This Issue includes:

1. Dividend Policy and Bank Performance in Pakistan (4-11)
   Faid Gul, Rashid Mehmood

2. Cultural Values and Beliefs in Private and Public Organizations in Pakistan: A Comparative Study. (12-21)
   Rauza, Dr. Naveed Akhtar

3. After Shocks of Work Life Imbalance: Descriptive Analysis Grid (22-32)
   Anita Abbasi, Dr. Naveed Akhtar

4. Impact of advertisement on Brand Prestige: A case of Fair & Lovely. (33-42)
   Asif Ali, Muhammad Ahmad Farooq, Kamran Maqbool

5. Examining Data and Model Specification Before Analysis of A Structural Model in Structural Equation Modeling. (43-64)
   Dr. Ghulam Dastgeer, AtiqUr Rehman, Wali Rahman

   Pervaiz Akhtar
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**Table of Contents**

1. Dividend Policy and Bank Performance in Pakistan  
   (4-11)  
   Faid Gul, Rashid Mehmood
2. Cultural Values And Beliefs In Private And Public Organizations In Pakistan: A Comparative Study.  
   (12-21)  
   Rauza, Dr. Naveed Akhtar
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   (22-32)  
   Anita Abbasi, Dr. Naveed Akhtar
   (33-42)  
   Asif Ali, Muhammad Ahmad Farooq, Kamran Maqbool
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   (43-64)  
   Dr. Ghulam Dastgeer, Atiq Ur Rehman, Wali Rahman
   Pervaiz Akhtar
DIVIDEND POLICY AND BANK PERFORMANCE IN PAKISTAN
Faid Gul, Lecturer, Rashid Mehmood (MS. Scholar)
Faculty of Management Sciences, NUML Islamabad

Abstract
This study aims at ascertaining the relationship between dividend policy and banks’ performance in Pakistan. The data have been collected from 5 years financial statements (2007-2011) of 29 banks operating in Pakistan. These comprise of 24 Conventional and 5 Islamic banks. Financial statements were downloaded from banks’ websites. The results of this study show that the average dividend paid by Pakistani banks over the study period was calculated as 11.43%. The results reveal that paying higher dividend in the current period is a signal of better future performance. The results also show that during the period under observation risk taken by the banks negatively affected their performance. This is, primarily, because of the global economic crisis where the performance of banks with excessive risk exposure was badly affected.

Keywords: Dividend policy, Risk, Bank performance, Pakistan

INTRODUCTION
Dividend policy is vital for banks to make their financial decisions. Dividend shows the distribution of company’s earning to its shareholders which is declared in Annual General Meeting (AGM). Dividend allocation decision is one of the major decisions which a company has to take. Other crucial decisions include financing, working capital management and investment (Rose et al., 2002). Dividend distribution is very important because it identifies the flow of funds which are going to be distributed to the shareholders and retained by the firm for reinvestment purpose. It also provides information to shareholders regarding a firm’s current and future performance. Dividend is considered one of the most important financial decisions that corporate manager meets, as noted by Baker and Powell (1999).

Every Shareholder is a rational investor who expects to receive income as a return on his investment. Therefore bank shareholders also require a rate of return be in the form of dividend payment or in the form of capital gain. But shareholders place more value on the current income they receive, e.g. dividend, from their investment and less value on the future cash or non-cash income, e.g. capital gain. Therefore dividend policy becomes a very important decision for corporate managers. In such circumstances, as noted by Lasher (2000) decline in dividend is a horrible news for shareholders which consider as a signal of future performance. It usually comes with a continuous decline in earnings in the future periods. A number of studies on dividend policy have been conducted in developed countries without focusing on a particular sector.

In developing economies, the decision is taken very carefully by both the investor and management of banks whether to pay dividend or to retain the earnings (Glan et al., 1995). According to Pecking order theory, firms prefer to use internal source of financing first, then debt, and finally external equity is obtained from issuing new of stocks. Firms which are more profitable have higher internal financing available as well as can support high level of dividend. According to Lintner (1962) and Gordon (1963), dividend payout changes the market value of the firm which shows enhancement in performance.

This study provides added evidence on the impact of dividend payout ratio and risk on bank performance in developing country like Pakistan. It encompasses all banks operating in Pakistan.
including Conventional as well as Islamic banks. Here dividend is used as a signal or predictor of current and future performance as measured by pre-tax return on equity. Similarly, risk taken by the bank is also used as an explanatory variable of the performance. It will help the decision makers in formulating the strategies and rules for the dividend and risk management in banking sector in Pakistan.

LITERATURE REVIEW

Dividend policy of a firm is multipart but critical issue in corporate finance. From dividend we can judge the performance of banks or other organizations. Similarly, risk exposure and risk management play a critical role in banking sector therefore it can affect the performance of banks. For the current study it is even more critical as the study period is characterised by the global economic and banking crisis. In such circumstances it is expected that banks with excessive risk exposure will have lower financial performance. This may sound like a contradiction to the standard view of positive association between risk and expected return but in the wave of global economic and banking crisis it is expected to have negative association.

Kale and Noe (1990) proposed that dividend performs as an indicator of the stability and solidity of an organization future cash flows. The analysis of the existing literature expose that the key determinants of dividend decision include the liquidity, after tax earning of firms, cash flow consideration, future earnings, past dividend, growth, inflation and interest rate. Brigham (1995) accepts that dividends give possibly the best and most trustworthy signal about future performance. According to Brigham, increase in dividend is an indicator of executive self-belief that upcoming earning will be strong enough to maintain the new and high level of dividend. This view is similar to Foong, et al. (2007) when they note that there is proof to hold the vision that shareholder responds to dividend change. Lintner (1956) finds that the main significant determinant of size of a company’s dividend payment varies with changes in current and expected earnings. Foong, et al. (2007) observe that although organizations do not have compulsion to announce dividends on common stock, they normally hesitate to change dividend rate every year as organization try hard to meet stockholder hopes and to construct to good quality image among investor, and provide indication in general public that organization have consistent earning. Firm performance measured by the earning generated in terms of their profit. Dividends are important to shareholder and investor in showing the earning that a company has generated.

Bird in hand theory proposes a similar relationship that exists in dividend payout and firm value. It declares that capital gains are more risky as compare to dividends. Investors prefer dividend to capital gain (Amidu, 2007). Since dividends are less risky than capital gains, so the firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price. But high payout ratio is an indication of better current and future performance.

Bhattacharya (1979) examines in his study that stock prices positively react to increase in dividend payments. So he suggests that dividends have informational contents that can also be used for predicting future earnings. Few et al (2007) points that companies which have good dividend paying policy are less risky, more profitable, stable and mature in comparison with the companies which have bad dividend policy.

In Pakistan, Section 19 (1) of banking companies ordinance 1962 restricts banks not to pay dividend on their shares until all of their capitalized expenses, which include preliminary expense, share selling commission, loss incurred, organizational expenses, and any other item of
expenditure not represented by tangible assets, have been completely written off. Therefore, in Pakistan any bank which is paying high dividends means more profitable and having better performance. So dividend payment can be used as an explanatory variable for future financial performance of banks. Along with dividend payout ratio risk exposure of the banks is also used as an explanatory variable, primarily, because of the recent global banking crisis. This study attempts to investigate the impact of risk exposure on the performance of banks in a situation characterised by global banking crisis.

The theoretical framework of the study with dependent and explanatory variables is given below.
Theoretical Framework

Hypothesis

H1: There is a significant relationship between Dividend Policy and Bank Performance.

H2: There is a significant relationship between Risk and Bank Performance.

METHODOLOGY

The study is based on panel data constructed from financial statements of 29 Conventional and Islamic banks operating in Pakistan. This research study uses secondary data, which are taken from the 5 years (2007-2011) annual financial reports. Annual financial reports are publicly available from the website of respective banks. Multiple Linear Regression analysis is used to investigate the impact of dividend payout and risk exposure on banks performance. SPSS is used to estimate the multiple linear regression equation as well as the descriptive statistics of the sample data.

Model

Pre-tax ROE = Constant + DivPout + Risk Pre-tax ROE + Error Term

All variables are defined in Table A with their expected sign. In this equation the dependent variable is performance, which is denoted by Pre-tax ROE, whereas dividend payout ratio and risk exposure of bank’s return, denoted by DivPout and Risk Pre-tax ROE respectively, are the explanatory variables.
Table A. Variables and Expected Signs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
<th>Expected Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-tax ROE</td>
<td>EBT to Equity</td>
<td>Positive</td>
</tr>
<tr>
<td>DivPout</td>
<td>Cash Dividend Paid to Net Income</td>
<td>Positive</td>
</tr>
<tr>
<td>Risk exposure</td>
<td>Standard Deviation of pre-tax ROE</td>
<td>Positive/Negative</td>
</tr>
</tbody>
</table>

DISCUSSION OF EMPIRICAL RESULTS

Descriptive Statistics

Descriptive statistics are given in Table B below. Results in Table B over in five years shows that the mean ROE to equity holders is -2.86% based on earnings before taxes. This negative value is largely because of the global banking crisis which started in 2007. The mean dividend payout ratio over the five years time is 11.43% while the standard deviation of the Pre-tax ROE, which measures the risk exposure of bank’s earning to equity holders, is 26.80%.

Table B. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-tax ROE</td>
<td>29</td>
<td>-1.64</td>
<td>.91</td>
<td>-0.0286</td>
<td>.45701</td>
</tr>
<tr>
<td>DivPout</td>
<td>29</td>
<td>.00</td>
<td>.48</td>
<td>.1143</td>
<td>.16540</td>
</tr>
<tr>
<td>Risk exposure</td>
<td>29</td>
<td>.04</td>
<td>1.86</td>
<td>.2680</td>
<td>.41388</td>
</tr>
</tbody>
</table>

Multi-collinearity

The check the multi-collinearity and mutual independence of the explanatory variable with each other Variable Inflation Factor (VIF) and Durbin Watson tests are applied to the data. In these results neither of predictor variable has a VIF greater than ten, which is the critical value for this test, therefore the model does not suffer from multi-collinearity problem. The values for Durbin Watson tests are also in the acceptable range of 1.5-2.5 therefore it is clear that the explanatory variables are mutually independent and do not measure the same phenomena. The results of these two tests are given in Table C.

Table C. Regression results for the model

<table>
<thead>
<tr>
<th>Model Summary^a</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>.729^a</td>
<td>.531</td>
<td>.495</td>
<td>.32473</td>
<td>2.054</td>
<td>1.018</td>
</tr>
</tbody>
</table>

^a. Predictors: (Constant), Risk exposure, DivPout
DISCUSSION OF REGRESSION RESULTS

The model summary of regression results shows a value of 0.531 and 0.495 for R square and Adj. R square, respectively. Keeping in view the simplicity of the model, with only two explanatory variables, this shows a reasonable value of the coefficient of determination. This result shows that around 50% of the variation in the pre-tax ROE is explained by dividend payout ratio and risk exposure of banks. The ANOVA table, with F-value of 14.729 and F-significance 0.000 shows the overall fitness of the model.

From the regression results, given in Table C, it is evident that dividend payout has a statistically significant positive impact on the performance of bank’s as measure by pre-tax ROE. The coefficient of dividend payout ratio is 0.407 with a t-value of 3.005 which is statistically significant at 99% confidence interval. This means that high dividend payout ratio is an indication of better performance. It should be noted, however, that high dividend payout ratio is not the reason of high profitability but it is, actually, a signal or indication of better performance. High dividend payout ratio reflects the confidence of management about future performance. On the other hand, high dividend payout ratio of banks also compels management to use the scarce resources effectively and efficiently. Therefore management will extract more profit from the limited equity thus increasing the value of pre-tax ROE.

Generally, the sign of risk coefficient is expected to be negative based on the extensive literature. But as discussed above here the sign was expected to be negative because of the global banking crisis.
crisis. It means that the pre-tax ROE is negatively affected by the excessive risk position taken by banks. Here the coefficient is negative with a value of -0.552 with is statistically significant with an absolute t-value of 4.074. This of t-value is also statistically significant at 99% confidence interval.

CONCLUSION

The main thrust of this study is to find investigate the impact of dividend payout and risk exposure of bank on it performance in Pakistani context. As the time period of the study is characterised by the wave of global banking crisis therefore this add a new dimension to existing research in this field. Based on the empirical results of the study it can be concluded that dividend payout ratio and risk exposure of bank significantly affect bank’s performance in Pakistan. It is important to note that dividend payout ratio is an indication of better performance and play a signalling role for performance of bank. It is not an independent variable of the kind which causes the performance if it value is changed. The valuable lesson from this study, that an investor can learn, is to take advantage of the payout ratio of bank to speculate about it future perform. Similarly, risk exposure of bank negatively affects its performance. Excessive risk exposure coupled with global banking crisis is the reason behind this negative association between risk exposure and performance of a bank. For future research a comparative study of the time period characterized by global banking crisis and stable economic conditions may be conducted. Similarly, the study can also be extended to other sectors of the economy.

REFERENCES

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CULTURAL VALUES AND BELIEFS IN PRIVATE AND PUBLIC ORGANIZATIONS IN PAKISTAN: A COMPARATIVE STUDY

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ABSTRACT

The purpose of this research is to identify if there is any difference in cultural values and beliefs that exist in Public and Private Organizations in Pakistan. The motive behind this study is to authenticate or nullify the perception of people that there is a big cultural difference between public and private sector of Pakistan. Culture has been measured on three dimensions i.e. Heterogeneity, Uncertainty Avoidance and Individualism and its difference is identified in public and private organizations in Pakistan. This research paper includes three research questions to measure if the above mentioned three cultural dimensions different in public and private organizations in Pakistan. The stratified random probability sampling is used for selecting of organization i.e. three private and three public organizations. Response from 100 hierarchical levels employees (Top to Bottom) is gathered through structured questionnaire. To find relationship between these variables Mean, standard deviation and multiple correlation is used to support the findings.

KEY WORDS: Cultural values, Heterogeneity, Individualism, Uncertainty Avoidance.

INTRODUCTION

Culture is basically a mechanism which is based on meanings constructed by society. Culture is always different and unique that the people sharing the same culture react to the same problems that each person in the culture has. Beliefs and values are developed by the members of a group or groups in a society and then passed it on to others. The meanings of these values are extracted from the successfully and precisely dealings of cultural problems that may arises in the environment and also from solving the difficulties of aligning relations of a society. (Hofstede, 1980; Schein 1985). National culture is used to explain the culture on the basis of society level i.e the cultural beliefs and values which are categorization of a particular or specific people that belongs to a certain nation and country. Culture is hence found to be integrated or correlated with and in most cases forecast, results and behavioral interest which are important to the researchers of management or international business.

Values and beliefs play an important role in influencing an organizational culture. Organizational culture plays an essential role in determining the principals of an organization. Cultural beliefs and values have a considerable impact on the attitude towards life. One behavioral description of culture says that it is a social system where people check and observe their own values, beliefs principles and actions. It serves as a base for the life of any organization. Culture forms and persuades an organization’s attitude and outlook and it gives an exclusive identity to any organization.
Differences in cultural beliefs and values, on the basis of three cultural dimensions i.e. heterogeneity, uncertainty avoidance and individualism, is identified in public and private sector of Pakistan. Today’s culture is very uncertain. Mangers of private and public organization can get benefit from this paper in identifying these cultural dimensions Heterogeneity, Uncertainty Avoidance and Individualism in their organization.

The present study is based on the study of Adrian and McGuire (2003) that used cultural model with nine dimensions. This study is to discover the reasoning patterns of various respondents from both public and private organizations of Pakistan and the relationship that lies between such reasoning with the respondent’s cultural beliefs and values.

**RESEARCH QUESTIONS**

- Is heterogeneity different in public and private organizations?
- Is uncertainty avoidance different in public and private organizations?
- Is individualism different in public and private organizations?

**LITERATURE REVIEW**

Perceptions regarding creativity are affected by cultural beliefs and values. Ideas which might be useful, interesting and considered potentially useful in one culture may be considered as bizarre, inappropriate and trite in other Cikszentmihalyi (1996). There are many approaches and frameworks which describe and assess the beliefs and cultural values. This research has used three dimensions to measure culture with in Public and private organizations the dimensions which are used are Heterogeneity, Uncertainty Avoidance and Individualism. The three cultural variables which are evaluated and analyzed in this study are defined as follows:

**Heterogeneity**

It is the extent to which the members of a group within a culture endure differences in approaches and work attitudes between both out-group and in group members. A study by (Storbacka, Nenonen 2009) analyzed how customers heterogeneity can be balanced by the firms, as well as their relationship (customers) and the portfolios of the customers through differentiated models of business. They found that it is the duty of the management to identify the relationship between heterogeneity of a customer and its performance and to develop their portfolios of the customers accordingly.

Another study by Vilchez at al (2011) aimed to describe heterogeneity of skills regarding on job and the performance of action teams by keeping in view that the levels of the skills related to job may be different in team members. Data was gathered from 30 teams of National Basketball Association from 21 seasons through (1986 to 2007). A total number of 584 matches were analyzed and a positive relationship were found in addition to this some teams deflected poor performance the members of which have low skills related to jobs.

Another study by Rowold (2010) analyzed that in modern organizations work teams heterogeneity is increasing e.g: ages, cultural backgrounds and genders are different of a work team members as a result the leaders of those teams encountered various challenges regarding certain values needs and the purposes. Only a handful empirical research is been conducted to check whether leadership effects the behavior regarding performance and has minor effects on
team heterogeneity facets. A three heterogeneity facets (Gender, culture and age) Laissez- Faire, and transformational and transactional behavior of leadership, consideration and establishing structure at initial stages were analyzed based on an empirical study consisting of a sample consisting of 283 employees from a fire departments of Germany the findings indicated that the relationship that exist between performance and 3 important leadership behaviors were being effected by team members facets of heterogeneity. (Somech, Zahavy, 2011) examined the organizations effectiveness (staff team of school) by analyzing the characteristics of team particularly on team support and its heterogeneity. According to an organizational and educational theory the research extracted prepositions, how the effectiveness of team and the team support may be effected by heterogeneity ( Team tenure, educational, functional) more precisely the research generally hypothesized the factor that heterogeneity attributes which are task related would be positively related to the effectiveness and team support. Where as attributes which are related to relations would be negatively related to the team effectiveness and team support. This study used sample size of 48 teams. The uncertainty in the environment and heterogeneity has been worked on quiet deliberately in literature of organizations theory. (Sohi, 1996).

**Uncertainty avoidance**

The extent to which individuals in a society tries to minimize the ambiguity and have a restricted attitude towards uncertainty. A study by Lerman at al (2007) showed that consumers that belong from countries where uncertainty avoidance is high evaluated more product uncertainty offerings than those countries which have low uncertainty avoidance.

A study by (Lim et al, 2004) exposed the two important national dimensions of cultures, certainty avoidance and individual – collectivism and intersection of these dimensions that impact the shopping rates on internet across a variety of country. These factors together compiled 14% of the describe variance (which has an accumulated variance of 63% define through economic growth, crime rates, unemployment rates, educational level and level of national income) in forecasting these shopping trends. The finding showed that the shopping rates were high in the countries which were low in uncertainty avoidance and individualist then the cultures which had high uncertainty avoidance and were collectivist. The strategies about the web design s on the national and internet level were discussed. The hypothesis was tested by using a model of linear regression.

Leventhal (1995) found that old people were keener towards avoidance of physical uncertainty and were very keen to get care. Shane (1955) purposed that societies which are high on uncertainty avoiding is less innovative then societies which are more uncertainty acceptance due to their lower legitimacy grip.

**Individualism**

It is the extent which explains the preferences of the individuals that feels more comfortable while working separately and try to achieve their status and goal on their own. This study Chen (2008) explained the relationship of the cultural values of individuals in collectivism and individualism which up to create psychological contracts and the personality traits which are selected. The data was collected through US and China. 695 graduates from different business colleges and universities filled up the questionnaires. The packets that were received through
mail also had a cover letter, which was from an author who explained the study nature, instrument that was used for survey forms which were complete and can be used were returned that showed only 23.7% of response rate. Personality trait and selected cultural values effect on individuals was analyzed through multiple regression, that also explained individual, tendency to create relational or transactional contracts. Locus of control (external) and equity sensitivity that are important personality characteristics were turned out to be having a positive relation with transactional type consisting of both samples, and the relational contract was related positively to conscientiousness.

Another study by Meng (2010) explained relation between tourist behavior and culture in terms of collectivism and individualism. This study tends to suggest workable framework that can create relation between group travel intention and culture (collectivism and individualism). The study argued that the above two factors are not only effected by the background of culture in collectivism or individualism but also due to variety of factors such as political, economical influence the individual personal background and social. The research interpreted the significant problems in tourist’s behavior (cross cultural) studies and research methodology.

Jusoff (2010) analyzed a potential issue that organization is likely to face in future is to manage the workforce increasing diversity. The managers from two different environment cultures were examined in this research on the basis of individualism and collectivism (Australia & Malaysia). Questionnaires were used to collect data from the total of 28 organizations in which all respondents were middle managers. The findings indicated that there is a difference between Australia and Malaysian managers regarding vertical collectivism, horizontal collectivism and vertical individualism. The managers from Australia showed higher job satisfaction then Malaysian managers.

Sue love (2007) indicated that collectivists and variables demographically related to job experienced more psychological community sense then individualists. Another research by (Herstein, Tifferet, 2010) explained three objectives, to identity, if consumers priorities in national v/s private brands are effected by individualism, to analyze the impact of individualism that how consumer perceive the importance of a brand image, and to analyze the extent to which there is a difference of cross- cultural on individualism found with a particular country. A sum of 400 customers of private brands contributed in this study. These customers were graduates of eight different colleges and universities. The results indicated that individualism impacts the manufacturer identity and explains the patterns that are used by customers to purchase brands of store.

**METHODODOLOGY**

This is a comparative study in which structured questionnaire with Likert scale is used to gather preliminary data.

**The NC Instrument**

For this research paper NC instrument is used, which consists of a 58 self report questionnaire on cultural beliefs and values. Items of the questionnaire are established on the instrument inspired by Mac Guire. The difference is that he used 150 questions which consist of nine dimensions and I used 58 questions that describe the 3 dimensions. The respondents
opinions is classified through Interval scale (Likert five point) in which 1 represents (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) and 5 (Strongly Disagree).

Population and Sampling

The data for this study is gathered from a total of 100 respondents consisting of six different organizations at all hierarchical levels (Top to Bottom) in which 3 are Private and 3 are public. The Private Organizations include Mobile telecom organization, Interactive Group of Communications and A Public School. Where as government/Public organizations include A Cantonment Board, An anonymous public organization, and F.G. Stratified random probability sampling is been used to collect this data.

STATISTICAL ANALYSIS AND RESULTS

Three dimensions of the cultural values and beliefs: Heterogeneity, individualism, and uncertainty avoidance were taken to identify the level of involvement of employee.

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The reliability of a research instrument concerns the extent to which the instrument yields the same results on repeated trials. Although unreliability is always present to a certain extent, there will generally be a good deal of consistency in the results of a quality instrument gathered at different times. The tendency toward consistency found in repeated measurements is referred to as reliability Carmines & Zeller (1979). The value of Cronbach Alpha greater than 0.7 is reliable. Therefore Cronbach Alpha was determined and for whole questionnaire (58 items), it is 0.873. Dimension wise reliability was also calculated which was found good. This shows that our instrument is reliable and ready for further statistical analysis.

Normality is concerned with determining whether a data set is well-modeled by a normal distribution or not, or to compute how likely an underlying random variable is to be normally distributed. To determine the normality values of Kurtosis and skewness was determined. The value of Kurtosis for all three variables (heterogeneity, uncertainty avoidance and individualism) came out to be Zero which means that our data is normal as its value lies between +1 and -1. Similarly the value of skewness on all three cultural dimensions lies in between +1 and -1, confirming that the data is normal.
DIMENSION WISE DISCUSSION

The opinion on dimension of Heterogeneity was found moderately high 3.62. This score shows that employees of public and private organization practice this cultural dimension (both organizations, public & private possess the dimension of heterogeneity in their culture. Therefore it can be said that employees of both the organizations like to work in teams, they believe in organizational values and beliefs, they also do not like to work with those people who does not do their work in a right way. They trust their own judgments and are hard workers. These people tolerate too many differences of opinion among its own members. The bosses of both the organizations are tolerant of each employee’s new approach to work and appreciate them. Moreover these employees are not general problem solvers rather they are specialized in their jobs.

Uncertainty avoidance was found to be 3.64 which is again very high which shows that both public and private organizations practice the dimension of uncertainty avoidance in their organization. Hence it can be said that the employees of both public and private organizations have little tension and stress on their jobs. These employees like to work in an environment where the requirements are clear. They also like to have a clear job description so that they are well aware of what they are expected to do. Employees like to work in such organizations where the subordinates have two bosses. They never break the rules even if doing so goes in their organization’s best interest.

Similarly, individualism was found to be 3.52 which verify our third research question that both public and private organizations practice the third dimension of individualism. This clearly shows that the employees of both the organizations like to have challenging work that gives them personal sense of accomplishment. They like to work with people who like to cooperate well with one another. They also think that group award and success are more important than individual award and success. Every person in both public and private organizations has a responsibility of all others working in a group or a unit. Employees of both the organizations think that every employee should only pursue their goals after considering the welfare of the group. Moreover they all agree the fact that societies work best when people make sacrifices for the good of everyone.
Correlation

Table above shows the correlation among all three independent variables i.e. Heterogeneity, individualism and uncertainty avoidance. Heterogeneity is perfectly correlated with heterogeneity and it has a significant correlation with other two variables similarly uncertainty avoidance is perfectly correlated with uncertainty avoidance and it has significant correlation with other two variables. Correlation table also shows that individualism is perfectly correlated with individualism and it has significant correlation with other two independent variables.

Group statistics show that the mean difference of heterogeneity between private and public organizations is same i.e. 3.62 which answers our first research question that heterogeneity is not different in public and private organizations. The table also shows that mean difference of uncertainty avoidance and individualism is almost same which answers our second and third research question that uncertainty avoidance and individualism is not different in public and private organizations.

**FUTURE RESEARCH AREAS**

This research paper has analyzed if there lies any cultural difference in public and private organizations and culture has been measured on three dimensions namely, individualism, uncertainty avoidance and individualism respectively. In future, research can be done while considering other cultural dimensions that this research paper did not include.
Secondly, the sample size can be increased to measure cultural difference in public and private organizations. This research paper only includes three public and three private organizations. In future more public and private organizations can be taken into account when conducting the research.

CONCLUSION

Research was conducted to find out if there lies any difference of culture in public and private organizations of Pakistan, culture was measured on three dimensions i.e. heterogeneity, uncertainty avoidance and individualism respectively. A detailed analysis was done to answer three research questions and the results show that all three dimensions are same in both public and private organizations which means that the culture (heterogeneity, uncertainty avoidance and individualism) of both public and private organizations is just the same.

REFERENCES

AFTERSHOCKS OF WORK LIFE IMBALANCE: DESCRIPTIVE ANALYSIS GRID

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ABSTRACT

Now a day in very fast world everyone is facing work life imbalance in his or her life. Because everyone is busy and they want to walk with the pace of time and due to imbalance in their work and life people are facing problems. Purpose of this paper is to unfold those side effects, which are developing due to work life imbalance. Utilizing a framework named as aftershock of work life imbalance, this descriptive study investigates work life imbalance as daily achievement and daily enjoyment with four quadrants. Achievement is scale as high to low from left to right. Enjoyment is scale as high to low from top to bottom. Result based on theory state when individual’s achievement and enjoyments are high there is balance in his life and he is in state of pleasure and satisfaction, which led to better performance, better physical and mental health. Second quadrant describe when employees are enjoying their life more and paying less attention to their jobs they come to second phase that is unbalanced life, this is a state of dissatisfaction, which led to poor performance. Quadrant 3 is phase where individual’s enjoyment is low while achievement is high. Here he is use to of doing more work even taking work to home also. Resultantly role and job conflicts arise, which led to poor performance, physical and mental health. When there is continuous distress in quadrant three employees enter into state of depression in quadrant four. This is sever phase where individual’s enjoyment and achievement both are low because of continuous imbalance in life and work. Employees stress increased his physical and mental health going down and which ultimately affect his performance. Although past researcher, address work life conflict. This paper is not addressing conflict and balance but this is particularly for studying what issues individuals can face due to work life imbalance. It will help employs to understand where they are laying and which area needs improvement in their life. It is also helpful for employer to understand employee’s problems and their effect on performance.

INTRODUCTION

Work life balance concept introduced in U.K in 1970 and in U.S.A in 1986 and it describes the balanced between once personal life and his work. 1980 were an era of changes. Work life conflicts during those eras are tremendously increased. Workers are facing more challenges in balancing their roles as parents, brothers, sisters and employees. They are facing more stress in their life because of that their health is declining and they do not have satisfaction in their life. It’s now a competitive world where employers and employees attitude toward jobs are changed and jobs are more stressful employers also demanding best output due to that employees tarrying to give maximum input toward their jobs and to accomplish their goals. Employees carried their
office work to homes and they extending their times to accomplish goals and finished that work. According to estimation, seventy percent of US and eighty one percent from world says that there is unbalance in their life and work and their health is affect by their job and unbalanced life. Fifty nine percent of workers feel that stress and work load affect their relationships.

Work life conflicts also tremendously increased because of high demanding life and men and women are doing jobs equally. Now women do not want to stay at home and look after their homes but they are also careers oriented and they want to have their best career. In the past women, are staying at home and men are working and there is less effect of imbalance life. But now world is now global village and Women don’t want to give up their careers even they have a more responsibilities as mothers etc. according to estimation women are more employed in 2010 and after that till now. About 77 percent of mothers are doing jobs now and they do not wish to give up their careers though they are also facing challenges of balancing their work and life. Divorce rate also increasing because of work life conflict while both mother and father are working and they are unable to meet the balance in life it become lead to breakup of families.

According to Iran miner (2011) who is Psychiatrist, divorce rate in Pakistan is high in educated families of Pakistan because of career-oriented women. Komal tariq (2012) discussed in her article divorce rate raised during last two decades one of the main reason for divorce are highly career-oriented women. Because Pakistan is male dominating society where women are not encouraged to give more time to their career. Nazish saleem (2012) also discussed in her article divorce rate increased by 4.9% during 2010 to 2011 in Pakistan including many other reason here main reason is also work life conflict. Break up of families surprisingly increased in the world beside other problems work life conflict is main problem behind increase in separation and breaking families.

Work family conflict is “a form of inter-role conflict in which the role pressures from the work and family domains are mutually non-compatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family role (Greenhaus & Beutell, 1985)”.

Duxbury and Higgins in (2001) investigate three dimension of work life conflict in Canada they discussed work overload, family to work and work to family interventions had increased, no one had left safe from this conflict. According to them parental men and women are facing more problems in balancing their life than non-parental. They also state that work life conflict has adverse effect on organizational performance and employee’s health. They also suggest that in 2001 employees who faced high level of conflict visited hospital more than those who faced low level of conflicts. This study in Canada indicates work life conflict also effect employee’s performance in their jobs.

Schwartz in (1992); Burke and Davidson in (1994) suggest that as working women are increasing which led to increase in work life conflicts. (Nelson and Burke, 1994) suggest not only women face these problems but by men and women both are facing these problems. Hochschild, 1997, 1998; Burke and McKeen, (1992) state that now it is difficult to balaced your life and commitment because of worldwide competition. Employer’s expectation is heightened and they expect more energy, time and work performance from employees. Employees are also
facing more work pressure and time spent on their work place and this situation is not suitable for women because women have some other household bulk of tasks and it may curtail women’s entry into senior level of jobs. These circumstances heightened work family conflict, which is reported by men and women both. Ronald J. Burke, (1997) examines four different groups and he suggests that parental families examined negative work family experiences.

PROBLEM STATEMENT

Now a day in very fast world everyone is facing work life imbalance in his or her life. Because everyone is busy and they want to walk with the pace of time and due to conflict in their work and life people are facing problems. This paper will has discussed work life balance and aftershocks of work life balance when there is unbalanced in work and life of the people what aftershocks they can face.

PURPOSE OF STUDY

Numerous work had been done in past for work life balance but purpose of my study is to unfold those side effect which are developed due to work life conflict. Here which I called aftershocks of work life balance and for that, paper focus on two main theories daily achievement and daily enjoyment.

SIGNIFICANCE OF STUDY

Although past researcher addressed and discussed work life conflict, work life balances and effect of that conflicts and balance on individuals. This research is not addressing conflict and balance but this is particularly for studying what issues individuals can face due to work life conflicts and for these two main elements are studies daily enjoyment and daily achievement of individuals. It will help employs to understand where they are laying and which area needs improvement in their life.

LITERATURE REVIEW

Hudson, (2005) “Work-life balance, in its broadest sense, is defined as a satisfactory level of involvement or Fit between the multiple roles in a person’s life”

According to (Marks MacDermid, 1996) “the tendency to become fully engaged in the performance of every role in ones total role system, to approach every typical role and role partner with an attitude of attentiveness and care. Put divergently, it is the practice of that evenhanded alertness known sometimes as mindfulness”. other researchers are also discussed work life balance like Marks and MacDermid like (Kirchmeyer, 2000) discussed as “achieving satisfying experiences in all life domains, and to do so requires personal resources such as energy, time, and commitment to be well distributed across domains”.

According to Kofodimos, (1993) balance is a “a satisfying, healthy, and productive life that includes work, plays, and loves. ”. Limoges, (2003) describe work life balance, as it is an issue related to your decision when you hold and when you let it to go. (Frone et al., 1992; Guendouzi, 2006; Noor, 2004; Welter, 2004) All of them state in their papers Due to dynamic
change in the world women’s participation in careers creating balancing work and life challenges and this is the most significant challenges of today’s time which they faced.

According to Bird, 2006 balancing work and life is more challenging for women than men because of some additional responsibility. (Brown, 2004; Duxbury & Higgins, 2001, 2003) discussed that work life balance is now more complex because of change in the world number of working women are heightened now, employees have more responsibilities other than jobs also and all that situations create difficulties in balancing family life and works.

Duxbury & Higgins (2001) also described employees have many roles in life as employees, students, parents and many other roles and conflict in these roles in their life create work life imbalance. (Eikhof, Warhurst and Haanschild, 2007) suggest that in the debate of work life balance overload work is a problem. (Eby et al., 2005) describe that every working people want to combine their personal life and working and they faced the problem that their personal life affected by their work and vice versa.

Hyman and summers (2004) state that most of employees facing problem in balancing their work and their families or their household responsibilities. they also conclude that evidence suggest lack of flexible working time, sudden unpaid increase in working hour or overtime and taking work to homes are also create problems and that employers are needed to bring changes in their attitude to achieve employees best performance. They also suggest that the UK help their employees for maintain employers but still there are some concerns regarding that also welcome balance in work and life and the approach to facilitate employees. (Clark, 2000) defined work and personal life balance as, better performance and feeling of pleasure and satisfaction at their work and home with least conflict between roles. Frye and Breaugh, (2004) discussed work family conflicts, family and job satisfaction, working hours, parental responsibilities and they found that job satisfaction and family satisfaction are related to work life conflicts. (Grzywacs and Bass, 2003) discussed work life conflict’s effect on mental health and the effect of facilitation provided by employers and families on the mental heath of individuals. They also compared different blend of conflict and facilitation and results suggest that facilitation and conflict are separate and that should be treated separately. Individual’s mental health is see good when conflicts, which they faced, are low and the facilitation provided to them are high. These facilities are self-protective that balanced and protect the harmful effect of work life conflicts on health. (Bergman and Gardiner, 2007) discussed work and life as work and life are two separate things but both are equally important.

Beham and Drobnic, (2010) discussed that there is a begaive relationship between work time, mental job and job uncertainty of employees and employees satisfaction unbalancing work and life. Job security, social support at life and work has positive relationship with work family balance and satisfaction.

Burchell et al., (2002) also suggest that because of globalization, high demanding jobs and employers expectation have increase pressure on employees and they always fight for managing their roles and responsibilities and balancing their life’s. Some researchers like Lambert, 1990; Milliken and Dunn-Jensen, 2005 also state that work and family lives are not knotted with each other and it cannot be treated separately.
Valcour, (2007) suggested now work life balance is dilemma for organizations and individuals. How to balance work and life is a key question for organizations and individuals. As work life balance is a key question for organizations and individuals (Heiligers and Hingstman, 2000) discussed that employees are now very conscious while taking job related decision they take into consideration choice of employers, choice of occupation, job security, working hours, career development and contribution towards job for attaining a satisfactory and suitable level of work family balance.

Like others Demerouti et al., (2001) discussed work demand as “physical, social, or organizational aspects of a job that require sustained physical or mental effort, and are therefore associated with certain physiological and psychological costs”. Goode, (1960) gives a theory of role strain according to him available resources are scarce and people have limited resources and they divide that limited resources into different roles in their life and when you devote your time in one role suppose in work than time for life is not available.

Further work demand is divided into strain based demand and time based demand by Voydanoff (2005) and he differentiate between these two types of work demand, time based demand like overtime in job, extended working hours and employer time expectation has negative work life outcomes. Wears strained based demand like job insecurity, overload work, work stress and pressure also has negative relation. Like him many other researchers Frone et al., (1997); Hill et al., (2001); Valcour, (2007); Major et al., (2002); Milkie and Peltola, (1999;) found that these work demands are directly linked with conflicts, high work family conflict and low work life balance has direct association with these work demands.

Sarah Jackson (2011) reported about fathers who have flexible timing, low and high income. It is found that men who have flexible timing they faced low stress and they have better life and health condition, men who have flexibility in work they have balanced their life and work and they can deal with workload successfully than those fathers who don’t have flexibility in work. In the same way income, also effect work life balance and the fathers who have high income they faced less stress and the fathers who have low income they faced more stressed.

S.B. Burnett, C.J. Gatrell, C.L. Cooper, P. Sparrow, (2010) they studied work life policies to evaluate whether because of these policies families vacillated or not. For this, they studied professionals, parental workers with children and they found that these policies are base on gender, policies take into account mothers than fathers and organization did not know the social changes and fatherly role. they also state these policies are considering childcare etc.

Gatrell (2005) suggest that because of social changes parenting role are now changed especially among dual earner couples, fathers are also involved in upbringing their children.

Gatrell and Cooper (2008) discussed work life policies are important for workers stress, they found that there is gendered difference in work life balance social expectation are also different for women and men because of gender differences. Women are criticized if they are working for long time and men are discouraged to work flexibly. They suggested pressure of society and to and social norms cause to both men and women to organize work life balance.
Furthered Gatrell and Cooper, (2008) reported men especially fathers are committed to more working hours than mothers, fathers in managerial and professional levels have more long working hours than women and specially mothers. Lewis and Cooper, (2005) also found there are more policies regarding work life balance is base on gender and he found women who are second earner and they get benefit of plasticity to fulfill their commitment with their families.

Elizabeth Walker, Calvin Wang, Janice Redmond, (2008) investigated self-employment. Self-employment or home based business gives a solution to women, form work life conflict and to balance their dual role work and family. They found self-employment and home business are very important for women who want to balance their work and life and to change their life styles. For women their main issues are the dependent children or any other family member in that situation self-employment means a lot to them.

White and Rogers, (2000) reported due to intense increase in economic pressures during past few years dual earner are need of time, to survive and to meet the cost of living majority families have dual earner both mother and father. Families faced most complex problem of their life work life imbalance.

Ford et al., (2007) also discussed the same issue, which discussed by White and Rogers due to rise in economic pressure people of 21st century faced imbalance work life problem. Meanwhile structural changes also affect the balance in work and life. Feldman and Bolino, (2000) investigate structural changes of employees like part time job, perm ant job, contractual jobs, day night shifts and long working hours affect work life balance. Pocock, (2003) also endorsed Feldman and Bolino.

Posig and Kickul, (2004) studied role conflicts and its effect and they found pressure of women and men’s different role effect balancing their life. They are doing different roles as parents, employees, personal roles and social roles. Their aged parents are also depending on them. Conflict among these roles also led to work life imbalance.

Furthered they state family roles can create problem to contribute in family roles and both are interrelated with each other’s. It is difficult for individuals to balance their work and life but it is more problematic for women.

Cappelli, (2000) reported if employers want to retain their best employees, employers need to increase employees satisfaction, reduce their strain and problem faced on work. Work life balancing factor can reduced absenteeism, sickness of employees, as strain employees cannot work effectively and they can make more errors than happy employees can. Lingard et al., (2007) with endorsing Cappelli suggest in sever cases strained employees exhausted and they go through emotional, mental, health exhaustions and burnout.

De Cieri et al., (2002) discussed in their paper Australian employers recognized the benefits of balancing strategies very early in 1990. They very early understand to hold on best employees work family strategies should be formulated. They introduced flexible working hours, annual leaves, family leaves, parental leaves and childcare.
De Cieri et al., (2002) there are numerous reasons which hurdle implementation of strategies like extended working times, employer’s obligation, unaccommodating work atmosphere, obstacles from supervisor and lack of communication.

Ken Roberts, (2007) discussed why now work life imbalance is major issue and which resultanty led to dissatisfaction of employees. Dissatisfaction among employees occurred because of dual earner, job insecurity, long working hours, day night shifts, participation of women in jobs, opportunity cost, higher status job, economic and social pressure. All these factors led to the dissatisfaction of employees and work life imbalance.

METHODOLOGY

Research papers are select from Emerald and journal of management sciences from HEC digital library. Variables are extracting from different authors, there are seventy papers, which are study besides news articles and reports.

DISCUSSION

The literature revealed different ingredient of work life imbalance. That entire ingredient can be placed in a grid of four distinct parts: quadrant (I) state of satisfaction and pleasure in balanced life, quadrant (II) state of unsatisfaction in unbalanced life, quadrant (III) unbalanced life where role conflict and job conflicts arise; Quadrant (IV) is a state of depression that led to anxiety (Figure 1). Daily achievement is scaled from high to low from left to right in horizontal continuum and daily enjoyment scaled as high to low from top to bottom in horizontal continuum.

Achievement mean someone doing their work successfully by using own skills, effort and great care. Paying full attention to accomplish goal by full determination, practices and skills. Zhang ChunXing (1986) suggested achievement is ones attentions that are important for individuals; individuusals make their best effort and determination to reach at that level. Mccllland (1961) state achievement is ones engagement in their important work and making effort to reach at those goals.

Enjoyment means state of benefiting; enjoying and pleasing. The paper discussed Daily enjoyments as time for your family, yourself and your friends. Zillmann and Bryant, (1994) discussed enjoyment or entertainment as “Any activity designed to delight and, to a smaller degree, enlighten through the exhibition of the fortunes or misfortunes of others, but also through the display of special skills by other and/or self,” . “any kind of game or play, athletic or not, competitive or not, whether witnessed only, taken part in, or performed alone musical performances by self for self or others, of others for self, or with others”.

28
The paper examines the work life imbalance with daily achievement and daily enjoyments of employees, daily achievements mean daily performance ensuing successful performance. Daily enjoyments mean time for your family, yourself, and your friends. Time is limited resource between these two dimensions. When we focused on one dimension other is neglected and vice versa each situation brings problem in individual’s life which is name as after shock of work life imbalance. After shocks are discuss are discuss as conflicts, dissatisfaction and anxiety. When individuals have high achievement and enjoyment that is the state of balanced life where one feels satisfaction in this state individuals are satisfied from work and life and they feel pleasure. When imbalance arise in individuals life conflicts also arise and at last goes to the state of depression and it likely to damages the physical and mental health of individuals.

MODEL DISCUSSION

Quadrant (I) describe as balanced life where employee’s achievement and enjoyment both are high. In this state Employees is happy with their job’s role and family’s role. And feeling pleasure and satisfied. Locke (1976) describes satisfaction as emotional condition comes from experiences and assessments. According to Specter (1997), it is describing as employee’s happiness and his attitude towards his work e.g. poor performance, lower productivity and absenteeism. There are number of factors, which describes levels of satisfaction and among that according to Williams (2004), work, family imbalance is emerging factor. Mark and Robert
(1998) state it is a critical chore for management to bring satisfaction in employees while employee’s satisfaction is essential part of any job because satisfaction brings confidence in employees. It create loyalty, confidence and enthusiasm, it eventually increased the performance of employees and improved quality of output given by employees.

Quadrant (II) is describe as imbalanced life where employee’s achievements are low but enjoyments are high. They give more time to their life while give less time to achievements. This phase is furthered divided into career oriented workers and low profile workers. Career oriented workers feel satisfaction in this phase while low profile workers feel dissatisfaction. Bruck, Spector and Allen (2002) found imbalance in work and life increased dissatisfaction in jobs, employee’s productivity is decreasing and his commitment toward job is going down. Hammer, Gradey and Bauer (2003) support Bruck, imbalance in life effect employee’s productivity, commitment and performance. Absenteeism also increasing and at last it end to change in job. Here low profile workers are quiet happy with this unbalanced life and it does not effect very much. However, it is state of dissatisfaction of career-oriented worker. Allen, Herat, Bruck, and Sutton, (2000) state work-family imbalance has negative effect not only on individuals but also on society. Furthered Spector et al., (2005) also endorse past resrches that there is negative relationship between work family ambiguity, society and business.

Quadrant (III): Greenhaus and Beutell (1985) stated work family imbalance occurred because of role conflicts. When there is incompatibility between Demand and expectation of work and family responsibilities then work life conflicts raised. When employee does one role effectively, he experienced less time for other roles. Frone, Russell and Cooper (1992) investigate role theory and he state that according to role theory there is a negative relationship between work family imbalance and job satisfaction. Low level of work family imbalance increase the job satisfaction and vice versa. Kanh, Wolfe, Quinn, Snoek, and Rosenthal, (1964) suggest Work family imbalance raised due to incompatibility between two roles work and job. It occurred because of imbalance between expectation and demand of these two roles. It increased the dissatisfaction among employees. Beehr and Glazer, 2005 also endorsed Kanh’s view of role stressor and he state conflicts in roles bring negative attitude in employees. Perrew and Wayne A (2001) found life and job displeasure occurred because of imbalance life and work. In addition, this dissatisfaction causes frustration among employs, which affect the achievement of important goals and values. Quadrant III that include job conflict and role conflict led to increase conflicts in employees because they cannot give quality work to both achievement and enjoyments. Due to this unbalance, division of time in achievement and enjoyments conflicts raised. When this conflict is not controlled in quadrant III it move to next phase which is disastrous phase of work life imbalance.

Quadrants IV indicate low achievement and low enjoyment by employees. This is the disastrous stage of employees where both achievement and enjoyments are going down and which ultimately effect employees. Cooper and Cartwright (1997) studied American employees’ occupational anxiety. He discussed it as most important health danger of employees. He studied stress in short term and long term and he found short-term anxiety effect stomach, sleepiness and employees energy. Short-term strain led to the emotional suffering. Headaches, stomach problems, restlessness, fatigue and energy loss. While when it took more time and continues stress in for long time led to the illness, cardiology’s problems and early deaths. It also contribute to employees’ low productivity, increase in absenteeism and increase in cost of health. Furthered
Fink and Schaubroeck (1998) assess employees and he found heavy workload, overtime, employer’s expectation from employees and more work that is demanding are directly related to the physical health of employees. It led to the headache, illness and poor performance. Moreover Sauter et al., (1999) further studies work stress and anxiety. He explained various factor which influence to Job stress and which effect employee’s physical and mental health. In additionally Fried, Melamed and Froom (2001) also investigate factory employees and he stated anxiety in employees led to the high blood pressure.

CONCLUSION
The Descriptive study investigates work life imbalance as daily achievement and daily enjoyment with four quadrants. Achievement is scale as high to low from left to right. Enjoyment is scale as high to low from top to bottom continuum. Framework (Figure 1) named, as aftershock of work life imbalance is study descriptively. Aftershock is explains here in four distinct quadrant. Employee’s daily enjoyment and achievement both are at high-level. Employees feel satisfaction and pleasure. In second phase when individual’s daily achievement is low while enjoyment is high. Low profile worker are satisfied but career-oriented workers are dissatisfied. No one can be in same situation always and when individual’s enjoyments are low and work demand is high, than that are unbalanced. At this stage, role and job conflict arise because individual cannot give full attention to their roles. When individuals give time to one role and ignore others vice versa. Conflicts increase and employees move to the state of depression and anxiety. Anxiety effect stomach, sleepiness and employees energy. Short-term strain led to the emotional suffering. Headaches, stomach problems, restlessness, fatigue and energy loss. When this depression and anxiety faced for ling time by individuals, cardiology’s problems, early deaths occurred, and it led to the high blood pressure.

Recommendations
- There should be a flexible work time.
- There must be Compensation for over timing
- Stress management programs should be arranged
- There must be flexible time for part time workers
- Childcare facilities should be provide to employees
- Job security must be providing to employees.
- Wok expectation by employers should be realistic
- Organizational culture should be supportive.
- Managers in organization must be of good nature and supportive.
- Sense of responsibility and freedom of expression should be providing to employees.
- Employee should have courage to say no on overtime hours if it is unreasonable.
- Employees should not take their office work to homes.
- Employees’ should leave home problem at home and work problem at work.
FUTURE RESEARCH AREAS
Future studies can evaluate employees work life imbalance from medical point of view how it will effect employees physical, mental health and their performance. To get real result this can be studies as quantitatively by asking different age groups with different roles. Gender can also be studies in future. This model will be quantitatively test in future.
IMPACT OF ADVERTISEMENT ON BRAND PRESTIGE A CASE OF FAIR & LOVELY.

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Abstract

Advertisements create an image and appeal of brand. Different appeals enhance effectiveness of advertisements that evokes some emotional reaction in viewer’s mind. A dusky woman will buy a tube of Prestigious Fairness cream due to advertisement, so it is the psychological makeup of the advertisement strategies of the company that makes us think that we are buying prestigious brands. This study is a case of a famous brand’s (Fair & Lovely) advertisements in Pakistan. In this hypothetical study the authors will analyze the perspective of brand prestige and ethical or unethical television advertisements caused by Fair & Lovely in Pakistan. Data is gathered from the females in the twin cities of Islamabad and Rawalpindi aged 13 to 35 years. Firstly, consumers look for prestigious brands in personal care products, therefore companies need to position themselves as prestigious brand so all companies are trying to set their image as an admired brand. Secondly, the advertising strategies, in general, used by competitors in fairness cream sector are ethical in nature Fair & Lovely has improved upon advertising in the sense that viewers are now more comfortable with the appeals. Females both young or middle aged share beauty tips, remedies, recommend skin care product for enhancing the color of their skin. The teenagers, young adults, brides-to-be and married females are all conscious about their skin tones; hence Fair & Lovely should concentrate on functional benefits of the products. The study concluded that the brand in discussion needs to diversify from its core ‘fairness’ proposition and establish itself a complete skincare brand through effective advertisements. It should try to raise its image from a Mass Brand to a Premium Category Brand.

Keywords: Fairness Creams, Skin Care, Television Advertising, Brand Prestige, Pakistan,

1. INTRODUCTION

Fairness Cream gives fairness with an even tone, while clearing dark spots, discolored and pigmented skin. A fairness cream is supposed not only to impart fairness, but also remove blemishes from the skin. Its natural action involves reduction of the black melanin in the skin without changing the skin’s natural balance. Fairness creams work upon reducing the production of melanin; also creams with sun screen effect absorb the ultraviolet rays thus preventing the skin from darkening. Research has proven that no fairness cream can make the individual fairer than the skin with which the person was born, unless it contains harsh bleaching agents damaging skin cells. What they can do is to reverse the damage done by unprotected long exposure to the sun and protect the person against the harsh sun rays. When used regularly, they gently but effectively lighten and improve the skin tone.

Prestige is based on exclusive human deed inborn to the brand. Prestige is an independent evaluative decision about the high social status of people or lifeless objects such as brands.
"Prestige – it's to do with appreciation … It depends, it can be, if it's the prestige of an entity – it's appreciation toward the entity, if it's the prestige of a individual, it's appreciation in the direction of the individual for what they've done, their accomplishment, for what they are."

Customers are more attracted towards admired brands; hence every fairness cream company set their brand as a prestigious brand through effective advertisements strategies.

The important purpose of Advertising is to create awareness, remind and convey information within the general customers. Advertising plays an important role in setting an image of a specific product and services according to product or services position in the mind of customer. For the first time when a customer sees any commercial from any source, he or she humanly think about that particular ad and its massage that what does this ad want to say? If that massage takes a place in the mind of the customer than it means that it is an effective and specific sales massage. Advertising is a strong and effective way of building connections and relations between organizations and customers.

The most important advertising goals are to build a global brand and corporate image. It generates the brand equity and brand prestige which is a set of features that makes a brand more anticipated to consumers and businesses.

Fair & Lovely came under the umbrella of Unilever International Pvt. Ltd. Over the years the brand has continuously rejuvenated itself and has been successful in carving out a well-defined brand personality for itself. Fair & Lovely is trying to set its image as a prestigious brand by means of different advertisement strategies.

There are different types of Television (TV) ads of Fair & Lovely, which now a days are being shown on different TV channels of Pakistan. Some of the Fair & Lovely TV ads and characters displayed are being discussed below concisely to ease understanding of the readers about the Ethical and Unethical Advertisements. (a) Female Cricket Commentator Advert a shot of a girl in a cricket field. The camera moves into flash black where the girl is sitting outside a playing field and doing commentary for the cricket being played in the field. Cutting to the scene where she is commentating at her home while watching live cricket match on TV. When her elder sister notices her passion, she gives her a Fair & Lovely cream so she can become fairer and more self-confident to pursue her dream i.e. to become cricket commentator. In the next shot it is shown that the girl after attaining her new found fairness is confident enough to send an audition tape for the job of a commentator. Finding it good, the selection team approves her name for the job.

(b) Fair & Lovely Multi-Vitamin Beauty Parlor Treatment. A girl working in beauty parlor and made another girl beautiful by giving her different beauty treatments. But she has not applied those expensive beauty treatments on her own self. When she returned back to home her sister was watching the same model on TV and said to her that you made other people attractive and beautiful, why do not you make your own self beautiful and attractive. She has shown the secret of Fair & Lovely Multi-vitamin Fairness Cream that is equivalent to all those expensive beauty parlor treatments. Different parlor treatments have been shown and pronounced that the Fairness Cream Multivitamin Cream gives the same treatment and the model becomes five times fairer. She goes to give audition for TV and the director get impressed by her beauty and glow. In the next shot the same model comes into parlor for makeup and asks for the girl who is now selected by the director. Other girls in the parlor point her on TV where she is doing a TV show. (c) Fair & Lovely Scholarship Program. A college of Young females is flashed on the screen with the voice over saying, “Kahani Himmat aur Hoslo Kee, Mazboot Iradon Kee”. A girl looking at the palm of her hand and the voice over says, “Kismat Hamaray Hathon mein Hay”. Another female enjoying rainfall and the camera cuts where she smiles and the voice over says, “Hum Khud
Badal Saktay Hain Apnee Kismat”. Another female is shown with the voice over, “Bayshumar Sapnay Pooray Kar Saktay Hain”. The voice then announces the arrival of Fair & Lovely with Scholarship for 100 girls across Pakistan. (d) Matrimonial Theme Fantasy. A shot of bride smiling in her wedding finery and looking with curiosity at her groom who is gesturing in a way that he is taking and safely protecting the secret of her beauty with him. Fair & Lovely is shown on the model and her skin tone is improved four times the tone of her original skin. These are the TV Commercials (TVC) shown on Different Television channel. In these TVC, different stories are described about middle class females facing fairness problems and Fair & Lovely is shown as solution to those problems.

OBJECTIVES OF THE STUDY

There was no research which specifically discusses that the advertisement strategies of Fairness creams are either ethical or unethical shown in the television commercials in Pakistan. These types of issues remain unaddressed because consumer concerns are rarely debated in these countries. So the main objectives of this paper are as follows; To determine how far can the fairness creams diversify from their core fairness proposition; To explore the extent of ethical and social responsibility in marketing communications; To analyze the positioning strategies of Fair & Lovely since its launch and evaluate how these strategies have helped the brand in connecting with the Pakistani consumer; To find out the perception of fairness creams advertisements in the consumers mind and what persuades them to buy these; To explore whether a change in positioning strategy of fairness creams will help in increasing their brand prestige.

LITERATURE REVIEW

Research has proven that no fairness cream can make the individual fairer than the skin with which person was born, unless it contains harsh bleaching agents damaging skin cells. There is a shared fondness for fair face skin in the South Asian countries. Especially in female segment of South Asian countries, those females are considered superior and beautiful who has fair skin. Females of South Asia are likely using fairness creams for the last 50 years. This Fair face skin need has been created by the producers of fairness creams. (Patricia Goon, 2003) Fairness creams manufacturers dominating fair skin appeal in their advertisement for influencing of their brands on customers and linking it with association who are top in the mind of customers for their satisfaction (Shankar et al, 2006). Fairness cream companies are using Television advertisements as a medium of delivering their message to the targeted customers. Advertisement is any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor (kotler, 2009). Preceding research support the view that consumers are inclined more favorably towards prestigious brands (Mathur & Mathur, 2000). A firm cannot make fantasy to be a prestigious brand until it invests in its advertising activities, for which consumer market have been leading through advertisements (Hussainy et al., 2008). Advertisement is the main source of brand identity and brand prestige and this provides competitive advantage to firm (Tony Meenaghan 2008). Most of Pakistani exposed due to television advertisements (70%) and having positive attitude tower side TVC (Habib, 2010). As an advertising strategy, advertising delivers key tools in creating brand awareness and condition the mind of a prospective consumer to take final purchase judgment. Promoter’s primary mission
is to reach prospective customers and influence their awareness (Ayanwale et al., 2005 and Adelaar et al., 2003). Television advertising is a form of promotion in which services, goods, ideas, organizations etc. are indorsed via the medium of TV. (Abideen et al., 2011). For a long time large social and economic problems have been raised about the role of advertising in the society (Batra et al, 2005). According to the literature review we developed following hypothesis:

- Consumers look for prestigious brands in personal care products, therefore companies need to position themselves as prestigious brands.
- The advertising strategies, in general, used by competitors in fairness cream sector are unethical in nature.

**METHODOLOGY**

The female customers who use fairness creams of the different companies and who studies in school, collage, university, working females and housewives etc, in the city of Islamabad and Rawalpindi were taken as a population of study.

This approach has been chosen as it has the goal of formulating problems more precisely, clarifying concepts, gathering insights, eliminating impractical ideas, and forming hypothesis. Exploratory research can be performed using a literature review, surveying certain people about their experiences.

The above mentioned design has been selected as the study is not intended to be restricted to quantitative research. The sample data were collected from the females (13-35 of age) of schools, colleges, universities, working ladies and housewives. Girls from low socio-economic background were selected to know their approach and views about the fairness creams and their TVC. The population group was chosen aged (13-35) because generally fairness creams companies target young and beauty conscious females. Sample size is n=110 i.e. 110 females are surveyed in total. Out of these, Schools Students were (12 Participants, 10%), College students were (21 Participants, 19%), Universities Students (43 Participants, 40%), Working females (23 Participants, 21%) and House wives were (11 Participants, 10%). The data is collected by means of well-developed, ordered and verified scale. All of the questionnaires were circulated among the respondents in the defined areas by the researchers. Data were feed into the Statistical Package for Social Sciences (SPSS) for analysis and evaluation. All the Participants read the Questioners thoroughly and Response justly for being this Research accurate.

**LIMITATIONS OF THE STUDY**

Firstly, this study was carried out in general about the Fair & Lovely. Secondly; this study was conducted with a small sample size through Questioners. The same type of study may be conducted with a large sample size by using different methodology and at a different location. Thirdly; the data on the Pakistani personal care industry is not well-documented and the facts and figures are not available easily as compared to well documented industries like telecom, IT etc. Fourthly; the consumer survey is restricted to the population of Rawalpindi/Islamabad

**RESULTS AND DISCUSSION**

The main topics explored from the consumer survey reports participants are categorized in the following themes.
From the respondents, question was asked that what motivates /can motivate you to buy fairness cream. The respondents give opinion which we rate in percentage. Sun Protection68%, Improved Skin 68%, Fair Complexion 44%, Advertisement Appeals 6%. Result is showing that maximum customers are appealing in advertisements because of sun protection and Improved Skin. Another question asked was what makes you aware about fairness cream? The respondents give opinion which we rate in percentage. Sun Protection68%, Improved Skin 68%, Fair Complexion 44%, Advertisement Appeals 6%. Result is showing that maximum customers are appealing in advertisements because of sun protection and Improved Skin.

The next question was about purchasing of fairness creams due to advertisements. Pond’s 48%, Fair & Lovely 32%, Ubtan Turmeric 3%, Bio Nikhar 8%, English Fairness 1%, Stillman’s 8%. So the percentage of the Pond’s cream is the highest and customers are purchasing Pond’s due to advertisements. The next question was about brand prestige and respondents marks like; Pond’s 388, Fair & Lovely 316, Stillman’s 266, Oriental Herbals 256, Ubtan Turmeric 216, Emmami 154. Pond’s topped the list and was considered the most prestigious brand, followed by Fair & Lovely. This indicated that Fair & Lovely is considered a prestigious brand, though not top of the line, yet above its five other competitors. It is standing on the 2nd position on brand prestige that signifies that the brand has a favorable image in the consumer’s mind. This is because of the relatively different advertising approaches that the brand has been coming up with. Another question was about purchase reason of the fair & lovely and question from the respondent was you purchase Fair & Lovely because of; Effective TV advertisements 48%, Feature 42%, Celebrity 8%, other 2%. Finding shows that fair & lovely doing effective television advertisements which are influencing the consumer attachment with fair & lovely. Next question which asked from correspondents was about favorite theme in advertisement; which is your favorite theme in Fair & Lovely Advertisements? Answer of the question is in percentage; Career Woman 54%, Kismat kay Sitaray 24%, Multi-Vitamin Beauty Parlor 6%, Winter Fairness 10%, Matrimonial 14%, Other 2%. Result shows that the customers are more comfortable with Career Woman TVC so Fair & Lovely should carry on career Woman TVC on different television channel.

HYPOTHESIS TESTING

H1: Consumers look for prestigious brands in personal care products, therefore companies need to position themselves as prestigious brands.

This hypothesis is accepted because in this case Fair & Lovely has not been able to position itself as a prestigious brand. Although it has scored the 2nd position on brand prestige according to consumer survey but this is because (Other than Pond’s), Fair & Lovely has an undue advantage over its competitors as most of them have not been able to position themselves as strongly on a number of attributes as Fair & Lovely that continuously makes efforts for rejuvenating the brand. The three main reasons because of which the brand despite rated high is not considered prestigious:

i. Brand Name
ii. Advertising Strategies
iii. Product Packaging

The brand name ‘Fair & Lovely’ clearly suggests that the product is to be used for lightening dark skin and making the personality fair, attractive and lovely. During the research, it was observed that the Pakistani consumers are shy in admitting that they use products that would make their complexion fair. They do not want others to think that they are unsatisfied with their
complexion and perceive it as dark and are hence using ‘Fair & Lovely’. Another factor is that
the Pakistani consumer has a well-developed aesthetic sense and sophistication level and the
name ‘Fair & Lovely’ doses not fit well with their taste. They have an ‘apologetic attitude’ when
purchasing the product. This becomes more evident when comparing the name with Pond’s
White Beauty Detox where the latter ‘sounds’ more prestigious and formal and goes well with
the Pakistani consumer’s style.
Also the Pakistani consumer’s standard of living improves and as she gets richer and better
educated, the ordinariness attached with the name ‘Fair & Lovely’ becomes all the more obvious.
Fair & Lovely is a mass seller, i.e. it’s one or more variant is always available at all types of
retail and general stores and this name cannot make brand go upscale beyond a certain point.
Fair & Lovely is positioned for females belonging to the middle and lower middle segments. The
campaigns under study depict a typical middle/lower-middle class ambiance. Although Fair &
Lovely has been rated second highest in prestige as compared to other brands (consumer survey),
the general perception is still that of an ordinary brand despite the continuous brand
strengthening efforts such as new product varieties etc. This is because the main character of the
campaigns is a girl hailing from lower-middle class background. The adverts convey the message
that fairness is apparently not a need for the relatively well-off.
While it is an intrinsic desire in the Asian women to get fair skin tone, Fair & Lovely should
convey this message in a manner that does not stereotype a particular group and everyone in the
target market possibly relate to it. The adverts also convey the message that fair complexion is an
attribute desired by middle class girls if they want to earn a respectable place in society.
As far as the packaging is concerned, as mentioned above Fair & Lovely places itself in the
middle and lower-middle tier of the market. In Pakistan it does not have any upscale premium
variant such as Perfect Radiance Range launched in India. Fair & Lovely comes in common
packaging similar to one used by other competitors. Product packaging plays a very important
role in determining the prestige for a personal care. Such a shift in positioning will help in
upgrading the overall image, i.e. also in the middle tier market.

H2: The advertising strategies, in general, used by competitors in fairness cream sector are
unethical in nature.
The above hypothesis was built based upon the idea that fairness creams are giving out the
message that fairness is a necessary element for a strong career and overall success and
achievement in life and without a fair complexion a strong career or a blissful matrimonial life is
not possible.
This hypothesis is rejected because over the past few years, Fair & Lovely has improved upon
advertising in the sense that viewers are now more comfortable with the appeals as they do not
touch the taboo of a girl nor receiving suitable proposals because of her pale skin (though this
theme is now been transformed to fairness guaranteeing a successful married life latter), yet the
fear appeal has been called off. Complexion after all is one of the Asian standards if beauty and
the source campaigns is the social and cultural context in which the adverts connect with the
lives and realities of the target market.
The airhostess advert has certain objectionable content as mentioned in the analysis but Fair &
Lovely has gradually improved upon its advertising. With the cricket commentator and the
matrimonial advert, the brand now, is not directly hitting or exploiting a taboo or making the
viewer uneasy or disturbed as before when fairness was blatantly shown as a need for finding a
suitable husband. The bottom line is that talented females are induced to get out of the confines of their life and build their own identity, helped along by a fairness product. The target market is educated, independent and broadminded and is now interested in a fair skin to achieve their ambitions in life instead of the sole purpose of getting married. Hence in view of the changing trends and psyche of the society, Fair & Lovely is now adapting it to the changing scenario with the use of variants. Fair & Lovely is essentially a fairness cream i.e. the main purpose of the product is to give the females a fair skin that would make them look lovely. Observing the society, it is a fact that the social standards find a fair skinned female (or male) more attractive. It is a strong desire in majority of females to have a light skin tone, brides work incessantly on their skins before their big day, just to make it look fair, since times immemorial, the home made remedies for getting fair have been very popular in this part of world (subcontinent). It is not that because of introduction of Fair & Lovely, many females with dark skin tone have started to feel inferior. This irony has been present in many Asian countries and particularly the subcontinent where years of British rule have made the natives obsessed with white skin and so has been the preoccupation with fair skin and the desire to have it. Also according to survey, a sizeable number (44%) admits the fact they use fairness creams for the purpose of getting fair.

Fairness creams as a product are an important category which meets the genuine requirements of young females and have a physical and an emotional attribute that has been highlighted. This obsession with whiter skin has resulted in spurt in the fairness products market and has opened up great opportunities for skin cream manufactures and the market is ridden with all kind of creams, lotions and gels that guarantee fairer skin after regular use and Fair & Lovely is cashing upon a strong need present in the society. Although the advertising strategies have not yet positioned the brand as a prestigious one, yet they have improved in comparison with competitors and do not solely revolve around the matrimonial theme. The Kismat Kay Sitary campaign has helped the brand to cast a positive impression for itself and show that it is working for empowerment of women. The Fair & Lovely Scholarship program gives out the message that the brand is playing a broader role in shaping the life of women than just providing fairness.

CONCLUSIONS

In the light of interpretation and analysis of research findings, the following conclusions have been made. The Pakistani society has a strong obsession for fair skin tone and fairness is an inherent desire in the society, not only among the females but also among males. For many, the color of skin plays an important role in shaping up their personalities. Whether it is ironical or unfortunate, yet it is a fact that fairness is considered an important attribute and those who possess a fair skin are considered blesses. The society pays attention to skin color. Females both young or middle aged share beauty tips, remedies, recommend skin care products for enhancing the color of their skin. The teenagers, young adults, brides-to-be and married females are all conscious about their skin tones. However, the consumers feel shy in admitting publicly that they are using fairness creams and are dissatisfied with their original skin tone. Fair & Lovely, launched in 1978, has its roots in peculiar consumer need that only the Asian women have; the need to look fair but has its direction towards becoming a skin care brand. Fair & Lovely also needs to look how far it can diversify from the core “fairness” proposition because
in view of the Pakistani consumers psyche, consumers irrespective of the market tier where they belong, display a discomfort or uneasiness in associating themselves with a product that promises to make them ‘fair and lovely’. Over the past decade, Fair & Lovely has launched many new variants that have helped it in gaining an edge over many of its competitors. Over the years Fair & Lovely has experimented with different advertising approaches. According to the consumer survey, the most well-liked appeals were the female cricket commentator/Airhostess (Career Woman) theme and Kismat Kay Sitaray, as according to consumer survey 54% expresses a liking for Career Woman, followed by a 24% votes in favor of Kismat Kay Sitaray. The target market feels more comfortable with the career woman approach taken by fairness creams advertisements as compared to the matrimonial theme. The social trends in the new millennium are changing. The young females in Fair & Lovely’s target market are becoming more open-minded, educated and aspire to go higher in life by building a sound career. There is a new aggression and assertiveness in the young women of the 21st century, who want to live life on their own terms and are less willing to make compromises.
RECOMMENDATIONS

i. Emphasis on Product Benefits

Fair & Lovely has improved upon its advertising strategies with the passage of time but it has room for improvement if it touches upon the ‘fairness issue’ in understated manner. Fair & Lovely campaigns project a complete 180 degree shift in the lives of the women who use Fair & Lovely. Although the campaigns have not been taken as unethical and the target market feels comfortable while watching them because of their quality execution and direction yet there is a room for improvement. Strong brands (and especially market leaders) must be sensitive to their consumers. In fact, in the long run this sensitivity and foresight may actually strengthen the brand.

Fair & Lovely should concentrate on functional benefits of the products. The skin enhancing ingredients such as papaya, neem, cucumber etc. present in the variants and the sun screen should be exploited instead of demeaning the dark skin and warning young women that if they are dark they will never find a caring husband or live happily ever after, will never get a job and will never live the life of which they have dreamed. Although the society at large has connected with the career woman campaign yet if Fair & Lovely concentrates more on the functional benefits, while keeping the fairness aspect precisely as subtle as the typical sophisticated Pakistani consumers would like.

Brands meant for the middle and lower markets can also be positioned in an esteemed manner. For example Pond’s White Beauty Detox and Fair & Lovely’s Multivitamin are priced in the same range but there is a visible difference in advertising. A case in point can be the Pond’s talcum powder advert where the model is a civil engineer and the product is helping her feel fresh on the work site, under the scorching sun. Concentrating on the functional benefits with the help of interesting executions can strengthen Fair & Lovely’s bond with its consumers and this in turn, can help in changing its positioning from core fairness theme.

ii. Shift from ‘Core Fairness Proposition’ to a Complete Skin Care Brand

In the Pakistani market, Fair & Lovely advertises five variants (the Fair & Lovely X Sun Block is not manufactured by Unilever Pakistan. This variant is imported and is only available in a big retail stores but not advertised). In Pakistan despite the five variants, Fair & Lovely is largely perceived as a fairness cream although the brand has its direction in becoming a complete skin care brand. The advertising strategies should modify the positioning to skin care rather than plain vanilla fairness. In order to become an esteemed brand (even while remaining in its continuum of that of a middle-to-low-end market), Fair & Lovely needs to diversify from its core ‘fairness’ proposition and establish itself a complete skincare brand through effective advertisements.

iii. Shift from a Mass Brand to a Premium Category Brand

The Pakistani consumers are trying newer formats for skin care and cleaning. Also there is growing awareness in their skin care regime. To cater to such consumers, Fair & Lovely should try to raise its image from a mass market brand. In India the brand has come up with a new upscale range of expert skin care solutions, “Perfect Radiance”. The brand has been launched as a premium offering by restricting the distribution to a limited number of selected modern format retail outlets that has helped in elevating the brand’s image and making it stand in line with prestigious brands.
If this range is introduced to the Pakistani consumer, then with sleek packaging and smart marketing and positioning, the brand can move away from the frumpy, down-market image of ‘Fair & Lovely’.

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EXAMINING DATA AND MODEL SPECIFICATION BEFORE NALYSIS OF A STRUCTURAL MODEL IN SEM

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Abstract

Data analysis is highly critical for a value added research output but very tricky to handle by the researchers. Each statistical technique in research methodology has its own nuts and bolts that the researcher has to take care of. The purpose of the present study is to present the most important aspects, issues and procedures to examine the characteristics of data and relationships of interest prior to Structural Equation Modeling technique. Through literature review the researchers have noted main issues and procedures in examination of data prior to a SEM analysis. Some major issues discussed in the paper are model complexity, sample size, nature of data, and measurement model fit. An example in the field of Management Development (MD) is also presented to explain the procedure of data analysis in SEM. Findings of the research revealed that by devoting considerable time and efforts on examining and exploring the nature of data and the relationships among variables before the application of this techniques can help researchers in resolving the procedural issues and assist lead to better prediction and more accurate results. The present study contributes to literature on SEM provides more holistic view of data examination before SEM analysis and provides practical guidance for researchers to use SEM more effectively.

Keywords: SEM, CFA, Basic Assumptions, Unidimensionality.

1. Introduction

Structural Equation Modeling (SEM) is one of the important multivariate techniques which simultaneously estimates and tests a series of hypothesized inter-related dependency relationships between a set of latent constructs (Reisinger and Mavondo, 2007). SEM has acquired hegemony among multivariate techniques, become the preeminent multivariate method of data analysis among the multivariate techniques, it has been, and continues to be, the technique that is undergoing the most refinement and extension (Hershberger, 2003). Schumacker and Lomax stated “SEM can be used to examine the nature and magnitude of postulated dependence relationships and at the same time assess the direct and indirect relations” (as cited in Reisinger & Mavondo, 2007, p. 42).

The importance of SEM has practically been recognized through its application in a number of disciplines, including psychology, sociology, economics, cross-cultural research, environmental studies, marketing, tourism studies and management (Reisinger & Mavondo, 2007). Researchers like Dastgeer and Rehman (2012), Bulut and Culha (2010), D’Netto et al. (2008), Garcia-Morales, Llorens-Montes and Verdu-Jover (2008), Chaibur and Marinova (2006), Cheng (2001) and Tracey et al. (2001) used SEM in the field of management development (MD) and reported the benefits and effectiveness of SEM for research.

The choice and preference of a specific statistical technique is subject to the demand of data. However, once the choice is made the researcher is required to have basic knowledge of that particular technique. SEM cannot be an exception to that necessity. Broadly speaking, besides the basic jargon, it includes pre-SEM technical analysis, model specification, and
analysis of a measurement model prior to measure structural model. By pre-SEM analysis technical we mean the examination of the characteristics of data and fulfillment of basic statistical assumptions prior to a SEM analysis. Data analysis may appear a time-consuming but very crucial step which helps researchers to get a basic understanding of the data and relationships between variables (Hair, Black, Babin, Anderson, & Tatham, 2006). But this important step is overlooked by most of the researchers specially before using SEM techniques. For example, Reisinger and Mavondo (2007) reported that too often researchers use small sample sizes (less than 100) in SEM studies with no discussion of whether the sample is sufficiently large enough to run SEM or not. Similarly, in a large scale analysis of use of SEM in research studies, Similarly, Schreiber, Nora, Stage, Barlow, and King (2006) found that researchers provide no discussion concerning basic assumptions of data analysis like normality, outliers, linearity, or multi-collinearity.

Likewise, a researcher is required to specify a model before he/she starts the analysis. In this specification a researcher is usually guided by a combination of theory and empirical results from the previous research (Hox & Bechger, 1998). Analysis of measurement model means to look into the association between the variables (latent and observed). And before testing the hypothesized relationships among the constructs of the model, the measurement model must hold (Cheng, 2001; Andreson & Gerbing, 1988). Measurement model is tested for validation of the measurement instrument. That means missing any crucial step or wrong specification of a measurement model can lead to potentially catastrophic problems in subsequent process/analysis of a SEM model. After a comprehensive analysis of studies that used SEM analysis, Schreiber et al. (2006) complain that researchers are not fully aware of specification and estimations of a measurement model. In management and human resource (HR) literature we also found that studies like Dastgeer and Rehman (2012), Bulut and Culha (2010), D’Netto, Bakas, and Bordia (2008), Garcia-Morales, Llorens-Montes and Verdu-Jover (2008), Chaiburu and Marinova (2006), and Tracey, Tannenbaum and Mathieu (2001) used SEM analysis but in the first stage of specification and estimation of a measurement model, one or more steps are missing.

The purpose of the present study is to investigate the critical aspects, issues and procedures to examine the characteristics of data and assessment of measurement model prior to SEM analysis. An extensive literature review was carried out by researchers to highlight main issues and procedures in examination of data and assessment of a measurement model prior to a SEM analysis.

2. Specification of path and measurement model

Model specification process consists of all steps necessary to specify the relationships among the latent constructs and determine how the latent constructs will be measured. This step is considered as most important, difficult and crucial because everything else follows from it.

2.1. Size of a Path model

The first step in SEM is developing a theoretical based model and converting the theoretical model in to a path diagram of causal relationships among constructs/variables. A path diagram helps in depicting a series of causal relationships among variables. But a fundamental question remains: How many variables or constructs should be there in a path diagram? Hair at al. (2006) opine that although there is no specific theoretical limit on number of variables to use in a model, however, researchers must balance the number of variables included in the model against the practical limitations of the SEM. Practical limitations mainly relate with interpretation of results. As the number of variables in model increases the interpretation of the
results and statistical significance becomes difficult to achieve. However, arbitrary deletion of variables is not acceptable. Hair at al. (2006) warn the researcher not to omit a concept just because of number of variables is becoming large, rather researchers should go for a parsimonious and concise theoretical models.

From now onward we will use an example to illustrate how to examine the characteristics of data and estimation of measurement model prior to SEM analysis. Figure 1 depicts a path diagram of model of management development (MD) effectiveness adopted from Dastgeer (2012). A detailed discussion on theoretical base and concepts of the model is beyond the scope of this paper. The model simply portrays the relationships among variables. There are total five constructs (denoted by rectangles) and six hypotheses (indicated by arrows) in the model. For example, it is hypothesized that line manager support is positively associated with individual initiative, opportunity for skill utilization, and program design. Further it is hypothesized that variables like individual initiative, opportunity for skill utilization, and program design have direct positive association with MD effectiveness.

![Path diagram of predictors of MD effectiveness](image)

**Figure 1: Path diagram of predictors of MD effectiveness**

### 2.2 Specification of a measurement model (Determining the Number of Indicators)

In SEM a path diagram is always demarcated in terms of constructs and researchers have to find variables/indicators to measure each construct. Hair et al. (2006) state that a construct can have a single indicator although a single indicator generally does not provide adequate representation of such constructs and hence, creates problem of the estimation of reliability. A better approach is to obtain multiple indicators of each construct. Each construct should have at least two pure variables/indicators but preferred minimum number of indicators is three (Resinger & Mavondo, 2006; Hair et al., 2006). Although there is no cut-off number of indicators per construct, researchers like Hair et al. (2006) have suggested that five to seven indicators should represent most constructs.

In Figure 2 an example of a measurement model or CFA is given which specifies relationships between latent constructs and their indicators. The model is put to see if the model fits into the data. Figure 2 depicts that in measurement all latent constructs are connected by double headed curved arrows, which represents correlation among constructs. Each of the construct has six to seven indicators/observed variables used to measure it.
3. Pre-SEM Analysis Technical

3.1 Sample Size

As in any other statistical techniques, sample size plays critical and important role in estimation and interpretation of results and estimation of sampling error (Hair et al., 2006). Reisinger and Mavondo (2007) stated sample size is critical for achieving acceptable fit measure. Reisinger and Mavondo (2007), Schreiber et al. (2006) and Hair et al. (2006) argue that there is no standard requirement of sample size for SEM but absolute minimum sample size must be at least greater than the number of correlations in the input data matrix. Recommendation from researchers like Reisinger and Mavondo (2007), Schreiber et al. (2006) and Hair et al. (2006) is a
minimum ratio of at least five respondents for each estimated parameter, with a ratio of ten respondents per parameter considered most appropriate. SEM analyses of small samples are almost certainly problematic. Sample size requirements increases as complexity of model increases (Schreiber et al., 2006). It implies that a small sample may not be large enough to support the estimation of more complex model. While using most common estimation procedure Maximum Likelihood Estimation (MLE), Hair et al. (2006) recommended sample size ranging between 100 to 200 and sample size of 200 is considered more appropriate and critical. Is there any effect of large sample size? Because as researchers increase sample size above this value (like 400 or more), the MLE method increases in its sensitivity to detect differences among the data and makes indicators of goodness-of-fit measures poor fit.

In our CFA example of MD effectiveness model, the achieved sample size is 177 that fulfills the minimum requirements of SEM as recommended by Hair et al. (2006).

3.2 Statistical Assumptions and Outliers

Reisinger and Mavondo (2007) argued that like other multivariate data analysis techniques, in SEM there are few basic assumptions that need to be satisfied in order to ensure accurate inferences. Some major assumptions are independent observations, random sampling (except for longitudinal studies), linearity of all relationships, multivariate normality, discriminant validity of measures, no extreme cases (i.e. outliers), data measured on interval or ratio scale, and no skewness or kurtosis in the data (Reisinger and Mavondo, 2007; Hair et al., 2006). For the standard use of structural equation modeling is that observations are drawn from a continuous and multivariate normal population, a sufficiently large variation from normality can makes all statistical tests invalid (Hair et al., 2006). Before using the data for SEM estimation, researchers should perform all of the diagnostic tests on the data.

Outliers can distort statistical analysis, hence, researchers are strongly recommended to identify any outlier in the data before it is used for SEM. “Outliers are observations with a unique combination of characteristics identifiable as distinctly different from other observations” (Hair et al., 2006).

In our example of MD effectiveness model, we evaluated the assumptions of normality through SPSS 17 using box plots. In total seven questionnaires were treated as outlier because those were substantially different from the other observations, hence, those questionnaires were dropped out.

3.3 Missing Data

Beside all other statistical assumptions, researchers are suggested to report a systematic discussion of the handling of missing data. In SEM missing data can have a thoughtful effect on calculating the input data matrix and estimation process (Carter, 2006; Hair et al., 2006). Because SEM requires complete data set, there are numerous methods to deal with missing data problem, for example:

i. Delete case: It involves deleting of incomplete cases from the dataset (Carter, 2006). That means researcher delete the variable/indicator from the data sheet that has record with missing data.

ii. Imputation: It involves placing expected values into the data set in the location of the missing data (Carter, 2006).

Hair at al. (2006) stated that there is no single best method to deal with the missing data because every method has its advantages and disadvantages, and researchers should try to use several techniques to assess the stability of the results. In sum, SEM studies should indicate the
extent to which there is missing data and should describe the technique used to handle missing data (Reisinger and Mavondo, 2007).

In our example of MD effectiveness model, we evaluated the missing data through SPSS17. We found that two respondents filled the questionnaire partially that means those questionnaires had too many missing data. As the missing data was too much in those questionnaires, we simply removed those questionnaires from the data sheet to get more stable results.

3.4 Reliability and Unidimensionality

i. Reliability

Sekaran (2006) defines reliability of a measure as “an indication of the stability and consistency”. Most commonly method for testing reliability of research instruments is the internal consistency method which involves computation of Cronbach’s alpha. Internal consistency reliability confirms the consistency of respondents’ answer to all the items in a measure and items are independent measures of the same concept (Sekaran, 2006). Cheng (2001) argues that an indicator/measure has to be deleted of it has extremely low internal consistency. The acceptable threshold of Cronbach’s alpha is 0.70 (Nunnally & Bernstein, 1994).

In our example of MD effectiveness model, Cronbach’s alpha statistics was used to check the reliability of the research instrument (all constructs). Cronbach’s values for all constructs are given in table 1.

Table 1: Cronbach’s values for constructs

<table>
<thead>
<tr>
<th>Name of variable</th>
<th>Cronbach Alpha value</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD effectiveness</td>
<td>0.894</td>
<td>6</td>
</tr>
<tr>
<td>Line manager support</td>
<td>0.899</td>
<td>6</td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>0.666</td>
<td>7</td>
</tr>
<tr>
<td>MD program design</td>
<td>0.891</td>
<td>6</td>
</tr>
<tr>
<td>Opportunity for Skill utilization</td>
<td>0.886</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 1 shows that the Cronbach’s values for all constructs except individual initiative ranged from 0.83 to 0.92. Only the construct “individual initiative” had value of 0.66 falling somewhat short of the recommended level. Henceforth, except the construct “individual initiative”, Cronbach’s values for all constructs imply that all items of each constructs are measuring the same content universe (i.e. construct). Construct individual initiative needs revising. But before revision of this particular construct we will check the unidimensionality of all constructs.

ii. Unidimensionality

Unidimensionality is a concept similar to the concept of reliability. Hair et al. (2006) define unidimensionality as “a characteristic of a set of indicators that has only one underlying trait or concept in common” (p. 584). Researchers should perform unidimensionality tests on all constructs that have multiple indicators before estimation of a SEM analysis (Hair et al., 2006). In order to test unidimensionality of a scale, usually, principal component factor analysis which generates eigenvalues is used. As a rule, eigenvalue should be greater than one to establish unidimensionality of a scale (Hoe, 2008, p. 80).

To test the unidimensionality of measurement instrument, in our example, at first, rationale review of item contents was done by researcher to determine like items, as suggested by Hall et al. (1999). Secondly, principal component factor analysis was used to test for
unidimensionality as suggested by Germain, Droge and Daugherty (1994). All constructs in the current study were separately subjected to principal component analysis and the eigenvalues presented in Table 2.
Table 2: Eigenvalues of measures

<table>
<thead>
<tr>
<th>Construct</th>
<th>Component</th>
<th>Total</th>
<th>Initial Eigenvalues</th>
<th>% of Variance</th>
<th>Cumulative%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>1</td>
<td>3.933</td>
<td>65.549</td>
<td>65.549</td>
<td></td>
</tr>
<tr>
<td>Development Effective</td>
<td>2</td>
<td>0.723</td>
<td>12.051</td>
<td>77.600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.424</td>
<td>7.069</td>
<td>84.669</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.379</td>
<td>6.312</td>
<td>90.981</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.274</td>
<td>4.573</td>
<td>95.554</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.267</td>
<td>4.446</td>
<td>100.000</td>
<td></td>
</tr>
<tr>
<td>Line Manager Support</td>
<td>1</td>
<td>4.051</td>
<td>66.912</td>
<td>66.912</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.595</td>
<td>9.909</td>
<td>76.822</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.571</td>
<td>9.511</td>
<td>86.333</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.345</td>
<td>5.756</td>
<td>92.089</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.304</td>
<td>5.073</td>
<td>97.162</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.170</td>
<td>2.838</td>
<td>100.000</td>
<td></td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>1</td>
<td>2.765</td>
<td>39.493</td>
<td>39.493</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.153</td>
<td>16.474</td>
<td>55.968</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.919</td>
<td>13.131</td>
<td>69.099</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.751</td>
<td>10.734</td>
<td>79.833</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.604</td>
<td>8.632</td>
<td>88.465</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.452</td>
<td>6.460</td>
<td>94.925</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0.355</td>
<td>5.075</td>
<td>100.000</td>
<td></td>
</tr>
<tr>
<td>MD Program Design</td>
<td>1</td>
<td>3.889</td>
<td>64.812</td>
<td>64.812</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.592</td>
<td>9.862</td>
<td>74.674</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.574</td>
<td>9.573</td>
<td>84.248</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.367</td>
<td>6.120</td>
<td>90.368</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.319</td>
<td>5.313</td>
<td>95.681</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.259</td>
<td>4.319</td>
<td>100.000</td>
<td></td>
</tr>
<tr>
<td>Opportunity of Skill Utilization</td>
<td>1</td>
<td>3.822</td>
<td>63.699</td>
<td>69.699</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.552</td>
<td>9.197</td>
<td>72.896</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.542</td>
<td>9.031</td>
<td>81.928</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.407</td>
<td>6.778</td>
<td>88.706</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.400</td>
<td>6.671</td>
<td>95.377</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.277</td>
<td>4.623</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Table 2 depicts that except individual initiative, all other constructs had only the first eigenvalue greater than 1. This provided support for the unidimensionality of these scales. For individual initiative, two eigenvalues were greater than 1. To enhance the unidimensionality of Individual initiative, once again a rationale review of items was done by researchers, assessed the “Cronbach’s alpha of item deleted” and incremental modification was carried out to find out the threats. It was found that item “ind4” and item “ind5” are serious threats to the unidimensionality of this construct. These two items were deleted from the data sheet and principal components analysis was rerun on these two construct to determine the eigenvalues.
<table>
<thead>
<tr>
<th>Construct</th>
<th>Component</th>
<th>Total</th>
<th>Initial Eigenvalues</th>
<th>% of Variance</th>
<th>Cumulative%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Initiative</td>
<td>1</td>
<td>2.698</td>
<td>53.958</td>
<td></td>
<td>53.958</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.810</td>
<td>16.194</td>
<td></td>
<td>70.152</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.635</td>
<td>12.709</td>
<td></td>
<td>82.861</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.500</td>
<td>10.002</td>
<td></td>
<td>92.863</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.57</td>
<td>7.137</td>
<td></td>
<td>100.000</td>
</tr>
</tbody>
</table>

Table 3 shows that only first eigenvalue was greater than 1 for construct Individual initiative. This provided support for the unidimensionality of these scales. After deletion of threats we rerun the reliability test on Individual Initiative construct. Revised Cronbach Alpha value of Individual Initiative is 0.78 that falls under the recommended value of 0.70.

4. Measurement Model Estimation

Cheng (2001) suggests two different ways to evaluate a measurement model’s validity. First is a test of the measure of each construct separately. Second is a test of all measures together at one time (p. 653). Cheng (2001) further suggests that second method of evaluation of measurement model is better than the first one.

In our example, we adopted the second method of measurement model’s validity as per Cheng’s recommendation. LISREL software was used to estimate the model and constructs’ correlations. For parameter estimation number of estimation methods are available including maximum likelihood, weighted least squares, instrumental variables, generalized least squares, two-stage least squares, unweighted-least squares, ordinary least squares, and diagonally weighted least squares depending on the data and nature of model (Reisinger & Mavondo, 2007). We used Maximum Likelihood Estimation (MLE) procedure for the model estimation which is most commonly used and accepted for estimation (Reisinger & Mavondo, 2007). MLE provides valid results even if sample size is small (Hair et al., 2006, p. 605). Procedurally, we performed a “Confirmatory Factor Analysis” (CFA) of the combined measurement model to validate the measures of the latent constructs. In CFA, overall model fit portrays the degree to which the specified indicators represent the hypothesized constructs. All the indicators of latent constructs were loaded on their specific constructs and all constructs were inter-correlated. To ensure reliability of the indicators by CFA, it was confirmed that the factor loads are higher than 0.4 and significant (t ≥1.96; p≤0.05), composite reliability of each whole scale by applying the Cronbach alpha, composite reliability (≥0.7) and average variance extracted (≥0.5) (Hair et al., 2006).

4.1 Determining Offending Estimates

While estimating a measurement model, first of all, researchers are required to examine the results for offending estimates. There are number of estimated coefficients that need to fall in acceptable limits. According to Hair et al. (2006) offending estimates refers to any value that exceeds its theoretical limits. Before analyzing the hypothesized relationships among variables and interpreting the results for overall model fit, researchers need to correct the nonsensical or theoretically inconsistent estimates. Cheng (2001) suggest the researchers to modify the model if there is any indicator that does not measure its underlying construct or is not reliable. To modify a model, an offending indictor has to be deleted (Cheng, 2001). The most common examples of offending estimates are as following.

i. Correlation among constructs (Convergent validity)
Correlation between two variables/constructs is treated as an offending estimate if (in the standardized solution) it exceeds value of 1.00 or even variables are highly correlated. Recommend solution for such type of offending estimates by Hair et al. (2006) is elimination of one of the constructs or should ensure that true discriminant validity has been established among the constructs.

Table 4 presents the correlation among all latent constructs of our model. Matrix shows that constructs are significantly correlated with each other and none of the correlations are above 0.68. Therefore, multicollinearity problem is fairly low. Values exceeding 0.80 can be indicative of problems and value exceeding 0.90 should always be examined (Hair et al., 2006).
Table 4: Correlation among all latent constructs

<table>
<thead>
<tr>
<th>Name of variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Opportunity for Skill Utilization</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.Program Design</td>
<td>.663</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.Individual Initiative</td>
<td>.385</td>
<td>.542</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.MD Effectiveness</td>
<td>.579</td>
<td>.637</td>
<td>.554</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5.Line Manager Support</td>
<td>.684</td>
<td>.554</td>
<td>.503</td>
<td>.352</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**ii. Standardized Factor Loading**

Another type of offending estimates in CFA is standardized factor loading exceeding or very close to 1.00 (Hair et al., 2006). To deal with such type of offending estimates and to achieve best fitting measurement model, Hair et al. (2006) and Cheng (2001) suggest the deletion of the offending variable or set the small value (0.005) for corresponding error variance to ensure that loading will be less than 1.0. Segars and Grover (1993) recommended that deletion of offending indicators should be made one by one as the deletion of one indicator or measure may affect other parts of the model instantaneously. The model is then required to be re-estimated.

Table 5 and Figure 3 show the indicator loadings that all the indicators were statistically significant for the proposed constructs and no indicators had loading so low that they should be deleted. The “t” values associated with each of the loadings exceed the critical values for the .05 significance level (critical value = 1.96) as suggested by Hair et al. (2006). All variables are significantly related to their specified constructs, verifying the posited relationships among indicators and constructs. In summary, the various measures of overall model goodness-of-fit and standardized regression weights lend sufficient support to deeming the results an acceptable representation of the hypothesized constructs.
Table 5: Measurement model results (Standardized regression weights or construct loadings)

<table>
<thead>
<tr>
<th>Constructs (Variables)</th>
<th>Indicators</th>
<th>Standardized Structural Coefficient</th>
<th>t values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Development Effectiveness</td>
<td>MD1</td>
<td>0.826***</td>
<td>12.73</td>
</tr>
<tr>
<td></td>
<td>MD2</td>
<td>0.818***</td>
<td>12.54</td>
</tr>
<tr>
<td></td>
<td>MD3</td>
<td>0.732***</td>
<td>10.68</td>
</tr>
<tr>
<td></td>
<td>MD4</td>
<td>0.829***</td>
<td>12.81</td>
</tr>
<tr>
<td></td>
<td>MD5</td>
<td>0.632***</td>
<td>08.78</td>
</tr>
<tr>
<td></td>
<td>MD6</td>
<td>0.746***</td>
<td>10.95</td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>Individual1</td>
<td>0.788***</td>
<td>11.26</td>
</tr>
<tr>
<td></td>
<td>Individual2</td>
<td>0.810***</td>
<td>11.69</td>
</tr>
<tr>
<td></td>
<td>Individual3</td>
<td>0.532***</td>
<td>06.86</td>
</tr>
<tr>
<td></td>
<td>Individual6</td>
<td>0.616***</td>
<td>08.18</td>
</tr>
<tr>
<td></td>
<td>Individual7</td>
<td>0.500***</td>
<td>06.30</td>
</tr>
<tr>
<td>Line Manager Support</td>
<td>Line1</td>
<td>0.657***</td>
<td>09.30</td>
</tr>
<tr>
<td></td>
<td>Line2</td>
<td>0.652***</td>
<td>09.19</td>
</tr>
<tr>
<td></td>
<td>Line3</td>
<td>0.783***</td>
<td>11.81</td>
</tr>
<tr>
<td></td>
<td>Line4</td>
<td>0.843***</td>
<td>13.21</td>
</tr>
<tr>
<td></td>
<td>Line5</td>
<td>0.890***</td>
<td>14.43</td>
</tr>
<tr>
<td></td>
<td>Line6</td>
<td>0.819***</td>
<td>12.65</td>
</tr>
<tr>
<td>Opportunity for Skill utilization</td>
<td>Opportunity1</td>
<td>0.795***</td>
<td>11.96</td>
</tr>
<tr>
<td></td>
<td>Opportunity2</td>
<td>0.750***</td>
<td>10.99</td>
</tr>
<tr>
<td></td>
<td>Opportunity3</td>
<td>0.776***</td>
<td>11.53</td>
</tr>
<tr>
<td></td>
<td>Opportunity4</td>
<td>0.733***</td>
<td>10.64</td>
</tr>
<tr>
<td></td>
<td>Opportunity5</td>
<td>0.749***</td>
<td>10.97</td>
</tr>
<tr>
<td></td>
<td>Opportunity6</td>
<td>0.694***</td>
<td>09.89</td>
</tr>
<tr>
<td>Program Design</td>
<td>Design1</td>
<td>0.763***</td>
<td>11.29</td>
</tr>
<tr>
<td></td>
<td>Design2</td>
<td>0.832***</td>
<td>12.82</td>
</tr>
<tr>
<td></td>
<td>Design3</td>
<td>0.745***</td>
<td>10.90</td>
</tr>
<tr>
<td></td>
<td>Design4</td>
<td>0.741***</td>
<td>10.82</td>
</tr>
<tr>
<td></td>
<td>Design5</td>
<td>0.766***</td>
<td>11.35</td>
</tr>
<tr>
<td></td>
<td>Design6</td>
<td>0.708***</td>
<td>10.16</td>
</tr>
</tbody>
</table>

Notes: ***p < 0.001 (two-tailed).
iii. Standard Error

A very large standard error associated with the any estimated coefficient is also treated as an offending estimation. Remedy for such problem is deletion of such indictors (Hair et al., 2006). Examinations of the results of our example reveal no instance of such problem in our model.

In sum, examination of our results indicates that there is no offending estimate in the current measurement model, thus we can proceed to assessing the overall model fit (goodness-of-fit) of the CFA.

4.2 Overall Model Fit (goodness of fit)

Overall structural model fit is also known as evaluation of goodness-of-fit measures of structural model. Goodness-of-fit measures determine whether the researcher should reject or
accept the structural model being tested (Hair et al, 2006; Reisinger & Mavondo, 2007). There are four main types of goodness-of-fit measures to assess the structural model. They are:

1. Incremental Fit Measures
2. Parsimonious Fit Measures
3. Absolute Fit Measures
4. Noncentrality-based Measures

LISREL results of all four types of goodness-of-fit measures of the current model of MD effectiveness are given in Table 6. Several researchers including Hair et al. (2006) and Reisinger and Mavondo (2007) are of the opinion that researchers are not required to report all types of goodness-of-measures, however, different indices from each type of goodness-of-fit measure should be reported to assess the structural model. In the current example different indices from all four types goodness-of-fit measures are given. These results indicate that the proposed model has a best fit to the data as all measures achieved the acceptable level and model is accepted.
Table 6: Comparison of goodness-of-fit measures for structural model

<table>
<thead>
<tr>
<th>Measurement Model Data:</th>
<th>Accepted Value*</th>
<th>Calculation</th>
<th>Adequacy*</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 indicators for 5 constructs (1 exogenous, 4 endogenous)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total degree of freedom = 367</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size = 168</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Model:</td>
<td>chi-square = 647.87</td>
<td>df = 367</td>
<td>$p = .000$</td>
</tr>
<tr>
<td>Null or Independent Model:</td>
<td>chi-square = 3262</td>
<td>df = 406</td>
<td>$p = .000$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goodness-of-Fit Measure</th>
<th>Accepted Value*</th>
<th>Calculation</th>
<th>Adequacy*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Absolute Fit Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood ratio chi-square statistic ($\chi^2$)</td>
<td>$\chi^2 = 647.87$</td>
<td>Significance level: 0.000</td>
<td></td>
</tr>
<tr>
<td>Goodness of Fit index (GFI)</td>
<td>Higher values indicate better fit, no established thresholds</td>
<td>GFI = 0.79</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

| **2. Incremental Fit Measures** | | | |
| Tucker-Lewis Index (TLI) | Acceptable value: $\geq 0.90$ | TLI or NNFI = 0.97 | Good |
| Normed Fit Index (NFI) | Acceptable value: $\geq 0.90$ | NFI = 0.93 | Good |
| Incremental Fit Index (IFI) | Acceptable value: $\geq 0.90$ | IFI = 0.97 | Good |

| **3. Noncentrality-based Measures** | | | |
| Root mean square error of approximation (RMSEA) | Acceptable values under 0.08 | RMSEA = 0.06 | Good |
| Comparative Fit Index (CFI) | Acceptable value: $\geq 0.90$ | CFI = 0.97 | Good |

| **4. Parsimonious Fit Measures** | | | |
| Normed chi-square | Lower value: 1.0, Upper value: 3.0 or 5.0 | Normed $\chi^2 = \chi^2/d.f = 1.76$ | Good |
| Parsimonious Normed Fit Index (PNFI) | Greater value shows well fit | PNFI = 0.84 | Marginal |
| Relative Fit Index (RFI) | Acceptable value: $\geq 0.90$ | RFI = 0.92 | Good |

* Source Hair et al. (2006)

**4.3 Measurement Model Fit**

According to Hair et al. (2006), after assessing the overall measurement model goodness of fit and examination of the construct loadings, “the reliability and variance extracted measures for each construct need to be computed to assess whether the specified indicators are sufficient in
their representation of the constructs” (p. 612). Table 7 and Table 8 present the computations for the reliability and the variance extracted measures.

**i. Composite Reliability**

As it has been stated earlier that reliability is a measure of the internal consistency of constructs. In other words, reliability depicts the degree to which the items indicate the common latent construct (Hair et al., 2006, p. 612). For our example, Table 7 shows that all constructs displayed satisfactory levels of reliability ranging from 0.79 to 0.90 and exceed the level of 0.70 suggested by Hair et al. (2006) except individual initiative. Construct individual initiative has a value of 0.68, falling somewhat short of the recommended level.

The reliability of the constructs was measured with the help of following formula as proposed by Hair et al. (2006).

\[
\text{Construct reliability} = \frac{(\text{Sum of standardized leading})^2}{(\text{Sum of standardized leading})^2 + \text{Sum of indicator measurement error} \times *}
\]

* Indicator measurement error was calculated as \(1 - (\text{Sum of standardized leading})^2\). Or it can be found as diagonal of the measurement error correlation matrix (theta-delta matrix) in the LISREL output.

**Table 7: Reliability for all constructs**

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD Effectiveness</td>
<td>0.89</td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>0.78</td>
</tr>
<tr>
<td>Line Manager Support</td>
<td>0.90</td>
</tr>
<tr>
<td>Opportunity for Skill utilization</td>
<td>0.89</td>
</tr>
<tr>
<td>Program Design</td>
<td>0.89</td>
</tr>
</tbody>
</table>

**ii. Variance-Extracted**

This is another method of measuring of fitness of measurement model. Variance extracted measure reflects the overall amount of variance in the indicators accounted for by the latent constructs (Hair et al., 2006, p. 612). Higher variance extracted values occur when the indicators are truly representative of the latent construct. For the variance extracted measures, Table 8 shows all constructs exceeded the recommended level 0.50 or 50 per cent (Hair et al., 2006) substantially ranging from 0.56 to 0.74 except individual initiative. Construct “individual initiative” has a value of 0.47, falling somewhat short of the recommended level. Thus for all the constructs, the indicators are sufficient in term of how the measurement model is now specified.

Variance Extracted of the constructs was measured with the help of following formula as proposed by Hair et al. (2006).
Variance Extracted = \frac{\text{Sum of squared standardized loadings}}{\text{Sum of squared standardized leading} + \text{Sum of indicator measurement error}}
Table 8: Variance-Extracted for all constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD Effectiveness</td>
<td>0.59</td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>0.44</td>
</tr>
<tr>
<td>Line Manager Support</td>
<td>0.62</td>
</tr>
<tr>
<td>Opportunity for Skill utilization</td>
<td>0.56</td>
</tr>
<tr>
<td>Program Design</td>
<td>0.58</td>
</tr>
</tbody>
</table>

For our example, we have achieved the recommended values of goodness-of-fit indices (i.e. attainment of best fitting measurement model). Now we can enter in second stage of SEM that is testing the structural model, where we can examine the estimated coefficients for both practical and theoretical implications.

5. Item Parceling in SEM

Hair et al. (2006) argued that in SEM, a large sample is required if the model is overly large or complex. Reisinger & Mavondo (2007) state that sample size has a significant influence on the complexity of a model, simple model is preferred if sample size is small and complexed models can be examined if large sample is available (p. 52). Hall, Snell and Singer (1999) state that increasing the number of indicators directly affects the sample requirements and further they recommended that with a small sample size, the number of indicators per construct should be limited e.g., to three or four (p. 235). Item parceling is a solution for the problem of large number of indicators and small sample size. Item parcels are commonly formed in order to reduce the number of indicators of lengthy scales (Bandalos & Finney, 2001; Bagozzi & Edwards, 1994).

According to Little, Cunningham and Shahar (2002), “Parceling is a measurement practice that is used in multivariate data analysis approaches, particularly for use with latent variable analysis techniques such as SEM and Confirmatory Factor Analysis (CFA)” (p. 152). Bandalos and Finney (2001) define item parceling as “a process by which raw item responses are combined into sub-scales prior to analysis”. This process is done by combining or averaging item responses into parcel score, these parcels are used as the observed variables most commonly in CFA or SEM (Bandalos, 2002).

Bandalos (2002) argues that use of item parceling has become common in SEM (p. 78). Meade and Kroustalis (2005) stated that because of advantageous properties, parcels have been advocated by many authors. These include greater reliability than individual items, a more optimal indicator to sample size ratio, a greater likelihood of achieving a proper model solution and better model fit (p. 02). Bandalos and Finney (2001) reported that researchers have cited three common reasons for using item parceling, first, it increases the stability of the parameter estimated, second, it improves the variable to sample size ratio and third, it is a remedy to small sample size.

Bagozzi and Edwards (1998) argue that item parceling can reduce the number of parameters estimated, resulting in more stable parameter estimates and proper solution of model fit. Coffman and MacCallum (2005) state “in SEM or CFA as the number of indicators increases so does the number of parameter estimated and the order of correlation matrix. The larger the order of a correlation matrix the less likely the model is to fit well” (p. 238). From this perspective using parcels rather than items as indicators of latent variables involves the reduction...
in the number of measured variables and likely to fit model better than model with items as indicators (Coffman & MacCallum, 2005).

The use of item parceling is not without controversy. Perhaps most important is determining the dimensionality of the items to be parceled (Bandalo, 2002). Because the dimensional nature of a measured construct can have a serious impact on the accuracy and validity of various parceling techniques (Little et al., 2002). Bandalos and Finney (2001) recommended that researcher should use item parceling only when parceled items are strictly unidimensional. Item parcels work effective when constructed on unidimensional structures (Little et al., 2002). “It has also been found that the use of parceling can result in biased estimates of model parameters” (Hall et al., 1999). In sum, the amount of argumentation for the advantages side far outweighs the disadvantage side of item parceling (Little et al., 2002) and researchers will continue to view item parceling as an attractive option (Hall et al., 1999).

After determining the nature of dimensionality of set of items, one or other technique for parceling items can be applied. Based on the unidimensional nature of the measures, “simple random assignment” technique was used. In simple method for constructing parcels, according to Little et al. (2002) “all items are assigned randomly and without replacement to one of the parcels grouping and depending on the number of items to be assigned, two, three or, possibly four parcels could be created” (p. 165). As discussed before, keeping in view the recommendations of Hair et al. (2006), Little et al. (2002) and Hall et al. (1999), it was decided to create 3 parcels per latent construct. Table 9 depicts the simple random parceling process and name of parcels along with their aggregated items.

Table 9: Simple random parceling

<table>
<thead>
<tr>
<th>Name of Constructs</th>
<th>Name of Parcels</th>
<th>Aggregated Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Development Effectiveness</td>
<td>MDE1</td>
<td>MD1+MD2</td>
</tr>
<tr>
<td></td>
<td>MDE2</td>
<td>MD3+MD4</td>
</tr>
<tr>
<td></td>
<td>MDE3</td>
<td>MD5+MD6</td>
</tr>
<tr>
<td>Line Manager Support</td>
<td>LineM1</td>
<td>Line 1+ Line 2</td>
</tr>
<tr>
<td></td>
<td>LineM2</td>
<td>Line 3+ Line 4</td>
</tr>
<tr>
<td></td>
<td>LineM3</td>
<td>Line 5+ Line 6</td>
</tr>
<tr>
<td>Opportunity for Skill Utilization</td>
<td>Opportunity1</td>
<td>opp1+opp2</td>
</tr>
<tr>
<td></td>
<td>Opportunity2</td>
<td>opp3+opp4</td>
</tr>
<tr>
<td></td>
<td>Opportunity3</td>
<td>opp5+opp6</td>
</tr>
<tr>
<td>Program Design</td>
<td>Program1</td>
<td>pro1+pro2</td>
</tr>
<tr>
<td></td>
<td>Program2</td>
<td>pro3+pro4</td>
</tr>
<tr>
<td></td>
<td>Program3</td>
<td>pro5+pro6</td>
</tr>
<tr>
<td>Individual Initiative</td>
<td>Individual1</td>
<td>Ind1+Ind2</td>
</tr>
<tr>
<td></td>
<td>Individual2</td>
<td>Ind3+Ind6+Ind7</td>
</tr>
</tbody>
</table>
5.1 Goodness-of-fit indices after item parceling

Table 10 represents the goodness-of-fit indices for the measurement model after item parceling. The table indicates that the $\chi^2$/d.f ratio was 1.502, which was much smaller than the threshold value of 3.00 as suggested by Hair et al. (2006). All other indices supported a good fit to the data as compared to the recommended values. (Detailed discussion on goodness of fit indices and recommended values are given in Table 6).

Table 10: Goodness-of-fit indices for CFA with parcels

<table>
<thead>
<tr>
<th>Goodness-of fit Indices</th>
<th>Calculation of Measure*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>100.66</td>
</tr>
<tr>
<td>d.f</td>
<td>67</td>
</tr>
<tr>
<td>$\chi^2$/d.f</td>
<td>1.502</td>
</tr>
<tr>
<td>GFI</td>
<td>0.92</td>
</tr>
<tr>
<td>NFI</td>
<td>0.97</td>
</tr>
<tr>
<td>IFI</td>
<td>0.99</td>
</tr>
<tr>
<td>RFI</td>
<td>0.96</td>
</tr>
<tr>
<td>CFI</td>
<td>0.99</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.05</td>
</tr>
<tr>
<td>NNFI</td>
<td>0.99</td>
</tr>
</tbody>
</table>

6. Conclusion

Our article provides some basic techniques/guidelines for researchers to pre-SEM data analysis technical, and specification and estimation of measurement model prior to estimation of a structural model. Guidelines included in our article could not cover all aspects because of complex nature of SEM. A careful analysis of data leads to better prediction and more accurate assessment of dimensionality. By devoting considerable time and efforts on examining and exploring the nature of data and the relationships among variables, estimation of a measurement model before the application of SEM techniques (structural model examinations) can help researchers in resolving the procedural issues and assist in more insight interpretation of the results. We strongly recommend the researchers to hold all these techniques/procedure before they face problems during SEM analysis that force them to do so.

References


Book Review

Business Ethics: A Stakeholder & Issues Management Approach by Joseph W. Publisher: South-Western College Pub, 5 edition (November 13, 2008)

Reviewer: Pervaiz Akhtar
Joseph W. Weiss is a Professor of Management at Bentley College, Where he is teaching and doing research on different areas like business ethics, leadership, organizational change management and technology management. He is the writer of five books, Business Ethics, Organizational Behavior and change, Project management.
The book chosen for review is the Business Ethics, “A Stakeholder and Issues Management Approach with Cases” by Joseph W. Weiss 5th Edition, South-Western Cengage Learning Mason USA. As mentioned above the writer is the professor of management and business so this book is combination of the concepts related with the business management and their linkage with ethics. The book consists of eight chapter and twenty four case studies two to four cases at the end of each chapter from the corporate business sectors. The fifth edition is in the market which is chosen for review. In this edition few new cases are included and the organization of the book is changed a bit. In previous editions there were seven chapters but in 5th edition one chapter is included extra which is about global and international business topics.
Objectives of the Book
The main objective of writing this book is to guide and motivate the students about basic ethical concepts, principles, and enhancing their understanding and use of ethics in solving moral dilemmas that are occurring now at every professional level. As mentioned in the description of this book that this book is a guideline for the students from the bed room to the class room that how to behave ethically in the society and business sector.
Organization and Concepts of the Book
Chapter one is about business ethics and the changing environment in this chapter the basic definitions and concepts are given. In the chapter the environmental forces effecting business practices and stakeholders of the firms are defined in detail. Level of business ethics and business myths are the concluding topics of this chapter.
Chapter two is about stakeholders and issues management approaches. In this chapter stakeholder’s analysis method is discussed and stakeholders approach with ethical reasoning is discussed in greater detail. Negotiation methods that how to solve the stakeholders disputes is also the core topic of this chapter.
In chapter three ethical principles, quick tests and decision making guidelines are discussed. The main concepts given in this chapter are about utilitarianism, universalism, right, and justice and virtue ethics. Further in this chapter the immoral, amoral and moral management terms are discussed in detail and at the end of this chapter four social responsibility roles are discussed.
Chapter four presents ethical issues and problems that firms face with external consumers, govt., and environmental groups. Corporate social responsibility which is the burning topic of good governance is discussed in great detail. The role of regulatory agencies in implementing the good governance and corporate social responsibility is also covered in this chapter. The main question of the chapter is about how organizations can and should act ethically in commercial dealings. At the end of chapter recent and past classical environmental and corporate problems are covered.
In chapter five of this book the author has discussed the different problems that a consumer faces in the market like privacy issues, internet marketing abuses, reliability and safety of the products.
Different questions asked in this chapter are, who controls the environment? What a consumer is willing to pay for safety? Who regulates the regulators in the free economy etc. The core issues of ethical advertising and its effect on consumers and especially on children are discussed in detail.

The chapter six of this book presents corporation as internal stakeholders. This chapter is about the concepts related with management, strategy, leadership, alliances, structures, systems and culture. The main theme of chapter is about the question, how to manage, lead and be a responsible follower in corporations today.

Chapter seven discuss employees as stakeholders of the corporation. The main focus of this chapter is on employees and workforce environment. The relationship between employer and employee is under discussion in this chapter. The rights and responsibilities of employee and employer are discussed in detail. The burning issues of today’s business sector in corporate world are sexual harassment, whistle blowing, and organizational loyalty which are also the part of this chapter and are discussed in great detail and with reasonable examples.

The chapter eight which is the last chapter of this book is about business ethics & stakeholder management in the global environment. In this chapter the issues faced by the multinational organizations in the host country is presented in proper way. The current issue of globalization and its effect on corporation’s performance and efficiency is also discussed by the author. The negotiation techniques for professionals responsibly doing business abroad are presented in this chapter.

**Conclusion**

This book is written purely for academia so is adopted by the many universities in world at business schools. Overall this book is organized in good way and the case studies presented in the text are relevant with business ethics concepts. All the chapters are in reasonable detail to understand the concepts given in these chapters. The author has tried to present the modern concepts of business ethics in this text.

The language of this book is somehow difficult for those readers who are not native speakers of English. Another flaw of this book is that only case studies are presented in this text and no solution is there for these cases. I suggest that at least one or two exemplary case solutions should be presented for students in this book. The language of the book should be changed somehow and it should be written in easy way.

Overall I would recommend this book to business students to develop their concepts to behave ethically in the corporate sector after completing their business degrees.