2014; Thorne, 2000). Hence, it could be elaborated through the scientific discussion that social motive, personal motives, aggression motives, acquisition motives and power motives are considered as instrumental values those could lead person towards achievement of power (Balon et al., 2013; Busch et al., 2013; Maqsud, 1980; Obschonka et al., 2019; Vallerand et al., 2003). In other words, power is not independent of societal motives, personal yearning, and actual achievement (Davies et al., 1995; Ho and Astakhova, 2020; Kerckhoff, 1976; Vallerand et al., 2003). Hence, the determination of achievement motive depends on all factors that reside in the society, in personal motives and in the motive of achievement (Sears, 1951). We, therefore, place the power motives in our conceptual model as being determined through all those factors.

We put the achievement motive of business student as an outcome of acquisition motive. Since achievement cannot take place without acquisition (Davies et al., 1995; Kerckhoff, 1976; Wilson, 1997). So, we argue that when students motive to achieve is driven by acquisition. Students are driven by achievement motive once they have already reached the acquisition level since no achievement is possible without acquisition (Carlson and McChesney, 2015; Helmreich et al., 1978; Michalos, 2008). It is this reason; we have put the achievement motive as an outcome of the acquisition motive. Considering this discussion, we propose the following conceptual framework as given in figure 1:

5 Conclusion

In the review of drive theory literature, it was observed that our understanding of drive theory demanded further development due to the basic presumptions-associated limitations of previous theoretical frameworks. The issue with drive theory is that the behavior of an individual is not always stimulated by physiological needs only. Moreover, motivation, attitudes, and intentions are discussed quite extensively in the existing literature; however, very little attention

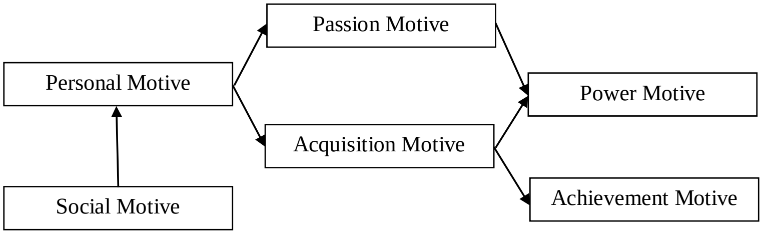

Figure 1: Conceptual Framework of the Themes

has ever been paid to the applicability of drive theory to business world. There is a need to explore the factors affecting students intentions for becoming entrepreneurs. The need for and impact of entrepreneurial education in Pakistan still needs to be explored. The current study is an effort to know the motives of business students of Pakistan.

The process of entrepreneur includes an examination of behavioral role and situational factors (Gartner, 1985) and demographic variables (Davidsson, 1995) on the intentions to commence a new business startup. These variables help to advance entrepreneurial drive among the students who want new startup. Current business students are future business leaders, and it is essential to study and examine their entrepreneurial drive and refine their entrepreneurial profile. Therefore, current study has contributed to existing literature of drive theory by exploring the psychological drives of business students of Pakistan.

The findings of the current study can have implications for the formulation of policies and strategies for encouraging business students in opening up their own businesses. Moreover, the results will also encourage the higher authorities of universities in determining different motivational factors that enabled business students to secure admission in the business program and the extent to which they strive to fulfill their motives by indulging in different activities to achieve their goals. It will also enable researchers to explore more on the psychological drives of an individuals rather than focusing on physiological drives only.

The results revealed that most of the business students took admission in the business program for accomplishing their acquisition motives of getting the business degree and successful utilization of this degree in acquiring employment opportunities and acquired business knowledge in starting their businesses. Others wanted to acquire the opportunity of utilizing their inborn personality traits in the business field due to its rising scope in the market which was otherwise not possible in other fields of study. They were also inclined towards the accomplishment of achievement motives as well by working effortlessly to obtain the desired CGPA according to their competency and urged towards participating in challenging tasks for their self-satisfaction. They also preferred to seek feedback and suggestions from concerned teachers and parents to seek perfection in their academics.

Business students revealed their inclination towards the attainment of power motives in relative group projects, assignments, tasks, and jobs as well. They successfully satisfied their need to attain power by volunteering as a group leader in particular group assignments and applied for jobs that enabled them to gain maximum benefits in terms of acquiring both monetary and non-monetary resources.

These students also exhibited the motives of transforming their failures into success. They did not let their personal and academic life failures affect their goals of achieving something bigger in this program. They also developed certain productive habits and practices for achieving personal motives of accomplishing their academic goals. Along with the goals of attaining excellence in studies, these students also emphasized the accomplishment of social motives in their academic life by participating excessively in social events and co-curricular activities arranged by the university.

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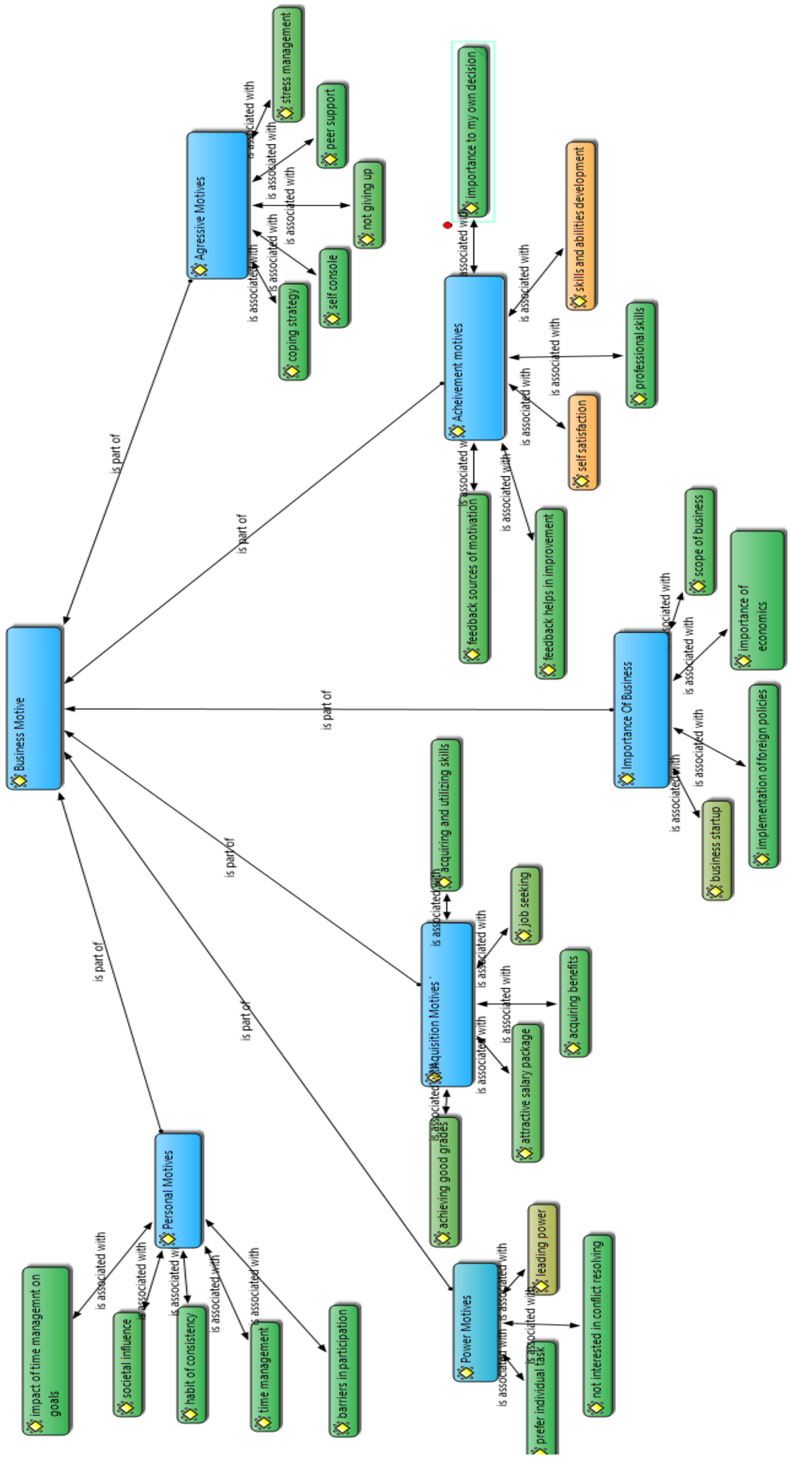
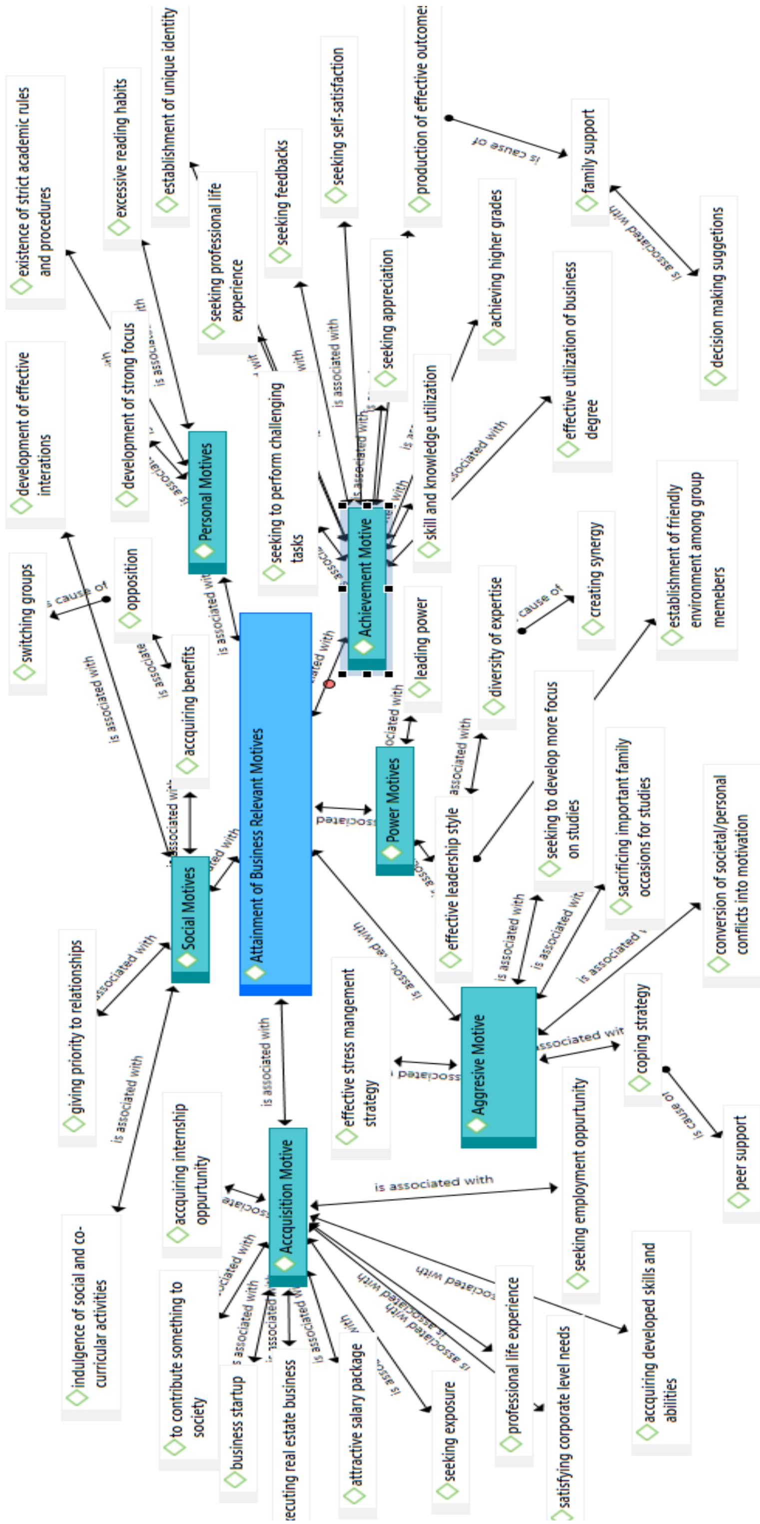
Appendix


Business Motive
is part of
Agressive Motives
is associated with
stress management
peer support
not giving up
self console
coping strategy
Acheivement motives
importance to my own decision
skills and abilities development
professional skills
self satisfaction
feedback sources of motivation
feedback helps in improvement
Importance Of Business
scope of business
importance of economics
implementation of foreign policies
business startup
quisition Motives
acquiring and utilizing skills
job seeking
acquiring benefits
attractive salary package
achieving good grades
Personal Motives
impact of time managemnt on goals
societal influence
habit of consistency
time management
barriers in participation
Power Motives
leading power
not interested in conflict resolving
prefer individual task


Attainment of Business Relevant Motives
Personal Motives
Achievement Motive
Power Motives
Social Motives
Aggresive Motive
Accquisition Motive
existence of strict academic rules and procedures
excessive reading habits
establishment of unique identity
seeking professional life experience
seeking feedbacks
seeking self-satisfaction
production of effective outcomes
family support
decision making suggetions
development of effective interations
development of strong focus
seeking to perform challenging tasks
seeking appreciation
skill and knowledge utilization
achieving higher grades
effective utilization of business degree
switching groups
opposition
accquiring benefits
leading power
diversity of expertise
creating synergy
establishment of friendly environment among group memebers
effective leadership style
seeking to develop more focus on studies
sacrificing important family occasions for studies
conversion of societal/personal conflicts into motivation
giving priority to relationships
effective stress mangement strategy
coping strategy
peer support
indulgence of social and co-curricular activities
accquiring internship oppurtunity
seeking employment oppurtunity
to contribute something to society
business startup
attractive salary package
seeking exposure
professional life experience
satisfying corporate level needs
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Behavior-Based Perceived Leadership Styles as Determinants of Organizational Functionality

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Abstract. This study aimed at exploring how the perception about leadership styles affected the functionality of the Higher Education Institutions. We used a self-administered questionnaire to a sample of 328 administration and faculty members of several public sector universities. The data collected were analyzed through structural equation modeling in AMOS 26. We found significant results between autocratic and democratic leadership styles as determinants of organizational functionality; such that the perceived autocratic leadership style negatively affected organizational functionality and the perceived democratic leadership style positively affected organizational functionality. The effect of laissez-faire was however statically insignificant. We thus conclude that the perception of a democratic leadership style improves organizational functionality; whereas, the perception of autocratic leadership negatively affects organizational functionality. Practically, the study shows as the employees are given the right to participate in the matters of a higher education institution, the organization becomes more functional.

Key words: Organizational leadership, functional leadership, dysfunctional leadership, implicit leadership theory.

1 Introduction

In this study, we have tried to explore how the perception of a leadership style affects the working culture or the functionality of an organization. The literature on leadership suggests great influence on the social and cultural environment of any organization (Chemers, 2014). Perceived leadership style on the other hand has been given little attention by the researchers. The concept of perceived leadership styles suggests that every individual in an organization can form a different perception about the leadership style of his or her supervisor or senior (Forsyth and Burnette, 2010).

Organizational functionality is primarily defined as the proper working of individuals as per the required norms and standards of the organization (Thompson, 2013). Thus, an organization going on as per the required standards may be termed as functional or otherwise dysfunctional.

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The role of leadership is shaping organizational functionality, which cannot be ignored and so is the role of perceived leadership styles.

Many studies on dysfunctional organizations investigated the question with various variables and approaches. A deeper review of dysfunctional literature shows that the problem has been examined about individual conducts in the labor market (López-Domínguez et al., 2013). Research based on human actions suggests that interpersonal instability stems from individuals' dissatisfaction in corporate settings. Any research relies on particular medical disorders, psychological characteristics, and social environments in the workforce among people associated with aggression or behavioral issues (Griffin and Moorhead, 2011).

Other studies offer a more comprehensive summary of the harmful inferences of ”counterproductive actions” by individuals about organizational roles (Levine and Moreland, 2012). All areas of study concentrate on what people with mental disorders do to company dysfunctions. Even organizations free of individual behavioral problems in the workplace may always have these individuals and organizational dysfunctions. Although it is challenging to deal with behavioral challenges, those actions' primary effect is a positive one (Alemu et al., 2016).

1.1 Problem Statement

The central concern or issue this study addresses is about the role of perceived leadership in determining the organizational functionality. At the beginning of the 20th century, there arose a ”trend” about organizational Culture in the management field. Organizational culture is a unifying tool for transforming an organization, but its intensity may affect efficacy and achievements or shortcomings crucially. Interpersonal culture abstract arguments are evident in the irony that an organization has an organizational culture and a culture (Domagała, 2017). There arose the concept of organizational functionally.

Besides, Organizational Functionality can be defined as the shared, basic assumptions an organization has learned while dealing with and resolving the environment and performing in efficient ways. External adaptation and internal integration problems that new members are taught are the right way to solve them. That organization has its own unique culture that evolves overnight in two dimensions to represent its identity: visible and invisible. A better functioning organization's visual aspect is expressed in its espoused principles, ideology, and purpose. Simultaneously, the hidden component resides in the unspoken set of values that govern the organization's employees' behavior and expectations (Al-Alawi and Alkhodari, 2016). The effect is that institutions become unstable, not only because of their internal contradictions but also because of an organization's interaction with its environment. Therefore, we consider that there is a need for studying the effect of the perceived leadership styles on the functionality of public sector universities.

Should the perceived leadership style in universities be considered while studying, them being functional? Unfortunately, it has been observed the leadership factor has been understudied with basically the unpleasant effects while seeing it as the mentoring factor in organizational settings (Harper et al., 2015). However, academia's leadership factor plays a vital role in employing its everyday running (Fullwood et al., 2013). Likewise, any other organization, universities are affected by the type of leadership responsible for its operations.

”With organizational life's increasing complexity, confusion and dynamism, organizational dualities and the latent contradictions they spawn are becoming more common” (Ashforth et al., 2014). The analysis of the subject literature concludes that organizational Culture, which can be described as ”organizational standards and expectations about an organization's actions and conduct," will inevitably promote the development and maintenance of such a working environment (Aarons et al., 2012).

Using this strategy, each company will decide how procedures arise, fix problems, establish habits, and unify intervention strategies, ensuring that the enterprise's dysfunctions are avoided. The influence of the circumstances under which Culture is thriving in the running of an organization. It should be thus consciously established and encourage the correct practices, the achievements and the risks involved with the everyday activities of a business underlined and the reality that any part of the organization takes place at all stages, which helps to prevent long-term disturbances and anomalies in the organization's actual functioning.

1.2 Significance of Study

This study is relevant to the target sector as formal leadership is still in a state of ferment (Alvesson and Sveningsson, 2015). How employees perceive their leaders and associate the functionality of their organization will be studied. We can see how perception is related to shaping an employee's performance (Cook and Beaven, 2013). Organizations with high-level functionality often attribute to the type of leadership present (Müller and Turner, 2010). That type of leadership, being practiced, will indicate that it is making the organization functional or dysfunctional (Oreg and Berson, 2011). Leadership is a crucial factor for any organization's growth and performance. Efficient leadership competencies and attributes guarantee an organization's performance when weak management competencies and practices contribute to the individual company's collapse. The presumed leadership traits dependent on actions have been seen to guarantee harmony, communication, good efficiency, and a high standard of services resulting in an organization's effectiveness.

A good leader boosts an institution's performance and vice versa (MalekalketabKhiabani and Abdizadeh, 2014). In the current day, there are huge variances amid the leaders of the functional and dysfunctional organization (Alemu et al., 2016). Your working style depends on the structure of your organization. The corporate structure defines your role, responsibilities, and Culture of work. The system requires an office, posting, hierarchy, etc. (Marquardt, 2011).

For maximum efficiency, organizations require good leadership. As we recognize, leadership is a function both incorporated and worthy of being learned. Leadership in companies discusses individual and professional psychology. Interpersonal organizations rely on improving organization appropriate leadership qualities and abilities. This means that people have the potential to confront and grow during difficult times in the industry. The supervisors are precisely defined and differentiated. The member will be able to manage the party of citizens (Müller and Turner, 2010).

A perfect business chief does not control anyone. This will lead people under him and give them a sense of purpose to accomplish corporate goals and behave responsible. He ought to be confident without a doubt. He would be empathic and consider the group's needs. A corporate chief can direct many and coordinate collective behavior (DeRue and Ashford, 2010).

As organizational leaders, extremely ambitious individuals with a high energy level, a drive for self-esteem, intelligence, thorough work knowledge, are honest and flexible. Leadership develops knowledge and expertise in leadership, effective collaboration, dispute management, and community problem-solving strategies. Organizational leaders communicate organizational purpose, vision, and goals, build staff trust, operate efficiently, aid workers in the organizations' efficient development, and contribute to their goals (Hu Juneja, 2011).

A supervisor is superior in the organizational setting and the leader of his group of aides.

That includes the managing director trying to make sure the employees collaborate to accomplish departmental or organizational goals. Hence, the boss needs to step in and assume action as chief if there are issues (DeRue and Ashford, 2010).

Members, executives, and staff of companies significantly impact the working environment's culture and efficacy. The interpretation is how we all perceive our interactions. It's a significant and demanding aspect of human conduct; supervisors will understand that everyone has different standards. People do not necessarily stand out when they try to serve their ideals. People do not necessarily follow as their beliefs suggest. You do something you think to reflect your beliefs. Secondly, it implies that the brain's understanding of an event and its behavior often has a time difference. Thirdly, the trial over this period is what can be used as a perception (Otara, 2011).

Mostly, people think they are efficient and successful members, but they might have a somewhat different opinion about their perceived supporters. Berelson and Steiner (1964), in their book Human Behavior explain cognition as a dynamic mechanism through which people choose sensory stimuli and assemble them into a cohesive and rational representation of the environment. We respond to such conditions based on what we think rather than what it is. We always see only what we expect to see in a particular circumstance. And the way we react depends, not just on what has been told, but on what we feel. Sensitivity is just another opportunity that a person uses to develop the real urge to be the best he/she might have. By using all available tools, we can achieve great things with our employees (Elliott, 2012).

To executives as well as philosophers, the issues of corporate success and failure are essential. This article has shown that the Framework of Organizational Growth has empirical support. It can be used as a meaningful lens for managers to plan future organizational development. This opens the way for researchers to new questions and problems. Although it does not address all issues in this field in full, we conclude that this article provides the foundation for a new course in research and management practice that can potentially be of significance (Flamholtz and Randle, 2015).

The research will be directed to the universities present in Quetta and will see how the leadership factor makes them functional or dysfunctional. Leadership is a very imperative position in any organization, and the study will help us find out what we want them to do and be as they lead us (Alemu et al., 2016). The leadership role will be evaluated against the characteristics from the perceived leadership theory, which will give us insight into their roles from different dimensions, i.e., their personality, ethical behavior, use of power, and negligence. And a study on this area will help better the role of leadership in making academic leadership more purposeful.

1.3 Study Aims and Rationale

The study aims to understand an organization being functional or dysfunctional through the leadership factor. This study will be evaluating the behavioral-based perceived leadership styles of the data collected and checking their functions related to them from the Higher Education Institutions present in Quetta. This will help us see how the leadership style will affect these organizations' functionality and dysfunctionality at a very small level as the most operative leadership role will be studied. The immediate supervisor and subordinate relationship will be studied. The practical implication of this research will be for individual leaders. The variables could serve these individual leaders to improve their style of leading their subordinates (Alemu et al., 2016).

2 Literature Review

2.1 Organizational Functionality

The term functional is defined as having a practical use or working properly (Thompson, 2013). Functional organization is a form of organizational structure using the function or role based theory of specialization. It permits decision making to be decentralized because matters are delegated to specialized individuals or groups. It is up to them to implement, evaluate or control the procedures or objectives specified. According to the group's primary role, the functional organization includes the whole of the business (Boneh et al., 2011).

Among the structures designed to define leadership, the Functional Leadership System is one of them. Much leadership research was done, many researchers years back, have tried to identify what differentiates a trustworthy leader from the masses. The result is a large variety of theories. These are therefore graded according to the perspective of the study. Popular leadership analyzes theories of characteristics, behavioral theories, likelihood theories, transformation theories, transactional theories, great man theory, and functional theories (Kuijk, 2018).

Many studies on dysfunctional organizations investigated the question with various variables and approaches. A deeper review of dysfunctional literature shows that the problem has been examined about individual conducts in the labor market (López-Domínguez et al., 2013). Research based on human actions suggests that interpersonal instability stems from individuals' dissatisfaction in corporate settings. Any research relies on particular medical disorders, psychological characteristics, and social environments in the workforce among people associated with aggression or behavioral issues (Griffin and Moorhead, 2011).

Other studies offer a more comprehensive summary of the harmful inferences of "counterproductive actions" by individuals about organizational roles (Levine and Moreland, 2012). All areas of study concentrate on what people with mental disorders do to company dysfunctions. Even organizations free of individual behavioral problems in the workplace may always have these individuals and organizational dysfunctions. Although it is challenging to deal with behavioral challenges, those actions' primary effect is a positive one (Alemu et al., 2016).

The illusory visibility of corporate culture's meaning hides the underlying issues connected with knowing it. The multiplicity of its concepts is the source of its many terms in the literature of the topic, including "a set of values, rituals, objectives, opinions, and attitudes" (Wiseman et al., 2017), "a pattern of assumptions" (Schein, 2010), "individual invention" (Habib et al., 2014)," normative beliefs" (Domagała, 2017), "an organization's autonomous nervous system," "a network of meanings created by people in the organization phase," "a mutual development."

The assessment of an organization's stability is an incredibly demanding activity as it also requires very intense and complex dysfunctionality in specific ways. Interpersonal interactions with the individual itself, the company itself, and the organizations nature will be studied. Every organization has its various malfunctions, which show that organizational malfunctions are "anomalies that are defined as the deviations from the actual working of an organization compared to a model that works (Domagała, 2017). Dysfunctions can have many origins and exist in an institution's different areas. The established causes of dysfunctions include "the disruptions occurring during the execution of an organization's essential functions, the dysfunctions arising from the differentiation of goals or of perception or both, and the effect of this situation on the interaction between the organization's leadership and its followers (Schein, 2010).

While we use the terms "ability," "competence," and "efficiency interchangeably, we render other distinctions. In technological fields, we refer to a person's capability or an entity's core competencies; in social issues, we refer to a person's leadership capacity or an organization's potential (Ulrich and Smallwood, 2012). When a business delivers on its employees' combined competencies and abilities, it is said to have organizational functionality. While an individual may be technically proficient or possess leadership qualities, the company may or may not share these qualities. Corporate flexibility allows organizations to transform their methodology know-how into performance (If so, workers who succeed in these areas would certainly remain employed; if not, they will become frustrated.) A central communications expertise, for instance, does not bring benefit unless the company may trigger improvements (Ulrich and Smallwood, 2012).

Organizations are continually making assumptions about their plans. Prudent leaders make decisions based on a detailed examination of present and past conditions, as well as a careful examination of potential possibilities. The researcher has proposed a model and method that allow organizations and their leaders to research (Alemu and Shea, 2019). The methods that may diagnose in an organizational context are the current method to examine organizational status to assess whether improvements are required to improve the organization's performance (Alderfer, 1980).

There are several reviews and theoretical models for diagnosing organizations in the organizational diagnosis literature. Another area of study that uses diagnostic technique is the CSF as a critical organizational success factor (Alemu and Shea, 2019). Lavy et al. (2010) suggested that managers should pay attention and diagnose crucial elements that influence the organization's overall performance. Alemu and Shea (2019) (p. 1520) mentioned that "The McKinsey 7S Framework, the Leavitt Model, and the MIT 90 Model" are examples of organizational diagnosis models that come under this principle.

A strategic plan, common principles, employee skills, leadership style, organizational structure, processes, and staff are the seven components of the McKinsey 7S framework essential for organizational effectiveness (Zheng et al., 2010). Besides, Leavitt (1965) model defines four fundamental elements: personnel, structure, task, and technology, affecting organization operations. The MIT 90 model is similar (Morton et al., 2012). The different variables that determine the performance of an organization are proposed. Outside the environmental and research, and technological advancement, the internal factors include organizational strategy, architecture, procedures, staff, and infrastructure (Morton et al., 2012).

The open system model is the second approach to organizational assessment (OS). According to this OS theory, organizations and their performance are determined by what happens internally and by environmental conditions. For example, the "Weisbord six box model" used "six distinct but interrelated variables" to enhance comprehension and organizational functions (Kontić, 2012; Stoller et al., 2013). Goals, organization, relations, incentives, helpfulness, and leadership processes are examples of such variables, which consider the outside world's work. According to the Congruence Model, organizations are structures made up of interconnected components. The higher the degree of fit or congruence in the interaction phase, the more successful the organization is (Seong et al., 2015).

The technical, political-cultural model corresponds to the OS method presented by Tichy (1983). These three pillars of technological, political, and cultural elements must all work together for organizations to function effectively (Zare and SHEKARCHI, 2014). "Burke and Letwin's model," based on the OS model, are considered previous research literature and their own consulting experiences (Stone, 2015). Through the interaction of 12 variables, i.e. project and policy, external environment, ideology, organization and style, leadership, procedures, atmosphere, skills-to-work commitment, motivation, and performance, we hypothesize multidirectional, causal linkages. Human interests and values are encouraged.

Furthermore, they term their model a strictly empirical causal model and interpret rather than any data analysis. Gavrea's recent causal model examined linear relationships between several variables categorized into practice and output variables. The model developed by Gavrea et al. (2011) did not go beyond the quest for relationships and direct effects to become a detailed model.

As a result, this study aims to diagnose a newly developed model to investigate the organization's functionality and leadership, employees, the way tasks are carried out (Culture), and organizational structure and governance (Alemu and Shea, 2019). Route analysis, a form of structural equation modeling (SEM), may describe a model that represents the degree and complexity of the effects of the organizational functionality. Finally, a road diagram illustrating and explaining the meaning is shown. The study will also look at the direct and indirect effects of these influences on organizational performance and their implications for education.

Three assumptions guide the selection of these variables for the model. The first assumption is that all these factors (leaders, personnel, community, and organizational structure) exist in every organization. Studies on functionality should consider all of them. These variables were carefully chosen based on the literature and commonly used components of the organizational diagnosis models available.

Furthermore, almost all of today's leadership theories relate leadership to the achievement of organizational objectives. Although the methodology and focus of leadership literature vary, it is widely acknowledged that management is an important component in the study of organizational functionality. Numerous studies on the topic emphasize the importance of the correlation between leadership and corporate success, either directly or indirectly (Vigoda-Gadot and Meisler, 2010).

Similarly, some previous studies have focused on the role of workers/staff in achieving organizational objectives. Employee care and active engagement are critical for the achievement of organizational objectives (Alemu and Shea, 2019). Amah and Ahiauzu (2013) hypothesized employees' involvement in organizational functionality and discovered a positive connection between productivity of employee and effective organizations.

Deal and Kennedy (1983); Tichy (1983); Waterman Jr et al. (1980); Weisbord (1976) are examples of organizational diagnosis models that use culture as a predictor. Organizational culture is a commonly used feature of the organizational study. Although their methods and models vary slightly, authors such as Deal and Kennedy (1983); Kotter (2008); Martin (1992); Schein (2010); Waterman Jr et al. (1980) all argue that organizational culture influences organizational performance directly or indirectly. According to Lee and Yu, culture affects an organization's efficiency and the organizational processes in place (Zheng et al., 2010).

It is difficult to conceptualize entities that are missing from the structure; however, understanding their effect on the organization's functionality level depends on how it is understood first. According to Meijaard et al. (2005), the structure is perceived within an organization regarding the division of labor and management mechanisms. Burke and Litwin (1992) provide a more detailed organizational structure described as "The organization of activities and persons in specific fields and positions of accountability, decision-making power, management, and communication to ensure the task and policy of the company can be effectively carried out." A field that commanded the attention of some researchers was the organizational structure concerning success. The research found that a company's structure influences its efficiency in both immediate and non-economic terms (Mehmood et al., 2016). Hao et al. (2012) identified an indirect performance-structure relationship via creativity (top level managers) and organizational learning (middle managers). Similarly, to achieve organizational objectives, emphasize the importance of organizational structure (Woodard, 2017). Even though leadership, personnel, culture, and structure are all important variables in the study of organizational diagnosis, none of these studies focuses on creating a research course model. Secondly, the two organizations' organizational efficiency with the same intent and capability in a similar setting that behaves differently because of internal factors in the organizations can be evaluated using the organization's internal variables. This is believed that an analysis of the extent of organizational functions utilizing internal variables within the business provides a more detailed appraisal and self-examination. It minimizes the noises generated by external variables. Therefore, in this study, all variables are deliberately chosen to be organization-specific. The third premise is that Organizational culture, staff, leadership, and an entity's control structure all have varying degrees of relationship with organizational performance; while assessing the degree and path of relationship impact is feature of current study.

2.2 Implicit Leadership Theory

In present days, leadership has become very significant in any management schema (Sadler, 2001). Leadership is both a field of research and practical ability to guide or "led" other individuals, teams, or entire organizations. Expert literature discusses different perspectives, comparisons between East and West leadership approaches, and (western) between the United States and European approaches. American academic environments define leadership as "a process of social influence in which an individual can attract help and support from others to perform a common task (Chemers, 2014).

Theories of situation, function, behavior, power, vision and values, charisma, and intelligence have been produced by management leadership studies (Chin, 2015). Functional leadership theory is a specific leadership theory expected to contribute to the organization's effectiveness or unit. This theory argues that the leaders' main task is to see that everything is taken care of for the group needs; therefore, if they have contributed to group effectiveness and cohesion, a leader can be said to have performed well. Leadership theories are developed through the study of successful leaders and the identification of actions and behaviors. Extensive studies with plenty of information enable leaders to correlate what they do with their successful results, i.e. their actions or functions. In the functional model, leadership is not centered on an individual but a set of community activities. Any group member can carry out such conduct so that every member can be part of leadership. The Functional Leadership Theory emphasizes how an organization and task are led than who is formally appointed (Hackman and Walton, 1986).

Although the leader is potentially at fault in chaotic situations, the author argues that various contextual factors cause success or failure. In essence, the leader is guilt-free. The three models/frameworks are specifically described to improve understanding of leadership disaster components (Walton, 2007). Management means working within the limits of the status quo, while leadership is more involved in seeing and attempting other, broader possibilities. However, to be effective, leaders must also be able to be managers (Govan et al., 2007).

It suggests at first glance that leadership is changing in universities and that university leadership needs to change. A second look may reveal additional ambiguities, especially related to the concept of' leadership.' Many people will consider leadership to be the domain of vice-chancellors, doctors, professors, department heads, and functional heads such as registry, catering, or property. But leadership can also be understood as a widely spread role in an institution and extends beyond senior post-holders official roles and responsibilities. Other comments on the values and traditions of democracy and the college may find the notion of leadership itself strange in the context of universities (Middlehurst, 1995).

With the help of the studies available on the functional and dysfunctional organizations, keeping the leadership factor in view that is one of the very emerging and researched themes, a study on the public sector universities of Quetta will be carried out. The study's core purpose is to look into the organizations with a view of how leadership at different levels affects them. It has been studied that prosocial aspects affect the organizational settings making them dysfunctional or functional (Brief and Motowidlo, 1986). The study will direct us to explore the ways organizations respond to them in terms of stability.

2.3 Implicit Leadership Theory

Implicit Leadership Theory (ICT), founded by Robert Lord and his associates, is a theoretical leadership theory (Forsyth and Burnette, 2010). The theory is that people construct and use abstract models of the universe for their life and actions (Schyns and Meindl, 2005). ILT means that leaders of the party collectively anticipate specific characteristics and expectations. The word tacit is used because it is not articulated publicly, and the word hypothesis is used as the concept generalizes the perception of the past into current interactions (Forsyth and Burnette, 2010). ILTs allow individuals to recognize leaders and help leaders prevent conflicts (Schyns and Meindl, 2005).

2.4 Individual Differences

While ILTs differ among people, many overlap with mission and relationship skills. Leaders need to succeed (Forsyth and Burnette, 2010). Most people follow a leader with job skills who is in charge, committed, influential, and actively engaged in community activities. A person, who loves, is optimistic towards fresh ideas and engaging in community activity, while assessing partnership skills is desired by many people (Schyns and Meindl, 2005). The heterogeneity in content and factor structure in male and female ILTs was opposed by three factors: leaders, active leaders, and supervisors, in a report by Offermann et al. (1994). Eight ILT influences, among males and females and over the three stimuli, were found to become relatively stable. Such eight facets are elegance, reactivity, dedication, spirit, attractiveness, beauty, and dictatorship. While ILTs vary depending on the person, this study's results indicate that this variability may be systemic and, at times, predictable (Shondrick et al., 2010).

2.5 Cultural Difference

Although cultural credibility is respected, leadership prototypes' quality plays a significant role in society (Den Hartog, 2015). For example, a study started in 1991, which measured leadership prototypes in 60 countries, found that more individualistic cultures favor ambitious leaders, while collectives often prefer self-defeating leaders (Arrospide et al., NA). Cross-cultural differences may be possible.

Implicit leadership theories (ILTs) of followers are central to understanding how leaders are represented and how they are successful. Although there is a great deal of knowledge about ILTs in the business context, we know little about professorial leaders while successful leadership is essential to academic performance and success (Tavares et al., 2018).

When should we know a leader? Socio-cognitive control and computer analysis methods respond to this question using the concept of implicit leadership theories (ICTs) (Hall and Lord, 1995). ILTs are rational constructs or prototypes built from a conception of a leader's characteristics and behaviors (Epitropaki et al., 2013). The relevance of ILTs to leadership is dependent on followers using the prototypes as a criterion to classify others as leaders (Junker and Van Dick, 2014). Followers' attitudes and actions toward leaders are influenced by this categorization process (Epitropaki et al., 2013). When a leader look like his idealized image the most, he will be viewed favorably (Foti et al., 2017).

Research has shown that the general congruence of ILT supporters and recognized leadership attributes are essentially linked to corporate outcomes such as leadership exchange consistency, leadership recognition, corporate engagement, employee satisfaction, and well-being (Epitropaki et al., 2013). Since such work focuses on leading designs in general, nothing is known regarding the importance of increasing a leader's particular trait in the categorization phase. However, the implied inference is that all lead characteristics are equally important for estimating results (Epitropaki et al., 2013). However, they cannot know how many prototypical characteristics could have personally led to these results or which prototype characteristics are most necessary to identify anyone as the chief. Since the prototype of leadership comprises of a set of characteristics that proponents consider members like wisdom, sensitivity, dedication, and dynamism to provide existed in certain dimensions, but well above the prototype, in others (e.g., intelligence), may be considered as comparable to the prototype (Epitropaki and Martin, 2004). However, we suggest that various configurations of attribute levels (i.e., a knowledgeable, arrogant leader vs. a receptive but unintelligent leader) can contribute to specific outcomes for leadership standards. This inference is possible that understanding of the will of the attributes of a leader, when integrated by the supporters, can acquire a strong weight to build an overarching opinion of the leader (Scott et al., 2008).

For instance, suppose one person expects leaders to have eight on a 1 (low) to 9 (high) scale regarding sensitivity and intelligence. Lets assume that this person creates an image of two leaders: the former is seen to be eight sensitive, the latter is four sensitive, and the latter to be eight intelligent. The two members are, on average, numerically similarly distant from the system. Nevertheless, if all other characteristics are kept stable, will such members be similarly prototypically categorized? The conclusion is yes, based on previous work congruence models. Nevertheless, if we believe that some of the leading attributes in the classification procedure, this query's response is not at all (Tavares et al., 2018).

We reason that the construction of leadership discernments outcomes from cognitive algebra (Scott et al., 2008), where the knowledge on leading characteristics earns different weights according to their uncertain importance. However, we think that this is not a pure additive operation. Instead, we claim that Asch (1961) structure model of perception fits the illusion that a leader is formed through supporters. The senses of the individual characteristics rely on other attributes. This more complex interpretation of the printing method is part of the systematic approach to perceptions (Finkel and Baumeister, 2010). Furthermore, we discover that, following the connectionist approach to categorizing leadership, the way followers incorporate knowledge about their leadership characteristics is affected by external factors (Lord and Shondrick, 2011).

Although, ILT studies have helped researchers recognize many leading characteristics of strong prototypic quality, there has been no attempt to examine how identifying such characteristics influence individual leadership expectations experimentally. We use socio-cognitive hypotheses on interpretation procedures and leadership categorization to fill this void to research experimental leadership interpretation development dependent on prototypical identification (Tavares et al., 2018). To this end, authors have conjoint analysis (CA). This technique allows manipulation of a multiple variables and the importance of an object's qualities to be evaluated (Rao, 2014). Authors checked the causal relation between identification using CA to evaluate the causal correlation between attribute identification and leadership impression.

We make four main contributions to the literature of ILTs by our manipulations. We first demonstrate that for recognition-based individual leadership standards, the (anti) prototypical features proposed by Epitropaki and Martin (2004) are heterogeneous. Additionally, to lure on a more all-inclusive method to the round of impression (Fiske and Taylor, 2013); we display the essence of leadership perception shaping setup; that is to say, we investigate whether the existence of a certain attribute can strengthen or dilute the effects of other attributes. Fourth, through the distortion of the leadership history (such as the armed, business, and political ones), authors presented the dynamism and consistency between the various leadership structures (Lord et al., 2001). To conclude, researchers presented the benefits of using CA in the exploration of ILTs.

2.6 ILTs and Leadership Categorization

Eden suggested the first ideas of Implicit Leadership and Leviatan focused on implicit personality theories. Eden and Leviatan (1975) requested their students to rate the conduct of leadership in a hypothetical situation. The findings (support, facilitation of function, communication facilitation, and target focus) were the same as previous studies. The citizens assessed the members of their respective organizations after examining the factor (Halpin and Winer, 1957). This result suggested that a link between leadership qualities was already in the participants' minds, regardless of whom they were assessing.

A system of leadership was suggested by Lord et al. (2001) to operate on ILTs by utilizing the principles of categorization theory (Rosch and Lloyd, 1978). The prototype of leadership can thus be described as an abstract cognitive framework shaped by the attributes closest to leaders (Epitropaki et al., 2013). Thus, persons are rated as leaders if their traits fit the perceiver's leadership template (Epitropaki et al., 2013).

Logical move in ILT research was to determine the characteristics of this leadership model. Several leading groups' characteristics have been identified (Schyns et al., 2018). The structure proposed by Epitropaki and Martin (2004) is used in our research, which is based on the work of Offermann et al. (1994). Epitropaki and Martin (2004) were interested in increasing the widespread use of ILTs by different groups of workers. Eight original considerations were reduced to six by Offermann et al. (1994), four of which apply to the prototype leader and two to the anti-prototype leader. The prototypes reflect intellect, sensitivity, responsibilities, and complexities, as well as the leader's prototypical traits. Epitropaki and Martin (2004) found that factor structure remained constant over time, with little variation among employee classes.

More recently, the connectionist perspective has emphasized the social influences that affect participants' thinking mechanisms in this leadership categorization philosophy. More precisely, the idea of leadership scheme or product activation (House et al., 2004). Developers that cause specific leadership schemes, depending on contextual factors such as background, perception of the demographic characteristics, gender, the leadership, and the nature of the task. This model helps prototypes of personal leadership to stay flexible and contextually reactive while preserving continuity and accuracy (Shondrick et al., 2010).

However, the areas of ILT are yet to be investigated considering the promising theoretical and scientific advances (Foti et al., 2017). We assume that an experimental method will help check the causal impact of these qualities in this area. Previous research examining the influence of leading prototypes has indirectly concluded that ILTs are similarly critical in understanding how individuals perceive others as leaders (Ayuninnisa et al., 2020). These models, however, do not make it possible to determine every attribute's value. Our research tackles this discrepancy by demonstrating how each prototypical trait is understood to affect followers' leadership expectations.

To resolve these problems, we have carried out a series of three research experiments utilizing CA. In First Study, we evaluate the comparative importance of determining their contribution to creativity perceptions by the six ILT factors used by Epitropaki and Martin (2004). Second Study explores how the leader perception is optimized for a more detailed view of this perception's development by testing interactions among ILT factors. In the Third Study, the complexities of the ILTs were finally evaluated to check the heterogeneity in the importance of ILT variables across contexts (e.g., industry, military, social, and political). We briefly present the CA methodology before describing the studies and illustrate how it fits our study resolve (Tavares et al., 2018).

2.7 Leadership Styles

The last half century has seen comprehensive leading international work. The scholars have focused so prodigiously because leadership subjects are critical to organizational performance (Kumar, 2007). Members of companies have difficulty achieving competitiveness, efficiency, and a competitive edge without strategic and successful leadership (Gumbe, 2010). Leadership styles have in recent years become a major topic in management, and leadership is viewed by many scholars as an essential variable in motivating how followers of the organization work (Hao et al., 2012). The leadership style was then also found to be a significant indicator of an organization's performance (Bass and Riggio, 2006).

Management is well-known in literature for the beneficial impact of corporate engagement. Commitments have been repeatedly recognized as an important variable in employee comprehension within organizations in organizational literature (Herscovitch and Meyer, 2002). Previous researchers suggest that engagement affects several job-related characteristics, such as determination to stay (Chew and Chan, 2008), absenteeism (Yang, 2015). This is pertinent as organizations with dedicated personnel can circumvent high turnover and absenteeism-associated costs. Additionally, more inspired workers and higher work efficiency are likely to become dedicated (Yang, 2015). The analysis discusses the interaction between Bass and Riggio (2006) and different variables of results (extra employee effort, manager happiness, leadership efficiency) and organizational engagement within the leadership aspects (Transformation and Transaction).

2.7.1 Autocratic Leadership

A paradigm shift in the field of leadership theories has taken place throughout history. This philosophy implies that the leader's task is to coerce and rulers since people have an inherent reluctance to function and would not operate whenever possible (Shaw, 1955). This theorem is the concept of autocratic rule. Theory X often believed that people must be coerced, pressured, or motivated to conduct the organizational tasks and tasks and be supervised, explicitly or threatened with punishment (Shaw, 1955). In this report, autocratic leadership is characterized as a leadership style, where the leader determines directives, strategies, and controls all operations without substantive employee participation. The following definitions are specified and their conceptual interpretation (Hackman and Walton, 1986).

Throughout history, a paradigm shift has occurred regarding leadership theories, but autocratic leadership styles are mostly used by the military and law enforcement organizations (Munduate and Medina, 2004). Leaders that use autocratic leadership styles are often referred to as ruling with an iron fist. Authentic coercion and rewarding power to influence others is the basis of autocratic leadership (Munduate and Medina, 2004). Such members are also assertive, authoritarian, and dictatorial in their leadership. However, although this form of management also fits well for unmotivated or troubled staff, that kind of continued usage will contribute to employees' frustration and unproductivity (Lambert, 2002). Leaders should put the needs of their employees first but still maintain loyalty to the organization. The term autocratic leaders sometimes convey negative thoughts. However, for this narrative inquiry research study, it will be viewed as positive and without biases to ensure trustworthy research (Woodard, 2017).

According to Weiskittel (1999), autocratic leadership includes the use of directives or instructions in conjunction with anticipated compliance. The autonomous leader is strong and uses the power to give or deny recompenses and control. Omolayo (2007) argued that autocratic leadership requires the leader to take all decisions, exercise total power, delegate tasks and maintain a master-servant relationship with its dependents. The autocratic dictator only concerns himself with achieving his duties, goals, or objectives. The wishes and interests of the superiors are not considered. Lack of concern for the employee's desires and preferences is not helpful in organizations (Van Vugt, 2006). Theorists have further explored leadership thinking and a robust approach when they change the emphasis of leaders on their employees' participation (Weiskittel, 1999). This model evaluated employee engagement while putting one individual in decision-making and power (Tedesco, 2004).

Autocratic leadership is often used in law enforcement organizations and partakes comparisons to the paramilitary-style method (Schwartz and Cliff, 1993). Orders, discipline, control, administration, and performance are typical of most organizations of law enforcement. Under autocrats, citizens are hired to apply and indoctrinated to conform to a certain leadership style on their first day of work (Schwartz and Cliff, 1993). Autocratic leadership style is the situation where a dictator sets rules, processes and ignores their subordinates' advice or recommendations (Avolio, 1999). Autocratic administration is also seen in businesses, fire services, and the health sector (Tedesco, 2004).

2.7.2 Democratic Leadership

Democratic leadership, or mutual leadership, is a form of leadership that includes community participation in decision-making. This kind of leadership may be extended to any organization, from private businesses to colleges, states, and other organizations (Amanchukwu et al., 2015). All have an incentive to join, open sharing of thoughts, and motivation to debate. Although democracy aims to focus on collective unity and the free exchange of information, the community leader provides input and influence. The democratic leader is responsible for deciding who is in the group and who can help in the decisions (Amanchukwu et al., 2015).

Investigators have found that democratic leadership is one of the most productive styles, leading to greater efficiency, better group involvement, and better group moral standards (Guraya et al., 2016). Strong political leaders foster trust and reverence for followers. They are genuine, and based on truth and principles. Supporters continue to be inspired and contribute to society. Strong leaders are always searching for diverse viewpoints and should not seek to suppress dissident views or others from a less common perspective (Iqbal et al., 2015).

Participatory decision-making often requires political leadership. It provides the staff of management organizations with a firm side. In recent decades, inclusive and participatory leadership or the 'two-name model' has become popular. It is from the thirties and the forty years. Kurt Lewin, a leading behavior expert, undertook experiments to assess the importance of the organization's cooperative/participatory leadership style (Clark and McCabe, 1970). Lewin and his colleagues Ronald Lippitt and Ralph K. White identified in "Leadership and Community Life" the three primary leadership models: egalitarian and autocratic. Lewin, Lippitt, and White argued that the concept of representative government is more popular among the subordinates from interviews with company leaders and staff (Val and Kemp, 2012).

Successful democratic leaders vary in two important ways from autocratic leaders and laissez-faire politicians. Like autocrats, democratic leaders assume individuals reporting to them have thorough expertise and show trust in themselves. Unlike the laissez-faire approach that assigns power to the professionals, the decision-making process includes democratic leaders (Sheshi and Kërçini, 2017). Cooperative / participating members have tremendous responsibilities. Organizations that implement the collaborative design still require sturdy leaders that recognize how to circumvent the downsides as they lose their bearings that can trip collective teams up (Gonos and Gallo, 2013).

2.7.3 Laissez-Faire Leadership

Although there was very little debate regarding laissez-faire leadership in the literature (Yang, 2015), laissez-faire leadership was related to negative outcomes, like tension and demotivation, or organizational performance (Avolio, 1999). The laissez-faire style of leadership is known as non-statistical leadership, or non-strategic style at the reverse end of transformation and transactional leadership (Neider and Schriesheim, 2011), multifactor Leadership Questionnaire (MLQ) was adopted for several scientific analyses of laissez-faire leadership (Avolio, 1999)s. As a result, laissez-faire leadership was widely regarded as ineffective, even though most transformational leadership and transactional leadership research emphasizes the efficacy of the two leading models in various ways, including employee job satisfaction and organizational effectiveness (Piccolo et al., 2012). Such studies underline the importance of leadership engagement when laissez-faire leadership is interpreted as a lack of leadership and null leadership due to a failure to provide subordinates' information or guidance (Bass and Riggio, 2006). However, according to this paper, it is not laissez-faire management per se that leads to one-dimensional negative outlook and impact, but rather the current value and subsequent evaluation of laissez-faire leadership. To put it another way, management should not always imply rejection, arrogance, disregard, and indifference towards its followers' wishes (Aasland et al., 2010), as stated today. For instance, although a manager / a leader is expected to perform certain tasks like controlling subordinates' success (Podsakoff et al., 2014), there are also incentives for workers to be left isolated with their relations. A leader's personality allows workers to feel valued and confident and demonstrate that leadership has a strong low or uninvolving impact.

Conceivable advantages of less or less involvement in leadership are also provided by principles of dependence (Eisenbeiß and Boerner, 2013), self-control, self-determination (Deci and Ryan, 1980), hegemony (Amundsen and Martinsen, 2014; Ford and Fottler, 1985), and self-leadership (Manz and Sims, 1989). In this way, although rare, some academic work reveals promising effects of laissez-faire leadership in subordinate's innovation capacity because it can promote an innovative environment (Ryan and Tipu, 2013). In other cases, there is a need to approach laissez-faire leadership more suited given possible advantages of non-involvement leadership. Hence this paper redefines the laissez-faire management of the current (negative) meaning-ridden concepts with a behavioral focus and discusses why and when the leadership that is laissez-faire can contribute to positive results. This paper aims at this topic by recognizing laissez-faire as an un-leading force and addressing possible moderators of laissez-faire that may deliver successful results (Yang, 2015).

Through addressing these ideas, this paper seeks to add not only to the literature of laissez-faire leadership nonetheless to leadership overall as well. First, concentrating on a leader's "behaviors" (a behavioral component of leadership) in this article is distinct from many current leadership models that have concentrated on "the theory" or "leadership characteristics." A practical structure can enable a more accurate analysis of leadership across different contexts as recognizing the meaning of leadership may involve multiple behavior. Secondly, this paper emphasizes the significance of conditions for efficacy and the degree of leadership effectiveness and extending the concept of situational leadership by reflecting on moderators' role. Although circumstance and contingent leadership emphasize the value of balancing leaders' attitudes and circumstances, this paper highlights the importance of fluvial actions rather than fixed ones by demonstrating certain contextual factors when a leader decides to engage in laissez-faire leadership (as a strategic leadership choice) (Zheng et al., 2010).

3 Methodology

The methodology of data analysis and collection are presented in this chapter. Research design, target population, criteria for respondents, and their information are also presented. Additionally, Research scales, scale validity, reliability, and discussion analysis are also mentioned. This research was done based on the posture of a positivist researcher. Positivism observes the social phenomenon, implementing a quantitative strategy with a value-free inclination towards research participants and the generalization of the research results (Saunders et al., 2003).

3.1 Participants

Study data collection was performed through cross-sectional surveys. The study's targeted population was the admin and faculty employees of public sector universities in Quetta city, of grade 17 to 19. The research data collection process was carried out by distribution to targeted university employees of questionnaires. The sampling rule is given by Saunders et al. (2003); a sample of 322 (for people up to 2000 and at 5% margin of error) was needed. To get this sample size, 350 questionnaires were firstly distributed. Three hundred twenty-eight filled questionnaires were received that present an effective response rate of 65.6%. Mugenda (2003) recommended that a response rate of more than 60% is good.

3.2 Materials

The implicit leadership style scale was taken from Northouse (2019). This scale had eighteen items that made use of a scoring system to determine if the leadership style was autocratic, democratic or laissez faire. The scale was primarily meant to measure the leadership style as told by the leaders, we, nonetheless, used the scale to measure the implicit leadership instead, we used the version developed by Zaman et al. (2017) with some updated in scoring and wording to match an implicit leadership style that was answered by the followers instead. The scale was tested in Balochistan and had shown good results.

To measure functionality, Functionality Appreciation Scale (FAS) was taken from Alleva et al. (2017). The Functionality scale has 8 items, and a sample item is, . I appreciate my body for what it is capable of doing. All the items from both the scales were organized on a seven-point Likert scale varying from 1 = highly divergent to 7 = firmly accepted to monitor employee opinions. The full scale is provided in the annexure part. The alpha of this size was Cronbach 0.85. In our context, CFA confirmed the validity of the scale.

3.3 Analysis Approaches

The research smears at two-step modeling by developing the measurement model before hypothesis testing. According to Hair et al. (2011), the accurate value of reliability and validity avoids interaction between measurement and hypothesis testing.

To determine whether numbers and loadings of estimation (indicator) factors on data support assumptions are checked with the verified factor analysis (CFA) AMOS (Kline, 2005; Zaman et al., 2017). CFA is often believed to be a robust methodology that renders factional properties of postulated calculation models (Anderson and Gerbing, 1988; Goldberg and Velicer, 2006; Hopwood and Donnellan, 2010; Straub et al., 2004), a methodology that enables the analysis of SEM models and frameworks (Thompson, 2013). In a single calculation model, both constructions would be evaluated. The uni-dimensionality, durability, and integrity of the measurement process for the constructs are assessed.

This study's selected constructs are functionality with eight items, Autocratic Leadership, Democratic Leadership and Laissez-Faire leadership with six items each of these three independent variables for the study. The scale is calculated using a minimum of 26 objects. To calculate whether the measured variables are contingent on unobserved or latent variables, a measurement model must be established (Hair et al., 2011). This means that a portion of a formula that determines whether the variables measured depend on the variables not observed, composite or latent' (Abetz et al., 2005) is referred to as the calculation function.

4 Results

4.1 Descriptive Statistics

The demographic data of respondents is given in table 01. The table demonstrates that out of 322 respondents, 225 were male, and 97 were female. A vast majority of the respondents (209) were grade 18 employees. The designation of respondents ranged from BPS 17-19. 193 employees were faculty members, and 129 were the administrative staff.

4.2 Correlation Analysis

As per the results shown in table 2, all the variables are positively correlated with each other, except the Autocratic leadership and Functionality. Such as, Democratic leadership is positively correlated with Functionality, Autocratic leadership, and Laissez-Faire leadership ($r = .297$, $p < 0.000$, $.496$, $p < 0.000$ and $.639$, $p < 0.000$ respectively). Laissez-Faire leadership with Functionality is ($r = .144$, $p < 0.000$) and with Autocratic leadership ($r = .231$, $p < 0.000$). The Autocratic leadership is negatively correlated with functionality ($r = -.065$, $p = 0.12$) table 02.

Table 4.1: Descriptive Statistics

Variables	Dimensions	Frequency
Gender	Male	225
	Female	97
Designation	BPS-17	104
	BPS-18	209
	BPS-19	9
Admin/Faculty	Admin	129
	Faculty	193

Table 4.2: Correlations

	1	2	3	4
Functional	1			
Autocratic	-0.065	1		
Democratic	.297***	.496***	1	
Laissez-Faire	.144***	.231***	.639***	1

*Note: The significance of the correlation shows at *, **, *** at 10%, 5% and 1% respectively.*

4.3 Results of Measurement Models

AMOS has been used for the study of confirmative factors (CFA). CFA is a statistical technique that examines whether the calculated variables (indicator) are verified in terms of the number of factors and their loadings (Kline, 2005). CFA is often believed to be a robust methodology that renders factional properties of postulated calculation models (Anderson and Gerbing, 1988; Goldberg and Velicer, 2006; Hopwood and Donnellan, 2010; Straub et al., 2004), a methodology that enables the analysis of SEM models and frameworks (Thompson, 2013). Within one calculation process, both constructions are tested (see fig 01). The measurement model for the constructs was evaluated based on the uni-dimensionality, reliability, and validity of the construct.

4.3.1 Assessment of Uni-dimensionality and Model Fit

First, in order to attain uni-dimensionality of the constructs, the indicators or items specified to measure a proposed underlying factor should have relatively high-standardized loadings (0.50 or greater) on that factor (Hair et al., 2011). Subsequently, the estimated correlations amid the factors should not be greater than 0.85 (Kline, 2005). This study's selected constructs are functionality with eight items, Autocratic Leadership, Democratic Leadership and Laissez-Faire leadership with six items each of these three independent variables for the study. The measuring model consisted of 26 items in total.

Standardized residual covariance examination indicates that some error terms are correlated with the other error terms in the same construct. The decision was to associate these error terms with fitting the model to explain the better reliability and validity (Hair et al., 2011). Furthermore, the inter-correlation among constructs (factors) is below .85, demonstrating good discriminant validity amid these factors (Kline, 2005). Each item's reliability can be tested by analyzing each measurement's outer loads (items) umrani2018. Researchers have established a retaining guideline for items under which they recommended that objects ranged from 0.40 to 0.70 would be kept (Hair et al., 2011). The 26-point scale and loads of each item suggest that both items reach the level of 0.50 (Table 3). Still, the overall model fails to meet the goodness-of-fit indices benchmark. After correlating the error terms (see fig 01) the data were found to be the acceptable cutoff for the measurement model the χ^2/df = 2.374 with p= 0.000, CFI = .918, SRMR = 0.072 and RMSEA= 0.015 (see Table 03).

Table 4.3: Model Fit Index

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.374	Between 1 and 3	Excellent
CFI	0.918	>0.95	Acceptable
SRMR	0.072	<0.08	Excellent
RMSEA	0.0153	<0.06	Excellent

According to the following principle, the CFA results should be like this given below:

- $\chi^2/\mathrm{df} < 5$ (Tabachnik and Fidell, 2007)
- Goodness of Fit Index-GFI $\geq$ .90 (Baumgartner and Homburg, 1996)
- Comparative Fit Index-CFI $\geq$ .90 (Hu and Bentler, 1999)
- Root Mean Square Residual-RMR $\leq$ .08 (Hu and Bentler, 1999)

The given values of multiple indices (χ^2/df, CFI, RMSEA) indicate the acceptable range and fit of the dataset to the research model.

4.4 Reliability and Validity of the Constructs

As soon as the constructs' uni-dimensionality is achieved, each one is assessed for reliability and validity (De Wulf et al., 2003). Construct reliability (CR) and average variance extraction are used to assess reliability, whereas validity measurement is done using construct, convergent, and discriminant. Using confirmatory factor analysis, (Table 4) shows that based on formulas by Fornell and Larker (NA), the construct reliability (CR) and average variance extracted (AVE) are calculated to confirm the reliability of the constructs further.

Note Composite Reliability (CR) for construct reliability, Average Variance extracted for (AVE) and MSV for convergent validity and Discriminant validity Fornell & Larcker (1981); the square root of AVE in diagonals with construct correlations values. The significance of the correlation shows at *, **, *** at 10%, 5% and 1% respectively.

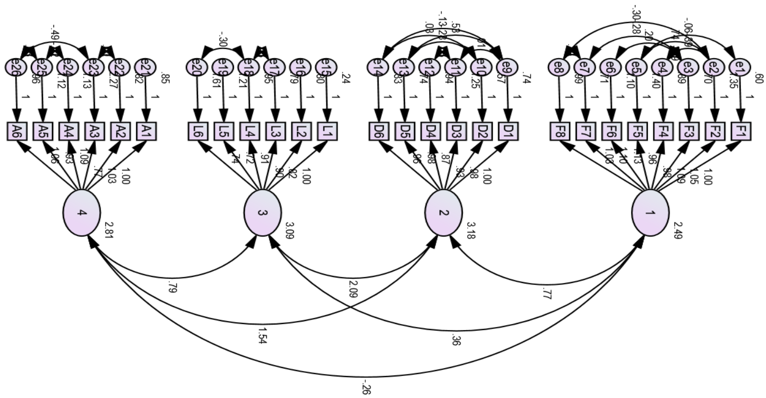

Figure 1: Model Fit Diagram

Table 4.4: Reliability and Validity of Constructs

CR	AVE	MSV	MaxR(H)	1	2	3	4
0.958	0.739	0.075	0.961	**0.86**			
0.958	0.794	0.445	0.965	0.273***	**0.891**		
0.934	0.704	0.445	0.96	0.128*	0.667***	**0.839**	
0.931	0.695	0.266	0.941	-0.098	0.516***	0.267***	**0.834**

The CRs above 0.70 and AVEs above 0.50 in all constructs in this study, as suggested by, Bagozzi and Yi (1988) indicate a further improvement to build reliability. The internal consistency (CR) rule, which suggests the threshold 0.7 or more interpretation of a composite reliability coefficient. Table 04 shows that the composite reliability coefficient for each latent variable ranged from 0.931 to 0.958, indicating that the indicators have sufficient internal consistency reliability (Bagozzi and Yi, 1988; Hair et al., 2011). Fornell and Larker (NA) suggested using average variance to determine convergent validity (AVE). The AVE should be at least 0.50 or higher to imply the convergent validity of a construct. Table 04 shows that all of the constructs in this analysis have a minimum AVE of 0.50, showed that the study has developed sufficient convergent validity (Chin et al., 1998).

Fornell and Larcker proposed using AVE with a value of 0.5 or higher as a rule of thumb Fornell and Larker (NA). Furthermore, they propose that the AVE's square root should be higher than the correlations among the latent variables when assessing discriminant validity. The AVE for full latent constructs should be above the minimum cutoff of 0.5, according to Table 4. Table 04 also reveals that the square root of AVE is greater than the latent variable correlations. As a result, it is possible to assume that all of the tests used in this analysis have sufficient discriminant validity.

4.5 Hypothesis Testing

This research has used multiple regression analysis for hypothesis testing and the significance of the coefficients, Table 5, provides estimates of the multiple regression of three leadership styles (Autocratic, Democratic and Laissez-Faire leadership) on functionality as the dependent variable in the study (Hair et al., 2011). H_1 proposed that Autocratic leadership will be negatively related to functionality. Results provided in (Table 05) have revealed a significantly negative association between Autocratic leadership and Functionality (β = -.447, t = -4.912, p < 0.00). Hence, supporting H_1.

The results also report a positive association (H_2) between Democratic leadership and Functionality with (β = 0.669, t = 6.839, p < 0.000). Thus, H_2 was also supported. Similarly, the results of H_3 show that the association between Laissez-Faire leadership and functionality (= -.175, t = -1.772, p = 0.077); therefore, the negative association among these two variables (H_3) can also be supported at a 10% significance level.

Table 4.5: Hypothesis Testing

		S. E	T-values	P-values
Autocratic	-0.447	0.091	-4.912	0
Democratic	0.669	0.098	6.839	0
Laissez-Faire	-0.175	0.099	-1.772	0.077
R2	0.157			
Adj R2	0.149			
F-stat	19.44			0

In order to assess variance explained in the dependent variable (Functionality), important criterion is the R2 value assessment, also called the coefficient of determination (Hair et al., 2011; Henseler et al., 2009).

The R2 is the change in the dependent variable by independent variables, according to different scholars, that can be described by one or more predictor variables (Elliott, 2012; Hair et al., 2011). The appropriate level of R^2 is subject, following Hair et al. (2011), to the circumstances under which research is carried out.

Falk and Miller (1992) mentioned that a 10% R^2 value is acceptable. The value of R^2 obtained for the present study was 0.157 (see Table 5). This suggests that three leadership styles (Autocratic, Democratic, and Laissez-Faire leadership) explain 15.7 percent of the functionality's variance. As per Falk and Miller (1992) recommendation, the obtained R^2 value is acceptable for this study. The F-Statistics is also significant with (F = 19.44, p < 0.000) in Table 5 represents the acceptable model fit for multiple regression.

In Table 6, the VIF value for all three independent variables is less than 3. This shows no multicollinearity issue for the model, and the estimated coefficients in the multiple regression can be count as an unbiased estimator.

Table 4.6: Multicollinearity

	Tolerance	VIF
Autocratic	0.742	1.348
Democratic	0.463	2.158
Laissez-Faire	0.582	1.719

5 Discussion

The research comprises three independent variables, i.e., democratic leadership style, autocratic leadership style, laissez-faire leadership style, and one dependent variable, i.e., organizational functionality. All the variables were positively correlated with each other, except the autocratic leadership with functionality. The results achieved uni-dimensionality of the constructs. Indicators or items specified had relatively high-standardized loadings (0.50 or greater) on the factors. The estimated correlations between the factors were not greater than 0.85.

Standardized residual covariance indicated that some error terms were correlated with the other error terms in the same construct. The decision was to associate these error terms with fitting the model to explain better reliability and validity. All constructs in the research had CR of above 0.70 and AVE of at least 0.50 as recommended by Bagozzi and Yi (1988), suggesting further support of the constructs' reliability.

The first hypothesis was formulated to test the negative relationship between the Autocratic leadership style and organizational functionality. A statistically significant relationship has been found between the Autocratic leadership style and organizational functionality (Bagozzi and Yi, 1988).

The second hypothesis tested the positive association between Democratic leadership and organizational functionality and the findings indicate that the relationship was statistically significant (Munduate and Medina, 2004; Van Vugt, 2006; Waterman Jr et al., 1980). Finally, the third hypothesis formulated to test the association between Laissez-Faire leadership and organizational functionality is also found significant (Munduate and Medina, 2004). For Autocratic leadership styles, literature shows how negatively an organization is influenced if the leader is practicing the autocratic leadership style. The subordinates prefer leaving the organization rather than being supervised by an autocratic leader (Van Vugt, 2006). But it was seen in the literature available to telling how subordinates work more carefully if an autocratic leader is supervising them despite their unwillingness showing no relation whether the organization is going functional or vice versa (Blaker et al., 2013).

The third question was whether democratic leadership makes an organization functional for which positive results were received. The positive results were very much predictable because democratic leadership gives guidance to the subordinates and participates in the group, encouraging every group member's involvement in decision-making (Rustin and Armstrong, 2012). So organizational functionality can be very easily associated with democratic leadership style. The fourth question was whether the Laissez-Faire Leadership style makes an organization functional this also resulted in negatively associated organizational functionality. This result was obvious because Laissez-Faire Leadership gives less or no guidance, leaves decision-making on the subordinates, and shows little or no involvement in any of their tasks (Rustin and Armstrong, 2012).

5.1 Conclusion

In the present study, the authors developed a multiple linear regression function to empirically analyze the behavior-based perceived leadership determinants of organizational functionality of the HEIs. The three leadership styles namely Autocratic, Democratic, Laissez-Faire were employed as predictors in the regression model. Primary data gathered from 328 respondents (administrative staff and faculty members) was analyzed through SEM in AMOS 26. The findings indicate that there is a significant relationship between autocratic and democratic leadership styles as determinants of organizational functionality. Moreover, the perceived autocratic leadership style negatively affected organizational functionality and the perceived democratic leadership style positively affected organizational functionality. The effect of Laissez-Faire is found to be statistically insignificant in the study at a 5% level of significance.

The research led us to multiple findings by looking individually at the three types of leadership. It was seen that the Autocratic leadership style does not make an organization effective. Likewise, the Laissez-Faire Leadership style achieved the same findings. At the same time, the Democratic leadership style was seen adding to the success of an organization.

5.2 Limitations

While studying the topic broadly, i.e., seeing all three leadership styles in making an organization functional, we speculated that a quantitative study could generalize the notion to only some extent. For a deeper understanding, we would have to carry out qualitative research on the topic. Autocratic leadership was assumed to be negatively related to organizational functionality, but we have examples of organizations working very efficiently with autocratic leadership. We can perform another study on the organization where autocratic leadership is practiced and how they show functionality under those circumstances.

We were limited to only academic institutions in our research, whereas other sectors can also show different results. Or you are maybe making the results more meaningful. Expanding the research in diverse organizations or organizations where various leadership kinds are practiced simultaneously can show different or same results. We also limited the research to a definite grade/scale of employees. The group members from lower and upper hierarchical order can show how a particular group of employees belonging to a definite group takes leadership as their ruling.

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Customer Loyalty a Key to Success: A Case Study in Telecom Sector of Pakistan

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Abstract. This paper identified the role of the independent variable like service quality, taking perceived value, word of mouth and customer satisfaction (mediation/ intervening variables) in creating customer loyalty (dependent variable) among the telecom user (mobile phone users). The empirical portion have extensive literature regarding the mentioned variables and shown their impact towards the customer loyalty. The telecom industry has been facing cut throat competition due to the market saturation, decrease in ARPU (average revenue per user), and shift to internet based (cheaper sources) communication tools, unexpected mergers, higher cost and decreasing the margin. Thus, telecom companies have been thinking about devising the best possible suitable strategies for creating the customer to maintain their survival and growth. The simple random techniques are used for sample selection and self-administration questionnaire is the tool for collecting data. A sample of 300 universities students from Rawalpindi and Islamabad is base for analysis. Amos 20 is the software and SEM is the tool for extracting result. Dual relationship is tested likewise direct (service quality and customer loyalty) and indirect through mediating variables. Results showed that customer satisfaction is the strongest mediator in developing a high-quality customer loyalty service, and it has more effect than the direct link between quality of service and customer loyalty. It leads industrial professionals to develop a strategy based on customer satisfaction. It is concluded that customer satisfaction increases the level of the industrial professionalism. Hence the customer satisfaction increases the service quality and customer loyalty services. In nutshell, the cooperate image and switching barrier can be possible leads for the future research.

Key words: Service quality, perceived value, customer satisfaction

1 Introduction

The new millennium had changed the total landscape of telecommunication sector (cellular phone sector) and emerged as one of the dynamic sectors of modern era economy. The fast

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connectivity, wider coverage, availability of 3G & 4G and decrease in prices make it one of the volatile fields of investment. As per PTA, the total number of cellular subscribers has crossed 130 million mark. Now cellular phone is taken as utility rather a luxury item as it was due to its countless facilities and benefits (Sattar and Sattar, 2012). The telecom sector is one of the leading sectors in bringing the FDI to country; the most recent is through the auction of 3G & 4G. The market is already reaching its saturation and margins are beginning to drop. The level of services is rising day by day and we are almost at the edge of information age. There is a flow of information through the power of social media, thanks to quality services of cellular companies (Izogo, 2017).

With all of the above, all the five existing companies (merged into four, after the merger of Warid with Moblink), are facing cut throat competition due to decreasing margins, saturation of user market, commonality of internet based means of communication, no switching barrier (Izogo, 2017). The average revenue per user is decreasing and making it hard for the companies to survive and grow (Dowling and Uncles, 1997). It has become the need of the hour for the companies to retain customers, not only to grow but to sustain as well, in this competitive market. Companies retain with the only feasible strategy of customer retention, can be achieved through creating loyalty among its users; as the cost of attracting one new customer is five to ten times greater than retaining the existing one (Slater and Narver, 2000).

All the cellular companies are devising different strategies to attract and retain customers, by offering different packages, internet bundles, free coupons, free minutes, double SIM number and other adjoining benefits and lastly through heavy comparative advertisement reminder to retain a customer with particular company. Thus all these circumstances are compelling companies to generate loyal customers that can stay for a longer period of time and company can cash their life time value (Sattar and Sattar, 2012).

The tremendous growth in telecom sector is because of deregulation by the government, liberalization of policies, decreasing prices of mobiles phones, more geographical coverage has encouraged companies to introduce services for better serving the customers and creating loyalty (Nasir et al., 2014).

This particular paper try to gauge the customer loyalty of telecom users through using customer satisfaction, perceived value, corporate image as intervening variable and service quality as an independent variable and the direct impact of service quality on customer loyalty without intervening variable.

A study by Ishaq (2012) has found the strong relation between perceived value and service quality on customer loyalty, while corporate image does not show any significant effect. A study by Jahanzeb et al. (2011) used the Xue and Liang (2005) model to measure the relation of loyalty and trust and found positive relation between them. However for this particular study Cheng et al. (2008) model has been adopted with few changes to measure the customer loyalty among the telecom users of Pakistan to assess the local.

This study will demonstrate the effect of service quality on customer loyalty and will contextualize the work of Cheng et al. (2008). When it comes to the importance of customer loyalty in relation to cellular service quality, the existence of casual relationships between the two could be indicative of significant opportunities for cellular companies to investigate and utilize these variables to the best of their ability to yield great results (Sattar and Sattar, 2012).

This study has used the Olivers theory to explain more about the customer loyalty in the telecommunication sector in Pakistan. Its proposed very unique and different variables like service quality, taking perceived value and word of mouth to be studied in the conceptual framework.

2 Literature Review

Overall assessment of the service by the customers is known as service quality (SQ). The renowned work on service quality was taken by Parasuraman et al. (1988) based on service expectation rather than services performance. Some has linked service quality as performance (Boulding et al., 1993; Zeithaml, 1988). Olorunniwo et al. (2006) examined the dimensions of SQ in motel industry and revealed that the key constituents may vary from sector to sector depending upon the meaning of service in that sector. Lymperopoulos and Chaniotakis (2005) observed positive relation between SQ and satisfaction along with WOM in the health care sector. Cronin Jr and Taylor (1994) redefined the scale for SQ and found different dimensions of SQ. A study by Lymperopoulos and Chaniotakis (2005) revealed the positive relation between satisfaction and quality.

Perceived value is known as ”the consumers evaluation of the utility of perceived benefits and perceived sacrifices”. Our perception and acquisition are measured. According to other research, quality and value have a direct impact on customer loyalty (Lai et al., 2009).

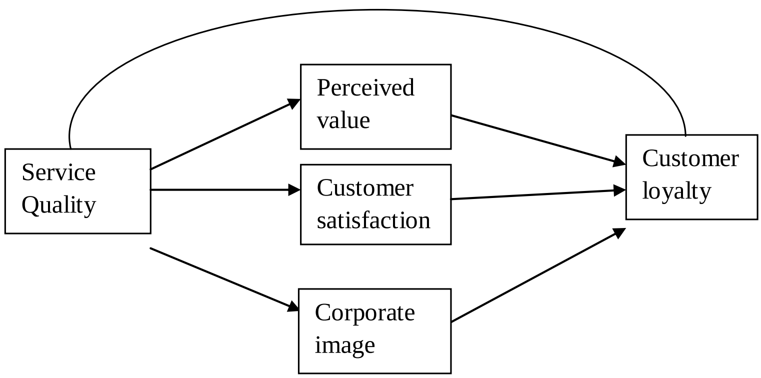
A study in Korea by Choi et al. (2004) explained that SQ has more significant effect on satisfaction in comparison to perceived value in health care sector. While a study of Finland telecom sector by Karjaluoto et al. (2012) explained the positive relation between perceived value and loyalty, where trust is working as moderator and strengthens the described relation. Similarly, Gallarza and Saura (2006) studied perceived value, efficiency and quality as the key ingredients of gauging customer loyalty. Chen and Hu (2010) revealed the positive relation between perceived values and customer loyalty in coffee outlets of Australia. Corporate image is defined as the overall impression made on the minds of the public about a firm. According to Kennedy (1977), functional and emotional emerged as the two main components of image. Dick and Basu (1994) revealed image and reputation as two important components for creating loyalty.

Shapiro (1982) has stated that reputation and good image help firms in gaining their sales and market share. Andreassen and Lindestad (1998) study in the Norwegian tourism industry revealed the image and satisfaction as the building pillars of customer loyalty. A study by Nguyen and LeBlanc (2001) revealed that loyalty level increases with the increasing level of perception of image and reputation. Similarly, Kuo and Ye (2009) posited that a significant relationship between the quality and customer loyalty exists. Hart and Rosenberger III (2004) has found the positive relation between image and customer loyalty at the mega stores in Australia. Similar relationship has been found in Taiwan super markets by Chang and Thai (2016). Customer satisfaction may be described as a level of pleasure from the consumed product or service and it becomes the great requirement for every company to maintain its optimum level. Oliver and Swan (1989) argues about two dimensions of satisfaction, intensity and Valence (positive or negative).

Bodet (2008) tested the Jones and Suh (2000) model in health fitness clubs in a French city and discovered satisfaction as a mediator between quality and loyalty. A study conducted in the United States by Flint et al. (2011) discovered a positive relationship between loyalty and satisfaction. Da Silva and Alwi (2008) discovered a strong positive relationship between image, satisfaction, and loyalty in UK online book stores in their study. Similarly, a study conducted by Kim et al. (2004) discovered a positive relationship between satisfaction, switching barrier, and loyalty in their study.

Companies today are struggling to build loyal customers because customer loyalty is a priority. A study by Roy and Ganguli (2008) found that loyalty can be measured by looking at the customers' propensity and their likelihood to return to the product or service. Based on previous research, which discovered that image and satisfaction both have an impact on customer loyalty in the hotel industry, Kandampully and Suhartanto (2000) found that image and satisfaction impact customer loyalty in the hotel industry. "Satisfaction and loyalty are related to one another, according to the results of the study by Deng et al. (2010)." Pan et al. (2012) have done a meta-analysis to determine the vital factors for building customer loyalty. They found that customer loyalty is mainly driven by trust, satisfaction, and perceived value. Moreover, literature posits that satisfaction, trust perceived value and switching barrier have positive impact on customer loyalty Amin et al. (2012). Quality of service and trust have a positive relation on customer loyalty, according to a study by Jahanzeb et al. (2011).

Many studies have revealed the positive relation of service quality on customer loyalty; while postulating that SQ has a positive impact on perceived value (Cronin Jr and Taylor, 1994). A positive and direct relation was observed among image and service quality (Sirgy and Samli, 1985); whereas, a study by (Cronin, 2000) found a link between customer loyalty and value, image, and satisfaction. The following model and hypotheses are developed based on the above literature support.



2.1 Hypotheses

H_1: Service Quality has a positive impact on customer satisfaction.

H_2: Service Quality has a positive impact on perceived value.

H_3: Service Quality has a positive impact on corporate image.

H_4: Customer satisfaction has a significant positive impact on customer loyalty.

H_5: Perceived value has a significant positive impact on customer loyalty.

H_6: Corporate image has a significant positive impact on customer loyalty.

H_7: SQ has a significant, positive effect on customer loyalty.

3 Methodology

This study was carried out in a completely natural setting, without artificial elements. Primary data and questionnaires are the two pillars on which this study based. The respondents were the students of different universities (two universities from public sector and two from private sector), in this case SZABIST and Iqra were from private and Quaid-I-Azam and PMAS Arid Agriculture University from their Management Sciences department and are user of any cellular service provider, operating in Pakistan. A self-administered questionnaire was distributed among the students being selected through simple random sampling. A total of 450 questionnaires were distributed to the students, with 350 of them being returned (an 80% return rate), which is quite evident in this case. A total of 37 responses were rejected due to incomplete data and finally 313 were run for analysis.

Questionnaire was the tool for measuring primary data from students of different universities operating in twin cities of Rawalpindi & Islamabad. The service quality tool was taken from Parasuraman et al. (1988); five dimensions of service quality. Perceived value scale was chosen from Zeithaml (1988), while customer satisfaction scale chosen from Stank et al. (1999). Corporate image scale was adopted from Zeithaml (1988), along with single item from Selnes (1993). Lastly the loyalty scale taken from another article of Zeithaml et al. (1996). The responses were analyzed on five-point Likert Scale, with five indicating strongly disagree and one with strongly agree. SPSS was used for descriptive statistics; The Structural equation modeling was run using AMOS to measure the intervention of mediating variables.

4 Data Analysis

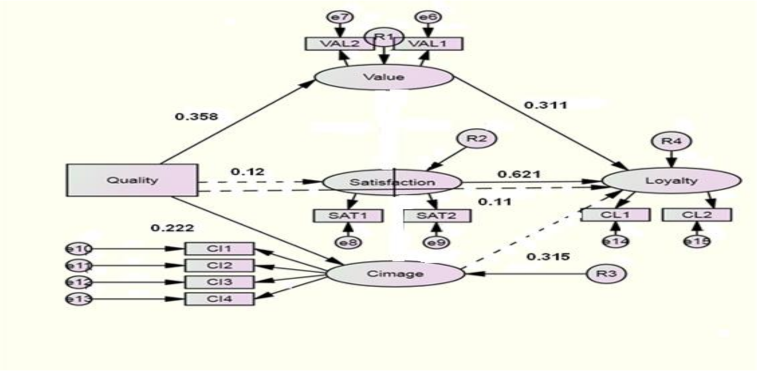
The study's main goal was to discover the direct and indirect links between service quality and customer loyalty. Before collecting actual data, a pilot study was conducted to test the scale's reliability and validity in a local setting. The total sample consisted of 53 percent males and 47% females, with 80% of the respondents being undergraduates and the remaining 20% being graduate students. A measure of skewness and Kurtosis lie within acceptable limits. All the variables have reliability of more than 0.70 and construct validity ranges from 0.80 to 1.2 that lies within limit (Fornell and Larcker, 1981). A weak to medium co-relation exists between variables, indicating medium strength relation between service quality and perceived value, while other relation are at par, but with acceptance. A comprehensive factor analysis shows a good fit of variable in the described model, with all the values RMSEA, CFI, GFI, NFI and PGFI etc. lies within limits.

4.1 Structural Equation Modeling (SEM)

Quality = SQ, Value =Perceived Value, Satisfaction = Customer satisfaction, Cimage = Corporate Image, Loyalty = Customer Loyalty

All the indices of structural equation modeling also lie within the limits (RMSEA, GFI, AGFI, NFI, PNFI and df etc.) and validate the model.

The hypotheses testing was made on the basis of standardized coefficients weights and their acceptance level. H_1 is rejected with (β = 0.12, p $>$ 0.05), indicates that service quality has no impact in generating customer satisfaction. H_2 is accepted with a standardized coefficient of (β =.358, p $>$ 0.01), showing that customers perceive better if quality services are being provided.



H_3 is also accepted with following measures (β =.222, p $>$ 0.01), thus depicting that better service quality will build the image of the company. H_4 is accepted as strong coefficient weight indicates (β =0.621, p $>$ 0.05) shows that customer satisfaction actually leads towards customer loyalty. H_5 is accepted as customers relate the perceived value to customer loyalty with (β = 0.311, p $>$ 0.01). H_6 is also accepted (β =.389, p $>$ 0.01) depicting that people do relate the image of the company in remaining loyal to that. H_7 is rejected with (β =0.11, p $>$ 0.05), thus indicating that people who dont belong to the service quality to customer loyalty and can shift due to many factors.

The above results suggest that only customer satisfaction and corporate image emerged as mediating variable in creating loyalty among customers, out of these two customer satisfaction has greater influence as compared to corporate image.

5 Discussion and Conclusion

The study results negate the direct relation of service quality and customer loyalty, however it verifies the same relation through customer satisfaction and corporate image and thus these emerged as mediating variable. A company has to devise such policies and tactics to create satisfaction and build image to reap its results in the form of greater loyalty.

All the accepted relations confirm the relation being brought from the previous studies as discussed in review. The mediating effects is also supported by literature as higher service quality builds image and enhances value and thus creating satisfaction (Aydin and Özer, 2005), along with satisfaction as mediator is in accordance (De Ruyter et al., 1997). However, all hypotheses have been accepted except H1 and H_7. Service quality decreases when the customer satisfaction increases, thus rejecting hypothesis one. Moreover, perceived value has positive effect with the service quality and increases when perceived value increases, service quality also increases and therefore hypothesis has been accepted. Moving forward, the results show the value of H_4 which is accepted because customer loyalty has a positive effect on the customer satisfaction. And it also accepted in hypothesis when perceived value has positive influence on the customer loyalty. Moreover, corporate image has a positive effect on the customer loyalty and gets accepted. Lastly, hypothesis customer loyalty decreases when service quality increases has been rejected.

5.1 Limitations

The study has few limitations as well; the small chunk of data had been selected for study along with respondent from universities, thus creating hindrance in generalizing the study results. Moreover, the data is being collected from twin cities and sample size is too small. The future study may be undertaken at a larger scale and by including all the sectors of population to better access the services and by incorporating more influencing variables like repurchase behavior and word of mouth, etc. Moreover, trust and repurchase intention may also be considered for measuring customer loyalty. The results indicate that perceived value and customer satisfaction must be taken into main stream for planning and implementing customer loyalty oriented policies. Like effective advertising to build image and better service quality tools to generate loyalty among telecom users in Pakistan.

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The Relationship between Workplace Violence and Turnover Intention with a Mediating Role of Work Engagement and Job Satisfaction

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Abstract. The current study aimed at identifying the relationship between turnover intention and workplace violence with a mediating role of work engagement and job satisfaction. A structured questionnaire has been used as a tool. In order to test the relationship, data were collected from 150 employees working in call centers of Pakistan, as the rate of turnover intention is highest in call centers. A cross sectional analysis was used to find out the results. SPSS has been used to find the results. Results indicated that workplace violence has significant relationship with turnover intention, and work engagement and job satisfaction plays a mediating role in this relationship. This paper reveals insight into the relation among the concept of workplace violence, work engagement, job satisfaction and turnover intention and forms a novel study that has not been recently investigated. The examination uncovered that if there is violence at workplace it will reduce work engagement and job satisfaction, which will lead to turnover intention. We support replications and expansion of this examination to build the generalizability.

1 Introduction

Workplace violence is a problem faced by every organization around the world (Park et al., 2015). If we identify violence in its early stages, it can prevent most of the violence at workplace. However, most of the time the situation is masked to save the reputation of the organization. A study was carried out using cross sectional data showing that in case if an employee is suffering from workplace violence, it is likely that the employee may feel anxiety, low motivation and even low job satisfaction. There are four different types of violence during work a) psychological b) racial c) sexual d) bullying e) verbal abuse (Chappell and Di Martino, 2006). Violence has four major categories 1) violence by those who are not connected to the organization or the company. 2) Violence by those whom the organization provides their services 3) violence by the former employee or current employee on the manager or the supervisor. 4) Violence by a person who is not connected to the organization or the company but is connected to the employee (Chappell et al., 2002). Workplace violence also reduces the level of job satisfaction.

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Job satisfaction is positive term while studying the work behavior. Job satisfaction is evaluated through mental state of the employee. Factors, which affect the job satisfaction is workload, environment, etc. that can lead to quitting job or turnover intention (Cicolini et al., 2014).

Turnover intention is the intention that the employee would likely to quit the job. An employee, who stays for longer period of time in the organization, becomes familiar to the organizations values and culture, etc. Then this acquaintance helps the organization to retain their best employee in long-term relationship and helps them to remain committed to organization for giving competitive edge to the organization. Factors that influence the turnover intention are WPV, stress, burnout, workplace engagement. Turnover intention is more cost effective than the actual turnover (Kim and Kim, 2014). Hence it is cost effective to find out the turnover intention of the employees. Previous studies have posited that the effects of turnover intention are burnout, stress, job satisfaction (Kim and Kim, 2014). Another study which was conducted in Korea showed that 50% of the employees had the turnover intention (Jeong and Kim, 2018). Turnover intention is also caused due to disengagement of work.

Work engagement is a positive factor, a psychological state of the employees related to their work, which makes them feel satisfied regarding their work (Salanova et al., 2011). The consequences of work engagement have not yet been developed (Robinson et al., 2004). Work engagement negatively affects the turnover intention of the employees. As per a study conducted on nurses, work engagement has shown negative impact on job satisfaction (Keyko et al., 2016). The importance of work engagement is triggering the need of explanation related to the components that drive the work engagement (Bakker et al., 2008). Work engagement has three dimensions: dedication, absorption and vigor. Vigor means to put your energy in your work. Dedication means to be inspired and to give your time and effort to your job. Lastly, absorption means to have high level of concentration on your job (Schaufeli et al., 2006, 2002). The present study focuses on call center as in call centers the turnover intention is high as compared to any other sector. Because of workplace violence the call center employees feel less satisfied at job; also work engagement is low, which leads to turnover intention. Therefore, present study attempts to examine the effect of workplace violence on turnover intention of call center employees, with the mediating role of job satisfaction and workplace engagement.

Effective event theory supports this model which states that certain situations provoke certain emotions and these emotions subsequently lead to subsequent behaviors (Eissa and Lester, 2017). Research depicts that workplace violence has a great impact on society (Nowrouzi-Kia, 2017; Zhang, 2006). It decreases job satisfaction (Heponiemi et al., 2014), and affects their mental and physical health (Shi et al., 2017), which also reduces work engagement. This may influence their quality of life and increase turnover intention (Sun and Wang, 2017). According to Heponiemi et al. (2014), physical violence (workplace violence) is connected to turnover intention and decreases the level of job satisfaction. Another study by Chen et al. (2016) shows that workplace violence has a negative impact on turnover intention. Similarly, according to the above discussion Affective event theory fully supports the model that certain situations lead a person to leave the organization.

2 Literature Review

2.1 Workplace Violence and Job Satisfaction

Workplace violence is a worldwide problem which affects professionals (Park et al., 2015). According to world health organization (WHO) (2002) workplace violence is a situation in which one is the subject of threat and abuse at workplace. According to WHO, workplace violence is of two types: psychological violence (threats, verbal abuse) and physical violence (pushing, pinching, slapping) (Krug et al., 2002). According to past research, society and hospitals are greatly affected by workplace violence (Nowrouzi-Kia, 2017; Zhang, 2006). Workplace violence also causes other issues such as decreased job satisfaction (Heponiemi et al., 2014), reduced performance of job (Kowalenko et al., 2013), which affects mental health negatively (Shi et al., 2017), and also affect the quality of their life and increase in turnover intention (Sun and Wang, 2017). According to the new research, it is identified that workplace violence influences turnover intention (Choi and Lee, 2017). According to previous review experience of workplace violence can lead to mental exhaustion, nervousness and even decrease the level of job satisfaction (Pourshaikhian et al., 2016). Job satisfaction is a main component and a positive concept describing behaviors during work (Cicolini et al., 2014). Factors influencing job satisfaction are working environment, role conflict, job stress, working conditions and so on (Atefi et al., 2015; Lu et al., 2012). Stress decreases the level of job satisfaction (Khan et al., 2016), which will also increase the level of turnover intention. Therefore, following hypothesis has been formulated:

H_1: Workplace violence has a negative impact on job satisfaction.

2.2 Work Engagement and Workplace Violence

Workplace violence (WPV) is a worldwide issue influencing all professional experts. It is known as the deliberate utilization of physical power or dangers of such activities at work (Crawford, 2019). Workplace violence and workplace bullying both are considered as social stressors which reduce confidence and the organizations face loss of adapting resources (Nielsen et al., 2011). It may cause behavioral changes such as over eating (McFarlin et al., 2001; Rospenda et al., 2008; Xu et al., 2019) and influence the variety of negative emotions (Balducci et al., 2011; Schablon et al., 2012; Viitasara and Menckel, 2002); whereas, work engagement is a feeling of satisfaction or a positive feeling that advances psychological well-being. Eagerness, pride in work, encountering work achievement and a strong dedication to work are key factors of work engagement (Bakker et al., 2008; Schaufeli et al., 2002). Engaged employees have a high level of mental strength and energy, they are highly dedicated and experience meaningful work with a concentration and complete focus on work (Schaufeli et al., 2002). According to past papers workplace bullying (workplace violence) influences work engagement, directly as well as indirectly (Goodboy et al., 2017; Nielsen et al., 2011; Park and Ono, 2017; Rai and Agarwal, 2017; Rodríguez-Muñoz et al., 2009; Trépanier et al., 2013). Similarly, workplace violence affects work engagement and a person cannot perform well which in turn harms the organization.

H_2: Workplace violence has a negative impact on work engagement.

2.3 Turnover Intention and Job Satisfaction

According to Spector (1997) job satisfaction is a proportion of employees satisfaction with their work/job, whether they are satisfied with their work/job or not. Dissatisfaction at job is one of the related sources of stress, a pressing issue for every organization is turnover intention (Gharakhani and Zaferanchi, 2019). Every organization sets goals and targets which they must achieve (Prasetio et al., 2019). According to Bartel (2004) performance of the organization is influenced by their capacity to deal with their employees. An organizations success depends on the efficiency of employees (Hersey et al., 2007). It also applies to call centers. One of the indicators is turnover intention, which tells whether the organization manages their employees or not (Prasetio et al., 2019). It is the responsibility of organization as well as employee to ensure that their job brought satisfaction. According to different studies, job satisfaction and turnover intention showed negative relation. Turnover intention is defined as a probability of an employee that he will leave the organization after certain period of time (Chao et al., 2015). A more satisfied employee will have less intention to leave the job vice versa (Mahdi et al., 2012; Prasetio et al., 2019). Extrinsic and intrinsic satisfaction of job has inverse relationship with turnover intention (Mahdi et al., 2012; Saeed et al., 2014). Meanwhile, Turnover intention is significantly affected by satisfaction with supervisor (Yamazakia and Petchdee, 2015). Based on the above arguments hypothesis three has been proposed:

H_3: Job satisfaction has a negative impact on Turnover intention.

2.4 Work Engagement and Turnover Intention

Work engagement is a solid indicator of employee turnover (Saks, 2006; Wan et al., 2018). Employees build a strong and trusting relationship with their organization who are highly engaged (Ajayi et al., 2017; Saks, 2006). Furthermore, employees who are engaged are more satisfied with their job/organization. As they are more committed to their jobs, they dont plan to leave their job (Schaufeli et al., 2006). An employee who is dissatisfied with tasks or work, refers to increase in turnover intention (Fernet et al., 2017). Positive wellbeing at workplace is one of the most important elements of work engagement (Bakker and Oerlemans, 2011). Employees find work meaningful when they are engaged in work and can invest in work in order to accomplish organization goal (Kahn, 1990). When an employee is emotionally committed to his organization, it means he is engaged at work (Mache et al., 2014). According to the previous researches, effective leadership, relationship with coworkers, rewards and interesting work-related tasks are the drivers of employee engagement at work (May et al., 2004). Past studies also show that engaged employee has less intention/aim to leave the organization (Alfes et al., 2013) because engaged employees find meaning in their work, they are enthusiastic about their work and can deal with work related demands (Schaufeli et al., 2002). Organizations should have to retain their best employee using HR strategy (friendly environment and developing job satisfaction). A good HR strategy can reduce turnover intention (Prasetio et al., 2019). Similarly, employees who are highly engaged will continue their present job (Shuck and Reio Jr, 2014); while, less engaged employees will leave their organization. Therefore, from these arguments it is proposed that:

H_4: Work engagement has a negative impact on Turnover intention.

2.5 Mediating Role of Job Satisfaction

Lower job satisfaction and turnover intention are caused by bullying, physical violence and workplace violence (Heponiemi et al., 2014). A study shows that WPV has a significant impact on turnover intention and burnout. To eliminate violence from external as well as internal environment ensure a comfortable, trustworthy, safe, supportive and a high quality working environment which will increase retention and job satisfaction (Casey et al., 2017). As it is identified in a study that training employees makes them feel happy and respected, managers should encourage them instead of threatening them. Respect and support will decrease turnover intention and increase job satisfaction (Lee et al., 2017). According to Pourshaikhian et al. (2016) workplace violence causes fear, mental exhaustion and anxiety which leads to reduced job satisfaction. Therefore, from the above discussion it is proposed that:

H_5: Job satisfaction negatively mediates the relationship between workplace violence and Turnover intention.

2.6 Mediating Role of Work Engagement

The construct of individual work commitment has been the focal point of hypothetical discussion given its association with positive authoritative conduct (Bailey et al., 2017). A positive wellbeing at working environment can lead to work engagement, which is the most important element (Bakker and Oerlemans, 2011). To achieve the organization goal an employee can invest in the work and find his work meaningful which is a state of work engagement (Kahn, 1990). An engaged employee is emotionally dedicated to work as well as its organization, they are one of the greatest focused differentiators in the working environment (Mache et al., 2014). Research recommends that the drivers of individual work engagements are relationship among coworkers, rewards, interesting work-related tasks, bonuses, effective leadership and capital to perform their work well (May et al., 2004). Past research recognized that an employee has less aim to leave work, when he is engaged (Alfes et al., 2013), because an engaged employee finds meaning in their work activities, can manage work related demands and they are also excited (Schaufeli et al., 2002). Similarly, an employee who is highly engaged worker is more liable to proceed with his present organization (Shuck and Reio Jr, 2014), while employee who is not engaged tend to leave his organization (Rafiq et al., 2019), which increases the level of turnover. Therefore, it is proposed that:

H_6: Work engagement negatively mediates the relation between workplace violence and Turnover intention.

2.7 Framework

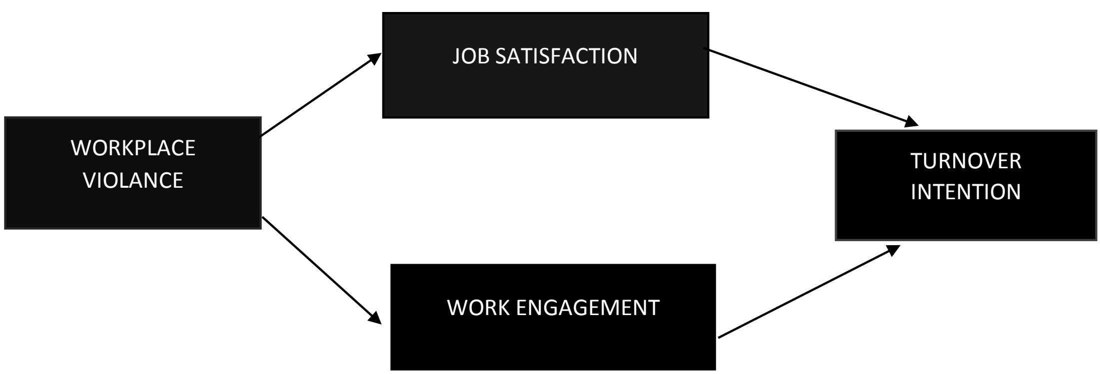

Figure 1: Framework

3 Methodology

3.1 Sample and Procedure

The purpose of data collection was to demonstrate the impact of workplace violence on turnover with a mediating role of job satisfaction and work engagement at call centers in the context of Pakistan. The participants will be asked to provide information regarding work engagement, turnover intention, job satisfaction and workplace violence. Convenient sampling technique was used for this research, in which 127 structured questionnaires were distributed among the call centers in Islamabad. In Pakistan, as data collection from employees is a bit difficult task because it is a time-consuming activity and due to time constraints data collected would be biased one, thus private sector organizations are more active and functional in research tasks and give better response for accurate results. Furthermore, data collection from this sector was bit challenging because 140 questionnaires were received out of 150, of which 127 questionnaires were considered for the analysis. The respondents of this research were having an age of 24 and above. The respondents were having qualification ranged from matric to MBA, MS/MPhil. Experience of the respondents was ranged between 0-9 years.

3.2 Measurements

Same pattern and type of questionnaires were distributed to each employee of different call centers in Islamabad. Likert scale was used for the measurement of the questionnaires by using the measurement scale of 1= Strongly Disagree, 2 = Disagree, 3 = Neither agree/Nor Disagree, 4 = Agree, 5 = Strongly Agree. Workplace violence is measured by adapting the scale of the Irish Nurses Organization and the royal college of nursing (UK). Consisting of 5 items (α = 913). One of sample item which was asked from the respondents is "Someone threw an object on me at workplace". Work engagement is measured by using scale of Schaufeli et al. (2006), consisting of 5 items (α = .799). One of sample is At my work I feel bursting with energy". Job Satisfaction is measured by using the scale of Spector (1997). He developed a scale of 36 question however in a research conducted by Sharma et al. (2019), he found that most of the questions in the scale was overlapping each other so, they selected 6 items in their study, we have also taken six items of Spector (1997) (α = .946). One of the sample items is "My work is helping my professional growth by developing my skills and learning new technologies/tools/practices". Turnover Intention scale of Leiter et al. (2011) is used to measure Turnover intention. Consisting of 5 items (α = .741). One of the sample items is I dont plan to be in this organization much longer.

4 Results

Table 1 shows the reliability analysis of variables; the Cronbachs Alpha of every variable is above 0.7. The results show full support for validity and reliability of the scales.

Second table represents Pearson correlation and Alpha reliability. The standard deviation and mean for workplace violence are (S.D = 1.16213, M = 3.1476), for work engagement (S.D = 1.06252, M = 2.7417), for job satisfaction (S.D = 1.33345, M = 2.857), and for turnover intention (S.D = 0.80374, M =2.6835).

Table 2: Descriptive statistics, reliabilities and correlations among variables.

Table 4.1: Reliability Analysis

Sr. No.	Variable	Cronbach Alpha	No of Items
1	Workplace Violence	0.913	4
2	Work Engagement	0.799	5
3	Job Satisfaction	0.946	6
4	Turnover Intention	0.741	5

Table 4.2: Correlations

	M	SD	1	2	3	4
1. WPV	3.1476	1.16213	1			
2. WE	2.7417	1.06252	-.376**	1		
3. JS	2.857	1.33345	-.357**	0.124	1	
4. TI	2.6835	0.80374	.53**	-.343**	-.366**	1

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

The correlation analysis shows the relation among variables. It is investigated that there is a significant relation between the workplace violence and work engagement (r = -.376, $p < .05$). This shows that increase in workplace violence in the organizations decreases the engagement of work. The correlation between the workplace violence and job satisfaction is also negatively related (r = -.357, $p < .05$). This means that job satisfaction of employee will be decreased by the increase in workplace violence in the organization. There is a positive correlation between (r =.53, $p < .05$) the workplace violence and turnover intention.

Table 4.3: Direct Hypotheses Testing

HYPO	IV	DV	R Square	F	Beta	t
1	Workplace Violence	Job Satisfaction	0.128	18.3	-0.357	-4.278
2	Workplace Violence	Work Engagement	0.141	20.588	-0.376	-4.537
3	Job Satisfaction	Turnover Intention	0.134	19.334	-0.366	-4.397
4	Work Engagement	Turnover Intention	0.118	16.645	-0.343	-4.08

The table: 3 represents the results of direct hypotheses 1, 2, 3 and 4. Regression analysis shows that 12% variation in the job satisfaction is caused due to workplace violence. It indicates that workplace violence causes job dissatisfaction (R2 = .128, F = 18.3, $p < .05$). Hypothesis 1 indicates that workplace violence has negative impact on Job satisfaction. Regression analysis supports the negative relation between WPV and JS, as the regression coefficient indicates (β = -0.375, $P < .001$). Therefore, first hypothesis has been accepted.

Further, second hypothesis indicates that 14% variation in the work engagement is caused due to workplace violence (R2 = 0.141, F = 20.588, $p < .05$). Workplace violence is negatively related to work engagement. Result of regression analysis also supports the negative relation between workplace violence and work engagement, that indicates the regression coefficient (β = -0.376, P $<$ .001). Therefore, second hypothesis is also accepted. Third hypothesis states that job satisfaction has negative impact on turnover intention. Regression analysis shows that job satisfaction has a negative impact on turnover intention, supporting the result regression coefficient indicates (β = - 0.366, P $<$ .001). Therefore, third hypothesis has also been accepted. Fourth hypothesis states that work engagement has negative impact on turnover intention. Regression analysis shows that work engagement has a negative impact on turnover intention, supporting the result regression coefficient indicates (β = - 0.343, P $<$ .001). consequently, the fourth hypothesis has also been accepted.

Table 4.4: Mediation Analysis

	Effect	**se**	**t**	**p**
Total Effect of WPV on TI	0.3278	0.0545	6.0185	0
Direct Effect of WPV on TI	0.2994	0.0583	5.1378	0
	Effect	**Boot SE**	**Boot LLCI**	**Boot ULCI**
Indirect Effect(s) of WPV on TI (Mediation of Job Satisfaction)	0.0284	0.0191	-0.0068	0.0681

For depicting the mediation analysis of work engagement and job satisfaction we used the mediation method recommended by Hayes (2009); which provides the direct, indirect and total effects of mediation in the model. According to table 4(a) the total effect of workplace violence on turnover intention is (β = 0.3278, t = 6.0185, p $<$ .05); indicating that increase in workplace violence leads to turnover intention. The direct effect of workplace violence and turnover intention is (β = 0.2994, t = 5.1378, p $<$ .05). The indirect effect of workplace violence and turnover intention clearly indicated that job satisfaction negatively mediates the relationship between workplace violence and turnover intention. The indirect effect β = 0.0284, [-0.0068, 0.0681], shows that workplace violence negatively influences job satisfaction which increases turnover intention.

Table 4.5: Mediation Analysis

	Effect	**se**	**t**	**p**
Total Effect of WPV on TI	0.3278	0.0545	6.0185	0
Direct Effect of WPV on TI	0.2994	0.0583	5.1378	0
	Effect	**Boot SE**	**Boot LLCI**	**Boot ULCI**
Indirect Effect(s) of WPV on TI (Mediation of Work Engagement)	0.0528	0.0223	0.0104	0.0977

Table 4(b) provides the direct, indirect and total effects of mediation. The overall effect of workplace violence on turnover intention (β = 0.3278, t = 6.0185, p $<$ .05) shows that increase in workplace violence leads to turnover intention. The direct effect of workplace violence on turnover intention is (β = 0.2994, t = 5.1378, p $<$ .05). The effect of turnover intention and workplace violence clarifies that work engagement negatively mediates the relationship between workplace violence and turnover intention. The effect β = 0.0528, [0.0104, 0.0977], shows that workplace violence negatively influences work engagement which increase turnover intention.

5 Discussion

The current study examines how workplace violence positively influences employees' turnover intention, through mediating mechanism job satisfaction and work engagement. The findings show that workplace violence has a positive relationship with turnover intention. The First hypothesis Workplace violence has a negative relation with job satisfaction has been accepted after running the regression analysis. If there is violence in the work environment the employees will be detached with their work, they would be no longer motivated hence job satisfaction will be lower amongst the employees. Second hypothesis Workplace violence has a negative impact on work engagement was proved after running the regression analysis. That if there is workplace violence the employee will feel discomfort which will in turn lower the engagement at work place. We proposed third hypothesis as Job satisfaction has a negative impact on Turnover intention. This proposed hypothesis has also been accepted. Moreover, the study proposed the fourth hypothesis as Work engagement has a negative impact on Turnover intention which has been accepted by the regression analysis. If the employees are not motivated enough or are not engaged in their work because of the violence faced at work, he/she would most probably have an intention to leave the organization. Fifth hypothesis Job satisfaction negatively mediates the relation between Turnover intention and workplace violence has also been accepted through regression analysis. When there is workplace violence, the employees of the work environment will feel less motivated and in turn will have intention to leave the organization as they are no longer valued in the work environment. This relation is further mediated by job satisfaction when there is workplace violence the employees will have low job satisfaction and the employee will have strong intentions to leave the work (organization). The sixth hypothesis Work engagement negatively mediates the relationship b/w workplace violence and turnover intention has also been accepted. Moreover, results show that work engagement negatively affects the relationship of the two proposed variables.

5.1 Practical Significance

The effects of workplace violence on work engagement, job satisfaction and turnover has been rarely studied. Therefore, with the help of this study we addressed the gap and provided reference for organizations/managers, call centers and hospitals to use to formulate policies relevant to it. The influence of workplace violence and turnover Intention can effectively be reduced by violence prevention climates. Recent studies about nursing suggested that a positive and supportive working environment, mutual respect is important for commitment In the organization (Erdogan and Yildirim, 2017; Perreira et al., 2018).

5.2 Conclusion

This paper reveals insight into the relation among the concept of violence at workplace, satisfaction of job, turnover intention and work engagement and from a novel study that has not recently been investigated. The examination uncovered that if there is violence at workplace it will reduce work engagement and satisfaction of job, which leads to turnover. We support replications and expansion of this examination to build the generalizability.

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The Impact of HRM Practices on Organizational Financial Performance of Banking Sector of Pakistan

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Abstract. This research comprehensively assessed the relation between framework of human resource management (HRM) practices and organizational financial performance. The results based on a sample of banks of Pakistan demonstrate that these practices have a monetarily and measurably huge effect on financial performance of organization in short and long term. Information was gathered through a questionnaire survey and tested on random sample of 120 bank employees in Pakistan. The effect of HR practices on financial performance of association is to a limited extent dependent upon their interrelationships. The mediating model is applied where the perceived organizational support is the mediating factor among the independent variables HR practices and dependent variable the financial performance of firm. The investigation demonstrates the relationship on the information gathered by the surveys using Statistical techniques, i.e. correlation and regression. The study concluded that all tested variables have a positive relation and impact on financial performance of banks. Towards the end, the research challenges are presented to mainstream researchers and future patterns are also enlisted.

Key words: HR practices, Banking Sector, Organizational Financial Performance, Mediating Model

1 Introduction

The influence of HR methodologies and practices on business performance is a significant subject in the grounds of HRM, commercial development, monetary decision making (Armstrong and Taylor, 2020). This research addresses the issue that how accurate the financial performance mediation model shows classification estimates in anticipating the HR practices of the banking services sector of Pakistan by analysing model results with statistical tools.

This research focuses on the past HR studies. The degree of investigation explains that dependent variables of the research has an impact on financial performance of banks, and the conclusions depend on a sample of local firms obtained through a wide scope of ventures. Besides, the studies expressly address two methodological concerns confronting survey-based research with respect to this topic: between HRM Practices and organizational financial performance and survey response bias.

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The banking industry of Pakistan is amongst the fast growing and developing areas of Pakistan. Therefore, it is significant to improve this area by having skilful and learned workers in this industry. As services are provided by banks to customers through the employees of the bank, it is significant for banks to retain the perfect individuals and this would be obtained by providing them what a worker needs apart from rewards and compensation (Huynh et al., 2020). HRM practices are a significant way to retain employees and furthermore to hold them. HR practices must be effective and should be considered in the Pakistan Banking sector, as they provide benefits to employees like, incremental pay scales, rewards and annual materialistic appreciations, regardless of whether workers in this sector observe that they are genuinely benefited of HR-practices? Different objections have been accounted for in news and magazines about poor HR-strategy in this sector. Hence, this research provides insight to this issue by analysing relation among HR-practices and financial performance of organization by applying statistical analysis.

Inappropriate HRM practices of a large portion of the banking sector are ascribed because of the absence of skilled HRM authorities. Research has proposed an affirmative link between an organizations HRM applications and the execution of HR independent variables on employees. The major section of the HR department of these banks doesnt understand the effect of appropriately dealing with its employees. Moreover, the additional consequences of HRMs performance in the organization are grouped (Quansah, 2013):

- Financial outcomes; benefits, bargains commercial centres, market shares
- Administrative outcomes; profit or loss, viability, sales,
- HR based outcomes; social and direct ramifications for the specialists satisfaction, obligation, delegate turnover, nonattendance

The financial performance of organization and the risk factors are two key problems that are challenging for the Banks. It is very risky that how efficiently the banking sector deals with general employees by keeping an eye on risk factors, which could in fact exploit the financial health of this sector. The banking sector may not become productive and they may not achieve proficiency unless the sectors HR section has specialties to deal with their employees.

In all, the following are significant contributions in this study:

- A wide range of existing literature has been discussed about HR practices and financial performance of organization having perceived organization support as a mediating variable (Quresh et al., 2010).
- A comprehensive empirical statistical analysis is performed on the survey data taken from the banks. Further, the correlation and regression techniques are applied (Ahmad et al., 2019).
- A collection of research challenges is discussed and the future directions are highlighted.

2 Literature Review

There is a broad research on the implication of HRM practices concerning the financial related execution of association. In spite of the fact that the investigation proposes different explanations behind HR failure, yet the most on a very basic level inspected the factor to quantify the money related execution of association, is choosing reasonable HR practices on keeping in view apparent perceived organizational support. The impacts of HR practices are to be assessed in this research, by estimating the financial performance of Pakistani Banks by mediating factor of perceived organizational support. For many years, analysts have been committing their time and respect for creating and watching the relationship among HRM-practices and money related execution of organization (Al-Bahussin and El-Garaihy, 2013). In perspective on the proof and results of going before investigates, it is essential that HRM is a huge segment that influences the legitimate ampleness in improving money related performance of the banks. In previous researches, the outcomes have demonstrated the certifiable connection among HRM and money related performance of organization. The review of the available theoretical evidence attempts to provide more insights into the understanding of this topic by investigating the theoretical facts on analyzing financial performance with respect to HR practices. The literature that is applied to this research on impact of HR has developed the following stages which are also summarized in Table 1.

2.1 HR Practices

The previous studies have dependably proposed that the usage of effective human resource board practices improves organizations performance. Precisely, determination and enrollment process, preparing; formal information sharing, disposition assessment, work plan, complaint methodologies, and work the board bolster projects; and execution assessment, progression, and propelling power pay structures that see and reward delegate authenticity have all been commonly associated with esteemed firm-level money related outcomes. These methodologies and procedures have been named HR Practices (Armstrong and Taylor, 2020), and received in this examination. Regardless, if this line of research is to be moved, a couple of certified impediments in the prior observational work must be tended to.

The Ability-Motivation-Opportunity (AMO) hypothesis (Bratton, 2017) gives the reason for making HR systems that deal with the representatives interests, to explicit their abilities, motivations, and the idea of their action. HRM practices thus have impact on individual performance inciting hierarchical performance if they reinforce discretionary undertakings, make aptitudes and allow performing.

Selecting the correct HR practices as independent factors are the significant development in the investigation of money related performance of the organization. The HR practices utilized for examining money related performance is a simple method to control HR instabilities in the vast majority of the organizations in academic investigations (Voo et al., 2018). The key objective of these examinations is to reveal the specific HR markers among the associations.

Additionally, the analysis (Kehoe and Wright, 2013) concentrated on the primary issue that concerns the potential simultaneousness between HR Practices and corporate cash related performance of organization. For instance, if the firms that have best performance in the industry undoubtedly grasp HR practices, by then simultaneous evaluations of the influence of these practices on performance of firm could be misrepresented. Then again, it may be that by and large lower-performing firms go to HR practices as a fix. Given this is valid, by then such cross-sectional examinations will make light of the certifiable effects of HR practices on financial performance. This sort of simultaneous relationship is more outlandish by virtue of turnover and proficiency, in light of the way that these variables would be most likely not going to by and large sway the assurance of HR practices (Schmidt et al., 1979).

2.2 HR Practices related to Firms Performance

Literature describes the influence of HR practices on performance of the banks in Ghana (Abugre and Adebola, 2015). The analysis has been made on the data of some specific years using statistical tools, providing the results that there is essentially an affirmative connection among HR practices and organizational performance. They analyzed HR practices and assessed the impression of employees on HR-practices of banks. This study also builds up the influence of selected HR-practices on the banks productivity. Keeping in view the existing theoretical studies, following hypothesis is proposed:

Hypothesis I (a): The recruitment and selection is positively associated to organizational financial performance at banks.

Although, author proposed that strategic human resource management (SHRM) research builds up the relation between HR practices and organizational level budgetary and advertise policies (Kim et al., 2017). The results of the statistical analysis provided the evidence that the significant job of the workers impression of HR practices had varying effect for some particular HR-practices and intervening effect on other HR practices on the performance of employees. The results show that workers impression of selected HR practices had slightly intervened and mediated the link among HR practices and performance of organization.

Recently in Pakistan (Ahmad et al., 2019; Hunjra et al., 2010; Khan et al., 2018; Quresh et al., 2010; Tahir et al., 2014) applied model of financial performance measured the organizational performance to evaluate the HR condition of the banking sector of Pakistan. These studies provide proof to the acceptability of these HRM models with employee and financial performance measures as a reliable tool to measure the productivity of the banking sector.

2.3 HR Practices and Financial Performance of Organization

Various researchers have considered the links among distinct HR practices and financial performance of beginners. For example, study contended that the budgetary profits associated with interests in active HR practices are commonly substantial (Dyer and Reeves, 1995). Additionally, the research related to utility analysis of employee (Huselid, 1995) has concluded that one percent increase in the standard deviation in performance of an employee is equivalent to forty percent of wage. This result proposed that the HR practices are considerable. Though, a vast percentage of the experimental work related to this subject has been conducted in research laboratories (Voo et al., 2018), exhibited field information suggesting that standard deviation may in reality be well more than 40 percent of pay. Likewise, another study posited an affirmative link between the HR practices and financial performance of a company by considering the enlisting, choice test (Chien, 2004), and the application of prescribed HR practices for the benefit of firms financial health. Likewise literature suggests an established relationship between the HR practice (TD program) and financial performance (Guthrie, 2001).

Nonetheless, given the direct link between firm profit based capacity of slack resources for interest in such HR practices, it is anything but difficult to envision a company's monetary exhibition having such an impact (Huselid, 1995). Since overview respondents for the most part self-select into tests, selectivity or reaction predisposition may likewise influence results. The most widely recognized type of selectivity predisposition happens when the likelihood of reacting to a survey is connected both to an association's money related performance and the nearness of HR practices (Russell et al., 1985). Without knowing the heading of these connections from the earlier, notwithstanding, a researcher can't decide the impact on the outcome of such rehearses on corporations financial act. In spite of a well-created writing dedicated to the factual correction of choice inclination (Arumugam et al., 2011), such remedy has infrequently been endeavored in earlier work.

Likewise, the study proposed that financial measures can be categorized as profit or loss, sales and share of market (Quresh et al., 2010). They comprise of numerous exercises and approaches planned for completing the people or the HR aspect of an administration position (Arumugam et al., 2011). This investigation focused on two HR practices, which are compensation and the reward framework, and training and development. These practices are picked in light of the fact that they are known to have the most effect on firms financial performance. Keeping in view the existing theoretical studies, following hypothesis is proposed:

Hypothesis II (a): The training and development is positively associated to organizational financial at banks.

HR practice (Compensation and reward) is required in organizations for budgetary salary and prosperity of their employees. Also HR practice (Training and Development) can prompt unrivaled information, aptitudes, capacities, frames of mind, and conduct of workers, in this way upgrading the great monetary and non-budgetary execution of the organizations. For any situation, analysts have utilized both budgetary and non-money related measurements to gauge authoritative execution (Thang et al., 2008). Keeping in view the existing theoretical studies, following hypothesis is proposed:

Hypothesis III (a): The compensation and reward is positively associated to organizational financial performance at banks.

Besides this fact some researchers have proposed in their studies that the better performance of employees wholly dependent upon HRM and it does matter. Study opposes that the particular theory of HRM that is its suspicion that improved financial performance of organization is dependent upon the better HR practices working in any organization (Arumugam et al., 2011). Hence, the more productively HR practices can be applicable to employees, the better would be the financial act of the association. Keeping in view the existing theoretical studies, following hypothesis is proposed:

Hypothesis VI (a): The performance management is positively associated to organizational financial performance at banks.

Further the research proposed by (Dajani and Zaki, 2015) describes the connection among HR practices and the organizations productivity and proposed that the HR practices were altogether recognized as the gross rate of turnover for assets for any organization. This indicates that if appropriate HR methodologies, procedures and systems are offered to any employee, then there is a substantial effect on financial performance of organization. Hence, the competence of HRM approaches depends on its planning procedures by following different business techniques.

2.4 Perceived Organizational Support (POS) as the Mediating Variable

Perceived organizational support could be improved through execution of HR practices. The past examinations portrayed the association between states of the workplace, the ability of POS in various organizations. They examined that the organizations where HR practices are executed sufficiently; they are more productive than other organizations. Moreover, a study drove an investigation of the financial sector of Korea and their inspiration of study was to ask about HR factors, influencing on POS (Kim et al., 2017). Further, the study portrays that POS and HR practices are interlinked to each other, as shown by HR practices expect a vocation of the worker to achieve the better regulated and needs POS (Tokmak et al., 2012). According to the factual investigation, for the most part representatives have trust and desire from the top management of the organization and along these lines, top specialists will undoubtedly give authoritative help to better financial performance of the employees and organization. Keeping in view the existing theoretical studies, following hypotheses are proposed:

Hypothesis I (b): The perceived organizational support mediates the positive effect of recruitment and selection on financial performance.

Hypothesis II (b): The perceived organizational support mediates the positive effect of training and development on financial performance.

Hypothesis III (b): The perceived organizational support mediates the positive effect of compensation and reward on financial performance.

Hypothesis VI (b): The perceived organizational support mediates the positive effect of performance management on financial performance.

Table 2.1: Summary of Literature Review (Form Time Period 2010-2019)

Research	Database	Country	Model	Findings
(Hunjra, 2010)	Data of 450 bank employees, 295 questionnaires were processed.	Pakistan	The relationship model of employment fulfillment HRM practices	Affirmative and considerable connection among occupation fulfillment and HR practices.
(Quresh, 2010)	Data of 46 private banks of Pakistan.	Pakistan	The relationship model of HR practices, monetary procedure of banks	There is positive impact among HR practices and the financial procedure of banks.
(Tokmak, 2012)	Data of managers of 186 SMEs.	Turkey	The relationship model of HR practices, corporations act and POS	HR practices have noteworthy and positive impact on financial activities and POS.
(Al-bahussin, 2013)	Data of 203 HR directors working in big organization.	Saudi Arabia	The relationship model of HRM practices hierarchical performance	HRM practices decidedly identify with employee and firms financial activities.
(Quansah, 2013)	Data of 150, 40 from top management and remaining 110 from lower level employees.	Rural banks of Ghana	The link model of HR practices corporations act.	HRM has the effect on firms financial activities.
(Tahir, 2014)	Data of 8 private banks of Peshawar region.	Pakistan	HR- practices identifies worker profitability, financial performance	There is an association among HR-practices and firms financial activities.
(Choon Hee, 2016)	Data of 245 bank employees, 200 questionnaires.	Egypt	Relationship model of worker commitment, work execution, authoritative commitment	Employee commitment has the positive effect identified with the associations financial activities.
(Khan, 2018)	Data of 15 Pakistani banks, the questionnaire were processed.	Pakistan	Relationship model of representative execution measures-firms performance	The execution proportions of the worker have agreed impact on financial performance of the firm.
(Ahmad, 2019)	250 questionnaires were processed to conventional banks.	Pakistan	Relationship model of the worker inspiration firms performance	Employee examination is unfavorably related and the motivator is decidedly identified with financial performance of the firm.

2.5 Research Framework

In this study the exhaustive structure has been developed, as shown in Fig. 1, comprising of HRM practices Recruitment and Selection (HR), Training and Development (TD), Compensation and Reward (CR) and Performance Management (PM) as the independent variables. Perceived organization support (POS) is the mediating variable that acts as mediator concerning HR practices and the dependent variable financial performance.

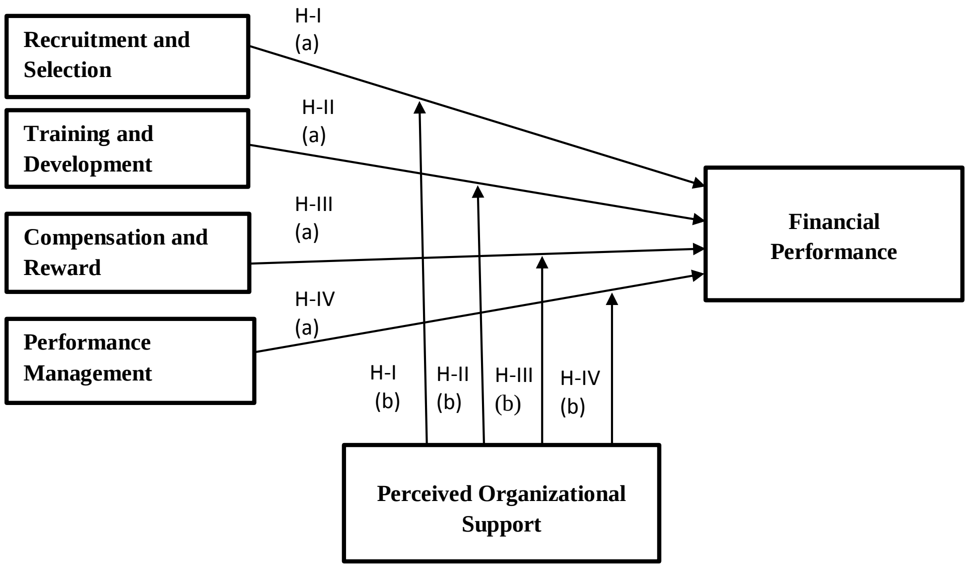

Figure 1: Proposed Research Framework of Mediating Model of HR practices- Financial performance mediating by Perceived Organizational Support, adopted from (Voo, 2018)

3 Materials and Methods

This research provides insight to this issue by analyzing relation among HR-practices and financial performance of Banking Sector of Pakistan by applying statistical analysis. A questionnaire has been developed based on Likert-scale type questions. The research approach is predictive and the methodology employed is quantitative in nature. This cross-sectional investigation is dependent on primary data. Primary data on five independent variables, mediating and dependent variable were gathered from officials/administrators and administrators working in banks in Pakistan through distribution of structured questionnaire. The convenient sampling is used to get reactions from focused respondents and keeping away from any anomaly impact on the outcomes. Keeping in view the expense of gathering primary data, sample size comprised of 120, focused on respondents living in enormous urban communities of Pakistan, i.e. Lahore and Islamabad by considering 95% confidence level and 5% margin of error. For the steadiness of this examination, a sorted out questionnaire comprising of 35 questions, which is adjusted from the exploration paper (Mayes et al., 2017) is made to gather primary data and depended on Likert 5 point rating scale. The information is gathered through poll which was intently investigated. When the reactions were coded and scored suitably the underlying investigation which included distinct insights of statistic factors was performed utilizing MS Excel/SPSS.

4 Data Analysis and Results

4.1 Descriptive Statistics and Correlation Analysis

To demonstrate the Pearson correlation, statistical technique was applied on the information to check the relationship among post selected HRM practices (HR, TD, CR and PM), perceived organizational performance (POS) and financial performance (FP) before doing the hierarchical regression analysis. The reliability of research instrument is validated using Cronbachs alpha on a pilot study based on 33 respondents. In this study correlation test was performed on the variables identified in the research model and its results are accessible from Table 2. In the correlation table, the factors of POS, HR, TC, CR and PM are identified as influential on organizational financial performance.

Organizational financial performance (FP) had strong positive correlation with POS and HRM practices (HR, TD, CR and PM). It also had strong correlation with demographic factors including service years, demographic factors age, education and job description.

Table 4.1: Correlations

Variable	**1**	**2**	**3**	**4**	**5**
1. FP					
2. Perceived organizational performance	.451**				
3. Recruitment and Selection	.261**	.542**			
4. Training and Development	.253**	.350**	.606**		
5. Compensation and Reward	.305**	.552**	.686**	.612**	
6. Performance Management	.323**	.532**	.570**	.563**	.632**

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

4.2 Multiple Regression Test

Multiple Regression Test was used determine the effect on the estimation of dependent variable regarding changes in independent variables. The regression test was used to recognize the direct or linear relationship among five independent factors, i.e. HR practices (HR, TD, CR and PM) and mediation factor POS are identified as influential on organizational FP. In this model (a), 9.3% variability is explained in the financial performance of banks by variables PM, TD, HR, CR, with a coefficient value of 0.55, indicating that increasing one unit of variables PM, TD, HR, CR will increase financial performance by 0.55. Table 3.1.

In this model (b), 18.6% variability is explained in the financial performance of banks by variables PM, TD, HR, CR, with a coefficient value of 0.37, indicating that increasing one unit of variables including mediating variable POS, PM, TD, HR, CR will increase financial performance by 0.37. Table 3.2.

Table 4.2: Multiple Regression Test for variables (pm, td, hr, cr, pos)

Model	**R**	**R Square**	**Adjusted R Square**	**Standardized Coefficients**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.351[a]	0.123	0.093	0.55	0.123	4.037	4	115	0.004

a. Predictors: (Constant), pm, td, hr, cr

Table 4.3: Multiple Regression Test for variables (pm, td, hr, cr, pos)

Model	**R**	**R Square**	**Adjusted R Square**	**Standardized Coefficients**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.469[b]	.220	.186	0.37	.097	14.126	1	114	.000

b. Predictors: (Constant), pm, td, hr, cr, pos

The R value signifies the variability explained in the financial performance of banks is 0.469 for Model 2, which specifies a high degree of positive strong relationship with mediating factor of POS. While R value for Model 1 is 0.351, which shows moderate degree of relationship. To determine the appropriateness of the research model, the value of R Square should be taken into consideration. R square of research model 1 is .123, it means that 12 percent of observed behavior of Financial Performance is well-defined by four independent variable of HR practices (HR, TD, CR and PM) (Table 3).

Moreover, R square of research model 2 is .220; it means that 22 percent of observed behavior of organizational financial performance is well-defined by four independent variables of HR practices (HR, TD, CR and PM), and with the mediating independent variable POS.

The Table 4demonstrates that each critical HR practice has indirect impact on organizational financial performance. The hierarchical multiple regression test is applied and Model 1 is without mediating factor POS. HR, TD, CR and PM predict nonsignificantly the financial performance. It means 1 standard deviation change in factors (PM, TD, HR, CR), does not cause

Table 4.4: Hierarchical Multiple Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)*a	12.796	1.972		6.49	0
	hr	0.052	0.201	0.033	0.259	0.796
	td	0.054	0.162	0.04	0.333	0.74
	cr	0.134	0.135	0.134	0.991	0.324
	pm	0.219	0.133	0.197	1.651	0.102
2	(Constant)*b	8.906	2.135		4.171	0
	hr	-0.128	0.196	-0.082	-0.652	0.516
	td	0.132	0.155	0.098	0.854	0.395
	cr	0.028	0.131	0.027	0.209	0.834
	pm	0.093	0.13	0.083	0.712	0.478
	pos	0.463	0.123	0.402	3.758	0

**Dependent Variable: fp*
a. dependent variable fp, independent variables(hr, td,cr,pm)
b. dependent variable fp, independent variables(hr, td,cr,pm and a mediating factor pos)

increase in financial performance. The standardized beta () has value closer to 1 or -1, the relationship between variables is stronger.

Where as in Model 2 POS exhibited an immediate impact on financial performance (B = .402, p .05 as Sig. is .000), exhibiting support for H5. This investigation likewise uncovered that the supposition of homogeneity of difference for the regression is met and that a communication between at any rate one of the HR practices and POS may be influencing everything.

The AVONA test is applied using alpha = 0.05, as the significance value for both models is less than p=0.05, thus the regression test is significant for Model 1 and 2 from Table 5.

The linear relationship between HR recruitment and selection (sigma value of .516), Training and Development (sigma value of .395), Compensation and Reward (sigma value of .834), Performance Management (sigma value of.478) and Perceived Organizational Support (sigma value of .000) with Financial Performance is upheld since determined sigma worth is equivalent or more prominent than 0.1 for POS.

Hence this study hypothesized that HR practices, an attention on worker advancement (for example not legitimately ordered or required by agreement), would associate with money related impression of authoritative help. Our results support previous study (Kim et al., 2017), where six of these hypotheses: HR, TD, and CR anticipate POS, which is the mediating variable and has positive correlation with FP; whereas for regression analysis and ANOVA test, POS shows a statistically significant overall relationship with organizational financial performance, thus accepting Hypotheses (B) of I, II, III and IV and results are supported according to previous study (Kim et al., 2017).

Table 4.5: ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	138.37	4	34.593	4.037	.004b
	Residual	985.496	115	8.57		
	Total	1123.867	119			
2	Regression	247.021	5	49.404	6.423	.000c
	Residual	876.845	114	7.692		
	Total	1123.867	119			

a. Dependent Variable: fp
b. Predictors: (Constant), pm, td, hr, cr
c. Predictors: (Constant), pm, td, hr, cr, pos

Table 4.6: Hypotheses Test

Factor	Beta Value	Sig.	Result
HR recruitment and selection	-0.082	0.516	Not Supported
Training and Development	0.098	0.395	Not Supported
Compensation and Reward	0.027	0.834	Not Supported
Performance Management	0.083	0.478	Not Supported
Perceived Organizational Support	0.402	0	Supported

5 Recommendation and Future Research

- HR practices are identified with authoritative financial performance as mediated by POS for representatives in organizations and the Hypotheses (B) of I, II, III and IV are accepted. As recently examined, HR practices and POS job were discovered all the more firmly connected with organizational financial performance when industry uncertainty is high (Waldman et al., 2001). On account of banks, the uncertainty of organization is high so all things considered the POS is certain. The HR practices may be particularly compelling in advancing POS and accordingly organizational performance.

- The employee POS mediated the relationships of HR-practices with organizational financial performance and hypotheses (B) of I, II, III and IV had been accepted based on the correlation and regression having standardized beta. Hypotheses (a) of I, II, III and IV are rejected because dependent variables (HR, TD, CR and PM) are not much affected unless the mediating variable POS escalates the financial performance of banks.

- Other organization wide factors other than HR practices like initiative are related with POS and, thusly, could add organizational performance in future in Pakistan.
- POS might be directed into standard employment exercises instead of into advancement. This might be totally satisfactory to organizations whose business methodology relies upon forefront workers' steadiness as opposed to inventiveness.
- Cultures and Climates may give a typical encounter of the organization as a well spring of low or high positive valuation and in this way add to POS. Thinking about casual systems inside organizations, POS has been found to increment with the quantity of connections workers have that give enthusiastic help or valuable data (Waldman et al., 2001). Such systems may work by recognizing the association as a solid wellspring of minding and positive valuation.
- The organizational size is the important factor while studying the mediating factor POS in concentrating small to medium sized associations. While large firms stock trades frequently comprised of layered bureaucratic constructions that might diminish the effect of mediating variable POS all through the organization and this would be new quest period for this theme.
- The government of Pakistan needs to appreciate the need for HRM, to have a strategic perception and to communicate this need to both the private banking business owners and government banks as well for better financial performance (Quresh et al., 2010).

5.1 Conclusion

By considering a sample of 120 business banks of Pakistan, the employee POS mediated the relationships of HR-practices with organizational financial performance because the hypothesis is accepted based on the correlation and regression having standardized beta. The strong positive correlations were discovered between independent variables, i.e. HR practices (HR, TD, CR and PM) and POS and dependent variable, i.e. FP. Further demographic also had strong positive correlation with employee performance. The research tested five hypotheses using regression analyses. The regression models had coefficient of R value of 0.469 which was indicative of high precision and reliability. The standardized beta () has value closer to 1 or -1, the relationship between variables is stronger. The regression analyses revealed that HR practices (HR, TD, CR and PM) and POS were important factors in employee performance. The positive connections of HR-practices with organizational financial performance, as mediated by POS, proposes reasonable ways organizations can upgrade their performance. However, the relationship of POS at the authoritative level relies upon up-to-date HR-practices which if not managed can affect financial performance of organization because of the inadequacy of the industry in which the organization resides.

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CONTRIBUTOR'S GUIDELINES

Abstract. .
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