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Correspondence:

Editor PBR
Institute Of Business Management(IoBM)
Korangi Creek, Karachi-75190, Pakistan
UAN: (+92-21) 111-002-004, Ext. : 731
Email: editorpbr@iobm.edu.pk
Website: https://pbr.iobm.edu.pk/
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FACTORS AFFECTING THE EMPLOYEE RETENTION IN THE BANKING SECTOR OF PAKISTAN

Zaid Bin Khalid¹, Naveed Iqbal Chaudhry² and Madiha Aslam³

Abstract

The intention of this study is to identify the factors affecting the employee retention within the banking sector of Pakistan. An Interpretive Structural Modeling (ISM) methodology is applied to diagnose the key factors. The mutual relationships among identified factors are presented in the structure of a hierarchical model. With the consensus of opinion of experts belonging to industry and academia and thorough review of literature, seven factors have been finalized as major barriers to employee retention in banking sector. Finally these identified factors are also classified according to their driving and dependence powers.

Keywords: Banking Sector, Employee Retention, Interpretive Structural Modeling, Driving and Dependence Powers.

JEL Classification: G210

Introduction

In service oriented organizations, it is challenging to achieve high profit margin within competitive environment. To achieve that level, it is important to understand what the predictions to employee service performance are. Employees are the main key to provide the competitive advantage because the human capital can’t be replicate (Allred, 2001). Banking sector faces a lot of barriers to retain its employees that affect their performance. Now a days every bank provides charming facilities to attract other bank’s employees (Yavas, Karatepe, Avci, & Tekinkus, 2003). Sometimes banking organizations fail to adopt strategies in order to preserve their human resources from high rate of turnover (Spector, Fox, & Domagalski, 2006). It is observed that turn over increases in any organization due to some reasons such as lack of motivation, lack of job satisfaction and

¹Visiting Lecturer, Department of Business Administration, University of The Punjab, Gujranwala Campus, Gujranwala, Pakistan. Email: zaid_125@hotmail.com
²Assistant Professor, Department of Business Administration, University of The Punjab, Gujranwala Campus, Gujranwala, Pakistan. Email: naveed.iqbal@pugc.edu.pk
³MBA (Research Scholar), Department of Business Administration, University of The Punjab, Gujranwala Campus, Gujranwala, Pakistan. Email: madihaaslam45@gmail.com
less compensation as well as environment, that’s why organizations fail to retain their employees (Ugur Yavas, Osman M. Karatepe, Turgay Avci, & Mehmet Tekinkus, 2003). Cascio (2006) describes the employee retention functions into certain activities such as; (1) employees rewarding to perform their jobs more effectively, (2) ensuring the pleasant working relationship between managers and the employees, (3) retaining safe and friendly environment. The excessive turnover can cause many effects on organizations like separation cost, training cost, placement cost, vacancy cost, and other morale effects (Nyberg & Ployhart, 2013).

**Employee Retention**

Das and Baruah (2013) defined the employee retention as, “Every effort an employer does to support and encourage productive and qualified employees to persistently working for the organization”. According to Peterson (2005), human assets undoubtedly are the means of sharing knowledge, experience and skills utilized as tools to enhance the financial value in any organization. An employee demands all those financial and non-financial facilities that made him loyal to retain in that organization (Lee & Mowday, 1987). According to Ramlall (2003), it’s more valuable for any organization to maintain their employees for the long term, they should recognize individual’s commitment towards their organization, as well as to create such environment where knowledge sharing takes place.

Human resources in any organization are considered constructive assets for the achievement of goals thus it is advantageous for any organization to plan and modernize its strategies to retain their effective employees for long term performance (Peterson, 2005). Several studies found that employee’s turnover rate is directly linked with personal, professional as well as demographic characteristics, motivation, job satisfaction, working condition and environment, alternative job offers, absenteeism, illness, role of management, compensation and most importantly job performance (Milman, 2003).

**ISM Methodology**

Interpretive structural modeling (ISM) approach helps to support a collaborative learning procedure which helps to improve the order and the direction of a composite relationship among several variables which derives from the empirical studies (Sage, 1977). ISM based model depicts the complex issues as well as portrays the field study system into graphical and hierarchical model. Basically ISM being a qualitative tool can be generally utilized in different domains (Ravi, Shankar, & Tiwari, 2005).

According to (Govindan, Palaniappan, Zhu, & Kannan, 2012), ISM technique is used as the graphic theory because it is applied in such manners that the theoretical, conceptual and also computational influences are utilized to describe the complex model of related interactions, including the group of factors or variables. ISM methodology is used by various practitioners and investigators
from last twenty seven years in high reputed journals. For instance (Ansari, Kharb, Luthra, Shimmi, & Chatterji, 2013) diagnosed several barriers obstructing the implementation of solar power in India by applying ISM approach and published their research work in the journal having 5.51 impact factor. Then (Panahifar, Byrne, & Heavey, 2015) employed ISM tool in their study and published it in an impact factor journal. Recently (Khalid, Mufti, & Ahmad, 2016) have applied ISM methodology to explore the barriers to collaboration among small and medium enterprises of Pakistan.

Experts’ opinion is the key cornerstone in developing ISM model. According to Warfield (1974), eight experts at least can be utilized as respondents for getting consensus, the groupings can be from both industry and academia domain. In present study 15 experts participated, 5 of them are from academia and 10 experts are belonging to banking sector. All participating experts have a minimum of ten years of experience in the relevant field. Khalid et al. (2016) explained the procedure of constructing ISM model as:

- Through extensive literature survey and consensus of experts’ opinion, a list of major factors affecting problem will be finalized.
- Pair wise contextual relationships will be established from the finalized factors.
- A structural self-interaction matrix (SSIM) will be constructed to represent pair wise contextual and mutual relationships among identified factors.
- Reachability matrices (initial and final) will be developed to check the transitivity error. The transitivity check is a fundamental assumption and considered mandatory in ISM.
- Final reachability matrix developed in the above step will be partitioned and divided into various levels.
- A directed graph will be drawn based on the relationships specified above in the final reachability matrix.
- The resulting digraphs will be transformed into an ISM, by substituting variable nodes with statements.
- The model constructed will be analyzed to check for theoretical inconsistency and required adjustments will be made.

Identification of Factors

In ISM model the first step is to classify the important factors affecting the issue understudy through literature review and consent of experts’ opinion. First brainstorming session was conducted with experts belonging to academia to finalize the important factors after carrying out a list of major factors affecting employee retention through review of literature. In second brainstorming session, experts from banking industry were invited to refine the list of factors selected by academic experts.
Seven factors are considered as major to affect the employee retention in present study with the consensus of experts from academia and banking sector. Table 1 represents these seven factors briefly.

**Structural Self-Interaction Matrix (SSIM)**

Subsequent to classification of factors affecting employee retention, the next step is to develop the pair wise contextual and mutual relationships among diagnosed factors. For this purpose, “leads to” type relationship is selected which shows that one factor directs to the other factor. A questionnaire (Appendix) is utilized to get the pair wise contextual relationships of factors. Various researchers including Azevedo, Carvalho, and Cruz-Machado (2013) and Khalid et al. (2016) recommended that a questionnaire moderated by the researchers can be utilized effectively to get the consensus of experts. The pair wise relationships are represented in SSIM.

**Table 1**

*List of factors along with their brief description as described in literature*

<table>
<thead>
<tr>
<th>Factor no.</th>
<th>Factor name</th>
<th>Brief Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Alternative Better Job Offer (ABJO)</td>
<td>Alternative job offer is defined as “Perceived Ease of Movement” because it demonstrates the availability of alternative job. When there is prevailing of attractiveness and high opportunity of growth then employees move towards alternative jobs.</td>
<td>(Lee &amp; Mowday, 1987; Hom &amp; Kinicki, 2001; Shamsuzzoha &amp; Shumon, 2007; Liu, Mitchell, Lee, Holtom, &amp; Hinkin, 2012; Arokiasamy, 2013)</td>
</tr>
<tr>
<td>02</td>
<td>Uncompetitive Compensation System (UCS)</td>
<td>When two or more workers execute same work and have same duties and authorities but receive different salary or other benefits can force lower paid employees to leave.</td>
<td>(Ramlall, 2003; Brown &amp; Yoshioka, 2003; Ongori, 2007; D’Annunzio-Green, Maxwell, Watson, &amp; Deery, 2008; Samuel &amp; Chipunza, 2009; Shukla &amp; Sinha, 2013; Arokiasamy, 2013)</td>
</tr>
<tr>
<td>03</td>
<td>Poor Neuroticism (PN)</td>
<td>Neuroticism is a personality trait which refers to emotional stability of any individual. Poor neuroticism/emotional stability is a major factor of employee turnover which has been described as being fearful, nervous, hyper, hostile, guilt, upset, sadness and feeling insecure or being anxious.</td>
<td>(Liao, Chuang, &amp; Joshi, 2008; Jeswani &amp; Dave, 2012; Singh, Singh, &amp; Singh, 2014)</td>
</tr>
<tr>
<td>04</td>
<td>Hostile Workplace Environment (HWE)</td>
<td>Stressful environment creating unpleasant situation to make the employees unhappy. Some organizational components that create hostile workplace environment such as strict rules and regulations, involvement of top level management in decision making, and no empowerment to employees.</td>
<td>(Hom &amp; Kinicki, 2001; Ramlall, 2003; Ongori, 2007; Samuel &amp; Chipunza, 2009; Nyberg &amp; Ployhart, 2013; Das &amp; Baruah, 2013; Arokiasamy, 2013; Shukla &amp; Sinha, 2013)</td>
</tr>
</tbody>
</table>

(Table Continued...)
### Initial Reachability Matrix

The symbols allocated to relationships among factors are then replaced into binary digits in the form of 1’s and 0’s, which are presented into initial reachability matrix (Table 3). To construct initial reachability matrix some rules are adopted to transform symbols into binary digits, which are as follows:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Lack of Motivation (LM)</td>
<td>Lack of motivation towards work and achievement of goals is key factor causing less employee retention in the organization.</td>
<td>(Ongori, 2007; Coomber &amp; Barriball, 2007; D’Annunzio-Green et al., 2008; Ostrom, 2009; Liu et al., 2012; Alam &amp; Shahi, 2015)</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>Lack of Job satisfaction (LJS)</td>
<td>If the expectations of employees are not met then there is lack of job satisfaction. It may also happen when employees are not considered worthy.</td>
<td>(Egan, Yang, &amp; Bartlett, 2004; Lu, While, &amp; Barriball, 2005; Coomber &amp; Barriball, 2007; Ongori, 2007)</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>Involuntarily Turnover (IT)</td>
<td>Involuntarily turnover is such type of turnover when employees leave the organization without any major reason or if organization terminates the agreement of employment with their employees irrespective of their desires.</td>
<td>(Shen &amp; Cho, 2005; Ongori, 2007)</td>
<td></td>
</tr>
</tbody>
</table>

Four alphabetical codes have been used to represent the relationships among factors which are following:

- \( V \) = Factor \( i \) helps to achieve factor \( j \);
- \( A \) = Factor \( j \) helps to achieve factor \( i \);
- \( X \) = Factors \( i \) and \( j \) help to achieve each other;
- \( O \) = Factors \( i \) and \( j \) are dissimilar with each other.

With the assistance of experts’ opinion, it is shown that the barrier 1(ABJO), 2(UCS), 3(PN) and 5(LM) has been able to achieve the barrier 7(IT), that’s why the relation marked as \( V \), while 4(HWE) and 7(IT) has been able to achieve each other so marked as \( X \).
1 and value of cell (j,i) will also become 1.

iv. If O relationship is shown in cell of (i,j) in the SSIM, then the value of cell (i,j) will become 0 and value of cell (j,i) will also become 0.

Table 2

*Structural self interactional matrix (SSIM)*

<table>
<thead>
<tr>
<th>Factor $j \rightarrow$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ABJO</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2 UCS</td>
<td></td>
<td></td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>3 PN</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>A</td>
<td>A</td>
<td>V</td>
</tr>
<tr>
<td>4 HWE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>5 LM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>V</td>
</tr>
<tr>
<td>6 LJS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O</td>
</tr>
<tr>
<td>7 IT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Final Reachability Matrix*

After incorporating transitivity, final reachability matrix is prepared on the basis of initial reachability matrix. Some newly entered values marked as 1† are reflecting in Table 4 of final reachability matrix after removing transitivity. In ISM technique, transitivity check is the basic assumption, it suggests if factor X is linked with factor Y and factor Y is associated with factor Z, in that case factor X will be unavoidably associated with factor Z.
### Table 3
*Initial reachability matrix*

<table>
<thead>
<tr>
<th>S.no.</th>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABJO</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>UCS</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>PN</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>HWE</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>LM</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>LJS</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>IT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 4
*Final reachability matrix*

<table>
<thead>
<tr>
<th>S.no.</th>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Driving Power</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABJO</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>I</td>
</tr>
<tr>
<td>2</td>
<td>UCS</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>I</td>
</tr>
<tr>
<td>3</td>
<td>PN</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>III</td>
</tr>
<tr>
<td>4</td>
<td>HWE</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>III</td>
</tr>
<tr>
<td>5</td>
<td>LM</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>II</td>
</tr>
<tr>
<td>6</td>
<td>LJS</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>II</td>
</tr>
<tr>
<td>7</td>
<td>IT</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

Note: $1^\dagger$ are newly inferred entries after incorporating transitivity.
Level Partitions

According to Warfield (1974), final reachability matrix is processed through level partition process by measuring the reachability and antecedent sets for every factor. The reachability set contains the factor itself for a particular factor and for all those factors that it may assist to attain, while antecedent set for a specific factor consists of the factor itself and all those factors which may achieve them. After deriving reachability and antecedent sets, the next step is to calculate intersection set. The factors for which their intersection and reachability sets are similar, those factors are designated at level I or top level in ISM hierarchy. In ISM model, the factors at the level I would not assist any other factor beyond their level in hierarchy. After defining top level factors, those will be omitted from the table for next iteration and same procedure will be replicated to get the factors of subsequent level. This practice of defining level of each factor will be continued in iterations until the level of last factor is defined. In present research the level partition process has been completed into 3 iterations or levels represented in Table 5-7. Level partition process is helpful in model formation of ISM hierarchy.

Table 5
Iteration 1

<table>
<thead>
<tr>
<th>Factors</th>
<th>Reachability Set</th>
<th>Antecedent Set</th>
<th>Intersection Set</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,3,4,5,6,7</td>
<td>1</td>
<td>1</td>
<td>I</td>
</tr>
<tr>
<td>2</td>
<td>2,3,4,5,6,7</td>
<td>2</td>
<td>2</td>
<td>II</td>
</tr>
<tr>
<td>3</td>
<td>3,4,7</td>
<td>1,2,3,4,5,6,7</td>
<td>3,4,7</td>
<td>I</td>
</tr>
<tr>
<td>4</td>
<td>3,4,7</td>
<td>1,2,3,4,5,6,7</td>
<td>3,4,7</td>
<td>I</td>
</tr>
<tr>
<td>5</td>
<td>3,4,5,6,7</td>
<td>1,2,6</td>
<td>5,6</td>
<td>II</td>
</tr>
<tr>
<td>6</td>
<td>3,4,5,6,7</td>
<td>1,2,6</td>
<td>5,6</td>
<td>II</td>
</tr>
<tr>
<td>7</td>
<td>3,4,7</td>
<td>1,2,3,4,5,6,7</td>
<td>3,4,7</td>
<td>I</td>
</tr>
</tbody>
</table>

ISM Based Model (Digraph)

A digraph in Figure 1 depicts the mutual relationships among identified factors before applying ISM, these relationships are so complex and difficult to understand. ISM based model rearranges these complex relationships into easy and understandable form. A final digraph has been constructed as ISM model (Figure 2) on the basis of level partition process of factors affecting employee retention which clearly depicts the relationships among factors. Factors that have level 1 are placed at the top in this model, followed by the factors at second level of iteration 2. The factors which have level 3 are located in the bottom of the hierarchy.
Classification of Factors

Duperrin and Godet (1973) introduced first time the concept of classification of factors and alike to technique used by (Khalid et al., 2016). The purpose of classification of factors is actually to examine and classify the factors along with their dependence and driving power (Khalid et al., 2016). In this analysis factors are categorized into four different clusters, first cluster indicates the weak factors which possess both weak dependence and driving powers. Therefore, those factors falling in this cluster are comparatively incoherent from the system because they have weak or few links and are called as ‘Autonomous factors’. Second cluster shows strong dependence power where as weak driving power and known as the ‘Dependent factors’. Then, third cluster is known as ‘Linkage Factors’ with both strong powers, these are unstable and have strong impact on other factors. The factors of fourth cluster possess weak dependence with strong driving power and named as ‘Independent factors’. In present research factors number 3(PN), 4(HWE) and 7(IT) are falling in the second cluster and show that these factors are dependent in nature on other variables. Factors number 5(LM) and 6(LJS) are falling in the third cluster of linkage factors and any effect on these factors will have strong effects on other factors. The remaining factors number 1(ABJO) and 2(UCS) are falling in the fourth cluster, these factors are highly independent in nature. None factor is included in the first cluster so there is no autonomous factor in this study.

Table 6

<table>
<thead>
<tr>
<th>Factors</th>
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<td>1,5,6</td>
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<td>1,2,5,6</td>
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</table>

Table 7

<table>
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<th>Factors</th>
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<td>1</td>
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<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>III</td>
</tr>
</tbody>
</table>
Discussion and Managerial Implications

The foremost aim of this research is to examine the factors which hinder the retention of employees in the banking sector. Thus it is vital to be aware of different intensities of these factors. Factor number 1 (ABJO) and factor number 2 (UCS) are the main decisive factors with high driving and low dependence power among all discovered factors and are located at the bottom of ISM model. The factors number 5 (LM) and 6 (LJS) are with low dependence and high driving powers are of strategic nature, hence they play a key function in affecting employee retention. That is why they need more attention. Factors 3 (PN), 4 (HWE) and 7 (IT) are located at the top of ISM framework as they hold high dependence and low driving powers. Classification of factors is useful in providing valuable insights about the nature of factors (Figure 3). There is not any single autonomous factor hence policy makers need to pay high attentions to all seven diagnosed factors. The results of this research shall be supportive to policy makers and managers of banking organizations who are facing difficulties to recognize the actual reason behind excessive turnover. Moreover, an important input of this research is to develop contextual relationships among factors affecting employee retention and assign different hierarchical levels to them to present them easier to recognize and understand by the banking policy and planning managers. This study will also assist the decision makers to use their existing resources and means to manage these factors optimistically.

Limitations and Scope for Future Research

There are few limitations of this study; first, the contextual relationships are developed on the basis of experts’ opinion which may include a minor element of bias. The ISM system is not used to allot the weights to various identified factors instead it is just used to develop model and impose the order of the complex relationships among factors. Secondly this ISM model is also not yet statistically tested. Thus a further research can be conducted to empirically test this proposed ISM based model by using a statistical tool called ‘structural equation modeling’ (SEM). Third limitation is the number of identified factors, although the authors have carried out extensive review of literature but there is chance that any important factor might have been neglected. Similar type of research can also be conducted in other service sectors of Pakistan in future.

Figure 1: Diagraph portraying the mutual relationship among identified factors before applying ISM.
Figure 2: Hierarchical based ISM Model

Figure 3: Classification of Factors
References


228.
Appendix

Questionnaire for experts and specialists:

The subsequent table is proposed to list the opinion of experienced employees from the banking sector and academia to build pair wise contextual relationships between factors affecting the retention of employees working in banking sector:

Kindly fill up the blank cells of the table selecting any one of the signs mentioned below:

V = factor $i$ leads to alleviate/achieve factor $j$  
A = factor $j$ leads to alleviate/achieve factor $i$  
X = factor $i$ and $j$ both lead to alleviate/achieve each other  
O = factor $i$ and $j$ are not linked

<table>
<thead>
<tr>
<th>Factor $i$</th>
<th>Factor $j$</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>B7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1:</td>
<td>Alternative Better Job offer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>B2:</td>
<td>Uncompetitive Compensation System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B3:</td>
<td>Poor Neuroticism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B4:</td>
<td>Hostile Workplace Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5:</td>
<td>Lack of Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B6:</td>
<td>Lack of Job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B7:</td>
<td>Involuntarily Turnover</td>
<td></td>
<td></td>
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CORPORATE GOVERNANCE AND FINANCIAL RESTATEMENTS EMPIRICAL EVIDENCE FROM PAKISTAN

Haniya Tariq\textsuperscript{1}, Nadia Iftikhar\textsuperscript{2} and Iftikhar-ul-Amin\textsuperscript{3}

Abstract

The financial scandals around the world have greatly challenged the way financial reporting plays its role in corporate governance mechanisms. The present study empirically tests if corporate governance attributes lead to the possibility of restatements in financial statements. Logistic regression has been applied on data from 90 PSX listed companies. In addition to governance variables, firm specific variables like size, age, financial structure have been tested for their role in the financial restatements taking place in a company. The results reveal that an independent board of directors significantly reduces the incidence of financial restatements. Thus independent directors can efficiently oversee the function of financial reporting. Similarly, an independent audit committee significantly influences financial restatements. Thus accounting restatements could be reduced with strong governance inside the corporations. These results carry implications for the corporate regulatory bodies and the overall corporate governance framework in Pakistan.

Keywords: Financial Restatement, Corporate Governance, Audit Committee, Framework.

JEL Classification: M480

Introduction

Agency conflicts in companies with separate ownership and management calls for effective mechanisms of corporate governance. This is inevitable if the interests of shareholders’ in particular and of all the stakeholders in general are to be safeguarded. This is achieved by ensuring that all essential control mechanisms are in place and working properly. It helps to mitigate the risk of possible future failures before they occur.

Corporate Governance refers to the mechanism that addresses agency conflicts encountered as the ownership and control of a company is separated (Fernando, 2009). The OECD

\textsuperscript{1}Management Trainee Officer, Askari Commercial Bank, Former research student at Institute of Management Sciences, Peshawar, Pakistan. Email: Haniyatariq1@gmail.com

\textsuperscript{2}Assistant Professor, Institute of Management Sciences, Peshawar, Pakistan. Email: nadia.qadir@imsciences.edu.pk

\textsuperscript{3}Assistant Professor, Institute of Management Sciences, Peshawar, Pakistan. Email: iftikharulamin@imsciences.edu.pk
refers to this phenomenon being the system which gives direction to business corporations and controls their operations. It has also outlined the rights as well as the responsibilities associated with different roles in a corporate entity e.g. shareholders, board of directors, management etc. rules and regulations regarding corporate decision making also come under the domain of corporate governance.

Corporate governance becomes all the more important in developing countries like Pakistan where the implementation of law is weak. Agency conflicts in such countries are more intense. The reason is that most large companies are owned by families and the top management positions are also held by family members (Cheema, Bari, & Siddique, 2003). Corporate governance is not just about the decision making by directors but also about the manner in which organizations could be held accountable for their doings. Financial reporting is one yardstick through which the management of a company could be held answerable to shareholders and has to meet certain targets to keep the shareholders satisfied. When it is unable to meet those targets or when it wants to cover up bad performance, it begins to misstate its performance. To solve this problem, the corporate governance mechanisms need to be adapted and improved continuously.

The present study aims to explore whether corporate governance attributes might influence the financial restatements done by companies. This aim is achieved through a comparison of the corporate governance mechanisms of those firms where financial restatement was done with firms where financial restatement did not take place. This comparison helps to examine the differences between the two sets of firms in terms of their corporate governance mechanisms.

**Literature Review**

Corporate governance, among other activities also encompasses the financial reporting of a firm. It is no more considered a low-priority bookkeeping activity (Berndt & Leibfried, 2007). According to Berndt and Leibfried (2007) information is needed for two purposes: from an economic viewpoint, for the efficient allocation of resources, and from a legal viewpoint, for the protection of investors. Without reliable information, stakeholders are not in a position to assess a company’s performance and allocate resources efficiently. Cotton (2002) observes that financial reporting was the root cause behind the corporate frauds leading to major financial losses over the past several years. Unfortunately, in the past there have been many instances of material restatements relating to financial reports. The integrity of the board of directors, external and internal auditors has become questionable in wake of the demise of many corporate stalwarts. At the same time investors have also become apprehensive of the firms where they could possibly invest. Restatements may be due to fraud or error and research shows that market reactions to restatements indicating fraud are more severe than restatements indicating errors (Palmrose et al., 2004). However, similar findings by Hennes, Leone and Miller (2008) put misstatements into errors and irregularities, and not frauds. Nevertheless, this does not mean that restatements are appreciated. Kinney and McDaniel (1989) and Turner, Dietrich, Anderson, and Bailey (2001) are also of the view that firms engaged in revisions
in their financial statements face sharp decline in the share prices upon disclosure of the said activity.

Causes of Financial Restatements

Several reasons have been observed to cause financial misstatements and restatements. Plumlee and Yohn (2010) investigated the motives of restatements. They classified restatements into 4 categories based on causes of restatements in their data set that are (1) an internal error by the company (2) intentional manipulation by the company (3) complex nature of the transaction being recorded (4) improper application of the accounting standards. Their results complied with the generally held views about the complexity of the accounting standards being the major reason for restatements. The same view is held by Ciesielski and Weirich (2006). Another reason for financial restatements is the presence of numerous accounting standards.

Dzinkowski (2007) argues that companies have a hard time trying to find the relevant accounting standards as they carefully go through thousands of pages of accounting standards. Kellogg and Kellogg (1991) found that companies manipulate financial statements to entice investors to buy their stocks and bonds thereby increasing the value of their stock for existing stockholders. Similarly, Dechow et al. (1996) attributed the access to low cost financing as the prime motivation for companies to do earnings management which ultimately leads to restatement. Finally, some studies conclude that the instance of financial restatements increases due to the pressure companies face to meet earning targets ultimately leading to earnings management these earnings management when unveiled have to be restated (Plumlee & Yohn, 2010).

Financial Restatements have often been used as indicating earnings management (Desai et al., 2006), ineffective corporate governance practices (Srinivasan, 2005), quality of accruals (Doyle et al., 2007), as well as lack of experience of financial executives leading to internal company errors (Aier et al., 2005).

Corporate Governance and Financial Restatements

Abbot, Parker and Peters (2004) reveal that financial restatements is a consequence of weak corporate governance mechanisms. Similar view is shared by Agrawal and Chadha (2005) and Efendi, Srivastava, and Swanson (2007). Farber (2005) reports that the companies doing fraud through financial reporting (which ultimately leads to restatement when frauds are exposed) have certain characteristics: firstly their boards are less diversified with less expertise; consists of few independent directors and the audit committee meets less often. Few of these firms carried audit through the Big 4 auditing firms and majority had a single person carrying out the dual role of CEO-Chairman in comparison with non-fraud firms before the fraud is surfaced.

A formal and systematic approach towards corporate governance started off with the
introduction of the first code of 2002. This also paved the way for increased interest of academicians and practitioners in this area in Pakistan. Compliance with the code has resulted in improvement in the financial reporting quality of Pakistani businesses (Rais & Saeed, 2005). This improvement has added to the accountability and transparency associated with financial reporting. Reviewing the Pakistani literature on corporate governance shows that a major part of the literature strives to develop a connection between attributes of corporate governance and how they impact the profitability of companies in textile sector, banking sector, oil and gas sector and cement industry, (Yasser, 2011; Azeem et al., 2013; Dar et al., 2011; Rehman & Hussain, 2013; Zaman et al., 2014; Inam & Mukhtar, 2014; Yasser et al., 2011). However, there is not much work done on corporate governance and financial restatements which provides an opportunity for further research in this area.

Methodology

Defining Variables

Independent variables

Board Size signifies how many directors are appointed to the board that overlooks and monitors the management in the company (Cheng, 2008; Linck et al., 2008). Information regarding this variable is generally contained in the corporate annual reports.

Board Independence refers to the degree of independence enjoyed by the board of directors. It is taken to be the percentage of outside/non-executive directors on the board (Beasley, 1996). An independent director is expected to be free of any influence from the company, and hence, should be able to bring his expertise and knowledge to the decision making process without any affiliation or influence from the firm (Beasley, 1996). Data on Board Independence has been extracted from the annual report of a company. This is a dummy variable which is taken 0 if one-third of the board members are not independent directors, and 1 otherwise.

Audit Committee Independence is proxied by number of outside directors serving as part of the audit committee (Beasley, 1996). Information related to the composition of the Audit Committee is also accessed from the corporate annual reports. In the present study, if 50% of the members of this committee are non-executive, the dummy variable is coded 1, otherwise 0.

The Big 4 Audit Firms refer to the top four largest audit firms around the world. These big 4 audit firms along with the local members in parenthesis are: KPMG (KPMG TaseerHadi & Co.), Price Water House Coopers (A.F. Ferguson & Co.), Ernst & Young (EYFord Rhodes SidatHyder) and Deloitte Touche Tohmatsu (Deloitte Yousaf Adil & Co.)\(^4\). Information about the external auditor of a company is available in the annual report of a company. If a company has one of the Big 4 auditors as its auditor this variable is coded 1, otherwise 0.

\(^{4}\) SBP BPRD Circular Letter No. 20
CEO-Chairman Duality is when the CEO also serves as the Chairman of the Board (Chen et al., 2007). Information about CEO-Chairman Duality is available in the annual report of a company. If CEO-Chairman Duality is present, it is coded 1, otherwise 0.

Firm age is the time period that the company has been in operations taken in number of years. The information has been extracted from the companies’ websites.

Firm size is proxied by natural log of the total assets of the firm as done by Klai and Omri (2011) and Agrawal and Chadha (2005).

Leverage signifies the riskiness of a business. It is proxied by the ratio of total liabilities to equity as used by Agrawal and Chadha (2005) and Klai and Omri (2011).

Profitability has been proxied by the return on assets. This ratio is calculated using total operating income to total assets following Agrawal and Chadha (2005).

**Dependent variable**

“Restatement occurs when a company, either voluntarily or prompted by auditors or regulators, revises public financial information that was previously reported” (US Government Accountability Office, 2002, p.1). Restatement was measured by comparing the financial statements of a company for the same year from its 2 consecutive annual. If a difference in figures was observed i.e. a restatement, this variable was coded as 1, otherwise 0.

**Hypotheses**

The strength of corporate governance mechanisms is inversely linked with financial restatements (Abbot et al., 2004; Agrawal & Chadha, 2005; Efendi et al., 2007) while some studies have found mixed evidence. Agrawal and Chadha (2005) report absence of any relationship amongst board independence and restatement; whereas Lin et al. (2006) reports same results for audit committee independence and restatement. These mixed views lead us to test empirically if there is any relationship between corporate governance attributes and financial restatements.

Furthermore, Corporate governance has been measured using 5 proxy variables that are board independence, board size, presence of audit committee, audit committee independence and CEO-Chairman duality. The sub-hypothesis for each proxy variable is as follows:
Board Independence (Sub-Hypothesis 1)

Klein (2002), Effendi et al. (2007), and Beasley et al. (2000) reported about companies having more independent boards had better standards of financial reporting. However, Larcker et al. (2007) and Abbot et al. (2001) do not support this notion. Brickley and James (1987) and Rosenstein and Wyatt (1990) argue that larger number of outsiders constituting the board are more effective than boards having greater number of insiders while Agrawal and Chadha (2005) report the absence of any relationship between these two variables.

\[ H_0 = \text{Occurrence of financial restatements is not influenced by board independence} \]
\[ H_1 = \text{Occurrence of financial restatements is influenced by board independence} \]

Board Size (Sub-Hypothesis 2)

Yermack (1996) revealed that companies having smaller boards were better performers than firms who had larger boards. However, Jensen (1993) gives a contradictory view that small sized boards which had less than 7 members were more effective but equally more difficult for the CEO to control.

\[ H_0 = \text{Occurrence of financial restatements is not influenced by board size} \]
\[ H_2 = \text{Occurrence of financial restatements is influenced by board size} \]

Audit Committee Independence (Sub-Hypothesis 3)

Beasley et al. (2000) contended about independent audit committees being responsible for reducing the likelihood of a company indulging in financial misreporting while Agrawal and Chadha (2005) as well as Lin et al. (2006) found no evidence of any relationship between audit committee independence and the probability of restatement.

\[ H_0 = \text{Occurrence of financial restatements is not influenced by AC independence} \]
\[ H_3 = \text{Occurrence of financial restatements is influenced by AC independence} \]

The Big 4 Auditors (Sub-Hypothesis 4)

Audit firms that are bigger in size have achieved economies of scale but face reputational risk at the same time. Such firms are in a better position to provide high quality audit services (De Angelo, 1981). Auditors’ name, audit quality has been directly linked to the chances of uncovering financial statement fraud (Deis & Giroux, 1992; Palmrose, 1987). Farber (2005) is of the opinion that firms issuing fabricated or manipulated financial statements are less likely to engage a Big Four audit firm for their audit services. In the same vain, Francis and Wang (2008) report that occurrence of earnings management is generally lower for companies hiring the Big Four audit firms as their auditors.

\[ H_0 = \text{Occurrence of financial restatements is not influenced by presence of Big Four auditors} \]
H4 = Occurrence of financial restatements is influenced by presence of Big Four auditors

**CEO-Chairman Duality (Sub-Hypothesis 5)**

Firms engaged in earnings management had greater chances of having CEO-chairman duality (Dechow et al., 1996). The probability of financial misstatements is more for firms where there is CEO-chairman duality (Effendi et al., 2007; Jensen, 1993). Farber (2005) also argues that firms issuing fabricated financial statements are more likely to have CEO-chairman duality.

H0 = Occurrence of financial restatements is not influenced by CEO-Chairman duality

H5 = Occurrence of financial restatements is influenced by CEO-Chairman duality

The aforementioned hypotheses are tested by applying logistic regression. The objective of this study could be achieved by using logistic regression. It is suitable for use in situations where unequal sampling from two populations (control firms and restatement firms) takes place (which is the case in this research). Under this method, the unequal sampling does not affect the coefficients of the independent variables (Madala, 1991). A dichotomous dependent variable that can take only binary number calls for the use of logistic regression. This is evident in many other relevant studies (Beasley, 1996; Agrawal & Chadha, 2005; Lin et al., 2006; Dechow et al., 1996; Abdullah et al., 2010; Soroushyar & Ahmadi, 2013). In the present study, financial restatement which is the dependent variable is also dichotomous in nature with outcomes as either yes or no.

**Data Collection and Sampling**

Data of 90 companies listed on PSX have been taken for the time period of 2010-2014. The published annual reports of these companies have been the source of the data. These annual reports have been accessed via company websites.

**Analysis**

The results of the logistic regression encompassing the relationship of corporate governance attributes and financial restatements are presented in Table 1.
Table 1
Results of Logistic Regression

<table>
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<th>β</th>
<th>Sig</th>
<th>Exp(β)</th>
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<tr>
<td>BoD Independence</td>
<td>-1.026</td>
<td>.000***</td>
<td>.359</td>
</tr>
<tr>
<td>BoD Size</td>
<td>.170</td>
<td>.752</td>
<td>1.185</td>
</tr>
<tr>
<td>AC Independence</td>
<td>1.405</td>
<td>.002***</td>
<td>4.075</td>
</tr>
<tr>
<td>Big4 Auditors</td>
<td>.237</td>
<td>.329</td>
<td>1.268</td>
</tr>
<tr>
<td>CEO/ Chairman Duality</td>
<td>-.291</td>
<td>.298</td>
<td>.747</td>
</tr>
<tr>
<td>Firm Size</td>
<td>-.051</td>
<td>.436</td>
<td>.950</td>
</tr>
<tr>
<td>Firm Age</td>
<td>.205</td>
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</tr>
<tr>
<td>Leverage</td>
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<td>.184</td>
<td>1.025</td>
</tr>
<tr>
<td>Profitability</td>
<td>-.405</td>
<td>.491</td>
<td>.667</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.638</td>
<td>.262</td>
<td>.194</td>
</tr>
</tbody>
</table>

The results support the acceptance of hypotheses H1 which states that board independence significantly influences financial restatement. These results confirm to the findings of Beasley (1996). H2 states that board size has a significant impact on financial restatement. However, the pertinent result is not statistically significant hence H2 is not supported. H3 predicts that audit committee independence has a significant impact on financial restatement. Results support this hypothesis. However, the finding is generally unsupported by previous literature. In Pakistan, majority members of an audit committee are non-executive directors who may not be “truly” independent and probably may not be in a position to perform their job properly.

H4 states that the Big-4 auditors have a significant impact on financial restatement. The results show that this finding is not statistically significant and hence, H4 is not supported.

H5 relates to the relationship of CEO-Chairman duality and financial restatement. But the results do not support H5.

The results reveal a negative although statistically insignificant relationship between size and restatement. Older firms are more well-known and they would not want to indulge in financial restatements that would tarnish their image. But the relationship of age and restatement is positive. The positive sign of debt to equity increases the probability of restatement although this result is statistically not significant. This finding makes sense as firms that are more leveraged can be tempted to misstate figures in order to avoid violating debt covenants. Lastly the negative sign of operating income shows that as the ratio of operating income to total assets increases the probability of restatement decreases but as the p-value is 0.491, this result is not statistically significant. This
result also makes sense as firms which are already making profits would have no reason to overstate profits.

Table 2  
Model Diagnostics

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>Percentage correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restatement</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>169</td>
<td>62</td>
</tr>
<tr>
<td>1</td>
<td>92</td>
<td>101</td>
</tr>
<tr>
<td>Overall percentage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 presents the model diagnostics. It also highlights the overall explanatory power of the model. The term “Overall Percentage” which is equal to 63.7% shows the extent to which the independent variables explain the variability in the dependent variable.

Conclusion

The demise of large corporations like Enron and WorldCom due to corporate frauds led to increased demand for legislation regarding corporate governance. In the US, the Sarbanes-Oxley Act in 2002 marked a significant step in this direction. Its effect became evident in Pakistan as well when the Code of Corporate Governance, 2002 was introduced. This point forward, academia and practitioners developed interest in this area. However, corporate financial reporting still remains underexplored for research. This research is a step in that direction.

The prime objective of this research was to study if financial restatements are driven by corporate governance attributes. However, looking at the results revealed the direction of relationship as well. Board independence significantly influences the chances of restatements. Specifically, increase in board independence decreases the odds of restatement by 0.359 times. Results also show that audit committee independence significantly impacts restatements while the other variables that are CEO-Chairman duality, the Big-4 auditors and board size have an insignificant impact on financial restatements. The direction of the significant relationship between audit committee independence and restatements is positive. The reason for such a result might be that in Pakistan majority members of an audit committee in reality and by requirement of the Code of Corporate Governance, 2012 are non-executive directors. Apparently these non-executive directors may not be associated with the company in any capacity but in reality may not be “truly” independent. That is why they may not be in a position to perform their job properly.
As mentioned earlier there are many avenues to explore in this area. Further research with the same and additional variables can be carried out for other firms to check the significance of results. Comparison between corporate governance attributes of different sectors and their impact on financial restatements or specifically earnings management can also be checked.

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POLITICAL ACTIVISM IN GENERATION Y: A GLOBAL PHENOMENON

Shahzad Ali¹ and Dr. Sarwar M. Azhar²

Abstract

Millennials also known as generation Y (born within 1980-2000) are actively in pursuit of taking charge of their surroundings. Their presence now prevails from business to social, political and professional environment. Recent research on generation Y shows that in number of cases they have been found to exhibit a unique behavioral commonality of political activism in which they have been observed to actively participate in change movements to correct the situations against their interests. This behavior is emerging to be a very critical factor around the world and it provokes a need to understand how this generation makes sense of the work, minimum acceptable standards and their preferences in terms of selecting and staying within a specific business, social and political organization. It implies that the organizations both political and business have to understand this generation and its emerging behavior of political activism and shape up their employer brand proposition accordingly in order to attract and retain and satisfy them. This paper is opting a stance of critical realist and substantiates upon the latest reported facts in number of countries including Pakistan, United Kingdom, United States of America, Chile, Malaysia, Quebec, Turkey and Hong Kong to propose that this behavioral commonality of political activism is a global phenomenon. This research concludes that the proposition is valid and holds a very significant value for the business and political organizations for the formation of employer brand and utilizing this knowledge help them in employer brand development for attracting and retaining generation Y.

Keywords: Employer Brand, Generation Y, Political Activism, Globalization.

JEL Classification: Z000

Introduction

The urge of developing a strong employer brand is linked with a deeper understanding of its various underlined dimensions (i.e. attractiveness dimension and competency dimension). These dimensions contain factors that are subjected to the perceived preference patterns further leading towards behavioral manifestations. One of the factor is emerging nature of study and is considered to

¹PhD Scholar, University of Management and Technology, Lahore, Pakistan and Honorary Research Fellow at Ilma University, Karachi, Pakistan. Email: shahzadali.umt@gmail.com (This paper is from the author's PhD dissertation).

²Professor, Department of Management Sciences, IBA University, Sukkur, Pakistan. Email: sarwar.azhar@iba-suk.edu.pk.
be as critical is political activism for it’s witnessed multiple simultaneous recurrences around the globe in generation Y. Generation Y currently cascaded in the age bracket of 19 and 39 is ready to prove their vitality in social, political and business organizations (Morin & Taylor, 2009; Oh, Yong, Sarwar, Low, & Vinayan, 2019; Shiratuddin et al., 2016). It makes it pivotal for the respective organizations to understand their significance, recognize their potential and reconsider the power of this generation. Beside the diversity among them in so many ways they have recently been witnessed of having reliably conflicting behavioral manifestations (Lancaster & Stillman, 2003; Macky, Gardner, & Forsyth, 2008; Pînzaru et al., 2016). However, the clustered commonality also revealed that they have significant similarity when it comes to the behavior of political activism in this generation. Political activism has been defined by David (2007) as an activity including organizing, petitioning, protesting at lobbying in reaction to any action taken by an individual, or group of people”. The recent research by Morin and Taylor (2009) also shows that this generation is much more sensitive and politically active when it comes to religion, society and organizational practices while making the decisions about joining or leaving any particular group of people. This lucrative participation of this generation at various forums is currently and will in future have significant impact on the society at large especially on political and business organizations. It is evident that the behavior of political activism in not only limited to male population but female population is also exhibiting it. These activist are not born rather they are the product of rational organizational contexts formed via civic links (Norris, 2007).

This research pools up the same knowledge from the overlapping areas of organizational behavior, social activism and political science for the formation of a proposed model, which highlights that the generation Y, is exhibiting a common behavioral manifestation of political activism. This study is also establishing the fact that under the contemporary situation of globalization this model application is valid globally. Rooting in the premises the study is aimed at highlighting few propositions, which are later analyzed critically, based on the evidences from real life cases from the various parts of the world. These evidences on one hand are differentiating the behavior of generation Y from previous generations and on the other hand are showing the universality of behavioral commonality of political activism in this generation.

This research highlights the behavioral commonalities based on the cases of the different regions of the world which strength the logical application of generational frame around the globe. Hence, the research also adds value in the field of generational studies and its application in various fields of such as in the fields of marketing, branding, organizational behavior, social and political science. This research will also provide in-depth insights to the stakeholders for understanding the phenomenon in better way and later for learn about its drivers with finally devising the strategies to substantiate this knowledge to extract benefit.

As the nature of the work is interpretive, the study has taken the stance of critical idealist. This stance has taken because of the involvement of rigorous phenomenological examination and the examination of its priori synthetic elements for understanding and experiencing the phenomenon
thoroughly. This leads further to the core of the study that is to establish enough evidence to substantiate the proposition that political activism is a global phenomenon. It leads to the main research question of this study: is the behavioral manifestation of political activism in generation Y a global phenomenon?. Which further leads to the core research propositions:

\( P1 \): Generation Y is exhibiting the behavioral commonality of political activism.
The above proposition leads to the main proposition

From the above proposition, this research establishes the core proposition:
\( P2 \): Generation Y is more politically active globally.

**Research Method**

This study has taken the stance of critical idealist in the formation of its theoretical model (given in the Fig. 1 below) for analysis and discussion of the substantiate evidence in the form of globally published research and media reports.

![Figure 1: Conceptual Model](image)

**Behavior**

There are various methods and frameworks used by the researchers in order to understand and explain the behavioral manifestations. The logic behind is to understand the antecedents of certain behaviors as to what actually leads towards a certain type of behavior. So finally it reaches at to point
of anticipation and somehow control it for example the framework of personality type has been used in order to relate certain type of personality traits with certain behaviors and circularly what type of behavior lead to the formation of certain type of personality. Here the notion of what causes what is rather circular (Barrick & Mount, 1991; Hines, Hungerford, & Tomera, 1987; Judge & Bono, 2001; Rodriguez, Boyer, Fleming, & Cohen, 2019).

However, this research has used the generational framework to explain the origin, rationale and directional dependence of specific type of behavioral manifestation of political activism (Muskat & Reitsamer, 2019; Solomon, Russell-Bennett, & Previte, 2012).

**Generational Frame**

The segmentation of generations is primarily originated from USA based on the year of the birth as shown in Fig 2 and this frame was later found useful in its application in other parts of the world (Macky et al., 2008). However, the deeper encapsulating complexities which actually differentiates these generations are the major political, social, technological and economical incidents happened during and before that time span, finally leading towards the formation of unique and universal behavioral manifestations in the people belonging to that generation (Alesto, 2010; Anantatmula & Shrivastav, 2012; Appel-Meulenbroek, Vosters, Kemperman, & Arentze, 2019; Dries, Pepermans, & De Kerpel, 2008). It involves adopting and adapting to the general environmental factors leading to the wider formulation from how people live in general toward how society moves and globally effecting each aspect such as trade, politics and social life etc. (Macky et al., 2008).

**Table 1**

*Generational Framework*

<table>
<thead>
<tr>
<th>Generation</th>
<th>Birth year</th>
<th>Significant events</th>
<th>General values</th>
<th>Values in Work</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans</td>
<td>1922-1945</td>
<td>Great Depression</td>
<td>Conformism</td>
<td>Obedience</td>
<td>Value of experience</td>
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<td></td>
<td></td>
<td>World war II</td>
<td>Maturity</td>
<td>Loyalty</td>
<td>Value of per-severance</td>
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<td></td>
<td></td>
<td></td>
<td>Conscientiousness</td>
<td>Obligation</td>
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<td></td>
<td></td>
<td>Thrift</td>
<td>Security(stability)</td>
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<td></td>
<td></td>
<td></td>
<td>Idealism</td>
<td>Challenge</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Creativity</td>
<td>Workaholic</td>
<td>Value of contribution</td>
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<td></td>
<td></td>
<td></td>
<td>Tolerance</td>
<td>Criticism</td>
<td>Bonus and other incentives</td>
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<td></td>
<td>Freedom</td>
<td>Innovativeness</td>
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<td></td>
<td></td>
<td>Restructuring of Society</td>
<td>Self- fulfillment</td>
<td>Advancement</td>
<td></td>
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<tr>
<td>Baby Boomers</td>
<td>1946-1964</td>
<td>Moon Landing</td>
<td></td>
<td>Sacrifice</td>
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<tr>
<td></td>
<td></td>
<td>Restructuring of Society</td>
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<td>Economic Prosperity</td>
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<td></td>
<td></td>
<td>Roaring sixties</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Yuppie-culture in 80’s-foundation of business world</td>
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(Table Continued...)
<table>
<thead>
<tr>
<th>Generation X</th>
<th>1965-1979</th>
<th>Part of welfare state</th>
<th>Independence</th>
<th>Practicality</th>
<th>Non-hierarchical structure</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Depression</td>
<td>Skepticism</td>
<td>Learning</td>
<td>Loyalty</td>
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<td></td>
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<td>Education opportunities</td>
<td>Flexibility</td>
<td>Entrepreneurship</td>
<td>Time-off as incentive</td>
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<td>Aids</td>
<td>Control</td>
<td>Materialism</td>
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<td></td>
<td>Technology usage</td>
<td>Fun</td>
<td>Work-life balance</td>
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<td>Divorce rate</td>
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<td>Adaptability</td>
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<td>Strong career ambition</td>
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<tr>
<th>Generation Y</th>
<th>1980-2000</th>
<th>Fall of the</th>
<th>Collectivism</th>
<th>Passion</th>
<th>Lower need for social approval</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Berlin Wall</td>
<td>Positivity</td>
<td>Learning</td>
<td>Innovation</td>
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<td></td>
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<td>MTV</td>
<td>Moralism</td>
<td>Security-</td>
<td>Monetary gains</td>
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<td></td>
<td></td>
<td>Internet, Digi</td>
<td>Confidence</td>
<td>Not stability</td>
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<td></td>
<td></td>
<td>9/11-War on</td>
<td>Civic mindedness</td>
<td>Willingness to work</td>
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<td></td>
<td></td>
<td>Death of Princess Diana</td>
<td>Diversified</td>
<td>Ambitiousness</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Adoring Parents</td>
<td>Confidence</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Generation Z</th>
<th>2001-</th>
<th>Great depression started in 2008-No luxury or economic safety</th>
<th>Highly connected with the digital world-digital natives</th>
<th>Multi-tasking</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High-tech revolution</td>
<td>Individualism</td>
<td>experience-based learning</td>
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<td></td>
<td></td>
<td>Networking</td>
<td>Confidence</td>
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<td></td>
<td></td>
<td>Diversity</td>
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Source: Adopted from (Dries et al., 2008; Anantatmula & Shrivastav, 2012; Alestalo, 2010; Geck, 2007)

This generational classification originally based on the year of birth and the shaped up behaviors mentioned are mostly related to the population of USA but the model has been generalized keeping its source format of classification. (Judge & Bono, 2001).

**Generation Y**

The year of birth for the people falling in this generation ranges from 1979 to 2000 (Marconi, 2001; Reisenwitz & Iyer, 2009). This generation have practically seen relatively stable geographic environment such as least warfare and their predecessor generations such as generation X and baby boomers have provided most of their life necessities. However, generation Y have seen technological revolutions especially in the fields IT, mobile and artificial intelligence. The communication has become so easy, quick and vast that world is now virtually merging into a
big global village. The cultures, ethnicities and rituals are embracing each other people connecting so rapidly, trends and information spreading so fast and unanimously that has not been witnessed ever before. This is acting as one of the principle reason in shaping up the globally similar behavioral manifestations of groups around the world. Based on the availability of vast range of information and opportunities beyond comprehension this generation has developed a set of unique behaviors which differentiates them from previous generations (Muskat & Reitsamer, 2019). According to literature this generation is more impatient and is more eager to get opportunities. They are more demanding from their employers and would not take no for an answer (Dries et al., 2008; Lancaster & Stillman, 2003; Lyons, Cude, Gutter, & Lawrence, 2003). They have very low patience for the inequality and unacceptable unethical and illegal practices and have courage to come out to speak about it act on what they believe and are very active in terms of political activism.

**Political Activism**

The research on political activism do not only highlights the notion and its application but it also explains the cases where the people actually demonstrated it to communicate their agendas (Norris, 2007). It was conceptually originated from the work of various researchers including (Verba & Almond, 1963; Verba, Nie, & Kim, 1978; Verba, Nie, & Row, 1972), and Barnes et al. (1979). In 1980s the work was principally done to understand its theoretical underpinnings and the philosophical assumptions leading to the survey based research. However, it was in 1990s that the notion was further developed and analyzed scientifically. It was later in 2000s when the major themes of this notions were highlighted in the work on Norris (2007):

i. The institutional perspective of the resolution held in reserve for election turnout becoming increasing important and having an increased approval;

ii. Consequences of declining tendency to become a member in the democratic settings;

iii. Political association having inclination towards social capitalism getting increased acceptance for adhocism; and

iv. An increasing tendency towards cause based activism having diversity of agendas including environmental, social, political, professional agendas.

The concept of political activism was further evolved due to the technological advancement, elevated social life style, increased rate of literacy, increase in the number of available medias spreading information and creating awareness, increased understanding of basic human rights and vast interconnectivity of people from different parts of the globe, communication ease and a lot of other similar factors (Martin & justice, 2007; Roberts, 2004).
Despite its wide range of application in almost all fields of life, in order to make the concept parsimonious the contemporary study is presenting the evidences from education industry. The cases highlighted in the study highlights the presence of certain age group their resistance towards forced and unacceptable policies and practices and their political activism in terms of protest to make sure they get what they feel is right. Here the conjecture of this thought of political activism is accelerated in three stages. At first stage there is a strong expression of unique individual level of beliefs based of what they have learned and are inspired from. The second stage is when they refuse to blindly obey the authorities. And at the third and final stage they come to act against them in the form of protest in order to correct those actions, policies and procedures. This become even more pertinent to activism due to paced sharing of information encouraging other mobs to act accordingly (Norris, 2007).

One of the remarkable fact about political activism is that current political systems specifically democratic systems are somehow the outcome of its consequences. It can be said that the system have to contain political activism as its rout in order to bring about the required change in the political systems (Norris, 2007). The same activism can be viewed in the current scenario all over the globe where generation Y is recognizing its potential and participating actively in changing the system which are obsolete or unacceptable to bring political systems on its place. The same is happening in other cases such as in business where the same activism is pushing organizations to live in accordance with the society and mostly consider what this generation consider to be good and bad (Norris, 2007; Smith, Fressoli, & Thomas, 2014).

Globalization

The times have changed people living in silos have been connected to form a bigger picture of human evolution and globalization have played it vital part in its advancement (Hines et al., 1987). The windows of opportunities opened all around the globe have also created an understanding of other cultures their respective geographic limitation and the possibilities there wider reach of opportunities have provided (Robbins et al., 2013). People tend to not only comprehend each other, learn from each other but also have started to share the comparable behavioral manifestation given the same reach of exposure they have to the vast world of information. They are forming inspirations standing tall and sure of what they believe and are ready to take part and to actively change the surrounding for good. This when considered in generational perspective have shown that generation Y all around the world are exhibiting similar behavioral patterns (Lancaster & Stillman, 2003).

Interrelationship of Employer Brand, Generation Y, Behavior, Globalization and Political Activism

One of the major challenges organizations are facing these days are that the previous generations are getting retires and are leaving their workplace for new generations to takeover. And the emerging scenarios is that the workplace is comprised of mixed generations working under the same roof. These are not just people of different age groups rather they are people with different
set of beliefs and people with different level of exposures to the overall scenarios of their time and space (Economist, 2008). This makes them comfortable with relatively different set of working behaviors, policies and procedures (Foot & Stoffman, 1998). For example, one generation can be very comfortable with working extra times and another may seem it otherwise. Similarly, one generation may find it ok to work on the same designation and concerned more about retirement and another generation may not accept lack of promotional opportunities and may not plan to stick within same organization years after year. The point here is to understand that there are different generations with different work related behaviors and expectation in the job.

Globalization have also played a very critical role in formation of these behaviors people at same work place may have diversity in terms of gender, races, political believes, nationalities, ethnic, religious and cultural backgrounds. This makes it even harder for management to keep everything under control. Globalization have a diverse workforce with relatively new knowledgebase, new set of skills and better rates but have posed a challenges of managing all under same rooftop. Now linking the notion of generational frame the study have proposed that even within all these bases of diversities there are overlapping similitary among the people of these generation as they have been found to have developed al the postulates of political activism they are having there learning strengths and inspiration, they are better aware about their rights and they don’t accept any incompatible policies and procedure and eventually they take against actions to correct any actions, policies and procedures against their personal, social, environmental, economic, political, national, global and religious interest (Anantatmula & Shrivastav, 2012).

The latest research on the beliefs and preference patterns of generation y in terms of politics have revealed that this generation have a grave importance because of their increasing interest and participation in political activity making them a very significant political asst. this generation is having very high tendency towards establishing the social and political recovery and is not hesitated taking about the liberty of human rights. This generation is very active and is ready for serving. They do not take an order just for the sakes of obedience they do not take no for an answer and they don’t only recognize their rights and their power but they also pursuit to establish a fare system and act against the policies and procedures they seem unfit.

The influential capacity of this generation was also seen during American elections where the candidate name Barack Obama came out as a promising figure with an understanding of this generations issues, taking simple mottos and satisfying their dreams. It was marvelous how this young generation completely rearranged and moved the whole political scenario.

The generation Y in Malaysia also showed a significant affiliation with political activism. They are more eager than that of their previous generations. Although there have spread in all shades but they have been seen to have more inclination towards liberal qualities in the system.
Empirical Evidences of Political Activism in Gen Y

There are a lot of media reports and substantial literature evidence on the phenomenon of generation Y being politically active. Here are some of the major pragmatic evidences from different geographic regions of the world, e.g. Pakistan, Turkey, Hong Kong, Quebec, UK, USA, and Chile etc. in supporting core proposition on this work.

Pakistani media have witnessed and reported that right from the start of the new millennium the young generation from the Pakistani population has taken keen interest in political and social activities. The stats in table number 2 are exhibiting that the participation of Pakistani young population has been resulted into progressive increase in the voting turnout from 43.07% to way above 50% especially exceeding 55% till 2013 and have witnessed highest participation exhibiting the highest level of political activism in last four decades:

Table 2
Voting Turnout in Pakistan

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</thead>
<tbody>
<tr>
<td>Turnout</td>
<td>43.07%</td>
<td>45.46%</td>
<td>40.28%</td>
<td>35.42%</td>
<td>41.08%</td>
<td>44.23%</td>
<td>55.02%</td>
<td>51.70%</td>
</tr>
</tbody>
</table>


Pakistan has been facing a series of protest and long march on the road to the capital city from opposition right from 2013 elections by the opposing parties against the ruling party mentioning there alleged rigging in the process of 2013 elections. Although both parties have different political image as one party is considered to more of liberal and another party is considered to be more of conservative, still there are two commonly shared similarities in both of the parties: (i) the participation level of young generation or the people belonging to age group of generation Y has been very high, and (ii) more women participation than ever before. Although the women population is higher in Pakistan however due to the male dominating social culture and various local factors the women have not been given right to participate freely and more than that majority of the vote bank of women are controlled by the respective male family or social leaders with their consent and will. So it was rather unusual to have witness such high level of women participation. The overwhelming participation and political activism led to the selection of the liberal party in the election 2018 also depicting that this generation is not only political active but very persistent.

“Umbrella Revolution” in September 2014, led by – Joshua Wong – a young man no even reached his fifties has been proven to be the most iconic political main stream activity in the Hong Kong history. Another major turning point has been witnessed in Hong Kong in the form of a movement “Occupy Central” in 2017 elections against the decision of Beijing not allowing candidates open nominations (Avsaroglu, 2014). This movement was also led by the group of college students.
belonging to age group of generation Y.

A serious political stance has been witness in Turkey in 2013 against the government. The Gezi Park Protests turned out to be a nationwide assault of the youth of Turkey against the government decisions about center renovation plan because they found it against the national interest of Turkey. It was reported by the survey (report, 2014) that age of 31% of the people in protest was from 21 to 25 and 31% was 26 to 30 years. The protest and actions in terms of Beyoğlu and the Taksim development taken by the youth generation Y was later recognized by the court and it resulted into the reversal of the decisions taken by the government.

Another anti-capitalist movement namely “Occupy Wall Street” was held in 2011 in USA. According to reports the people who initiated and taken on the movement through social media belonged to the age group of generation Y(occupywallst.org, 2014). However, with its growth the more people from other age groups also pooled.

In 2012, Quebec also faced a protest taken on principally by the people belonging to generation Y against the government for raising up the bar of tuition fee of university (Winograd & Hais, 2014). Further, the protest against governmental decision grew larger at a scale where it eventually pushed government to reverse the decision proving the significance of this generation and the core proposition of political activism in generation Y.

The similar challenge was also faced by UK in 2012 when its youth got out on streets particularly belonging to this generation Y protesting against the government decision of raising the tuition fee. The youth belonging to generation why gathered in the form of mob well exceeding the number of 10000 on the streets of London to protest against this fee raise and for the increasing rate of unemployment. The government very tactfully managed to handle the situation given their political pressure (Wagner, 2014). Here the important notion is not to see who won the protest and ho didn’t the important point is to note that the people belonging to this generation are very politically active and are not tolerant for any injustice and incompatible policies made by business, political or social organizations or even governing authorities.

In 2011, the Chilean student’s mob came out protesting against their government and against the educational governing bodies demanding a change in old educational framework. The protest eventually was recognized by the governing authorities and a lot of respective changes were incorporated as per the demands. The protest then turned further into political movement impacting at presidential level and played a significant role in drastic fall down of approval rating of the ex-Chilean President Sebastian Pinera’s.

Apart from the political organizations, consumers and employees from all over the world are exhibiting political activism joining gathered to support youth-led mobilization effort (2019) to
bring attention to the climate crisis. According to a research by Global Tolerance (2019), 62% of generation Y wants to work only for the business organizations who are contributing positively in the environment and society. This Swedish led political activism act have led to expression of worldwide political activism against the brands like Cadbury chocolate and resulting into closure of 100s of outlets of the brands like starbucks and walk out of 1000s of employees such as from Amazon forcing organizations act properly. These expressions of political activism have led organizations to rethink and reform their policies to further attract and retain employees especially from generation Y.

**Discussion and Conclusions**

All the research and empirical evidence mentioned within the previous sections depicts that the point of focus is not to look at the apparent success of generation Y while mentioning and getting their needs, rather it’s the enactment of certain similar behaviors of the members of this generation in the form of political activism. All the major political, social and business movement mentioned in recent time has been originated and led by the people belonging to this generation due to their lack of acceptance for inequality and oppression etc., which also confirms the core proposition of this work that political activism in generation Y is a global phenomenon.

**Patterns of Behaviors Generation Y Causing Political Activism**

This conceptual work has focused on the behavior of political activism in generation Y as a universally occurring phenomenon, which has not only been witnessed in European countries but has also been seen in south Asian developing countries like Pakistan as a global phenomenon. One of the core reason of this global phenomenon found in both men and women of generation Y is the behavioral similarity among this generation around the global (Alestalo, 2010).

One of the research done by “Reason's information” have mentioned that generation Y have a tendency to be liberal towards their social environment and are more direct when it comes to financial matters. Even at social business and political forums, they recognize themselves in the support of liberalism and democracy rather than as preservationists and Republicans. Pew information (Ng, 2015) also revealed that they are more participative and more clear in declaring themselves as libertarians than previous generations same age group people. Especially when it comes to economic, political, geographic and social reforms (King, 2014). One elemental implication for business organization is that these organizations need to consider the behavioral manifestations of generation Y while formulating the attraction and retention strategies leading to the formation of employer brand. Without it the rest is dream in times to come.
References

Business Books.
BUSINESS EXCELLENCE INITIATIVES AND PERFORMANCE OF PHARMACEUTICAL SECTOR OF PAKISTAN: MEDIATING ROLE OF BUSINESS PROCESS CAPABILITIES

Suleyman Degirmen¹, Wasim ul Rehman² and Sana Shaukat³

Abstract

Presently, business excellence initiatives (BEIs) is functioning like a substantial criteria to increase efficiency of businesses to remain competitive. In this concern, the purpose of this study involves inspecting the effect of BEIs on performance of pharmaceutical sector of Pakistan by way of utilizing the role of business process capability mediating mechanism. An intermediating framework is proposed and data is assembled via a modified instrument (questionnaire) from 514 top and middle level managers. CFA is utilized for estimating the postulated framework’s fitness. The estimates of CFA models depicts that the proposed framework is fit. The outcomes of path coefficient (standardized) validate the significant contribution of BEIs on performance of pharmaceutical sector. The outcomes of study show that each of the postulated hypothesis is significant statistically (p<0.001) and furthermore indicating that business process capability (mediatory variable) is also associated with excellence initiatives of business and performance predictors. Moreover, study’s outcomes depict that business process capability shows partial mediation in BE focused performance and significantly contributes in value formation. This study proposes valuable insights for practitioners as well as future researchers thus suggesting that managers need to build an effective BEIs system to make business processes more influential for boosting performance of pharmaceutical sector of Pakistan. Firms must dedicate all of its potential in recognition and execution of BEIs as well as in enhancement of business process capabilities to attain improved BE focused performance.

Keywords: Business Excellence Initiatives (BEIs), Process Capability (BPC), Firms’ Performance.

JEL Classification: M210, M140

¹Professor of Economics and Dean School of Economics and Business Administration, Mersin University, Turkey. Email: suleymandegirmen@gmail.com
²Assistant Professor, Department of Business Administration, University of the Punjab, Gujranwala Campus, Pakistan. Email: wasimulrehman@yahoo.com, wasim.rehman@pugc.edu.pk
³MS Scholar at IBA, University of the Punjab, Lahore, Pakistan. Email: sana_1808@yahoo.com
Introduction

For sustaining profit margins and competitiveness, firms must constantly improve its productivity (Samardzija & Fadic, 2009). Currently, business excellence initiatives (BEIs) is arising like substantial criteria to enhance consumer contentment and efficacy of businesses (Ittner & Larcker, 1998). The notion of BE is grounded on the beliefs and frameworks of total quality management (Adebanjo, 2001). BE utilizes philosophies and tools of TQM with intent to enhance performance outcomes (Drescher et al., 2011). BE initiatives are internationally proven instrument to enhance performance (Samardzija & Fadic, 2009). Researches show a number of models to inspect BE driven performance for instance Malcolm Baldrige model, European Foundation for Quality Management Model and Deming Prize Model (Vartiak & Jankalova, 2017). Furthermore, the business process capabilities are also observed as an influential way to maintain business performance outcomes (Eisenhardt & Martin, 2000).

Extant literature shows scarcity of research to examine excellence initiatives (BEIs) driven performance of pharmaceutical sector of Pakistan. It is one of hi-tech, growing and knowledge oriented manufacturing sector with $1.6 billion contribution in GDP of Pakistan. This sector is closely related with the health of human beings and must contain excellence in each respect. However, the concept of BE is relatively unknown in this sector. Emergence of excellence in business systems and processes of pharmaceutical sector enhance the firm’s productivity and operational excellence, resulting in manufacturing of quality medicines at competitive price for local as well as international markets thus helping to improve the performance outcomes and business process capability of this sector.

Business processes are widely recognized for improving organizational performance (Davenport, 2005; Harmon, 2010). Furthermore, BEIs contributes in enhancing performance outcomes by way of supporting growth of resources (Tena et al., 2001). Prior literature on resource based view (RBV) states that most of resources that enhance and sustain competitiveness are resources such as business process (Barney et al., 2001). However, no prior study explores the mediating intervention of BPC while observing BEIs driven performance to make the distinctive contribution is prevailing literature. So, this research yields new insights and attempts to bridge this gap and investigates that in what manner BPC functions as a competitive edge, through efficiently utilizing resources, resulting in enhance BEIs driven performance.

Therefore, the research’s intent is to analyze the role of BEIs via Malcolm Baldrige criteria of pharmaceutical sector through exploring the mediating role of BPC. Malcolm Baldrige criteria classifies BE in six categories i.e., leadership, strategic planning, customer focus, process management, human resource management and knowledge management (NIST, 2008).

Numerous studies explored the relation of BEIs with performance outcomes (Jacob et al., 2004; Curkovic et al., 2000). BE affirmatively impact financial performance and results in enhanced

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sales, revenues and resources (Hendricks & Singal, 1997). BEIs offer significant benefits to firms (Escrig et al., 2001). Firms that employ techniques of BE are more likely to achieve excellence and attain success (Mann, 2008). BE serves as a development and managerial instrument for improving performance outcomes by coping with long-term goals in competitive setting (Adebanjo et al., 2011).


**Literature Review**

*Business Excellence Initiatives* Leadership (LS)

Leadership is an ability to encourage and inspire persons (Burns, 1978). Leaders control all the operations of a firm and are viewed as leaders instead of managers (Pradhan & Pradhan, 2015). Extant researches suggest that leadership significantly influence performance outcomes (Felfe & Schyns, 2004; Agle et al., 2006) and business processes of a firm (Bandara et al., 2007; Becker & Glascoff, 2014). Efficient leaders recognize target market as well as insistently enhance business processes to content consumer (Johnson, 1992) and offer enhanced output and revenues (Jackson, 1999). Effective leaders know the importance of process capability for sustaining and enhancing performance (Law & Ngai, 2007) and advance by efficient management of business processes (Rosemann et al., 2006). Reforming of business process encompasses leadership competences (Hall et al., 1994). The leaders enable workforces and firms for adapting changes and to do well (Soebbing et al., 2015). Accordingly, this research recommends the following hypotheses:

\[ H_1: \text{There is an association between LS and firms’ performance.} \]

\[ H_2: \text{There is an association between LS and BPCs.} \]

*Strategic Planning (SP)*

Strategic planning regulates mission, objectives and plans that manage the attainment and allotment of resources to accomplish firm’s goals (Pearce et al., 1987). Numerous researches inspect the affiliation of strategic planning and performance of firms (Bask et al., 2010; Gibson & Cassar, 2005) and business processes (Lyles et al., 1993). Strategic planning prior reforming of business processes, redesign processes in accordance with the objectives (King, 1994). This leads to better performance
(Short & Venkatraman, 1992). A study proposes utilizing strategic planning depict enhanced financial performance (Wood & LaForge 1979). Prasad (1999) asserted that current strategies, rehearses and systems are needed to be reviewed before reforming significant business processes. Business processes are stated by means of aims and strategies to achieve main objectives of a firm (Nurcan et al., 2005). Strategic planning encompasses of redesigning of business processes to accomplish targeted performance outcomes (Harrington, 1991) and suggest the following hypotheses:

\[ H_3: \] There is an association between SP and firms’ performance.

\[ H_4: \] There is an association between SP and BPCs.

Customer Focus Initiatives (CFIs)

Customer focus involves adapting and implementing such tactics that lead to consumer contentment (Armstrong, 1999). Prior researches point out that customer focus initiatives influence profitability (Reichheld & Teal, 1996; Zhang & Pan, 2009) and business processes of a firm (Chan, 2005; Trkman, 2010). Business process focused on firms’ enhanced capacity of processes by centering customer’s desires (Willaert et al., 2007). Since high consumer contentment results in enhanced performance outcomes (Williams & Naumann, 2011). Customer focus initiatives function as process capability for building and maintaining relations with consumers for accomplishing enhanced organizational performance (Lambert, 2009; Morgan et al., 2009). For improving performance outcomes it is necessary to provide enhanced value to consumer. Reformation and integration of fundamental business processes are crucial for attaining this purpose (Chan, 2005). Therefore, this study recommends the following hypotheses:

\[ H_5: \] There is an association between CFIs and firms’ performance.

\[ H_6: \] There is an association between CFIs and BPCs.

Process Management Initiatives (PMIs)

Process management encompasses of planning, advancing and regulating processes (Juran & Godfrey, 1999). Extant literature show that process management initiatives enhance firm’s performance (Kumar & Movahedi, 2008; Kohlbacher & Reijers, 2013) and business processes (Benner & Tushman, 2003). PMIs make organizational processes more stable for accomplishing enhanced performance outcomes (Palmer, 2007). PMIs accelerate constant business innovation processes, leading to enhancement of profits (Garvin, 1995). Currently, BPCs are viewed as utmost resources of firms since they offer momentous projections for improving market share, decision-making and firm’s performance (Seethamraju, 2012). PMIs boost business processes resulting in increased revenues, ultimately improving performance (Harry & Schroeder, 2000) and recommends the following hypotheses:

\[ H_7: \] There is an association between PMIs and firms’ performance.

\[ H_8: \] There is an association between PMIs and BPCs.
Human Resource Initiatives (HRIs)

HRIs are management of firm’s utmost valued resource, the employees, who assist in accomplishment of firm’s aims and goals (Armstrong, 2006). Extant literature depicts that HRIs influence firms’ performance (Huselid & Becker, 1996; McMahan et al., 1994) and business processes of a firm (Plevel et al., 1994; Conklin, 2005). Effective regulation of human resources in functioning of business processes can stimulate the outcomes of BPCs, resulting in accomplishment of greater efficacy from resources leading to enhanced performance (Arias et al., 2018). Firm realizes rapid profits from enhanced BPCs by means of saving incurred cost (Davenport & Short, 1990). HRIs are strategically substantial for enhancing business processes value (Brush & Rush, 2005). HRIs considerably boost workforces in accomplishment of comprehensive knowledge associated with firm’s business processes and implementing planned techniques to enhance performance outcomes (Thatcher, 2006) and recommends the following hypotheses:

\[ H_9: \text{There is an association between HRIs and firms’ performance.} \]

\[ H_{10}: \text{There exist a relationship between HRIs and BPCs.} \]

Knowledge Management (KM)

KM comprises set of procedures and techniques that regulate creation, distribution and utilization of knowledge to enhance functioning of businesses (Davenport & Prusak, 1998). Extant literature proposes an affirmative link of knowledge management with performance (Zack et al., 2009; Norton & Kaplan, 2004) and business process capability (Chen & Wu, 2014; Prieto & Easterby-Smith, 2008). Knowledge management is a fundamental tactic for reforming processes (Wu, 2002), for creating novel process capabilities (Hu & Wu, 2012) and requires to be integrated into business processes, policies and organization configuration (Gold et al., 2001) if firms desire to enhance performance. Knowledge management initiatives are directly associated with intermediating variables: BPC and organizational learning. These intermediating variables in response emit an affirmative association with performance (Wu & Chen, 2014). Therefore, this research recommends the following hypotheses:

\[ H_{11}: \text{There is an association between KM and firms’ performance.} \]

\[ H_{12}: \text{There is an association between KM and BPCs.} \]

Business Process Capabilities (BPCs)

The approach employed by firms in designing and bring of BPCs as a driver of firms’ performance (Harmon, 2010). Firms encompassing strong and mature processes are more likely to sustain performance and accomplish competitive edge (Helfat, et al., 2007). Resources can act as a competitive edge if they are effectively employed by means of business processes (Fathy & Hooley, 2002; Day, 1994). Business score card (BSC) recommends that capacity of business process can
momentously influence firm’s performance (Kaplan & Norton, 2001). Firm’s processes are directly associated with performance (Rai et al., 2006). BPCs support a firm in attaining competence in a remarkable way. This also accelerates firm’s market value (Wu & Chen, 2014). Accordingly, this research proposes the following hypothesis:

\[ H_{13} : \text{There is an association between BPCs and firms’ performance.} \]

**Research Methodology**

**Data Collection**

An instrument (questionnaire) and convenient sampling are utilized to accumulate data from top and middle level managers employed in pharmaceutical sector. For gathering data, 600 questionnaires were disseminated. 514 questionnaires are deliberated for analysis and other questionnaires are excluded because of choosing alike responses or being incomplete. This depicts 85.6 % response rate which is rational for this study.

**Instrumentation**

Extant literature is explored for adapting the measurement items. BEIs are evaluated through employing Malcolm Baldrige criteria, acknowledged as well as modified from (Ahire et al., 1995; Choi & Eboch, 1997) and others. BEIs encompasses six dimensions i.e., LS, SP, CFIIs, PMIs, HRIs and KM. For every BE dimension there are five items. BPCs are measured through study of Wade and Hulland (2004) and Banker et al. (2006). It involves three dimensions i.e., outside-in, inside-out and spanning capability. Each of these three dimension contains four items. Performance is estimated through employing two dimensions i.e., operational excellence and financial achievement. These dimensions are adapted from (Bowersox et al., 2000; Rai et al., 2006; Inman et al., 2011; Wu & Chen 2014) and others. Four items are employed for each of these dimensions. Few modifications are made in questionnaire to make it in accord with research context. Questionnaire is created on five point Likert scale (1 specifies strongly disagree and 5 denotes strongly agree).

**Finding of the Study**

**Measurement Model**

For evaluation of measurement model, CFA is utilized in this research by way of structural equation model (SEM). For broadening model examination, Fornell and Larcker (1981) typology is used for examining the convergent and discriminant validity. Initially, convergent validity is evaluated by factor loading (\( \lambda \)) values. Computed value of factor loading requires to be larger than 0.60 to show significance. AVE is estimated for every measurement item required to be above 0.50 (Fornell & Larcker, 1981) and value of (C-\( \alpha \)) should be in the range of 0.6 to 0.8 (Shavelson & Cronbach, 2004).
Table 1 presents loadings items ($\lambda$), means, standard deviation, AVE and coefficient of (C-$\alpha$) of model’s measurement items.

Table 1

*Results of Factor Loading and Internal Reliability*

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measurement Items</th>
<th>Loading Values</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach alpha’s (C-$\alpha$)</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS</td>
<td>Item1</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td>0.74</td>
</tr>
<tr>
<td>LS</td>
<td>Item2</td>
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<td>Item3</td>
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<td>0.60948</td>
<td>0.794</td>
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</tr>
<tr>
<td>LS</td>
<td>Item2</td>
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</tr>
<tr>
<td>SP</td>
<td>Item4</td>
<td>0.76</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SP</td>
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<td></td>
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<tr>
<td>SP</td>
<td>Item2</td>
<td>0.79</td>
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<td>0.57243</td>
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<tr>
<td>CF</td>
<td>Item5</td>
<td>0.72</td>
<td></td>
<td></td>
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<tr>
<td>CF</td>
<td>Item1</td>
<td>0.73</td>
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<td></td>
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</tr>
<tr>
<td>CF</td>
<td>Item2</td>
<td>0.81</td>
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<td>4.0525</td>
<td>0.51997</td>
<td>0.798</td>
<td>0.746</td>
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<tr>
<td>PMIs</td>
<td>Item5</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMIs</td>
<td>Item1</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMIs</td>
<td>Item2</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRIs</td>
<td>Item3</td>
<td>0.71</td>
<td>4.0669</td>
<td>0.58323</td>
<td>0.797</td>
<td>0.743</td>
</tr>
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<td>HRIs</td>
<td>Item4</td>
<td>0.79</td>
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<tr>
<td>HRIs</td>
<td>Item5</td>
<td>0.72</td>
<td></td>
<td></td>
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<tr>
<td>HRIs</td>
<td>Item1</td>
<td>0.65</td>
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<tr>
<td>HRIs</td>
<td>Item2</td>
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<td></td>
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<td></td>
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<tr>
<td>KM</td>
<td>Item3</td>
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<td>3.9444</td>
<td>0.58581</td>
<td>0.790</td>
<td>0.736</td>
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<tr>
<td>KM</td>
<td>Item5</td>
<td>0.73</td>
<td></td>
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</tr>
</tbody>
</table>

(Table continued...)
This study utilizes research of Fornell and Lacker (1981) for computing discriminant validity which must be greater than squared correlation (Wang et al., 2014). Table 2 presents the correlation values among the constructs.

Table 2
\textit{Correlation and Discriminant Validity}

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
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<tr>
<td>Leadership</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>0.64**</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Customers Focus</td>
<td>0.63**</td>
<td>0.59**</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Management</td>
<td>0.59**</td>
<td>0.59**</td>
<td>0.56**</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>0.64**</td>
<td>0.63**</td>
<td>0.61**</td>
<td>0.65**</td>
<td>0.86</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Knowledge Management</td>
<td>0.62**</td>
<td>0.63**</td>
<td>0.55**</td>
<td>0.62**</td>
<td>0.67**</td>
<td>0.86</td>
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</tr>
<tr>
<td>Operational Excellence</td>
<td>0.57**</td>
<td>0.63**</td>
<td>0.58**</td>
<td>0.67**</td>
<td>0.61**</td>
<td>0.61**</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Financial Achievement</td>
<td>0.42**</td>
<td>0.43**</td>
<td>0.38**</td>
<td>0.46**</td>
<td>0.42**</td>
<td>0.47**</td>
<td>0.49**</td>
<td>0.89</td>
<td></td>
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</table>

(Table continued...)
This study computes fitness of model by utilizing absolute fit measures, incremental fit measures and parsimonious fit measures. Table 3 depicts fitness measures of CFA models as well as suggests threshold for every score, proposing that each score meets adequacy criteria, confirming fitness of model and suitability for inspecting the proposed hypotheses.

Table 3

Models Fitness (CFA) Results

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Scores(^1)</th>
<th>Scores(^2)</th>
<th>Scores(^3)</th>
<th>Scores(^4)</th>
<th>Scores(^5)</th>
<th>Scores(^6)</th>
<th>Recommended values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit Measures</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>CMIN /DF</td>
<td>2.363</td>
<td>2.343</td>
<td>2.135</td>
<td>2.220</td>
<td>2.417</td>
<td>2.368</td>
<td>≤ 2(^*); ≤ 5(^b)</td>
</tr>
<tr>
<td>GFI</td>
<td>0.912</td>
<td>0.913</td>
<td>0.924</td>
<td>0.921</td>
<td>0.915</td>
<td>0.914</td>
<td>≥ 0.90</td>
</tr>
<tr>
<td>RMSEA</td>
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<td>0.051</td>
<td>0.047</td>
<td>0.049</td>
<td>0.053</td>
<td>0.052</td>
<td>&lt; 0.08(^*); &lt; 0.10(^b)</td>
</tr>
<tr>
<td>Incremental Fit Measures</td>
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<tr>
<td>NFI</td>
<td>0.901</td>
<td>0.904</td>
<td>0.915</td>
<td>0.950</td>
<td>0.903</td>
<td>0.904</td>
<td>≥ 0.90</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.889</td>
<td>0.891</td>
<td>0.903</td>
<td>0.899</td>
<td>0.892</td>
<td>0.890</td>
<td>≥ 0.90(^*); ≥ 0.80(^b)</td>
</tr>
<tr>
<td>CFI</td>
<td>0.940</td>
<td>0.942</td>
<td>0.953</td>
<td>0.950</td>
<td>0.940</td>
<td>0.942</td>
<td>≥ 0.90</td>
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<td>Parsimonious Fit Measures</td>
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<tr>
<td>PGFI</td>
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<td>0.725</td>
<td>0.725</td>
<td>0.722</td>
<td>0.718</td>
<td>0.720</td>
<td>≥ 0.50</td>
</tr>
<tr>
<td>PNFI</td>
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<td>0.777</td>
<td>0.778</td>
<td>0.776</td>
<td>0.767</td>
<td>0.771</td>
<td>≥ 0.50</td>
</tr>
</tbody>
</table>

Notes: Acceptance Criterion: *acceptable; \(^b\)marginal

1 Represents fitness scores of CFA for LP-driven performance
2 Represents fitness scores of CFA for SP-driven performance
3 Represents fitness scores of CFA for CFIIs-driven performance
4 Represents fitness scores of CFA for PMIs-driven performance
5 Represents fitness scores of CFA for HRIIs-driven performance
6 Represents fitness scores of CFA for KM-driven performance

Structural Model

Table 4 depicts structural model’s outcomes by means of standardized path coefficients. H\(_1\) proposes an affirmative relation of leadership with firms’ performance which is (\(β=0.759\)) at (\(p<0.001\)), therefore validating H\(_1\). Similarly, hypotheses H\(_2\), H\(_3\), H\(_4\), H\(_5\), H\(_6\), H\(_7\), H\(_8\), H\(_9\), H\(_10\), H\(_11\), H\(_12\) and H\(_13\) also depict affirmative relation of leadership with business process capability (\(β = 0.647\)), strategic
planning with firm performance ($\beta = 0.822$), SP with BPCs ($\beta = 0.781$), CFIs with firms’ performance ($\beta = 0.723$), CFIs with BPCs ($\beta = 0.735$), PMIs with firms’ performance ($\beta = 0.872$), PMIs with BPCs ($\beta = 0.828$), HRIs with firm performance ($\beta = 0.788$), HRIs with BPCs ($\beta = 0.798$), KM with firms’ performance ($\beta = 0.803$), KM with BPCs ($\beta = 0.766$) and BPCs with firms’ performance ($\beta = 0.944$) which are significance at ($p < 0.001$).

**Table 4**

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Estimates</th>
<th>P-value</th>
<th>SE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$ L→FP</td>
<td>&lt;0.001</td>
<td>0.085</td>
<td>0.759$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_2$ L→BPC</td>
<td>&lt;0.001</td>
<td>0.075</td>
<td>0.647$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_3$ SP→FP</td>
<td>&lt;0.001</td>
<td>0.072</td>
<td>0.822$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_4$ SP→BPC</td>
<td>&lt;0.001</td>
<td>0.063</td>
<td>0.781$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_5$ CF→FP</td>
<td>&lt;0.001</td>
<td>0.067</td>
<td>0.723$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_6$ CF→BPC</td>
<td>&lt;0.001</td>
<td>0.062</td>
<td>0.735$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_7$ PM→FP</td>
<td>&lt;0.001</td>
<td>0.076</td>
<td>0.872$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_8$ PM→BPC</td>
<td>&lt;0.001</td>
<td>0.071</td>
<td>0.828$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_9$ HRM→FP</td>
<td>&lt;0.001</td>
<td>0.077</td>
<td>0.788$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_{10}$ HRM→BPC</td>
<td>&lt;0.001</td>
<td>0.085</td>
<td>0.798$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_{11}$ KM→FP</td>
<td>&lt;0.001</td>
<td>0.106</td>
<td>0.803$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_{12}$ KM→BPC</td>
<td>&lt;0.001</td>
<td>0.060</td>
<td>0.766$^*$</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_{13}$ BPC→FP</td>
<td>&lt;0.001</td>
<td>0.077</td>
<td>0.944$^*$</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Note: * significant at the 0.001 level (2-tailed).

**Mediation Analysis**

For performing mediation analysis, bootstrapping is done in Amos 18. Primarily, independent variable’s direct impact on dependent variable is inspected. Then, the indirect effect by means of intermediating measure is explored. Table 5 illustrates the outcomes of direct effects of independent variables (LS, SP, CFIs, PMIs, HRIs and KM) on dependent variable (firms’ performance), all outcomes are significant ($p < 0.05$). Moreover, the outcomes of direct effect while examining the indirect effect using mediating variable BPC are reduced but still remain significant ($p < 0.05$). Thus, depicting that BPC show partial mediation in impacting the link amid BE initiatives (LS, SP, CFIs, PMIs, HRIs and KM) and firms’ performance.
Table 5

Direct Effect

<table>
<thead>
<tr>
<th>Variables</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>L→ BPC→FP</td>
<td>0.256**</td>
<td>0.505**</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>SP→ BPC→FP</td>
<td>0.178**</td>
<td>0.598**</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>CF→ BPC→FP</td>
<td>0.149**</td>
<td>0.613**</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>PM→ BPC→FP</td>
<td>0.303**</td>
<td>0.572**</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>HRM→ BPC→FP</td>
<td>0.221**</td>
<td>0.577**</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td>KM→ BPC→FP</td>
<td>0.286**</td>
<td>0.555**</td>
<td>Partial Mediation</td>
</tr>
</tbody>
</table>

Note: ** significant at the 0.05 level (2-tailed).

Table 6 depicts scale fitness measures and threshold values, with mediating variable (PBCs), proposing that all scores meet adequacy criteria and are fit for analysis of projected mediating model as revealed above.

Table 6

Scale Level Fitness Measures for Model with Mediator (Business Process Capability)

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Scores¹</th>
<th>Scores²</th>
<th>Scores³</th>
<th>Scores⁴</th>
<th>Scores⁵</th>
<th>Scores⁶</th>
<th>Recommended value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMIN /DF</td>
<td>2.324</td>
<td>2.444</td>
<td>2.445</td>
<td>2.526</td>
<td>2.398</td>
<td>2.471</td>
<td>≤ 2⁰; ≤ 5⁰</td>
</tr>
<tr>
<td>GFI</td>
<td>0.913</td>
<td>0.907</td>
<td>0.910</td>
<td>0.907</td>
<td>0.915</td>
<td>0.907</td>
<td>≥ 0.90⁰; ≥ 0.80⁰</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.051</td>
<td>0.053</td>
<td>0.053</td>
<td>0.055</td>
<td>0.052</td>
<td>0.054</td>
<td>&lt; 0.08⁰; &lt; 0.10⁰</td>
</tr>
<tr>
<td>Incremental Fit Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>0.905</td>
<td>0.901</td>
<td>0.902</td>
<td>0.900</td>
<td>0.904</td>
<td>0.900</td>
<td>≥ 0.90⁰</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.889</td>
<td>0.881</td>
<td>0.886</td>
<td>0.881</td>
<td>0.891</td>
<td>0.882</td>
<td>≥ 0.90⁰; ≥ 0.80⁰</td>
</tr>
<tr>
<td>CFI</td>
<td>0.943</td>
<td>0.939</td>
<td>0.939</td>
<td>0.937</td>
<td>0.941</td>
<td>0.937</td>
<td>≥ 0.90⁰</td>
</tr>
<tr>
<td>Parsimonious Fit Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGFI</td>
<td>0.714</td>
<td>0.709</td>
<td>0.717</td>
<td>0.714</td>
<td>0.715</td>
<td>0.712</td>
<td>≥0.50</td>
</tr>
<tr>
<td>PNFI</td>
<td>0.766</td>
<td>0.763</td>
<td>0.770</td>
<td>0.768</td>
<td>0.765</td>
<td>0.765</td>
<td>≥0.50</td>
</tr>
</tbody>
</table>

Notes: Acceptance Criterion: ¹acceptable; ²marginal
¹ Represents fitness scores of CFA for LS-driven performance
² Represents fitness scores of CFA for SP-driven performance
³ Represents fitness scores of CFA for CFIs-driven performance
⁴ Represents fitness scores of CFA for PMIs-driven performance
⁵ Represents fitness scores of CFA for HRIs-driven performance
⁶ Represents fitness scores of CFA for KM-driven performance
Discussions of the Study

The study intends to illustrate the impact of BEIs on pharmaceutical sector of Pakistan using BPCs as mediator. This study reveals following outcomes: Primarily, BEIs affirmatively effect performance of firms. While, the intermediating variable BPC represents a positive link with performance. Moreover, BPC depicts partial mediation in effecting relation of BEIs and firms’ performance.

This study’s outcomes propose that leadership impact performance (Agle et al., 2006; Felfe & Schyns, 2004) and BPCs, which confirm extant researches (Bandara et al., 2007; Becker & Glascoff, 2014). Moreover, the outcomes of study also suggest partial mediation of BPC in leadership-driven performance. This verifies the study of Hall et al. (1994), proposing the leadership assist in developing such process capabilities that lead to superior performance outcomes.

The outcomes of this study reveal that SP influences performance (Lyles et al., 1993; Pearce et al., 1987) and BPCs, which validate extant literature (Short & Venkatraman, 1992; King, 1994). Moreover, the outcomes of study also propose partial mediation of BPCs in strategic planning driven performance. This validates the findings of Harrington (1991), proposing that SP encompasses of redesigning of process capabilities leading to achievement of targeted performance.

The outcomes of this study suggest affirmative link of CFIs with performance (Reichheld & Teal, 1996; Zhang & Pan, 2009) and BPCs, which validate extant researches (Chan, 2005; Trkman, 2010). Moreover, the outcomes of this research propose partial mediation of BPC in CFIs driven performance. This validates the study of Harrington (1991), proposing that SP encompasses of redesigning of process capabilities leading to achievement of targeted performance.

The outcomes of this study recommend affirmative link of PMIs with performance (Kumar & Movahedi, 2008; Kohlbacher & Reijers, 2013) and BPCs, which validate prior researches (Harry & Schroeder, 2000; Benner & Tushman, 2003)). Moreover, the outcomes of this study propose partial mediation of BPCs driven performance. This verifies the study of Harry and Schroeder (2000), proposing that process management accelerates business processes, resulting in superior revenues and performance.

The outcomes of this study suggest affirmative link of HRIs with performance (McMahan et al., 1994; Huselid & Becker, 1996) and BPCs, which verify existing researches (Plevel et al., 1994; Brush & Rush, 2005). Moreover, the outcomes of this study suggest partial mediation of business process capability in human resource driven performance. This validates the research of Thatcher (2006), proposing that HRIs substantially assist in enhancing performance outcomes by improving business processes.
The outcomes of this study advocates affirmative link of KM with performance (Hu & Wu, 2012; Zack et al., 2009) and business process capabilities, which verify the existent researches (Wu, 2002; Wu & Chen, 2014). Moreover, the outcomes of this study propose partial mediation of BPC in knowledge driven performance. This validates the findings of Hu and Wu (2012), proposing that KM employs business processes for accomplishing superior performance outcomes.

This study proposes a positive role of BPCs for constructing an influential impact of BEIs (LS, SP, CFIIs, PMIs, HRIs and KM) on firm’s performance, as suggested by extant researches (Hendricks & Singal, 1997).

**Conclusion**

This study aims at to investigate the impact of business excellence initiatives on firms’ performance using a mediating mechanism of business process capabilities in pharmaceutical sector of Pakistan. This study proposes positive link of BEIs with firms’ performance and moreover reveals that the mediating variable (BPCs) exert partial mediation on the relation amid of BEIs and performance of firms’ in pharmaceutical sector of Pakistan. The outcomes also reveal that BEIs and BPCs show direct association with performance of firms. Furthermore, the broad intent of this research is to build a framework for creating BE-driven performance. The intermediary framework is formed due to the subsequent causes: Mainly, to validate the function of BEIs in enhancement of performance outcomes grounded on RBV. Moreover, for exploring the role of intermediary measures in BE driven performance grounded on RBV. These two aforesaid purposes are focused and verified in this study. The study motivates practitioners to identify BEIs as well as to incorporate mediatory measures and then execute them with reasonable anticipations. Furthermore, a firm encompasses many resources; therefore it should commit all of its powers in developing BPCs to establish BEIs driven performance.

**Limitations and Future Research Implications**

This study depicts some limitations and calls for future researchers. Initially, this research utilizes cross-sectional design of research that restrict to draw inferences from projected relations. This issue can be resolved by employing experimental or longitudinal research designs. Next, relation amid BEIs, BPCs and performance might be more significant in the selected sector, in comparison to other sectors. Relation must be investigated in other sectors such as chemical sector, banking sector, engineering sector and others as well. Thirdly, this research explores impact of BEIs on financial dimension of performance only. Non-financial measures of performance for instance customer intimacy and product leadership might be considered in prospect researches. Finally, the proposed framework is grounded on prior literature that is investigated in East Asia and Europe. Nevertheless, the outcomes of this study are exclusively based in Pakistan’s context. The study outcomes may contrast in other countries due to environmental, technical or structural differences. Therefore, prospect researchers must incorporate these factors in their researches as these are substantial for
BEIs driven performance and must to considered prior employing BE initiatives.

References


NIST. (2002). Baldrige winners beat the S&P 500 for the eighth year. Gaithersburg, MD: NIST.


Appendix

Figure: CFA Path Diagram
MOOD AND PURCHASE INTENTION TOWARD TELEVISION COMMERCIALS AMONG GENERATION Z IN PAKISTAN

Rizwan Shabbir¹, Ahsan Zubair² and Muhammad Azeem Abro³

Abstract

Television commercials are an effective way for an organization how wants to demonstrate its product/service for target customers. Purchasing behavior is obtained with promotions campaigns are launched to reduce customer confusion among competitive products/services. In marketing such behavior is called zapping that occur when television commercial are switched by customers. Pakistan is ranked among youngest countries in the world and second in South Asian Countries so, Generation Z customer are the first cohort with Information and Communication Technologies (ICTs) at a young age. Generation Z are the young people that accentuate on criticizing stereotyped behavior of millennial. This study investigate advertisement frequency, advertisement context, celebrity endorsement and customer perception with Generation Z purchase intention and also explore mediating role of positive mood. 274 responses from Generation Z were collected from colleges & universities of Faisalabad, Pakistan through fully structured questionnaires. The results showed that positive mood partially mediates the relationship of advertisement frequency, advertisement context and customer perception with purchase intention. However, fully mediation is observed in the relationship of celebrity endorsement and purchase intention. Therefore, it is necessary that matching celebrities should be hired for advertisements so that a huge impact could be created. Limitation, managerial implications and future directions are also explained.

Keywords: Generation Z, Positive Mood, Purchase Intention, Advertisement Frequency, Advertisement Context.

JEL Classification: M370, O150

¹School of Management, Huazhong University of Science and Technology, Wuhan, P.R. China and Lyallpur Business School, Government College University, Faisalabad, Pakistan. Email: rizwan5299@gmail.com
²Azman Hashim Business School, Universiti Teknologi, Skudai, Johar Bharu. Malaysia and Lyallpur Business School, Government College University, Faisalabad, Pakistan. Email: ahsanzubair4002@gmail.com
³Azman Hashim Business School, Universiti Teknologi, Skudai, Johar Bharu. Malaysia and Sukkur IBA University, Sukkur, Pakistan. Email: azeem.abro@iba-suk.edu.pk
Introduction

Among different sources of Integrated marketing communication (IMC) tools, most prominent source is known as Television Commercials (TVCs) and on average, globally a person view Television contents about one and half hours daily (Allen, 2005). TVCs persuade viewers by using color, sight, movement and sound attributes. Particularly, TVCs are effective when an organization want to demonstrate its product/service for target customers. According to Lin et al. (2013) TVCs has presented a golden opportunity to advertisers for mass-marketing their products/services by achieving desired goals due to its video attributes. Moreover; humor, celebrities and emotional storyline with relevant situation made TVCs as a dominating IMCs medium in this current era (Lewis & Reiley, 2013). The study of Xu, Oh, and Teo (2009) concluded that several advantages of TVCs include perception and taste of consumer, large audience can be targeted in an effective manner and pictorial presentation of message and product/service along with sound. Emergence of Social Media has transformed Television viewership by shifting them to live streaming by paying for an “advertisement-free” membership or recording them to their smart-TV devices, so that advertisement could be skipped (Rideout, 2014).

Purchase intention among customers is attained through promotion tools (Micu & Plummer, 2010) such as TVCs (Dyer, 2008); radio commercials (Southgate, 2017); banner (Duffett, 2017). Prior studies Barry et al. (2016) & Bragg et al. (2018) concluded that viewers’ attention towards advertisement has reduced due to multiple interfaces such as (smart-phone, internet, Television and touch-screen displays) as a result, zapping concept emerged in recent years (Tse & Lee, 2001). Zapping occurred when TV viewers switch to other channels due to program break or change in viewer mood. Marketing strategies regarding consumer behavior highlighted importance of positive/negative mood which is subjectively perceived by customers (Shao, Baker, & Wagner, 2004). It’s an affective state of customer towards a situation that is perceived as positive (relaxed, joyful) or negative (bad, sorrowful). In advertisement, recalling a message or product features is easier if customer is experiencing positive emotions. It has been found that attention of customers towards advertisement is dependent on their mood (Priya et al., 2010).

The study of Pickett and Brison (2019) concluded that a final product purchase occurred through a process in which consumer identify the intent, information search and available alternative evaluation. During these events, consumer get brand awareness, collect information through marketing communication tools and evaluate expectation with performance. Customer expectation is composed on the messages delivered by firms in their marketing campaigns. Generally, multinational brands advertised their products through TVCs because customer’s expectation enhanced through animation, cartoons, jingles and celebrities (Suzuki & Nelson, 2018). Moreover, TVCs are considered as most effective marketing communication medium in-order to deliver product message and gain reactions against promotional tools (Hartmann & Apaolaza-Ibáñez, 2012).
Generally, the people who are born during mid 1990s are classified as i-Generation or Generation Z (Horovitz, 2012). Many researchers and advertising agencies want to name these people as “i-Generation” because its era of internet boom. However, they are named after Generation X and Y which currently composed on customers that are 19 to 21 years old. By this definition, millennials were born in 1980s era to late 1990s which currently composed on customers that are 35-40 years old (Williams, 2015). Töröcsik, Szűcs and Kehl (2014) suggested the Generation Z customer are the first cohort with Information and Communication Technologies (ICTs) at a young age. This accessibility made them open-minded, responsible, and compassionate and advocate consumers. Generation Z are the young people that accentuate on criticizing stereotyped behavior of millennials (Moosa, 2018). This resulted in changing purchasing behavior through using IMCs. As reported by PNHDR-UNDP (2018), 64% of Pakistani population is under 30 years which is largest age group ever reported in Pakistan. Therefore, Pakistan is ranked among youngest countries in the world and second in South Asian Countries.

For an advertisement, various attributes are extracted for enhancing purchase intention, which includes theme (Jeong & Jang, 2017) that help to memorize product/brand, length (Turley and Shannon, 2000) which impact product/brand recalling, repetition (Kumar & Raju, 2013), music (Ilicic & Webster, 2011), humor (Eisend, 2009) and celebrity endorsement (Muda et al., 2014) which contribute to spread positive word of mouth (WOM) or intention to purchase. All these attributes contributed for causing zapping among target audience.

In Pakistan, the advertising spending of all IMCs tools in 2015 was estimated as 66.9 billion in which TV media share was 49.8% followed by print media by 24% (Jamal, 2018). In 2017, advertisement spending increase by 31% with the market size estimated around 88.7 billion rupees, the share of TV media was 47.9%. Thus, it is clear than more than 40% of advertisement spending by organization are through TVCs (Jamal, 2018). In 2016, Unilever was top advertiser in terms of advertising time and its share was around twenty percent, whereas, seven percent of the time was shared by P&G. Hum TV was the leading television network in Pakistan in terms of revenue as its share was ten percent in 2016. ARY Digital was the second largest network with a share of ten percent. This study also highlights intentions of the marketers to create appropriate marketing tools and advertisements besides the appropriate media choice.

**Literature Review**

**Purchase Intention**

The Lim, Ri, Egan, and Biocca (2015) concluded that TVCs showed a positive associated with the sales Fast Moving Consumer Goods (FMCGs). Moreover, TVCs has also positively affecting the living standards and life style of customers (Kim, 2013). Purchase intention of the customers is an important and essential element of every company’s marketing plan because it usually decides the success or failure of a particular product and in this way, companies can also increase their
profits as well (Lim et al., 2016). Consumers’ buying behaviour is gauged through purchase intention and willingness to purchase by customers will be higher if the purchase intention is higher (Nash, Pine, & Messer, 2009). Preferences and experiences of the customers are followed by their purchase intention (Hsu, Chang, & Chuang, 2015).

Purchase intention is also linked with several marketing features as well. Therefore, it was found that buying behavior of the customers is affected due to use of slogans, celebrities, visualization, background, music, and message of the advertisement. For instance; TVCs of fashion products is less attractive when warmth colors are used in advertisement, however, cool colors increase the quality of advertisement and make product and advertisement attractive (Jeong, 2007). The work of Hung et al. (2011) suggested that physical attractiveness, status and celebrity attractiveness are the key elements in the success of celebrity endorsements. Moreover, previous studies showed that consumer’s belief depend on celebrity attractiveness and recalling brand or recalling an advertisement which is enhanced through celebrity endorsement. Advertisement appeal also affects the purchasing intention and behavioral patterns. Emotional appeals in advertisements are activated using positive/negative emotions which create attention for customer that gain/modify their purchasing motivation (Spears & Singh, 2004).

The work of Alpert, Alpert, and Maltz (2005) concluded that music, mood and attitude of the customers is usually influenced by the behavioral intentions and emotional responses. It was therefore, recommended by the researchers that content of the advertisement should be creative and engaging so that purchase intention can be increased. TVCs have significantly affected the purchase intention of the children as the children are spending a lot of time in front of television (Smith, Chen, & Yang, 2008).

Prior studies regarding advertisement explored zapping behavior (Tse & Lee, 2001) which suggested that customers usually avoid advertisements when watching television as some of the advertisements are highly irritating. Moreover, repetition of advertisement is also another leading cause of avoidance (Southgate, 2017). The zapping behavior generate avoidance among viewer by changing channels, muting or leaving room during advertisement. Avoidance behavior might also generate due to offensive advertisement which includes sexual content, irritation, and repetition, irrelevant and meaningless in advertisements.

**Positive Mood**

Positive state of mind is maintained among happy individuals and they’re highly motivated to learn and listen anything. Thus, persuasive messages of TVCs are processed in their mind in a simple manner. However, it is difficult for the individuals to understand the messages properly if they’re not in a good mood. Positive thinking is enhanced by partial persuasion of good feelings and world is viewed by individuals as wonderful thing when they’re in positive mood (Tsai, 2005). Thinking of
individuals is faster, decisions are usually impulsive, lesser dependence on systematic thinking, and problem solving is more flexible when people are in positive mood.

Mood of the customers is critically important for the marketing campaigns and strategies of the companies as it is perceived that if the customers are relaxed, delighted, inspired, joyful, and happy that impact is positive on the customers. The work of Shao, Baker, and Wagner (2004) concluded that when customers are in good mood, they can easily remember product features and its related context. A research of Tafani, Roux, and Greifeneder (2018) found that brand switching has been observed among the customers who are in bad mood. Therefore, emotion and mood of the customers is considered as critically important while approaching the customers and purchase intention is largely affected by the positive or negative mood of the customers. Confusion among the customers is usually reduced when they’re in good mood. Similarly, customers remember the message of the advertisements for longer period.Moreover, positive mood also increases the decision making capability of the customers as well (Khandeparkar, 2017).

Advertisement Frequency

When potential customers are watching television advertisements of a product/service frequently the credibility of such brand increased among the customers and their purchase intention also increased. The message of the advertisement content is also memorized easily by the customers encounter through repetitive advertisements (Schmidt & Eisend, 2015).Repetition measures the wear out and wear in phenomenon regarding advertisements. For example, if the customers like the content of the advertisement, they’ll watch the advertisements over and over and this phenomenon is called as wear in. However, if customers switches the channel during advertisement, it will be called as wear out.If the advertisement is positively affecting the customers, then wear in phenomenon will be common or vice versa (Eisend, 2009). Wear in and wear out is also dependent on the mood of the customers because repetition of advertisement is crucial for companies.

Similarly, length of advertisement significantly impacts the purchase intention and in digital world, TVCs of fifteen and thirteen seconds usually attract the customers by significant manner. The effectiveness of any advertisement is usually measured by the length of the advertisement. Customers are usually attracted by the suitable length of the commercials as advertisement message is clearly understood by them (Turley & Shannon, 2000).

$H_1$: Mood positively mediates the relationship of advertisement frequency and purchase intention of Generation Z customers.

Advertisement Context

Advertisement context like advertisement message, humor, theme and music also positively effect on purchase intention of Generation Z. It has been found that there is positive impact of music
on the advertising responses and consumer mood (Illicic & Webster, 2011). Liking of the audience and customers is increased with the element of fun in advertisement (Bishnoi & Sharma, 2009). The theme or content of the advertisement that usually encourages the consumers to memorize and purchase the product is regarded as advertisement message. Emotional responses of the customers increases through television advertisements which usually increases the purchase intention (Jeong & Jang, 2017). Product choice is also significantly affected by the music of the advertisement as perception of the consumers is built through music. It has been found that most of the malls play music during the rush hours because good music usually increases the purchase intention of the customers. Similarly, if the customers listen a familiar music or tone, then, purchase intention of the customers is increased.

Music is strongly linked to human psychology and several studies discussed the relationship of music with human psychology. Similarly, it is also studied in a relation to purchase intention of the customers. Research noticed that advertising responses and mood of the consumers is usually affected by the background music of the advertisement. It has been analyzed that mood of the customers is positively affected by the music of the advertisements. It is a common observation that people usually become comfortable and relax when they are in good mood and listening a joyful or energetic music and such music influence the purchase intention of the customers as well (Priya, Kanti Baisya, & Sharma, 2010).

$H_2$: Mood positively mediates the relationship of advertisement context and purchase intention of Generation Z customers.

**Celebrity Endorsement**

It is a common practice in business industry to introduce celebrity in various marketing campaigns for promoting their products/service to encouraging consumer to join brand groups/clubs. The experience, character, belief, and opinion from a particular celebrity about certain product/service is called as endorsement. There are usually three categories of endorsers i.e. typical consumers, experts, and celebrities and every type of endorser are hired by the companies depending on the nature of the business (Pradhan, Duraipandian, & Sethi, 2016). The effectiveness of endorsers is usually determined by the attractiveness, trustworthiness, and perceived expertise. According to Thomas and Johnson (2016) purchase intention is usually increased by the expertise of endorsers. Whereas, attractiveness, and trustworthiness has less impact on the purchase intention.

The study of Kakkar, Sharma and Gupta (2019) suggested that product/service or brand is considered as more reliable when it is promoted by certain star celebrity and purchase intention is typically affected by the reliability of that endorser. Moreover, brand image, reputation, and prestige is developed when the image of celebrity is great (Majeed & Razzak, 2011). By using celebrity for marketing is also known as signaling strategy because customer brains more easily accept their opinion and its makes a brand to act as a touch of glamour.
$H_3$: Mood positively mediates the relationship of celebrity endorsement and purchase intention of Generation Z customers.

Customer Perception

Consumer perception is a method of choosing, forming and understanding information or stimuli inputs to make a significant image of the product or the brand (Sreejesh et al., 2018). Consumer perception is a procedure containing four phases that explain raw stimuli into meaningful information (Hassan & Valenzuela, 2016; Vasudevan & Kumar, 2017). Firstly Receiving data (Exposure): Marketing increases integrates a variety of factors that affect or open to the customer perception for example the idea of item, its physical characteristics, the brand name, the bundle outline and the commercials. In this manner, advertisers regularly utilize colossal eye-catching gadgets to achieve most extreme difference and in this manner draw in purchaser's consideration.

Secondly Selecting information (Attention): Individuals will see data contrastingly as per their requirements, desires and past encounters. These assistance individuals allot suggestions to the improvements and recognize items that will offer specific advantage to them. This perceptual advance is encouraged by mapping which is the arrangement of learning and convictions held by person. A pattern gives a sifting system to a person who concentrates to just a little measure of the first improvements. Thirdly the process is how the ones organize information in physical formation; therefore, they can interpret into a clear picture. Fourthly Interpreting data (Interpretation): The consumer will understand the picked improvements once the determination and association forms have been finished. This procedure is likewise extraordinarily individual since it fills in as a premise of purchaser's desire and past encounters. It is basic for advertisers to comprehend the idea of discernment so as to impart their messages effectively to customers. Since the manner in which individuals see and translate may differ contingent upon their point of view.

$H_4$: Mood positively mediates the relationship of customer perception and purchase intention of Generation Z customers.

Methodology

In the coordinating of research exertion, this study used deductive research approach and descriptive research strategy when hypothesis are essential to be attempted. According to Zikmund and Babin (2010) the methodologies and procedures used to aggregate and look at the information related to quantitative research relied on questionnaire-survey that are fully-structured. The study used population of Generation Z consumer in Pakistan, who watch Television commercials. Sample for this study is collected from Faisalabad, Pakistan which is the third largest city of Pakistan in terms of population (PBS, 2019). Majority of data was used local colleges and government universities. 500 questionnaires were distributed out of which 274 responses were fully completed after screening data with a response rate of 54.80%.
The questionnaire was designed by using previous studies; four items related to purchase intention was adopted from Ilicic and Webster (2011). Positive mood was measured by five items adopted from Watson and Clark (1997). Customer perception was measured by four items adopted from Hung et al. (2011). Advertisement context items consisted on Advertisement length 3-items adopted from Rogers (1995) and advertisement message 4-items adopted from Jeong and Jang (2017). Lastly, advertisement frequency consisted on fours items adopted from MajeedandRazzak (2011). All items were measured by using likert scale 1-5 (strongly disagree-strongly agree) (Malhotra, 2006). Reliability analysis showed that all factors than Cronbach alpha >.60 which is acceptance for data examination (Ercan et al., 2007). Such as advertisement Frequency has Cronbach alpha coefficient of 0.64, advertisement context has 0.638, Positive mood has 0.84 and purchase intention has cronbach alpha coefficient of 0.82. Data was analyzed by using SPSS.22 and Process Macro 3.1 (Model-4) by (Hayes, 2013) while considering all the assumption required to execute results i.e linear relationships, Multivariate normality, Homoscedasticity and multicollinearity.

**Result and Discussion**

Demographics results from 274 respondents showed that 61.31% respondents are male and 53.64% respondent has age 18 to 20 and 46.35% respondent have an age 21 to 24. 130 respondents are doing their bachelors followed by 66 college respondents. The pocket money of respondents showed that 52.91% has <10,000 PKR for their monthly spending. 45.62% respondents of generation Z watch TV less than 1 hour/day. Generation Z respondents are mostly males, university students with less pocket money and lower TV watching pattern see (table-1).

<table>
<thead>
<tr>
<th>Description</th>
<th>Freq.</th>
<th>%age</th>
<th>Description</th>
<th>Freq.</th>
<th>%age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Pocket money/month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>168</td>
<td>61.31</td>
<td>&lt;10000 PKR</td>
<td>145</td>
<td>52.91</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>38.68</td>
<td>10,001 - 15,000 PKR</td>
<td>82</td>
<td>29.92</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td>15,001 – 20,000 PKR</td>
<td>31</td>
<td>11.31</td>
</tr>
<tr>
<td>18 - 20</td>
<td>147</td>
<td>53.64</td>
<td>&gt;20,000 PKR</td>
<td>16</td>
<td>5.83</td>
</tr>
<tr>
<td>21 - 24</td>
<td>127</td>
<td>46.35</td>
<td>Watching TV/Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrolled</td>
<td></td>
<td></td>
<td>&lt;1 Hour</td>
<td>125</td>
<td>45.62</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
<td>1-3 Hours</td>
<td>72</td>
<td>26.27</td>
</tr>
<tr>
<td>High-school</td>
<td>23</td>
<td>8.39</td>
<td>4-6 Hours</td>
<td>58</td>
<td>21.16</td>
</tr>
<tr>
<td>College</td>
<td>66</td>
<td>24.08</td>
<td>&gt;10 Hours</td>
<td>19</td>
<td>6.93</td>
</tr>
<tr>
<td>Bachelor</td>
<td>130</td>
<td>47.44</td>
<td>Others</td>
<td>2</td>
<td>.729</td>
</tr>
<tr>
<td>Master</td>
<td>53</td>
<td>19.34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Before analyzing multivariate relationship among variables, this study gathered response regarding Generation Z behavior towards watching Television and their interest towards TV Commercials. So, those respondents’ interests in terms of TVCs category could be identified to better understanding of their attitude and perceived knowledge for ongoing TV commercials. The results showed that 43.43% respondents watch NEWS followed by 19.70% respondents who prefer to watch sports. 39.78% Generation Z respondents prefer Talk-show programs, 28.46% respondents prefer dramas and 18.61% prefer comedy program. Moreover, Generation Z respondents are attracted towards TVCs by music (32.84%), followed by product features (21.16) and sex appeal (16.05%). Majority of respondents prefer to watch TV in their TV lounge (62.40%) followed by bedroom (21.89%) see (table-2). Based on screening information, this study concluded that Generation Z respondents mostly like NEWS channels, preferred programs are Talk-shows with TV lounge as preferred place to watch TV. Generation Z are more attracted towards music along with product features, sex appeal and humor.

Table2

<table>
<thead>
<tr>
<th>TVCs profile of Generation Z respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Preferred Channel</td>
</tr>
<tr>
<td>Sports</td>
</tr>
<tr>
<td>Music</td>
</tr>
<tr>
<td>NEWS</td>
</tr>
<tr>
<td>Entertainment</td>
</tr>
<tr>
<td>Religious</td>
</tr>
<tr>
<td>Preferred Program</td>
</tr>
<tr>
<td>Drama</td>
</tr>
<tr>
<td>Talk-show</td>
</tr>
<tr>
<td>Comedy</td>
</tr>
<tr>
<td>Documentaries</td>
</tr>
<tr>
<td>Others</td>
</tr>
</tbody>
</table>

Descriptive statistics present mean and standard deviation of variables i.e, advertisement frequency has mean/std. dve of 3.42±.625 and purchase intention has mean/std. dev of 3.414±.954. Moreover, correlation (see table 3) showed that all variables are positively correlated that support for testing hypotheses. The correlation between purchase intention and advertisement frequency is .369**and purchase intention and positive mood is .449**which means that both variables are positively correlated with purchase intention and coefficient are within desired range.
The PROCESS macro (SPSS) presented mediation results (see Table 4) that showed positive mood mediates relationship between advertisement frequency, advertisement context, celebrity endorsement, customer perception and purchase intention. Moreover, partial mediation prevail in (advertisement frequency, advertisement context, customer perception) and purchase intention which means these variables directly and indirectly affect purchase intention. Such as, relationship between customer perception and purchase intention presented β of .72** which reduce after introducing positive mood as mediator β of .55**. However, full medication is observed between the relationship of celebrity endorsement and purchase intention. The total effect is .35**, existence of positive mood (Path-b) with β of .40** showed direct effect of celebrity endorsement on purchase intention is .13 (non-significant).

Table 3
Mean, Standard deviation and Correlation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Advert Frequency</td>
<td>3.428</td>
<td>.625</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Celebrity Endorsement</td>
<td>3.077</td>
<td>.740</td>
<td>.353**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Advert Context</td>
<td>3.580</td>
<td>.604</td>
<td>.467**</td>
<td>.336**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Customer Perception</td>
<td>3.427</td>
<td>.716</td>
<td>.407**</td>
<td>.395**</td>
<td>.520**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Positive Mood</td>
<td>2.987</td>
<td>.968</td>
<td>.382**</td>
<td>.427**</td>
<td>.436**</td>
<td>.553**</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Purchase Intention</td>
<td>3.414</td>
<td>.954</td>
<td>.369**</td>
<td>.274**</td>
<td>.372**</td>
<td>.537**</td>
<td>.449**</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01;

Table 4
Mediation results

<table>
<thead>
<tr>
<th></th>
<th>Path-a β (se)</th>
<th>Path-b β (se)</th>
<th>Total effect</th>
<th>Indirect effect</th>
<th>Se</th>
<th>LL CI</th>
<th>UL CI</th>
<th>Direct effect</th>
<th>Se</th>
<th>LL CI</th>
<th>UL CI</th>
<th>Direct effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF→PM→PI</td>
<td>.59** (.09)</td>
<td>.36** (.06)</td>
<td>.56**</td>
<td>.09</td>
<td>.21</td>
<td>.06</td>
<td>.11</td>
<td>.33</td>
<td>.35**</td>
<td>.09</td>
<td>.17</td>
<td>.53</td>
</tr>
<tr>
<td>AC→PM→PI</td>
<td>.70** (.09)</td>
<td>.35** (.06)</td>
<td>.59**</td>
<td>.09</td>
<td>.24</td>
<td>.06</td>
<td>.13</td>
<td>.36</td>
<td>.34**</td>
<td>.10</td>
<td>.15</td>
<td>.53</td>
</tr>
<tr>
<td>CE→PM→PI</td>
<td>.56** (.08)</td>
<td>.40** (.06)</td>
<td>.35**</td>
<td>.08</td>
<td>.22</td>
<td>.05</td>
<td>.13</td>
<td>.33</td>
<td>.13</td>
<td>.08</td>
<td>.03</td>
<td>.29</td>
</tr>
<tr>
<td>CP→PM→PI</td>
<td>.75** (.07)</td>
<td>.22** (.06)</td>
<td>.72**</td>
<td>.07</td>
<td>.16</td>
<td>.06</td>
<td>.05</td>
<td>.29</td>
<td>.55**</td>
<td>.08</td>
<td>.39</td>
<td>.72</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01; SE= Standard Error; LLCI (Lower confidence Interval); ULCI (Upper Confidence Interval);
AF, Advertisement Frequency; AC, Advertisement Context; CE, Celebrity Endorsement; CP, Customer Perception; PM, Positive Mood; PI, Purchase Intention
Discussion

Based on the results, it is summarized that advertisement context (humor, music & message) usually encourages the consumers to memorize and purchase the product. The study of Jeong and Jang (2017) also suggested that customers focus on the goals, interests, wants, and needs of the customers in their advertisement message. Therefore, it is seen that context usually impact customer mood for encouraging them to purchase the product/service. For example, if any company is entering in the smartphone industry and its main feature is affordability, then, its advertisement focus should be on the price of product. The work of Saleem and Abideen (2011) has explored that companies who focused on humor/music TVCs have attracted the attention of larger audience. Moreover, customers are also easily convinced through humor advertisement due to their greater involvement in the product and resulted into the increase purchase intention of the customers (Saleem & Abideen, 2011). The content and message of advertisement is also easily understood by the customers through humor advertisement. It has also been explored that brand name and product is easily memorized when it is advertised in a humorous manner and purchase intention is increasing due to humor advertisement.

As results has explained that advertisement frequency in terms of (repetition and length) has impact on customer purchase decision. The results supported the study of Kumar and Raju (2013) which summarized that repetition of TVC increase the chances of purchase intention because band image of product/service guide customer recall the TVC, when it is advertised frequently. Moreover, length of advertisement also significantly impacts the purchase intention and nowadays, TVCs of 15-30 seconds usually attract the customers by significant manner. Customers are usually attracted by the suitable length of the commercials as advertisement message is clearly understood by them (Turley & Shannon, 2000). Therefore, zapping is usually observed when advertisement is lengthy as the customers become bore which impact their mood and purchase intention based on higher recall rate of advertisement frequency.

Believe of the customers on company’s product/service is increased when celebrities are used in TVC to spread a positive message (Muda et al., 2014). However, it is necessary that matching celebrities should be hired for advertisements so that a huge impact can be created. Celebrities are usually hired to promote services or products with higher social risk i.e. cars, jewelry, whereas, experts are hired for the advertisements of professional appliances and medicine (Boyland & Halford, 2013). For example, if a product is Pakistan in Pakistan impact of any television advertisement with Hollywood actors will be less effective, then, a local actor.

Television commercial is considered as one of the most effective mediums to gain reactions of customers and stronger reactions are usually observed through this medium (Hartmann & Apaolaza-Ibáñez, 2012). However, it is difficult for the individuals to understand the messages properly if they’re not in a good mood. Another important element that influence the purchase intention of the customers through television advertisement is music as it has been found that there is positive impact of music.
on the advertising responses and consumer mood (Ilicic & Webster, 2011). It is common that pleasant music usually make individuals comfortable, and relax, therefore, pleasant music in advertisement can also encourage the customers to buy a particular product or service (Radocy & Boyle, 2012). However, it is also important that music should be according to the content of advertisement; for example, if the advertisement is funny, then, sad music will not influence the purchase intention of the customers (Bishnoi & Sharma, 2009).

**Conclusion**

The television advertisement has become one of the largest advertisement medium all over the world and it is also leading medium of advertisement in Pakistan as well. However, due to technological advancement, customers are largely concerned and updated about the leading brands and their products (Athey & Gans, 2010). Moreover, competition is also growing in the Pakistani industry due to increasing opportunities in Pakistan. Over the past few years, several leading multinational brands have entered in Pakistan and competition has been intensified due to the presence of these brands. Due to increasing competition and awareness, the effectiveness of the television advertisement has become a real question. Nowadays, companies are really focusing on the content and duration of their advertisements, so that, customers can be attracted, and purchase intention can be increased. (Elsen, Pieters, & Wedel, 2016).

Advertisement frequency is highly relevant to the purchase intention and mood of the customers. It is common that advertisements are mostly aired several times on television. The frequent advertisement of a particular brand or its product or services increases the awareness of the customers towards a particular brand (Domazet, Đokić, & Milovanov, 2017). Similarly, advertisements remained in the minds of the customers due to frequent advertisement and this is usually helpful in their shopping experience. From the study, it can be found that advertisement frequency positively affects the mood of the customers and purchase decision is also affected. Thus, it can be concluded that mood and purchase intention of the customer is increased with the advertisement frequency. Similarly, it can also be concluded that purchase intention is also increased with advertisement context.

Celebrities are commonly used by the companies in the advertisement and it is assumed that purchase intention is positively affected by celebrities and endorsers. Celebrities have millions of followers and their appearance in the advertisement can be effective for the companies (Kakkar, Sharma, & Gupta, 2019). In this study, impact of celebrities and endorsers on the purchase decision of the customers has been analyzed. However, it can be found that purchase intention is not affected by the celebrities. Therefore, it can be concluded that celebrity appearance in the advertisement don’t have any significant impact on mood and purchase intention of generation Z customers. Moreover, it can also be concluded that purchase intention and mood is positively affected by the customers’ perception. It will be helpful for the marketers to understand the changing trends of Generation Z.
This study has been conducted for Generation Z customers and this generation is highly dependent on technology and quickly responding to the trends. It is recommended that marketers should focus on the customers’ perception. If the perception of the customers is positive, then mood of the customers would be good and it would increase the purchase intention of the customers. Moreover, it is also recommended that advertisers should focus on the advertisement frequency as well. If the advertisements are aired frequently, it would remain in the minds of the customers and it will improve their shopping experience and purchase intention will be higher. Advertisers should also focus on the advertisement context as well because it will also positively affect the purchase intention of the customers.

The future studies could be conducted on other generations as well so that the impact of television advertisements can be measured on other segments as well. However, comparative analysis could be done on Generation Z of Pakistan and any other Asian country or comparative analysis of generation Z of Pakistan and developed countries as well. With regards to limitations, results of study can’t be applied on any other advertisement medium.

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commerce (pp. 639-656).
CORPORATE INNOVATION IN DEVELOPING NATIONS: DO POLITICAL ENVIRONMENT AND DEMOCRACY MATTER?

Muhammad Usman¹, Aamir Inam Bhutta² and Asif Iqbal³

Abstract

The goal of this study is to discover the impact of the political environment and democracy on corporate innovation in developing countries. To evaluate such liaison, we use firm-level data from the World Bank Enterprise Survey, and country-level data from Worldwide Governance Indicators, Economist Intelligence Unit, and Freedom House. The sample of the study consists of manufacturing firms from 41 developing countries across different regions of the world from 2010 to 2014. By using a broad range of control variables, the regression results propose that political stability and absence of violence, voice and accountability and, political rights and civil liberties stimulate corporate innovations. Moreover, democracy leads to promote corporate innovation, and this liaison is more significant in the high democratic environment among developing countries. These results suggest that political stability shows the continuity of policies, based on which, firms decide to invest in innovative projects. Furthermore, freedom of voice (speech and press) improves information and ideas sharing environment. Such atmosphere stimulates generation and diffusion of new ideas, which subsequently increase innovation. Additionally, democratic nations exhibit freedom, openness, and better governance as compare to autocracy, which subsequently motivate overall innovation.

Keywords: Political Stability, Absence of Violence, Accountability, Democracy, Civil Liberties, Corporate Innovation, Developing Countries.

JEL Classification: O320, O350

Introduction

Innovation is a key tool to attain long term economic growth and sustainability. Many studies are conducted to determine the factors affecting innovation, but still, several factors are unknown (Earl, 2006). According to scholars like Nelson (1993) and Spencer et al. (2005), national-level institutions,
more precisely political institutions, must be examined to identify the country’s innovative activities. Nelson (1993), explained that institutions (government policies and inter-firm relationships) play a key role in the country’s innovative process. Political institutions have an impact on innovation-related activities, as they describe the rules, standards, and procedures which govern linkage between persons, entities, and organizations that subsequently influence on innovative activities (Edquist, 2011; Spencer et al., 2005). Political institutions not only enforce high restraints but also offer possible opportunities in the national innovational system.

The innovative nations have some common qualities like political, economic and financial stability, which indicate the risk level of several countries. These are the measures of country’s overall creditworthiness, which specifies the state capacity to deal with its obligations on the bases of stability of aforesaid institutional environments (Hoti & McAleer, 2006). Stabilized political system characterized as continuous political takeover, social calm, peace and non-violence are considered as pre-requisite for innovation. Moreover, these characteristics of stable political environment encourage investment and economic growth (Feng, 1997). On the contrary viewpoint, unstable political situations create uncertain environment for investment, human capital development and enterprise freedom (Globerman & Shapiro, 2003). Unstable political circumstances depress innovative activities through unavailability of required workforce (scientists, engineers), non-cooperation between university and industry, and lack of qualitative scientific institutions.

The indication of positive association between stabilize political environment and economic growth is not new (Przeworski, 2000) besides, it can be argued that through which channel political stability encourages economic growth. Numerous arguments suggested that it is political regime type through which political stability enhances economic growth and constancy. Literature suggests that, in democratic regime, economy grows better as compare to dictatorship regime, because of institutional restraints. According to this perception, democratic regimes positively affect economic development, because of commitments and continuity towards policies. On the other hand, dictator at any point can decide to change rules or their interpretation either developed by himself or by preceding government. Such unpredictable environment hampers growth and investment activities (Leblang, 1997; North & Weingast, 1989).

Democratic regime is a way of governance in which public representatives hold political institutions through constitutional channel. These representatives work in favor of public, society and business. In turn, they are answerable for their actions. In contrast view, autocratic regime represents one man show (dictator) and usually came into power through unethical/unconstitutional practice. Generally, dictatorship characterized as strict regulations, limit economic activities, lack of freedom, fewer trade, institutional instability and not accountable regarding their policies (Knutsen, 2012). Empirical literature confirmed that democracy awakes economic freedom (De Haan & Sturm, 2003; De Melo et al., 2001), which subsequently enhances growth (Sturm & De Haan, 2001; Wu & Davis, 1999), knowledge creation and innovation (Acemoglu et al., 2006). Democracy plays an important role...
to provide and protect individual freedom and rights. Moreover, it also helps to construct institutional framework which subsequently leads to promote both scientific and technical innovation. Conversely, non-democratic economies need to take joint actions and strong leadership to attain such competitive advantages (scientific and technical innovation) (Gao et al., 2017).

This paper empirically examines the impact of political environment and democracy on firm innovation among developing countries. Innovation is a rapidly growing phenomena in developing economies, but these countries are largely using incremental innovations i.e., new innovation for firm or industry. By amending previously tested innovations, firms in these countries significantly reduce chances of failure and loss. Therefore, it is necessary to use broad range of innovations while observing innovation in developing countries, rather than just new inventions. The existing differences among developed and developing countries with regard to innovative capabilities are that, firms in developing countries, unlike developed countries, require and use technologies which are not produced within the country. Furthermore, developing countries are politically unstable, have less freedom of speech and accountability, non-free political rights and civil liberties, and fragile democracy. In such circumstances, firms face high level of risk regarding long term investments (R&D investments and innovative projects) and their payoffs, because such uncertainties significantly reduce yield to investment (Allard et al., 2012; Wang, 2013).

The rest of the paper is organized as follows: section 2 debates about the review of literature, previous research gaps and focus of current study. Section 3 deals with the construction of research hypotheses. In section 4, we explain the methodology in which we discuss about data sources, variables selection, measurements and developing econometric models for further analyses. As for as in section 5, we report the empirical results with explanation. Section 6 contains conclusion, policy implications and future research directions.

**Literature Review**

Growth related studies demonstrate that change in technology is an important determinant for long-term economic development and growth (Helpman, 2009; Nelson, 2005; Solow, 1957). Even a weak relationship between democracy and technological change, might be very significant for long run development. In an empirical article, Knutsen (2012) elaborated that how regime type impacts on technological change. Author conjectured that democracy has more technological intended economic growth as compare to dictatorship. After using ordinary least square with panel corrected standard errors, fixed effects and random effects regression techniques, results supported hypothesis and revealed that democracy produces greater total factor productivity (technological change) than dictatorship.

According to Davis et al. (1971), institutional setting is the combination of important political, legal and socio-economic rules, which form the baseline of productivity, interchange, and distribution.
Stability of political environment has considered as a pre-requisite for national innovation. In a study based on large sample size, Allard et al. (2012) assessed the influence of political instability and pro-market reforms on country-level innovation system. Cross sectional analysis with time lagged models were used. By controlling different variables, evidence showed that stable political situations play an important role in explaining countries’ ability to indulge in innovative activities. These outcomes were also consistent with institutional theoretical approaches given by Scott (1995) and North (1990).

Generally, enterprises which are engaged in innovative activities face negative impact of macroeconomic instability and low incentive to innovation. Masino (2012), explained the impact of macroeconomic instability (including political instability, monetary and real volatility) on innovative investment. Fixed effect and two stage least square statistical models were used to confirm the negative relationship between macroeconomic instability and innovations. Statistically, results found that political instability reduces firms’ R & D investment by 2.7% (Alesina et al., 1996; Fosu, 2003).

In general, developed countries have stable political system along with robust institutional structure, which are required for innovative systems and technological productivity (Freeman, 1987). Oubaiden (2012), inspected the effect of political, institutional and socio-economic predictors on innovation and technology. Study focused on three major Maghreb countries (Morocco, Tunisia and Algeria) from 1996 to 2010. Using GLM technique, study identified that afore-said predictors have influence over incentives to innovation in Maghreb states.

Past theoretical and empirical analyses have been affirmed that R&D is the key indicator to define change in technology, which subsequently enhances economic growth (Ang & Madsen, 2011; Ha & Howitt, 2007; Ulku, 2007). It indicates that, if a country wants to boost up its economic growth, it needs to increase R&D intensity. In an empirical analysis, Wang (2013) examined the association between institutions and R&D investment. Study covered cross country analysis of 162 countries with 14 years (1996-2009) of observations. Results suggested that institutions have an effect on different economies contrarily. More specifically, all indicators of political institutional quality explain by Worldwide Governance Indicators, have an influence on R&D investment.

Scholars recommended that generally country level institutions, especially political institutions need to be observed to understand the determinants of innovation related activities (Nelson, 1993; Spencer et al., 2005). Similarly, Broberg et al. (2013) evaluated the impact of political institutions on innovation activities. Authors divided innovation into two types, basic innovation and applied innovation. Study was based on the theoretical work of Spencer et al. (2005). Hierarchical linear model analysis (HLM) and diverse control variables were used. Outcomes advocated that political institutions provide aid to explain countries’ differences with respect to innovation. Political institutional structure has a vital role in defining nature and the number of innovative opportunities for both firms and entrepreneurs.
Currently, economists are focused to analyze the impact of institutions on knowledge gathering, technological conversion and growth (Huang & Xu, 1999; Rodrik, 2006). Empirical analysis of Tebaldi and Elmslie (2013), exhibited the impact of institutions on innovation. Institutions were further characterized as political stability, rule of law, government effectiveness, forced nationalization and confiscation risk (Kaufmann et al., 2010). By using number of patents as innovative ability, results revealed that institutional effectiveness (including political stability) explain countries’ differences in term of patents production and have strong positive impact on innovation. similarly, Bellettini et al. (2013), demonstrated the relationship between political agents persistence and firm level innovative activities. By using OLS (Ordinary Least Square) and 2SLS (Two Stage Least Square) tools for regression analysis, results found an adverse relationship between political stability (associated with political persistence) and firm innovation. Reguia (2014) explained that stable political environment and supportive behavior of authorities are necessary to stimulate individual as well as firm level innovation.

Economics and financial literature claim institutions as the important element for firm innovative process. Exclusively, political institutional quality is supposed to be an essential driver for industrial dynamics as well as for firm activities (Gertler, 2010; Nelson, 1993). David (2015), empirically explored the impact of regional political institutions on firm level innovation among Swedish Region. By using multi-level analysis (Srholec, 2010), outcomes proposed that regional political environment in which firms are located, matters for innovational investment. The study also established statistically positive effect of political institutions on corporate innovation.

Atanassov et al. (2015), inspected the connection between R&D investment and political uncertainty. Opposite from past literatures, results elaborated an interesting phenomenon that, as political uncertainty increases firms also enhance their R&D investment. Empirically, on average, firms increase R&D investment by 4.6% in the years of election as compare to other years. Moreover, such positive relationship is strong in politically sensitive sectors, where firms face high market competition with growth opportunities. In an another study, Gao et al. (2017) evaluated the impact of democracy on innovation. They used large dataset of 156 developed and developing countries for the period from 1964 to 2010. By using DID approach, study didn’t found any direct positive relationship among democracy and innovation (measured as patent count, citation and originality).

Hypotheses Development

Country’s ability to enforce any law depends upon its political stability and judicial system. The more the efficient of such systems, the patents will be better protected and the profit will be greater to innovate. Stabilize political conditions have positive effect on patents and therefore, to innovative activities (Varsakelis, 2006). Firm’s decisions concerning to patent any idea/innovation depends upon the future return of such idea or innovation. Therefore, tendency to patent an idea depends on innovator’s assessment of future stability of economic situations, which largely rest on
political stability. Rather than speculating about future situation itself, innovator judges other available options which are known under specific political regime type (Waguespack et al., 2005).

Political stability has now become a pre-requisite for dynamic national innovation system. Mostly innovative countries are developed and highly industrialized states, whose institutions actively support and promote knowledge and technological growth (Carlsson, 2006). One main reason of high level industrialization in such countries is due to the supportive behavior of government towards industrial and technological activities (Ford & Suyker, 1990). Usually in politically stable countries, there are rare chances that government dissolves through unconstitutional practice, civil war, social unrest and violence, which subsequently encourage investment and economic growth (Feng, 1997). Counter wise, unstable political countries are less predictable, hence attract less investments and human capital (Globerman & Shapiro, 2003). According to Triple Helix model (government, university and industry relations), such countries are less able to promote innovative environment (Leydesdorff & Meyer, 2006).

On the other hand, political instability damages country’s innovative capacity and scientific institutional quality, which further connected with reduction in firm R&D, lower cooperation among universities and enterprises, and scarce government investment in technologies (Bartholomew, 1997). Unstable political states produce coats of mistrust and uncertainty. Immediately, when the trust reduces, it leads to individual and society toward lack of confidence in formal and informal institutions, required to foster innovation (Busenitz et al., 2000).

Recent studies also documented the adverse effect of political uncertainty on investment and economy. According to the “real options theory of investment irreversibility”, uncertainty (especially political uncertainty) negatively impacts on capital investment by highlighting that, collaboration of irreversible investment and political uncertainty create positive value to delay investment decisions (Dixit & Pindyck, 1994; McDonald & Siegel, 1986). By delaying the innovative projects and keeping the options alive, firms suffer a continuous loss of current profits. Furthermore, uncertainty also enhances the cost to defer projects, and makes it ideal to postpone/stop such projects. R&D investment is also highlighted as an enormously irreversible and costly investment, because R&D is usually project oriented investment and substantial portion of R&D includes remunerations of researchers (engineers and scientists), which couldn’t be recovered if projects flop (Grabowski, 1968). In this situation, the adversarial effect of political uncertainty on R&D investment, hence, likely to be more severe than other types of investments.

Reduction in political uncertainty leads to promote innovation. One argument is that, companies with lower political uncertainties are in a better condition to predict change in policies that stimulate technological change. So in return, those entities invest more in technical inventions. Since innovations are characterized as high cost and great uncertainty, firms with limited/no access to political situation, innovate less (Aghion & Tirole, 1994; Holmstrom, 1989). Other argument is that,
companies with lower political uncertainties predict high future cash flows from innovative activities, as these entities are in better situation to get information from state/lawmakers regarding policies persistence. Moreover, firms which face fewer political uncertainties are saved from political risk cost, which subsequently reduces cost of capital and enhances incentive to innovate. So, we can hypothesize that:

\[ H1: \text{Stable political environment has positive impact on corporate innovation.} \]

Democracy boosts progress in technological advanced industries, because democracy is linked with policies which allow market competition and free entry (Aghion et al., 2007). It also has an ability to recover predictability and certainty regarding institutions, which establish the structure for innovation and business environment, because, in democracy, agents are answerable to the community rather than elite. Similarly, democratic elections give a positive signal to the organizations that political conditions are sustained by a constitutional and peaceful changeover of power, which in return provides durability and continuity to regional governance structures up to the extent that organizations can invest in those projects which are inherently risky e.g. innovation in shape of R&D investments etc. Payoffs from such kind of investments tend to be risky and uncertain, and take long time before costs are recovered, so democracy, as stable political atmosphere, enables firms to recover their costs from risky investments without fear of expropriation (David, 2015).

In dictatorship, autocrats for their political survival restrict civil liberties. In turn of restricted civil liberties, information (politically hazardous information and economic productive information) are blocked, such preventive policies also hinder economic related ideas and technologies. Sufficient information, communication, discussion, and learning without restrictions are required to generate and diffuse ideas. Restrictions on freedom to travel, speech, and media consequently bound economic agents’ skill to absorb and acquire local and foreign developed ideas. Civil liberties e.g. freedom of press, speech, travel and other civil liberties permit introduction of new ideas and their diffusion into market and economy (Knutsen, 2012). Civil liberties also allow comparing of different kind of ideas to develop and improve innovations. Democracy better protects civil liberties than dictatorship. Many theories claimed that civil liberties are the intrinsic properties of democracy (Inglehart & Welzel, 2005).

A democratic culture commonly reflects better openness, political stabilization and extended freedom of choice. Furthermore, democratic establishments are usually linked with a higher governance quality. According to Collier (2000) and Rivera-Batiz (2002), democracy encourages economic growth more efficiently than dictatorial regime, and supporters of democracy normally consider civil and political freedoms as essential elements for a nation to develop competitive edge in global economy. Thus, we can draw hypothesis as:

\[ H2: \text{Democracy has positive impact on corporate innovation.} \]
Methodology

Data Sources

To accomplish the objectives of the study, we create dataset having firm-level and country-level information regarding innovation and political environment. For country-level information, we use World Development Indicators, Democracy Index and Political Rights and Civil Liberties Index. Firm-level evaluation of innovation across emerging and developing countries in this study is only made possible with the help of the World Bank Enterprise Survey. It is conducted among a large number of countries since 2002 and usually responded by owners and top-level managers. Besides innovation, it also covers comprehensive business environmental topics, such as corruption, crimes, access to finance, infrastructure, performance measures, market competition and so on. The sample of the study consists of a large dataset of 41 countries, which are divided into 8 different regions (as per World Bank Enterprise Survey) from 2010 to 2014. All the selected countries are developing and emerging economies. Furthermore, we are only interested in firms which are operating in the manufacturing sectors. List of the sample countries are as follows:

- Africa: Ghana, Kenya, Rwanda, Senegal, and Zimbabwe
- East Asia Pacific: China, Mongolia, Myanmar, Philippine, and Vietnam
- Europe and Central Asia: Georgia, Hungary, Romania, Turkey, and Ukraine
- Latin America and the Caribbean: Argentina, Colombia, Ecuador, Mexico, Panama, and Venezuela
- The Middle East and North Africa: Egypt, Jordan, Lebanon, Morocco, and Yemen
- Non-OECD: Barbados, Croatia, Lithuania, Russia, and Uruguay
- OECD: Chile, Czech Republic, Estonia, Israel, and Poland
- South Asia: Bangladesh, India, Nepal, Pakistan, and Sri Lanka

Variables Selection and Measurement

Dependent Variable

The dependent variable of the study is corporate innovation. In most of the previous studies, R&D expenditure and patents are extensively used as indicators to measure innovation (Oluwatobi et al., 2015; Silve & Plekhanov, 2015; Tebaldi & Elmslie, 2013; Xiao & Zhao, 2012). Particularly, R&D expenditure (mentioned in financial statements) is widely used as a prime indicator to measure corporate innovation, because of the availability of data. But it has several issues. Firstly, R&D expenditure only describes one specific apparent quantitative-input (Aghion et al., 2013) and can’t explain the diverse dimensions of corporate innovation (Manso et al., 2017). Secondly, R&D expenditure is tricky as per accounting standards i.e., either to be capitalized or expense out (Acharya & Subramanian, 2009).
Thirdly, as per Compustat-database information, R&D expenditures reported in financial statements are unreliable, which can cause a substantial measurement issue (He & Tian, 2018).

Patents are not considered a good proxy to measure innovation in developing countries because of certain reasons. According to Gorodnichenko and Schnitzer (2013), patents usually have the following weaknesses. 1) Patents are the measure of inventions instead of innovation. 2) Patents’ tendency differs by countries, industries, etc. 3) Enterprises normally adopted other ways to protect innovation, such as technical complexity, business secret, etc. Thus, it is important to explain innovation in a wide range while analyzing firm innovation among developing countries. Therefore, we use different proxies to measure firm-level innovation.

The first proxy to measure corporate innovation is index core. It is an indicator to identify actual firm-level innovation. Index Core as the name indicates that it is the combination of core innovative activities conducted by firm i.e., product innovation and process innovation. It is an aggregate index measures through summing up core innovation indicators. Index value has a range from 0 (no core innovation) to 2 (full core innovation). That means the higher value of index core shows that firm is highly innovative for core innovative activities. Past studies (Ayyagari et al., 2012; Barasa et al., 2017; Xiao & Zhao, 2012) have also used these indicators to measure corporate innovation.

\[ \text{Index Core}_{itk} = \sum (\text{Product Innovation}_{itk}, \text{Process Innovation}_{itk}) \]  \hspace{1cm} \text{(a)}

World Bank Enterprise Survey also allows us to calculate two additional novel proxies to measure corporate innovation. These proxies for innovation are used for robust analysis in this study. Index 2 (second proxy) is an aggregate measure of two basic innovation indicators i.e., R&D investment and use of technology. These indicators show the actual capacity of a firm to involve in innovative activities. This variable is representing the aggregate sum of above-said variables with values ranging from 0 (no baseline innovation) to 2 (full baseline innovation).

\[ \text{Index 2}_{itk} = \sum (\text{R&D Investment}_{itk}, \text{Technology Usage}_{itk}) \]  \hspace{1cm} \text{(b)}

Index core and index 2 are only identified as the core and baseline innovation activities, respectively. But for the analysis purpose, we are also interested to identify the overall innovation activities of firms. To measure the overall innovative activities of firms, we draw an index 4 (third proxy), which contains all measures of firm-level innovation i.e., product innovation, process innovation, R&D investment, and technology usage. Index 4 has a value range from 0 (no innovation) to 4 (full innovation). This measure elaborates that higher index value is associated with higher firm innovation. These composite indexes are unique but separate indicators are used in previous literature (Sivak et al., 2011).

\[ \text{Index 4}_{itk} = \sum (\text{Product Innovation}_{itk}, \text{Process Innovation}_{itk}, \text{R&D Investment}_{itk}, \text{Technology Usage}_{itk}) \]  \hspace{1cm} \text{(c)}
Independent Variables

To measure political environment and democracy, we use country-level indicators i.e., “Political Stability and Absence of violence (WGI), Voice and Accountability (WGI), Political and Civil Liberties (FH) and Democracy index (EIU)”. The first indicator to measure the political environment is, Worldwide Governance Indicator (World Bank) named as Political Stability and Absence of Violence. It evaluates “the perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Estimation gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 (lower political stability) to 2.5 (higher political stability).” This indicator is also utilized in previous literature (Allard et al., 2012) to measure political stability.

The second variable is also WGI (Worldwide Governance Indicator) termed as Voice and Accountability. It indicates “the perceptions of the extent to which a country's citizens can participate in selecting their government, as well as freedom of expression, freedom of association, and free media. Estimation gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 (lower freedom of voice and accountability) to 2.5 (higher freedom of voice and accountability).” This indicator is used in past studies (Tebaldi and Elmslie, 2013; Wang, 2013) to determine the political environment. The third indicator to estimate the political atmosphere is an average variable of political rights and civil liberties developed by Freedom House and used in previous studies (Gao et al., 2017; Knutsen, 2012). On a scale of 1 to 7, this variable indicates that “a higher value means lower freedom”.

The fourth proxy used to measure countries’ democracy is Democracy Index developed by Economist Intelligence Unit. This index has a value range from 0 (lower democracy) to 10 (higher democracy) and constructed on the scores of 60-indicators grouped in 5 categories, such as “electoral process and pluralism, civil liberties, the functioning of government, political participation, and political culture”. The higher value of the democracy index exhibits a high democratic environment. The last indicator to measure democratic society is a high democratic environment i.e., a dummy variable by using a democracy index. This variable has a value of “1” if the corresponding index value is higher as compared to the sample median and 0 otherwise. Such a variable shows a higher or lower democratic environment among sample countries. Previous studies (Aghion et al., 2007; Gao et al., 2017; Waguespack et al., 2005) also used such kind of variables, but with different measuring instruments.

Control Variables

Firm Size: In this study, we control for firm size and divide sample firms into three different categories (small, medium and large firms) based on their number of employees. Small size firms are those which have 5 to 19, medium sizes firm have 20 to 99 and large size firms have more than 100 employees.
Furthermore, we create dummy variables that represent a value of “1” in case the firm is small/medium/large and 0 otherwise (Ayyagari et al., 2012; Jiménez & Sanz, 2011).

**Firm Age:** We measure firm age as the log value of the difference between the year of firm incorporation and survey year (Ayyagari et al., 2012; Pamukçu & Utku-İsmihan, 2009).

**Market Competition:** For this study, we control for competition by taking the number of competitors operating in the main market. It can be considered as a direct measure of the market competition faced by a firm. We categorize this indicator into three different levels. Low-level, mid-level and high-level market competition represents less than 10 competitors, 11 to 20 competitors, and more than 20 competitors, respectively (Aghion et al., 2002; Allen & Gale, 2000).

**Firm Ownership Status:** We divide the firm ownership status into three classes i.e., Domestic, Foreign and Government ownership. These indicators are the dummy variables based on major shares hold by domestic, foreign and government in firms’ ownership structure (Ayyagari et al., 2012; Lin et al., 2010).

**Firm Legal Status:** Sample firms are distributed into three categorize based on legal status (sole proprietor, partnership and company). All three variables are the dummy indicators and contain the value of “1” if the firm is sole proprietor/partnership/company and 0 otherwise(Ayyagari et al., 2012; Barasa et al., 2017).

**Managerial Experience:** Managerial experience is measured as the log value of top managers’ working experience in the business sector (Baik et al., 2011; Demerjian et al., 2012).

**Gross Domestic Product:** We use the log value of gross domestic product per capita as a country-specific control variable (Ayyagari et al., 2012; Xiao & Zhao, 2012).

**Models Specification and Evaluating Tools**

According to the nature of the dataset and past literature (Ayyagari et al., 2012; Xiao & Zhao, 2012), we use ordered probit regression model (OPROBIT) to examine the impact of political environment and democracy on firm-level innovation in developing nations. Along with the above-stated control variables, we also control for region, year and industry effect accompanied by the robust standard error in regression models.

\[
\text{Innovation}_{itk} = \beta_0 + \beta_1 \text{Political Stability}_{k} + \sum_{j=1}^{11} \beta_j \text{Control Variables}_{itk} + \varepsilon \quad \text{(1)}
\]

\[
\text{Innovation}_{itk} = \beta_0 + \beta_1 \text{Voice and Accountability}_{k} + \sum_{j=1}^{11} \beta_j \text{Control Variables}_{itk} + \varepsilon \quad \text{(2)}
\]
\[ Innovation_{itk} = \beta_0 + \beta_1 \text{Political Rights and Civil Liberties}_{k} + \sum_{j=1}^{11} \beta_j \text{Control Variables}_{itk} + \varepsilon \ldots \] (3)

\[ Innovation_{itk} = \beta_0 + \beta_1 \text{Democracy Index}_{k} + \sum_{j=1}^{11} \beta_j \text{Control Variables}_{itk} + \varepsilon \ldots \] (4)

\[ Innovation_{itk} = \beta_0 + \beta_1 \text{High Democratic Environment}_{k} + \sum_{j=1}^{11} \beta_j \text{Control Variables}_{itk} + \varepsilon \ldots \] (5)

Where;

\( Innovation = \) Index Core, Index 2, Index 4  
\( Control \text{ Variables} = \) Firm Size, Firm Age, Market Competition, Ownership Status, Legal Status, Managerial Experience, GDP Per Capita

**Empirical Analysis**

To empirically examine the impact of political environment and democracy on corporate innovation, we use firm-level as well as country-level indicators. Table 1 illustrates the descriptive analysis of data, used to testify the above-mentioned relationship. Table of summary statistics contains the total number of observations, their mean value, standard deviation, minimum and maximum values.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observation</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index Core</td>
<td>24,166</td>
<td>0.839</td>
<td>0.850</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Index2</td>
<td>23,779</td>
<td>0.436</td>
<td>0.608</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Index4</td>
<td>24,166</td>
<td>1.272</td>
<td>1.241</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Political Stability</td>
<td>24,166</td>
<td>-0.893</td>
<td>0.683</td>
<td>-2.496</td>
<td>1.278</td>
</tr>
<tr>
<td>Voice and Accountability</td>
<td>24,166</td>
<td>-0.184</td>
<td>0.759</td>
<td>-1.586</td>
<td>1.187</td>
</tr>
<tr>
<td>Political Rights &amp; Civil Liberty</td>
<td>24,166</td>
<td>3.541</td>
<td>1.583</td>
<td>1</td>
<td>6.500</td>
</tr>
<tr>
<td>Democracy Index</td>
<td>24,166</td>
<td>5.955</td>
<td>1.846</td>
<td>2.680</td>
<td>8.170</td>
</tr>
<tr>
<td>High Democratic Environment</td>
<td>24,166</td>
<td>0.480</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Firm Size (Medium)</td>
<td>23,910</td>
<td>0.391</td>
<td>0.488</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Firm Size (Large)</td>
<td>23,910</td>
<td>0.255</td>
<td>0.436</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Firm Age (Log)</td>
<td>23,840</td>
<td>2.768</td>
<td>0.790</td>
<td>0</td>
<td>5.347</td>
</tr>
<tr>
<td>Market Competition (Low)</td>
<td>16,124</td>
<td>0.337</td>
<td>0.473</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

(Table Continued....)
Table 2 demonstrates the Pearson coefficient of correlation along with the significance level between variables. The correlation coefficients measure the linkage between exploratory, explanatory and control variables. Sometimes variables in the dataset exhibit an econometric issue called “collinearity” between independent and control variables. This problem may lead to biased estimation. It is highly desired that the dataset should be free from such issues to determine the statistically valid relationship. According to the results of the Pearson Correlation Matrix shown in Table 3, there are no collinearity issues among variables that may lead to biased results. Moreover, the relationship between dependent, independent and control variables is also statistically significant.

Table 2

**Correlation Matrix**

|       | Index2 | Index4 | PS&AV | V&A  | DI   | HDE  | PRCL | FSm  | FSI  | FA   | Mcl  | MCm  | OSf  | OSg  | LSp  | LSd  | ME  |
|-------|--------|--------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Index2| 0.438* |        |       |      |      |      |      |      |      |      |      |      |      |      |      |     |
| Index4| 0.899* | 0.788* |       |      |      |      |      |      |      |      |      |      |      |      |      |     |
| PS&AV | 0.121* | 0.092* | 0.129*|      |      |      |      |      |      |      |      |      |      |      |      |     |
| V&A  | 0.057* | 0.062* | 0.071*| 0.429*|      |      |      |      |      |      |      |      |      |      |      |     |
| DI   | 0.066* | 0.067* | 0.080*| 0.268*| 0.946*|      |      |      |      |      |      |      |      |      |      |     |
| HDE  | 0.092* | 0.077* | 0.102*| 0.337*| 0.789*| 0.850*|      |      |      |      |      |      |      |      |      |     |
| PRCL | -0.046*| -0.059*| -0.062*| 0.044*| -0.981*| -0.918*| 0.946*|      |      |      |      |      |      |      |      |     |
| FSm  | 0.023* | -0.004 | 0.013*| 0.022*| -0.027*| -0.011*| 0.020*| 0.023*| 0.046*|      |      |      |      |      |      |     |
| FSI  | 0.117* | 0.207* | 0.181*| 0.012*| 0.021*| 0.003*| 0.007 |      |      |      |      |      |      |      |      |     |
| FA   | 0.145* | 0.085* | 0.093*| 0.145*| 0.124*| 0.121*| 0.158*| 0.008 | 0.143*|      |      |      |      |      |      |     |
| Mcl  | -0.013*| -0.003 | -0.054*| -0.071*| 0.099*| 0.007 | 0.015*| -0.015*| -0.016*| 0.015*|      |      |      |      |      |     |
| MCm  | -0.022*| -0.030*| -0.029*| -0.047*| 0.038*| 0.044*| 0.029*| -0.034*| -0.004 | -0.016*| 0.003 | -0.003| -0.191*|      |      |     |
| OSf  | 0.055* | 0.122* | 0.098*| 0.125*| 0.009*| 0.037*| -0.032*| 0.024*| -0.047*| 0.140*| 0.007 | 0.014*| -0.022*|      |      |     |
| OSg  | 0.013* | 0.023* | 0.019*| 0.020*| -0.084*| -0.079*| -0.051*| 0.087*| 0.006 | 0.037*| 0.014*| -0.004 | -0.012 | -0.016*|      |     |
| LSp  | 0.118* | 0.062* | 0.112*| 0.054*| 0.008 | 0.037*| 0.069*| 0.016*| 0.045*| 0.011*| 0.016*| -0.017*| -0.001 | -0.033*| 0.031*|     |
| LSd  | -0.015*| 0.093* | 0.035*| 0.222*| 0.044*| -0.045*| -0.096*| -0.062*| -0.023*| 0.183*| 0.065*| 0.136*| -0.001 | 0.130*| 0.015*| -0.472*|
| ME   | 0.057* | 0.024* | 0.052*| 0.090*| -0.030*| -0.080*| 0.081*| 0.005 | -0.032*| 0.058*| 0.361*| 0.022*| -0.009 | 0.010 | -0.002 | 0.120*|
| GDPPC| -0.014*| 0.065* | 0.022*| 0.492*| 0.002 | -0.143*| -0.057*| 0.007 | -0.016*| 0.023*| 0.001 | 0.028*| -0.046*| 0.107*| 0.029*| -0.181*| 0.469*| 0.205*|

p<0.01, p<0.05, p>0.1
For in-depth analysis to identify the impact of political environment and democracy on firm-level innovation, we use both firm-level and country-level data. According to the data structure, we use ordered probit regression analysis along with a robust standard error technique. Furthermore, we use a diverse range of control variables together with year, industry and region fixed effect. Regression results reported in table 4 show that firms operating in countries having a stable political environment are more likely to be innovative (Table 3, column 1) (Allard et al., 2012; Wang, 2013). Consistent results are found by using voice and accountability as an indicator of the political environment (Table 3, column 2).

Results suggest that freedom of voice, and choice of people to elect government influence firm-level innovation (Tebaldi & Elmslie, 2013). The reasons behind these results are that political stability shows the continuity of policies based on which firms decide to make innovative investments and projects. Moreover, freedom of voice (speech and press) increases information and ideas sharing environment. Such atmosphere stimulates generation and diffusion of new ideas, which subsequently increase innovation. These results are also verified by using political rights & civil liberties indicators (Table 3, column 3). Firms functioning in countries characterized as strong political rights & civil liberalization are more likely to witness high innovation level (Knutsen, 2012; Varsakelis, 2006).

Table 3
Ordered Probit Regression Model (Index Core)

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent Variable: Index Core</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Model 1)</td>
</tr>
<tr>
<td>Independent Variables:</td>
<td></td>
</tr>
<tr>
<td>Political Stability and Absence of Violence</td>
<td>0.118***</td>
</tr>
<tr>
<td></td>
<td>(5.39)</td>
</tr>
<tr>
<td>Voice and Accountability</td>
<td>0.205***</td>
</tr>
<tr>
<td></td>
<td>(7.21)</td>
</tr>
<tr>
<td>Political Rights and Civil Liberties</td>
<td></td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
</tr>
<tr>
<td>Firm Size (Medium)</td>
<td>0.187***</td>
</tr>
<tr>
<td></td>
<td>(8.52)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regression results (Table 4, column 1) also identify the positive relationship between democracy and firm-level innovation (Masino, 2012). It shows that an increase in the democracy level boosts firms’ activities to innovate. These results are further confirmed by using dummy variable of the high democratic environment (Table 4, column 2), which shows that firms likely to innovate more in the presence of a high democratic environment as compare to the low democratic environment. Democratic governments provide a high level of political rights along with civil liberties to their citizens. These political and civil liberties provide rights to residents to elect democratic government again through the constitutional procedure. Such mechanisms are responsible for continuity in

<table>
<thead>
<tr>
<th>Firm Size (Large)</th>
<th>0.345***</th>
<th>0.341***</th>
<th>0.346***</th>
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<tbody>
<tr>
<td></td>
<td>(12.60)</td>
<td>(12.50)</td>
<td>(12.64)</td>
</tr>
<tr>
<td>Firm Age</td>
<td>0.046***</td>
<td>0.045***</td>
<td>0.045***</td>
</tr>
<tr>
<td></td>
<td>(3.40)</td>
<td>(3.27)</td>
<td>(3.29)</td>
</tr>
<tr>
<td>Market Competition (Low)</td>
<td>0.103***</td>
<td>0.110***</td>
<td>0.107***</td>
</tr>
<tr>
<td></td>
<td>(4.52)</td>
<td>(4.81)</td>
<td>(4.67)</td>
</tr>
<tr>
<td>Market Competition (Medium)</td>
<td>0.059</td>
<td>0.065*</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>(1.51)</td>
<td>(1.65)</td>
<td>(1.60)</td>
</tr>
<tr>
<td>Ownership (Foreign)</td>
<td>0.184***</td>
<td>0.190***</td>
<td>0.185***</td>
</tr>
<tr>
<td></td>
<td>(3.21)</td>
<td>(3.32)</td>
<td>(3.24)</td>
</tr>
<tr>
<td>Ownership (Government)</td>
<td>-0.190*</td>
<td>-0.190</td>
<td>-0.196*</td>
</tr>
<tr>
<td></td>
<td>(-1.65)</td>
<td>(-1.57)</td>
<td>(-1.63)</td>
</tr>
<tr>
<td>Legal Status (Partnership)</td>
<td>0.236***</td>
<td>0.231***</td>
<td>0.237***</td>
</tr>
<tr>
<td></td>
<td>(10.02)</td>
<td>(9.80)</td>
<td>(10.05)</td>
</tr>
<tr>
<td>Legal Status (Company)</td>
<td>0.117***</td>
<td>0.130***</td>
<td>0.128***</td>
</tr>
<tr>
<td></td>
<td>(3.89)</td>
<td>(4.34)</td>
<td>(4.28)</td>
</tr>
<tr>
<td>Managerial Experience</td>
<td>0.048***</td>
<td>0.050***</td>
<td>0.047***</td>
</tr>
<tr>
<td></td>
<td>(3.41)</td>
<td>(3.57)</td>
<td>(3.37)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.160**</td>
<td>0.021</td>
<td>0.116</td>
</tr>
<tr>
<td></td>
<td>(2.06)</td>
<td>(0.26)</td>
<td>(1.46)</td>
</tr>
<tr>
<td>Year Control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Region Control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>15,185</td>
<td>15,185</td>
<td>15,185</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>1431.03</td>
<td>1458.14</td>
<td>1431.62</td>
</tr>
<tr>
<td>Prob. &gt; chi2</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.045</td>
<td>0.046</td>
<td>0.045</td>
</tr>
<tr>
<td>Log Pseudo Likelihood</td>
<td>-15618.64</td>
<td>-15606.90</td>
<td>-15618.61</td>
</tr>
</tbody>
</table>

*p<0.1, **p<0.05, ***p<0.01, z statistics in parentheses.
policies, predictability of future environment and stability of the political situation. Additionally, democratic nations exhibit freedom, openness, and better governance as compare to autocracy, which subsequently motivate overall innovation.

Table 4
Ordered Probit Regression Model (Index Core)

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent Variable: Index Core</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Model 4)</td>
</tr>
<tr>
<td>Independent Variables:</td>
<td></td>
</tr>
<tr>
<td>Democracy Index</td>
<td>0.083***</td>
</tr>
<tr>
<td></td>
<td>(6.48)</td>
</tr>
<tr>
<td>High Democratic Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.159***</td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
</tr>
<tr>
<td>Firm Size (Medium)</td>
<td>0.185***</td>
</tr>
<tr>
<td></td>
<td>(8.39)</td>
</tr>
<tr>
<td>Firm Size (Large)</td>
<td>0.339***</td>
</tr>
<tr>
<td></td>
<td>(12.40)</td>
</tr>
<tr>
<td>Firm Age</td>
<td>0.046***</td>
</tr>
<tr>
<td></td>
<td>(3.35)</td>
</tr>
<tr>
<td>Market Competition (Low)</td>
<td>0.106***</td>
</tr>
<tr>
<td></td>
<td>(4.63)</td>
</tr>
<tr>
<td>Market Competition (Medium)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>(1.55)</td>
</tr>
<tr>
<td>Ownership (Foreign)</td>
<td>0.194***</td>
</tr>
<tr>
<td></td>
<td>(3.41)</td>
</tr>
<tr>
<td>Ownership (Government)</td>
<td>-0.193</td>
</tr>
<tr>
<td></td>
<td>(-1.59)</td>
</tr>
<tr>
<td>Legal Status (Partnership)</td>
<td>0.232***</td>
</tr>
<tr>
<td></td>
<td>(9.86)</td>
</tr>
<tr>
<td>Legal Status (Company)</td>
<td>0.135***</td>
</tr>
<tr>
<td></td>
<td>(4.49)</td>
</tr>
<tr>
<td>Managerial Experience</td>
<td>0.050***</td>
</tr>
<tr>
<td></td>
<td>(3.58)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
</tr>
</tbody>
</table>

(Table Continued...)
The above-stated results are further proved by using diverse proxies for firm-level innovation i.e., Index 2 and index 4. Results reported in Tables 5, 6 (index 2), 7 and 8 (index 4), show that political stability and voice & accountability have a positive relationship with corporate innovation. Additionally, the democratic environment and political rights & civil liberties also enhance firm-level innovation.

Table 5
Ordered Probit Regression Model (Index 2) [Robustness Check]

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent variable: Index 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Model 1)</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
</tr>
<tr>
<td>Political Stability and Absence of Violence</td>
<td>0.0285 (1.15)</td>
</tr>
<tr>
<td>Voice and Accountability</td>
<td></td>
</tr>
<tr>
<td>Political Rights and Civil Liberties</td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td>Yes</td>
</tr>
<tr>
<td>Year Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Region Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>15,037</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>1667.56</td>
</tr>
<tr>
<td>Prob. &gt; chi2</td>
<td>0.000</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.074</td>
</tr>
<tr>
<td>Log Pseudo Likelihood</td>
<td>-11343.33</td>
</tr>
</tbody>
</table>

*p<0.1, **p<0.05, ***p<0.01, z statistics in parentheses.
### Table 6
**Ordered Probit Regression Model (Index 2) [Robustness Check]**

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent variable: Index 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Model 4)</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
</tr>
<tr>
<td>Democracy Index</td>
<td>0.036***</td>
</tr>
<tr>
<td></td>
<td>(2.48)</td>
</tr>
<tr>
<td>High Democratic Environment</td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td>Yes</td>
</tr>
<tr>
<td>Year Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Region Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>15,037</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>1669.68</td>
</tr>
<tr>
<td>Prob. &gt; chi2</td>
<td>0.000</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.074</td>
</tr>
<tr>
<td>Log Pseudo Likelihood</td>
<td>-11340.60</td>
</tr>
</tbody>
</table>

*p<0.1, **p<0.05, ***p<0.01, z statistics in parentheses

### Table 7
**Ordered Probit Regression Model (Index 4) [Robustness Check]**

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent Variable: Index 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (Model 1)</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
</tr>
<tr>
<td>Political Stability and Absence of Violence</td>
<td>0.086***</td>
</tr>
<tr>
<td></td>
<td>(4.24)</td>
</tr>
<tr>
<td>Voice and Accountability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.52)</td>
</tr>
</tbody>
</table>

(Table Continued...)
Political Rights and Civil Liberties

Control Variables

Year Control
Industry Control
Region Control

Number of Observations
15,185
15,185
15,185

Wald chi2
1934.98
1968.74
1944.22

Prob. > chi2
0.000
0.000
0.000

Pseudo R2
0.045
0.046
0.045

Log Pseudo Likelihood
-21110.47
-21097.82
-21107.28

*p<0.1, **p<0.05, ***p<0.01, z statistics in parentheses.

Table 8
Ordered Probit Regression Model (Index 4) [Robustness Check]

<table>
<thead>
<tr>
<th>Ordered Probit Regression</th>
<th>Dependent Variable: Index 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td>Coefficient (Model 4)</td>
</tr>
<tr>
<td>Democracy Index</td>
<td>0.064*** (5.38)</td>
</tr>
<tr>
<td>High Democratic Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.152*** (4.95)</td>
</tr>
<tr>
<td>Control Variables</td>
<td>Yes</td>
</tr>
<tr>
<td>Year Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Region Control</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>15,185</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>1953.96</td>
</tr>
<tr>
<td>Prob. &gt; chi2</td>
<td>0.000</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.045</td>
</tr>
<tr>
<td>Log Pseudo Likelihood</td>
<td>-21104.57</td>
</tr>
</tbody>
</table>

*p<0.1, **p<0.05, ***p<0.01, z statistics in parentheses.
Conclusion

In this paper, we detect the impact of political environment and democracy on corporate innovations among developing economies. To evaluate aforesaid relationships, we use Enterprise Survey database and Worldwide Governance Indicators by World Bank, Democracy Index by Economist Intelligence Unit, and Freedom in the World by Freedom House. To measure corporate innovation, we generate three indexes i.e., Index Core, Index 2 and Index 4, based on product innovation, process innovation, R&D investment, and technology usage. Countries’ political environment is examined through political stability and absence of violence, voice and accountability, and political rights & civil liberties. The democracy level among developing countries is evaluated via a democracy index and a high democratic environment. The main results mention that a stable political environment and democracy foster corporate innovation in developing countries.

In more depth, firms that are operating in the countries having political stability, freedom to citizens and a strong accountable environment, innovate more as compare to countries having opposite features. Such characteristics among developing economies build institutional trust through continuity in policies, which leads to minimizing future risk and uncertainty, and afterward foster firm-level innovations. Moreover, democracy provides lubricant to corporate innovation in developing countries. Such liaison is more substantial in countries that have a high democratic environment. Policy implications propose that countries wish to uplift their firm-level innovations should pay considerable attention towards political stability, freedom and accountability. Besides, democratic environment along with political rights & civil liberties are required to stimulate firm-level innovations. These steps are not only important to motivate corporate innovations, but also important for long term economic growth among developing economies. Prospect studies in the field of political institutions may examine the impact of state policies on science and technology on corporate level innovation. Moreover, such policies together with intellectual property rights have any significant influence on corporate innovation. Future studies may also be conducted to evaluate the differential impact of democracy and autocracy on corporate innovation.

References


Pamukçu, T., & Utku-İsmihan, F. M. (2009). Determinants of R&D Decisions of Firms in Developing Countries the Case of Turkey. In *Anadolu International Conference in Economics, Eskişehir, Turkey, June.*


DEMOGRAPHIC AND WORK DYNAMICS AFFECTING FUNCTIONAL FLEXIBILITY IN HIGHER EDUCATION INSTITUTIONS OF PAKISTAN

Muhammad Yasir\(^1\) and Abdul Majid\(^2\)

Abstract

This study examines the role of demographic and work factors in creating functional flexibility among employees working in higher education institutes in Pakistan. Data were collected from 323 employees including both teaching and administrative staff. The findings confirmed that teaching staff has a greater level of functional flexibility as compared to administrative staff. Furthermore, male staff showed higher level of functional flexibility than female staff. The findings also demonstrate that trust in management and autonomy positively predicts functional flexibility. Furthermore, task formalization was negatively associated with functional flexibility. These findings revealed that climate of trust and flexible work arrangements improve employee’s attitudes towards functional flexibility.

Keywords: Functional Flexibility, Demographic, Work Dynamics, Higher Education Institutes.

JEL Classification: J240, I230

Introduction

Unpredictable business environment and hyper competitiveness exert pressure on organizations to continuously promote flexible work environment (Yasir et al., 2017), which could be a significant source of organizational survival in a fast changing environment (Sarooghi et al., 2015; Hatum & Pettigrew, 2004). Flexible work environment is concerned with flexible working conditions perceived by employees at work place which can be established through autonomy, trustworthy climate and a lower level of task formalization (Van den Berg & Van den Velde, 2005). Clearly, this view has captured the interest of management scholars in the domain of organizational behavior for the better understanding of the factors that improve employee functional flexibility. In unpredictable organizational environment organizational efforts to increase flexible working conditions strengthen the feelings of employees to engage in discretionary behavior and go beyond their occupational boundaries (Bal & De Lange, 2015). Hodge et al. (2011) found that flexible working conditions such

\(^1\)PhD Scholar, Department of Management Sciences, Hazara University, Pakistan. Email: gccm81@gmail.com

\(^2\)Associate Professor & Director, University Advancement and Financial Aid Office, Hazara University, Pakistan. Email: abdulmajidmughal@hotmail.com
as autonomy and flexible procedures at workplace enhance the desirable behavior needed to perform diverse tasks across traditionally diverse occupational boundaries. This notion is closely linked to the employees’ functional flexibility concept (Atkinson, 1984).

In functional flexibility, complete range of skills and desirable behavior of the employees enhanced by acquiring the relative capacity for performing their job through traditional occupational boundaries (Atkinson, 1984; Majid et al., 2017).

Atkinson (1984) suggested a flexible modal for the firm provide an approach to achieve the functional flexibility which encourages the employees to execute diversified activities and tasks for the purpose of tackling the challenges of new services demand and new work requirements (Kok & Ligthart, 2014).

This concept gained a huge scholarly attention due to the emerging challenges of fast technological changes, organizational environment and demand for innovative work and services. Among organizational characteristics functional flexibility is of critical value (Atkinson, 1984) and it depends mostly on work dynamics (trust in management, job autonomy and task formalization) (Van den Berg & Van den Velde, 2005), and demographic characteristics (nature of job, age and gender) (Shacklock et al., 2009).

Work dynamics such as job autonomy, less formalization and trust in management enhance discretionary and desirable behavior of employees at workplace (Dirks & Skarlicki, 2008; Van den Berg & Van den Velde, 2005), that contribute to the successful operation in unpredictable and highly competitive business environment (Chen & Chen, 2012). Factors like trust worthy climate, task performance autonomy, and less formalization increases feelings regarding freedom at workplace and discretionary behavior needed to improve functional flexibility (Origo & Pagani, 2008). These factors induce the employees to transform their tasks and belligerently involve in extra-role behavior in order to sustain functional flexibility (Kok & Ligthart, 2014; Yasir & Majid, 2018). Beyond, these work related factors, demographic characteristics of workers also influence their attitude towards functional flexibility. Past studies explained that due to more expectations of professional enhancement, younger people are more excited to engage in functional flexibility. On the other hand, male employees prefer geographical mobility and alteration of jobs as compared to female staff (Shacklock et al., 2009). These preferences motivate and promote feelings of the young male employees to engage in activities beyond the traditional occupation.

In this study, we focus on higher education public sector institutes in Pakistan. In Pakistan, the structure of public sector higher education institutions is characterized by inflexible practices, bureaucratic structure, and various pressure and politics in decision-making. Rigid rules and regulation is a basic characteristic of public sector higher education institutes of Pakistan which specify the procedures for their establishment, administration and control (Education Policy 1998-
2010). To improve the efficiency of higher education institutions in Pakistan, there is a dire need of those workers who are capable of doing diverse and multiple tasks. In line with these assumptions, the objectives of this research are to measure the work dynamics and demographic of the employees working in higher education institutes of Pakistan to explain: how does task formalization shape the employee attitude towards functional flexibility? To what extent age, gender and job nature explain functional flexibility? To accomplish the purposes of this investigation, section two discusses the literature. Section three elucidates the theoretical framework, while, research methodology is explained in section four, whereas; results and findings are explained in section five.

**Literature Review**

*Demographic factors and Functional Flexibility*

Functional flexibility can be defined as a mechanism through which employees are able to perform multiple tasks and responsibilities at various positions (Beltran-Martin et al., 2008). Functional flexibility of employees act as an imperative mechanism related to the achievements of diverse and multiple tasks requirements for organizations operating in dynamic environments (Roca-Puig et al., 2008). In line with this concept, functional flexibility embeds in the extensive capabilities of employees such as a variety of skills, behavior and attitude to undertake diverse and multiple tasks (Beltran-Martin & Roca-Puig, 2013). Campion et al. (1994) argued that demographic characteristics have strong and contingent effect on employees’ functional flexibility. There are various demographic variables available in the literature that strongly affects functional flexibility, some of these include: job nature, gender and age. Majid et al. (2017) found that nature of the work is positively and absolutely associated with functional flexibility of the employees. Employees working on important and critical positions have greater opportunities to work on different and more interesting jobs. As the nature of workers in higher education institutions of Pakistan is considered, usually there are dual categories of faculty i.e. teaching and administrative staff. Hence in this study, we assume that there is a distinction and dissimilarity among the teaching staff and administrative staff regarding feelings and perception of functional flexibility and we have formulated these following hypotheses:

*H1:* Teaching staff working in HEI have greater perception towards functional flexibility as compared to administrative staff of HEI in the Pakistan.

Furthermore, functional flexibility is also influenced by the demographic characteristic such as gender and age. Previous studies found that both gender have different and dissimilar attitude regarding their preference towards the nature and geographical location of the job. The findings of Shacklock et al. (2009) argued that male employees show a higher tendency towards the work-related variables and alteration of jobs than female employees. Moreover, researcher documented that the male employees shown more preferences for geographical mobility than female (Brody et al., 2014). Noback et al. (2016) discovered that male had a higher tendency to change occupations as compared to female. The outcomes of the previous studies clarified that female working faculty showed
insignificant willingness towards functional flexibility than men. In line with these arguments, we formulated that:

**H2**: Male workers in teaching and administrative staff have greater perception towards functional flexibility than female staff of HEI in Pakistan.

Cordery et al. (1993) recommended that older workers exposed the adverse behavior for functional flexibility on the other hand younger employees have greater preferences for functional flexibility. Looise et al. (1998) argued that aged employees have lower intention to involve in extra activities i.e. willingness to be flexible due to the fewer chances of professional enrichment, while, younger employees shown more involvement in extra-role behavior as they anticipate and expect favorable chances for increasing professional development. According to Campion et al. (1994), employee’s attention regarding involvement in extra role behavior was adversely related with age. Furthermore Van den Berg and Van den Velde (2005) argued that age factor is negatively linked with the functional flexibility. For this reason, in current study we have hypothesized that:

**H3**: Age has a negative association with the functional flexibility.

**Work Factors and Functional Flexibility**

Previous studies documented that employees functional flexibility is a function of various factors such as organizational structure (Nasuridin et al., 2006; Yasir & Majid, 2017), individual self-efficacy (Majid et al., 2017), work dynamics such as low level of task formalization, trust in management and autonomy (Van den Berg & Van den Velde, 2005).

Consequently, employee’s functional flexibility depends upon work perceptions of employees. Therefore, Human resource practices concerning work design for employees to accomplish their task are considered crucial factors and directly influence the workers autonomy (Parker et al., 2001). According to Brink et al. (2015), autonomy is the magnitude of employee’s freedom regarding decisions, authority about aims (what), effort methods (how) and planning matters (when). Autonomy is another intervention of flexible job design that provides freedom and discretion to carry out the required tasks. There is a strong association of work autonomy with functional flexibility and task interdependence (Oldham & Hackman, 1981; Majid et al., 2017).

Parker etal. 1997 articulates that for the generation of flexible role orientation autonomous structure plays a vital role. Therefore, in this study we presumed that work perceptions of employees effects their willingness towards flexibility, which is used as a determinant of functional flexibility. Consequently, HR practices concerning work design for employees to accomplish their multiple tasks are considered crucial factor and directly influence the workers autonomy (Parker et al., 2001). Therefore, in this study we hypothesized that:

**H4**: Autonomy has a positive relation with functional flexibility.
According to Wagner and Rush (2000), Trust in the management is an additional work factor that can accomplish the employees’ requirements and it may encourage employees for social conversation with their organizations. According to Rousseau et al. (1998), trust is a psychological state of an individual which comprises the intention to receive vulnerability and depends upon positive behavior and intentions of others. Bal and De Lange (2015) founded that support from organizational top management increases the employees’ willingness to be flexible. Moreover, the willingness of employees to be flexible largely depends on trust in management which is also documented in the study of Van der Velde and Van den Berg (2005). In line with these arguments we hypothesized that: 

\[ H5: \text{Trust in management positively predicts functional flexibility.} \]

Flexibility in instructions for assignment recital is critical work factor that is also associated with the functional flexibility. Formalization is explained as the degree to which actions, directions rules and communications are written and discussed (Patel, 2011). On the other hand, flexible organizational structure is mainly designed to facilitate operational relationships and enduring configuration of tasks and activities among various units for the improvement of their performance (Zheng et al., 2010). The flexible organizational structure achieved either providing involvement in decision making process through decentralization or providing task autonomy to the employees through low level of formalization (Van der Velde & Van den Berg, 2005).

According to Van der Velde and Van den Berg (2005) task formalization is negatively correlated with employee’s functional flexibility. Organizations with mechanistic and rigid structure with a higher level of task formalization show lower level of functional flexibility among its employees than the organizations with organic and flexible structures with a lower level of task formalization (Yasir & Majid, 2017). So in this current study we hypothesized that: 

\[ H6: \text{Task formalization negatively predicts the functional flexibility.} \]

**Framework**

Figure 1 shows the association and direction of the variables employed in this study. We have used seven variables. Figure 1 presents all the association among these variables in the framework.

![Research framework](image)
Research Methodology

The population consists of teaching and administrative staff of the public sector higher education institutes in Pakistan. Sample consisted of 323 teaching and administrative staff. Two hundred and seventy two respondents were male (84.22%) and only fifty one were female (15.78%). Eighty four per cent of the respondents were Post-Graduate (16 years of education) (273); thirteen per cent of the respondents were Graduate (14 years education) (41) and three per cent were Under-Graduate (less than 14 years education) (9). Sixty three per cent of the respondents were teachers (206) and thirty seven percent were administrative staff (117).

Data Collection Process

The current study was quantitative in nature for which cross-sectional design was used to test the hypothesized model. Questionnaire was developed using latest techniques and program of “Google doc” because all sort of internet browser can open it and can be shared with numerous respondents. Covering letter (e-mail) of the questionnaire was comprised of purpose of research, guidelines about how to complete the questionnaire, researcher request and appreciation to the respondent for his participation. The process of data collection was initiated in the month of April 2015. The data collection process took five months. Initially questionnaires were sent via electronic mail to the 835 employees of higher education institutions. Out of received responses, only 323 were considered for analysis purposes which were completed in all respect.

Measures

The measures for the study in hand were adapted from the work of Van den Berg and Van den Velde (2005). Five-point Likert scale “Strongly Disagree=1 and Strongly Agree=5” was used for the measurement of study variables.

Demographic Factors

Several demographics variables were assumed to be associated to the determinants of functional flexibility. To test the influence of demographic characteristics towards functional flexibility, current study used following demographic variables: job nature (teachers and administrator), age (in years), and gender (male and female).

Work factors

Autonomy was measured with five items scales; these items generated α value of 0.87. Trust in management was measured with 3 items scales; these items generated α value of 0.83. Task formalization was measured with 3 items scales; these items generated α value of 0.89.
Functional Flexibility

Functional flexibility of teachers and administrative staff was measured by 7 items generated α value of 0.86. Table 1 shows the results of confirmatory factor analysis and internal consistency.

Table 1
Results of CFA

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicator</th>
<th>Cronbach’s Alpha</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>5</td>
<td>0.87</td>
<td>0.951</td>
<td>0.952</td>
<td>0.026</td>
</tr>
<tr>
<td>Trust in Management</td>
<td>3</td>
<td>0.83</td>
<td>0.923</td>
<td>0.942</td>
<td>0.044</td>
</tr>
<tr>
<td>Task Formulation</td>
<td>3</td>
<td>0.89</td>
<td>0.961</td>
<td>0.952</td>
<td>0.012</td>
</tr>
<tr>
<td>Functional Flexibility</td>
<td>7</td>
<td>0.86</td>
<td>0.942</td>
<td>0.934</td>
<td>0.028</td>
</tr>
</tbody>
</table>

Results and Discussions

Initially, in order to find out the differences among teachers and administrative staff for functional flexibility regarding job nature and gender independent samples t-test was used. The outcomes of independent samples test shows that teaching staff shown a higher level of functional flexibility as compared to administrative staff i.e. teacher \( t(76.178) = 4.567, P = 0.000 \) and administrative staff \( t(23.314) = 0.719, P = 0.479 \). Independent samples t-test analyses showed significant dissimilarity between teachers and administrator for their functional flexibility.

Results for Independent samples t-test of male and female confirmed that male respondents shown significant attitudes for functional flexibility as compared to female respondents from public sector institutes of Pakistan. The results of independent sample test shown statistics \( t(231.392) = 2.827, P = 0.005 \) and \( t(26.103) = 1.975, P = 0.59 \) for male and female respectively. These statistics confirmed that male employees shown higher score on functional flexibility than female faculty members of public sector institutes of Pakistan. The findings of the study confirmed the hypotheses 1 and 2.

The results showed in Table 2 presents coefficient of correlations among independents and dependent variables. The results revealed positive correlation between autonomy and functional flexibility \( r = 0.275**, p < .001 \), trust in management and functional flexibility \( r = 0.429**, p < .001 \), gender and functional flexibility \( r = 0.133*, p < .005 \), age and functional flexibility \( r = 0.30*, p < .005 \). Furthermore, negative correlation between task formalization and functional flexibility \( r = -0.113**, p < .001 \).
Table 2

Correlation

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D</th>
<th>Gender</th>
<th>Age</th>
<th>AUT</th>
<th>TIM</th>
<th>TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.16</td>
<td>0.365</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.78</td>
<td>0.920</td>
<td>-0.341**</td>
<td>0.179**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.66</td>
<td>0.718</td>
<td>0.083</td>
<td>0.179**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Management</td>
<td>3.78</td>
<td>0.801</td>
<td>0.252**</td>
<td>-0.009</td>
<td>0.511**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Formulation</td>
<td>2.79</td>
<td>0.937</td>
<td>-0.158**</td>
<td>0.071</td>
<td>0.137*</td>
<td>-0.143*</td>
<td></td>
</tr>
<tr>
<td>Functional Flexibility</td>
<td>3.67</td>
<td>0.778</td>
<td>0.133*</td>
<td>0.030*</td>
<td>0.275**</td>
<td>0.429**</td>
<td>-0.113**</td>
</tr>
</tbody>
</table>

Table 3 shows the coefficients of hierarchical regression analysis. In the first step we entered gender and age to control the demographic characteristics and functional flexibility. Step 2 was used to capture the coefficients of age, gender, autonomy, trust in management and task formalization.

The results in Table 3 shown the value of Beta Coefficient (age) is (-.25*) and p-value (0.008) which is less than p-value of (0.01) with functional flexibility which confirmed the study hypothesis 3, i.e. age is negatively correlated to functional flexibility, was established and result are consistent with Campion et al., (1994).

The results in Table 3 also shown the value of beta Coefficient (autonomy) is (.43*) and p-value (0.000) which is less than p-value of (0.01) with functional flexibility which confirmed the study hypothesis 4, i.e. autonomy has a positive association with functional flexibility. Furthermore, beta coefficient (.51**) 51 per cent and p-value (0.000), trust in management was explain significant relation with functional flexibility, which confirm the study hypothesis 5. Finally, beta coefficient (-.18**) and p-value (0.001), task formulation has negative connection with functional flexibility, which confirmed the hypothesis 6.

Table 3

Regression Analysis

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>B</th>
<th>Standard Error</th>
<th>Beta</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.21</td>
<td>0.07</td>
<td>-0.25*</td>
<td></td>
</tr>
<tr>
<td>Trust in Management</td>
<td>0.50</td>
<td>0.06</td>
<td>0.51**</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.40</td>
<td>0.05</td>
<td>0.43**</td>
<td></td>
</tr>
<tr>
<td>Task Formalization</td>
<td>-0.15</td>
<td>0.04</td>
<td>-0.18**</td>
<td></td>
</tr>
</tbody>
</table>

Note: The coefficients estimated at step 2 are presented.
*P<.05; **P<.001
Conclusions

The importance of the study in hand is to provide understanding about the attitudes of teachers and administrative staff towards functional flexibility working in higher education institutes in Pakistan. The aim of this study was to empirically investigate the effect of work dynamics and demographic characteristics on flexibility. Moreover, the results confirmed significant variation among teaching and administrative staff for functional flexibility working in institutes of higher education in Pakistan. These findings propose that both teachers and administrative staff have the different attitudes towards functional level flexibility.

The results supported that trust in management and autonomy shows positive relationship with functional flexibility. These findings suggest that management can increase the level of functional flexibility of employees by providing them flexible work arrangements and autonomy to work. Furthermore, results of this study also confirm that trust in management also enhance functional flexibility among employees. Moreover, it is also evident that, lower degree of formalization in work processes increases the discretionary power of workers needed to engage in functional flexibility. The findings shown that task formalization negatively predict the attitude of functional flexibility which suggests that inflexible work arrangements discourage employees’ to take part in extra-role behavior.

The study in hand also has theoretical significance, e.g. study confirmed the role of task formalization and trust-worthy attitude of management and consider as important antecedents for improving the willingness of faculty members towards flexibility. When we apply social exchange theory in order to find out the association between employees and organization, it can be concluded that employee’s encouraging image about work leads them to so commitment towards organization.

Moreover, the findings also recommend that organization improve the attitudes of its workforce to perform extra activities by providing flexible infrastructure using flexible procedures for task performance, equal and fair treatment on the achievement of novel tasks. These findings are consistent with (Majid et al., 2017). Furthermore, the results confirm that management policy regarding flexible infrastructure increases the chance for improving the level of employee’s flexibility. These results of the current study confirmed the findings of previous studies (Van den Berg & Van den Velde, 2005; Yasir & Majid, 2017).

The study in hand also provides in-depth knowledge about the relationship between demographics of workers and administrative staff and their attitude towards functional flexibility. Moreover, the positive effect of demographics factors on functional flexibility show that teaching staff working in higher education institutes are more inclined towards functional flexibility as compared to administrative staff. These findings are consistent with (Shacklock et al., 2009; Brody et al., 2014). Moreover, male workers are more inclined towards functional flexibility than female workers. These findings are consistent with (Noback et al., 2016).
References


of Commerce and Management, 16(2), 116-129.
THE ROLE OF PROJECT MANAGER NETWORK IN THE SUCCESS OF PROJECT MANAGEMENT

Saadullah Shah\textsuperscript{1}, Dr. Hafiz Ghufran Ali khan\textsuperscript{2}, Dr. Fauzia Mubarik\textsuperscript{3} and Dr. Saif ul Mujahid Shah\textsuperscript{4}

Abstract

The project is a temporary activity and its success is measured against project constraints i.e. cost, time, scope, and quality, and the project manager network plays a role in the success of the project. The present study is based on The Network theory, and different types of networks have been used in this study, such as Facebook, Orkut, LinkedIn, and Twitter used by the project manager during the project for different kinds of information. Data was collected from the employees of HEC based in Islamabad Pakistan. For this purpose, formal and informal channels mean and mode communication is used. The result shows that the project manager network has a positive effect on project management success. The current study suggests that the organizations in Pakistan should focus on project manager networks and invest in these areas to enhance the ratio of project management success.

Keywords: Project Manager Network, Project Management Success, Higher Education Commission of Pakistan, Organizational Performance.

JEL Classification: Z000

Introduction

Globalization influences the economies of developed and developing countries and this also changes the working criteria of organizations. Now around the world organizations either public or private makes plans and policies which short term time frame with minimal cost and maximum benefits and works in the form of projects. Project bases workings also got an attraction in developing countries especially in the public sector due to their faster track of working with time and cost limitations.

\textsuperscript{1}Ph.D Scholar (Management Sciences), Institute of Management Studies, University of Peshawar, Peshawar, Pakistan. Email: saadx5@yahoo.com
\textsuperscript{2}Assistant Professor, Faculty of Management Sciences, International Islamic University, Islamabad, Pakistan. Email: hafiz.ghufran@iiu.edu.pk
\textsuperscript{3}Assistant Professor, Department of Management Sciences, National University of Modern Languages (NUML), Islamabad, Pakistan. Email: fmubarik@numl.edu.pk
\textsuperscript{4}Lecturer, Department of Economics, National University of Modern Languages (NUML), Islamabad, Pakistan. Email: saifmujahid@numl.edu.pk
Oliveira and Rabechini (2019) define a project as “a temporary end over-under undertaken to create a unique product, service, or result”. Planning and timeline of the project are very essential and important for the success of every project (Paton & Andrew, 2019) and this timeline is also different in every project according to the objectives of the project. Every project starts either in the public or private sector with the focus of its time for accomplishment, cost, scope, and quality according to the predefined standards (Derakhshan & Mancini., 2019) that set by the experts of the field. Project management provides the most important and useful tools for the management of the organization for the enhancement of organizational performance (Anantatmula & Rad, 2016; Hurt & Thomas, 2009). By utilizing the tools and tactics of project management, the leadership of the organizations, plan, organize and accomplish efficiently their projects with better utilization of their tangible and intangible resources (Svejvig et al., 2019). According to Pivec and Maček (2019), the project-based performance of the organizations not only increases the revenue for the firms but also improves the economic conditions of the country, moreover, these activities also enhance the competition level among the organizations (Amaral & Araujo, 2009). Currently, due to the highly competitive environment of markets, usually, firms generate their activities to the planning and execution of projects (Price Waterhouse Coopers, 2012). According to Dvir et al. (2003) success of any project does not only depend upon the process and procedures of the projects but also now it depends upon the technical and technological requirements of the project. With globalization, it’s difficult for the state to provide necessities of life according to the growing demands of the goods and services, and this higher and quick demand of supplies only be possible accomplish through project execution (Willum et al., 2019).

The success of every project is based on some critical factor i.e. human resources, cost, time, quality and scope and these factors never been change and plays a vital role for the success of the project (Rockart, 1982; Van Nuland, Broux, & Crets, 1999; Cooke-Davies, 2002; Cheng, Ryan, & Kelly, 2012). Moreover, the success of the project is determined by the efficient accomplishment with quality together with efficient work of project management with scheduled working (Razmdoost & Mills, 2016; Mir & Pinnington, 2014; Ahadzie, Proverbs, & Sarkodie-Poku, 2014; Sunindijo, 2015). On the other hand, Berssanet & Carvalho (2015) argued that the performance of any project is based on satisfaction of customer, schedule, and planning of the project budget and on specified quality of the project as needed by the customer(Pargar et al., 2019). It has been observed that usually during the production process some activities of the processes and procedures become the cause of high cost due to wastage of energies that can be minimized by utilizing the project management techniques (Farashah et al., 2019). Project managers regularly used their social network during the process and procedures of the projects to achieve project success and these activities become more effective and efficient for project success (El-khalek et al., 2019).

Globalization affects every factor of life and it also changes the major concepts and models of life especially the utilization of resources in educational systems for traditional systems to digital systems (Schumann et al., 2014). As the working of projects usually much complex and risky and
during the process of accomplishment of projects some unforeseen situations and planning faults occurred which destabilize the success of a project (Fang et al., 2012). Network theory (Mei, Haung & Fang, 1997) has great importance in the area of computer and network sciences, and last few decades, economists, engineers, sociologists, and researchers from various fields have been focusing on network theory. Usually, network theory (Mei, Haung, & Fang, 1997) has been widely used in the fields where the solution of complex entities required i.e. for traffic flow, internet, quantum theory, movement of goods, molecular biology, and mathematical solutions, medicine, communication and recently for supply chain management (Albert & Barabási, 2002; Newman, 2003; Wen et al., 2013). Additionally, Rowley (1997) argued that network theory has also been used in project management with different aspect i.e. stakeholder influences. Every project plan either from the public or private sector modeled with different networks and project managers links these networks with each other (Martin & Poza, 2015). Amabile (1998), stated that usually, project managers eliminate inventiveness in project businesses due to the failure of connections between the networks i.e. actor and activities. Through networks, project-oriented businesses combine different tangible and intangible resources to produce new proficiencies (Owusu, 2003) that further help the management of the project for the achievement of project goals.

In this research, we use the lens of network theory (Mei, Haung, & Fang, 1997) to investigate the impact of project manager networks on the success of project management. This study contributes to the project management domain that how networks of project managers help them for the success of the project. This will also guide the practitioners on how they can utilize their networks for communication between the actors of the project for the success of the project.

**Literature Review**

In the last few decades, project management becomes prominent in the domain of management, and now project management has become important for the development, survival, and advancement of every organization (Cleland & Ireland, 2002). But higher education institutions have a low maturity level of working in project management as compare to corporate sector firms around the world (Bryde & Leighton, 2009). Due to globalization higher education institutions faces different challenges to increase their efficiency and use the models of working as utilized in the corporate sector at the managerial and administrative level (Costa et al., 2014). According to Melo et al. (2010), higher education institutions produce different types of knowledge in different fields i.e. in arts, technology, science, and culture that is highly valuable for society and the generation of revenue for the state. Higher educational institution institutions not only different from the corporate sector by their working and results because these institutions spread knowledge according to the expectation of their stakeholders (Fernández-López, 1999). According to Rodrigues et al. (2004), it is difficult for the universities to adopt measures as adopted by other firms because the focus of companies is customer, product, and market on the other side, universities usually focuses on knowledge, student and education. In contrast, Shattock (2002), stated that higher education institutions work best when
they adopt strategies of the corporate sector for the professionalism of their management.

Similarly, the partners from science are more important than firms’ customers, when introducing a new product to market (Pollack & Matous, 2019). The communication technology helps research and developmental groups by establishing interaction to geographically distributed members (Martinsuo & Hoverfält, 2018). In the social network e-mail usually used in the analysis process to analyze the direct and indirect effect of social media, the effect was examined on individual performance in virtual groups (Zwikael, Chih, & Meredith, 2018). Many organizations gradually setup multiple team projects to develop complex products, but still, the team is important during the internal process of small-scale projects. The collaboration between teams increases the performance of team members during the project’s execution and implementation (Bjorvatn & Wald, 2018). The agent-based model has been widely used in the social sciences, for innovation and new product development. The model is based on sociology, and management sciences, in which the researchers engaged heterogeneous agents for information and knowledge transformation through a network connection (Daniel & Daniel, 2018). The model was specially implemented in the manufacturing industry in which different projects required resources from heterogeneous agents (Garcia, 2005). So the interaction to partner effect the performance of innovation and knowledge transfer. Innovation success also depends on appropriate knowledge with the external partner which leads the performance of the product, because new product depends on knowledge and external partner (Knudsen, 2007). The relationship between region and institutions has developed labor and production networks for economic development (Zareei, 2018).

Recently organizations usually focused on informal personal ties than formal. For this purpose, personal networks play an important role during the knowledge transformation. The global personal knowledge network has been used in different project ecologies in the private and public sectors. Similarly, personal networks are keys to overcoming the shortcoming of formal organizations (Sirisomboonsuk, 2018). The project team, community, and personal ties are project ecology in any project-based organizations, and the main source of learning for business units (Papke-Shields & Boyer-Wright, 2017). Through social network people interconnected with friends and family members in offline lives (Subrahmanyam et al., 2008), and these concepts widely used for groups working and for more communication. This social connected relationship used by troops, churches, and universities as well for the advertisement of products or services (Weaver & Morrison, 2008). Social networking is a useful technology for learning purposes and supplementary tools to promote higher education at the university level students (Hung & Yuen, 2010). Social networking related to trust, social support, and community development (Hampton & Goulet, 2011). As per the above literature, social media had a tremendous role in the decision-making process. The government can run different projects for social welfare for which the private sector contribution is necessary to get fruitful results (Sabahi & Parast, 2020).
Project management widely used and well-accepted knowledge and utilize in diverse areas to improve the services and creation of new products (Mac Donald, Rezania & Baker, 2020). The project management success measured against the performance of cost, time, and quality. But a verity of projects undertaken by different organizations in which four “4” factors were identified for the success of the project i.e. communication throughout the project, define objectives and scope, breaking project, and project working plan (Turner, 1993). Moreover, project success also depends on project type, organization, and project manager traits (Papachristos, 2020). As described that the project success was measured against the project management practice (Martens & Carvalho, 2017). Successful project management directly related to project management ability. When the project manager understands organization politics then they become able to deal with the project more efficiently and effectively (Pinto, 2000). During the construction projects monitoring, coordination, design training, and institutional environment are keys to attaining project objectives (Radujković & Sjekavica, 2017). Similarly, in the construction projects cost, time, and quality have been used to assess the effective completion of project work. This traditional triangle is still most relevant but other such as customer involvement, acceptance also contribute toward project success (Ribeiro, Pedro, Paiva, Anabela, Varajao & Joao, 2013).

Information and communication technologies widely used in project management. As it was explored that clear communication with the team, organizational support i.e. multimedia, technical support, corporate support, infrastructure, policies, rewards, incentive system are factors of success for any project (Aragonés-Beltrán et al., 2017). Stakeholder management is essential for the proper managing of project groups. It increases the project weight to get the desired level of output (Li, Yongkui, Yujie, & Yi, 2011). The traditional success criteria of project success are the basic project triangle. But in information projects, managers’ competency, team commitment, and external stability are also important for project success. Similarly, at completion and implementation stage in the project life cycle depends upon external stability and organizational support (Thi & Swierczek, 2010). During web-based construction projects, the success related to six dimensions i.e. strategy, schedule, cost, quality, risk, and communication (Nitithamyong & Skibniewski, 2006). The software managers managed many projects more successfully. Project is successful when it is completed as per defined constraints i.e. time, cost, scope, and quality. User involvement, excellent planning and estimation, good leadership, and team member technical skill are major factors for project success (Musawir, 2017).

The above discussion we summarize that successful project management in high education institutions different from the corporate sector, as corporate firms mainly focus on higher productivity in the form of goods and services and on clients’ customers. On the other side, universities usually focus on productivity in the form of knowledge generation, knowledge spread, and focus on their students instead of clients. Similarly, the success of every project either of higher education institutions depends upon proper planning with objectives, timely execution, and quality accomplishment. Networks of project managers with different actors (i.e. leadership style, communication channels, technology, organizational support, team commitment, project management practices) play a vital role in the success of the project.
Methodology

Sampling and Procedures

The main focus of this research to examine the role of the project manager network in the success of project management. Data for this study has been collected from the Higher Education Commission of Pakistan, Islamabad. The structured questionnaires were distributed through email and personally to the managerial level employees of the Higher Education Commission of Pakistan, Islamabad. After collecting data, it was analyzed by the tables, graphs, Chi-Square test and by correlation coefficient test. The structured questionnaire was used, so the internal consistency and reliability of the questionnaire were measured by Cronbach’s Alpha and validity by factor analysis test.

Pilot Testing

The primary data has been collected through a structured questionnaire that was pre-tested on two project managers who were not part of this study; then that data has been used pilot testing for the validity and reliability of the questionnaire. The structure closed-ended questionnaire was used for data collection. The cause was to choose this instrument for the research is that the success of the project depends on the project manager network. Therefore, the closed-ended questionnaire was more helpful to address the targeted population other method was not beneficiary for the present research. The questionnaire was designed as per the research objective and questions. Furthermore, to improve the reliability of the statistical software (SPSS) has been used to analyze the data. Table 1 represents the results of the factor analysis.

Table 1

<table>
<thead>
<tr>
<th>Tools</th>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>The normal communication channel and mean i.e manual/handbook, memo/</td>
<td></td>
<td>.654</td>
<td>.609</td>
<td>.475</td>
<td>.489</td>
<td>.430</td>
<td>-.411</td>
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<tr>
<td>circular, notice board, email is beneficial for project success.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The external, as well as internal communication systems, are essential</td>
<td></td>
<td>.607</td>
<td>.546</td>
<td>.454</td>
<td>.483</td>
<td>.530</td>
<td>.461</td>
</tr>
<tr>
<td>for project success.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The mobile, laptop, internet, and verbal, non-verbal, written are</td>
<td></td>
<td>.675</td>
<td>.610</td>
<td>-.414</td>
<td>.492</td>
<td>.427</td>
<td>.535</td>
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<tr>
<td>useful means and modes of communication within the project for</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>project success.</td>
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</tr>
<tr>
<td>The mobile, laptop, internet, and verbal, non-verbal, written are</td>
<td></td>
<td>.572</td>
<td>.588</td>
<td>.573</td>
<td>.474</td>
<td>.452</td>
<td>.550</td>
</tr>
<tr>
<td>useful means and modes of communication outside the project for</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>project success.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The informal communication is beneficial for project success.</td>
<td></td>
<td>.634</td>
<td>.761</td>
<td>.655</td>
<td>.525</td>
<td>.501</td>
<td>-.429</td>
</tr>
<tr>
<td>The meeting, memos, letters and telephone, voicemail, email, internet</td>
<td></td>
<td>.546</td>
<td>.659</td>
<td>.531</td>
<td>.561</td>
<td>.633</td>
<td>-.476</td>
</tr>
<tr>
<td>chat are formal and informal communication channels for project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>success.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The social networks are effective in project success.</td>
<td></td>
<td>.490</td>
<td>.583</td>
<td>.501</td>
<td>.646</td>
<td>.541</td>
<td>.565</td>
</tr>
</tbody>
</table>

(Table Continued...)
The social network likes Facebook, Orkut, LinkedIn, Twitter is commonly used in the project to accomplish project success.

You are frequently using social networks in a project for achieving project success.

The regular use of social networks during the project is beneficial for project success.

Social networks provide plentiful opportunities to complete the project effectively.

Formal and informal communication networks are useful to manage project risks to achieve project success.

The nature (Permanent or temporary) of the communication network is essential in project success.

Formal and informal networks help increase project performance to achieve project success.

By using different social networks, the success rate of the project will be increased.

Different communication networks are the main source of information during the project for project success.

Social networks play an important role in project completion.

The communication system is a source of information for project success.

The social networks are very helpful during the project for problem-solving.

The formal and informal communication during the project is creating an association between team members and project managers for the successful completion of the project.

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

Data Collection

In this research data was collected through a structured questionnaire that was circulated in the Higher Education Commission of Pakistan, Islamabad. In this study estimated population was 50 project managers working in the Higher Education Commission of Pakistan, Islamabad, Pakistan. The random sampling technique was used for data collection with a 5 % confidence interval for the 2nd and 3rd objective. In this study, 32 (64%) respondent was selected out of 50 (100%).

Instrument and Analysis Method

The questionnaire of this study was modified and checked validity by pilot testing. The source of the questionnaire is given in the reference section of this study. There are 20 items questionnaire from which half (Q5, Q7, Q8, Q9, Q10, Q11, Q13, Q15, Q17, Q19) for the independent variable
and remaining (Q1, Q2, Q3, Q4, Q6, Q12, Q14, Q16, Q18, Q20) for the dependent variable. The questionnaire was circulated through e-mail and personally in the Higher Education Commission of Pakistan, Islamabad. The response rate for data and information was very fruitful. The collected data was analyzed through frequency analyses and presented by Pie chart. For the second, third objective Chi-Square and correlation tests were conducted. These methods were more helpful, easy due to the nature of data for interpretation and understanding for the variables of this research i.e. project manager network (independent variable) and project management success (dependent variable).

Results and Discussion

The Higher Education Commission of Pakistan is continuously struggling to establish a knowledge-based education system in Pakistan. So, for the uplift of higher education in Pakistan, the Higher Education Commission runs different projects, hence each project having specific output under the supervision of professional project manager. To get targeted output each project manager having some sort of network; this is regularly used by the project manager for the success of the project. To address the research objective of the present study, the structured questionnaire was circulated. The questionnaire was distributed among project managers in the following departments of the Higher Education Commission of Pakistan.

a. Academics  
b. Finance & Budget  
c. Human Resource Development  
d. Human Resource Management  
e. Learning Innovation  
f. Monitoring & Evaluation  
g. Planning & Development  
h. Research & Development

SPSS software has been used to analyze data. So, by frequency analysis and Pie chart presentation below result was generated. Similarly, Chi-Square and correlation tests were also conducted.

*Testing Reliability*

The value of Cronbach's Alpha was 0.748, lies between 0 and 1, which show that the data was consistent because the value is greater than 0.6 is much closed to 1 (Table 2).
Table 2  
Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.748</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 3, the summary indicates that there was no missing value i.e. total respondents were 32 in numbers.

Table 3  
Case Processing Summary

<table>
<thead>
<tr>
<th>Criteria</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Cases</td>
<td>32</td>
<td>100.0</td>
</tr>
<tr>
<td>Excluded Cases</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

List wise deletion based on all variables in the procedure.

Analysis

The analysis phase enables us to unify, confirm, and understand data which is very useful for the conclusion. During this phase, the size of data has been reduced and useful information deducted for discussion. The main objective of HEC is to promote the culture of education, research, and development in the degree awarding Institutions. For this purpose, the Higher Education Commission Carries out different types of projects to upgrade the standard of education in Pakistan. According to PMKOK, project success is measured against defined constraints. Because the project success is interim of these constraints i.e. cost, time, scope, and quality (zero defects). All projects having temporary nature, and one-time activity. The project manager regularly engaged through their network for the successful completion of projects. The purpose of this research is to study the role of the project manager network in the success of project management. Below-given Table 4 illustrates the summary of all respondents, which has been taken from the above tables.

Table 4  
Summary from Frequency Tables

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
</tbody>
</table>

(Table Continued...)
The above result is a summary of frequency tables and used to address the research question to acquire the research objective. The results shows favorable tendency. A total of 576 responses out of 640 favored my claim. That is only 64 responses are not favorable. In other words, 90% of the results are favorable. The successful completion, problem-solving, source of information, increase rate of success, project performance, managing project risks, efficiency, and effectiveness are the basic criteria for responses to know that the results are favorable or otherwise and the mentioned criteria were reached through the project manager network.

Q1. What type of Network used by Project Manager in the success of Project Management?

Every project having a project manager, the project manager is responsible for all kinds of activities throughout project life i.e. from planning to the implementation phase. Each project having defined constraints i.e. cost, time, scope, and quality. Therefore, project success measured against these constraints. For the success of the project, the project manager defines, plan, and implement different activities e.g. time estimation, cost estimation, defining the scope, and quality management. So, from the above table, it was clearly illustrated that the project manager using different types often work during the project. From frequency analysis and through pie chart representation, researchers interpret that social network like Facebook, Orkut, LinkedIn, Twitter is helpful for project success. Similarly, the project manager also using formal (meeting, memo, letter, manual/handbook, circular) and informal (telephone, voice mail, email, notice board, internet chat) channels during the project.
For this purpose, the project manager uses various means (mobile, laptop, internet) and mode (verbal, nonverbal, written) communication to get/share necessary information.

Q2. What is the impact of Project Manager Network on the success of Project Management?

After conducting the Chi-square test it was observed that the value of Chi-Square is .115 and the value of “P” is .944, which proved that P > 0.05. That was a clear indicator to accept our hypothesis. It is enough to understand that the project manager network plays a vital role in the success of the project. According to various authors, project success is measured in terms of project time, cost, scope, and quality, hence the project manager network is useful for project success. Table 5 depicts the results of the Chi-square test.

Table 5
Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.115a</td>
<td>2</td>
<td>.944</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.116</td>
<td>2</td>
<td>.944</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.096</td>
<td>1</td>
<td>.757</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The project managers adopt various procedures and techniques of project management to run the project varies from project to project. For this purpose, their network plays an important role in receiving necessary information required for successful managing of the project. The network enables the project manager to acquire support and information from stakeholders regarding the project. This is essential for project success. This network makes the project manager to successfully engage all project stakeholders. The project manager performs different tasks and activities during the project life. These tasks and activities based on information shared from team members and form outside stakeholders. So, by proper engagement of internal as well as external stakeholders the project manager can get project constraints. It is well-defined from the above table that the project manager network is important and supportive to meet the defined constraints.

Q3. Is there is any link between Project Manager Network and the success of Project Management?

Table 6 depicts the results of the Pearson’s correlation coefficient test.
Table 6
Correlations

<table>
<thead>
<tr>
<th></th>
<th>PMN</th>
<th>PMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMN</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
</tr>
<tr>
<td>PMS</td>
<td>Pearson Correlation</td>
<td>.777*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.351</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>32</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed). Where, PMN= Project Manager Network, PMS=Project Management Success

Yes. The project manager network is beneficial for achieving project success. On the bases of hypotheses testing it could endorse that the project manager network having the role to make the project successful. After performing Pearson’s correlation coefficient test, the hypothesis was accepted. The value of correlation was between +1 and -1, which was .777. The value of “r” is positive and very much close to +1, this showed positive correction between two variables i.e. is PMN (project manager network) and PMS (project management success). In other words, the value of “p” was .351 > 0.05, so there is an association between project manager network and project management success.

Conclusion

The major objective of this research was to investigate the role of the project manager network in the success of project management. A project manager is a key person in all projects that continuously managing the project during project life from the planning of the project to successful accomplishment. For this purpose, project managers usually use their networks to achieve project success. Moreover, project success is actually in terms of project constraint i.e. time, cost, scope, and quality defined by project management. The project manager during the life cycle of the project plan, schedule, motivate and control the defined activities of the project through different actors. For this purpose, they developed their contact and organize the project team and progressively assist them to meet the challenges of the project. Additionally, project managers used their links or network to engage required stakeholders, and these networks enabled the project managers for the command, coordination, and integration between the team members. Similarly, these networks enabled project managers to collect necessary technical knowledge to engage their stakeholders (i.e. vendors, suppliers, contractors, and sub-contractors) for the successful completion of the project. The project manager networks become useful for the achievement of the required performance of the project within estimated time and cost. Throughout the project life, project managers frequently passing through the decision-making process, these decisions become more effective and efficient due to the support of the project manager network. The higher education commission of Pakistan also appointed professional project managers who strictly follow the instruction of PMBOK. The useful and important achievement is to find different types of project manager network and its association with project management success.
Recommendation

The findings of this study suggested that networks of project managers play a vital role in the success of projects. There is the need that in public sector organizations especially in higher education institutions, management of the organization organize project-based targets and project managers use different actors of networks (i.e. technological, social, economic, financial, and time-oriented) so that they can understand and utilize them for the success of the project. The findings of this study also recommend that project managers of the education sector adopt techniques of project management form the corporate sector so that they can accomplish the objectives of projects. This study also guides the planners and practitioners of the project management domain that the use of social and technological networks provides assistance to overcome the error and hindrances for the success of the project timely.

Reference


EXAMINING SHRM HORIZONTAL FIT RELATIONSHIP WITH ORGANIZATIONAL PERFORMANCE: BY ELIMINATING METHODOLOGICAL CONCERNS

Noman Soomro¹, Aamir Firoz Shamsi², Muhammad Zahid³ and Abdul Rasheed⁴

Abstract

This paper aims to examine the relationship of SHRM horizontal fit with the organizational performance outcomes in the context of Pakistan. The study was designed, by observing the significance of SHRM, its unexplored nature in the organizations operating under the finance and insurance sector of Pakistan to leverage the contributions of SHRM horizontal fit towards their organizational performance. The study design, also keenly focused on eliminating the prevailing methodological concerns to examine the relationship. Collected data were assessed through AMOS to test the proposed hypotheses. The result of the hypotheses testing endorsed the positive contributions of SHRM horizontal fit towards the organizational performance of finance and insurance sector organizations of Pakistan. The study concluded with key managerial implications, contributions of the study and directions for future research.

Keywords: SHRM Horizontal Fit, Organizational Performance, Methodological Concerns, Study Design.

JEL Classification: Z000

Introduction

The strategic partnership of human resource management (HRM) has comprehensively replaced its traditional concept of record-keeping with a modern concept of strategic human resource management (SHRM), which has gained significant attention from the researchers on account of its contribution, towards the organizational performance. Since the inception of SHRM in the 1990’s its

¹Assistant Professor, Department of Management Sciences, SZABIST, Karachi, Pakistan. Email: soomro_noman@yahoo.com
²Dean and Professor, Department of Management Sciences, SZABIST, Karachi, Pakistan. Email:aamirfs.personal@gmail.com
³Assistant Professor, Department of Management Sciences City, University of Science and IT Peshawar, Pakistan. Email: zahid@cusit.edu.pk
⁴Assistant Professor, School of Business & Management Sciences, Minhaj University, Lahore, Pakistan. Email: Rasheed_online@hotmail.com
significance and positive contribution towards the organizational performance has been recognized by (Darwish, Singh, & Mohamed, 2013; Vekeman, Devos, & Valcke, 2016; Zehir, Gurrol, Karaboga, & Kole, 2016). SHRM as a field, broadly defined by Armstrong (2008) as an approach of achieving organizational performance through the integrated human resource management policies and practices. Organizational performance results through the effective integration of human resource management policies and practices in the SHRM literature remained achievable through a theoretical approach of SHRM horizontal fit (Wright & McMahan, 1992).

SHRM horizontal fit, as an approach is based on creating alignment, consistency, coherence, and integration of human resource management policies and practices within and outside the human resource management hierarchy to achieve the organizational performance (Chang & Huang, 2005; Ericksen & Dyer, 2005; Wright & McMahan, 1992). It is observed, that little is also known about the perspective and contribution of SHRM horizontal fit towards the organizational performance. Whereas, the SHRM literature through the number of studies provided the pieces of evidence of SHRM domination in the western context (Green, Wu, Whitten, & Medlin, 2006; Oyelere, 2014). As a result, SHRM outside the western context including in the context of Pakistan remained much under-researched. This unexplored nature of SHRM in the context of Pakistan provides an opportunity for the researchers to examine how SHRM horizontal fit is related to and contributes towards the organizational performance.

Presently within Pakistan’s finance and insurance sector (F&I), organizations are facing concerns about organizational performance (Ahmad & Othman, 2017). Globalization, rapid competition, and regulatory compliance strategically shifted organizations to enhance and increase their organizational performance (Ahmad & Othman, 2017; Oyelere, 2014). The privatization of most of the F&I organizations had changed the sector and brought significant results (Ali & Haq, 2017; Fatima & Yousaf, 2016). Thus the availability of SHRM policies and practices is very common in this sector in comparison with other sectors of Pakistan. As the core purpose of SHRM horizontal fit is to contribute in the organizational performance by creating an alignment within and outside the human resource management hierarchy, accordingly, the researchers need to examine how SHRM horizontal fit can leverage and contribute towards the organizational performance of the Pakistan F&I organizations.

Since SHRM inception, SHRM remained a scattered field, by lacking the concrete theoretical underpinnings and requiring further attention of researchers (Azmi, 2011). A significant development in the field of SHRM, which requires the attention of the researcher, is to design the studies by addressing the methodological concerns related to the elimination of the common method bias, ensuring the survey effectiveness and non-response bias.

Thus, based on the aforesaid gaps, this study is designed with the core purpose of examining the link of SHRM horizontal fit with organizational performance in the organizations operating under
the F and I of Pakistan by addressing the methodological concerns related to the elimination of the common method bias, non-response bias and ensuring the survey effectiveness.

**Literature Review**

**SHRM Horizontal Fit and Organizational Performance**

SHRM horizontal fit defined by Wright and McMahan (1992) as a linkage of human resource management policies and practices at within and outside the human resource management hierarchy. The human resource management policies and practices work in bundles and their alignment’s core purpose is to contribute towards the organizational performance (Delery, 1998). Human resource management policies and practices within the human resource management hierarchy derive the employee's behaviour, which may help the organization to achieve its results (Bellairs, Halbeslebe, & Leon, 2014). Whereas, the human resource management policies and practices outside the human resource hierarchy achieve the business objectives of the organization and generate organizational results (Verburg, Hartog, & Koopman, 2007).

Organizational performance, in the field of SHRM, remained an imprecise and loose construct; most of the researchers reviewed a great deal of literature on the organizational performance, but its exact definition and measurement are relatively unknown (Darwish et al., 2013). However, since the inception of SHRM relationship with organizational performance under the theoretical underpinnings of Dyer and Reeves (1995) and its successful testing, contributions and significance in the studies of (Allen, 2006; Herdman, 2008). Most of the researchers now generally agree that organizational performance in the SHRM literature consists of HR, operational and financial outcomes, and organizational performance can be defined as the product of all these three outcomes.

**Hypotheses Development**

Over time, researchers concluded that the contribution of SHRM with the organizational performance is positive and their relationship is indirect. In the SHRM horizontal fit perspective, the relationship between the independent and dependent variables also remained indirect which implied more interactions (Azmi, 2011; Chang & Huang, 2005). This indirect mode of relationship authorized the theoretical underpinnings of Dyer and Reeves (1995) that SHRM has an indirect relationship with the organizational performance, and it first impact is on the HR performance outcomes, which consequently generates an impact on the operational performance outcomes and finally on the financial performance outcomes. The stepwise impact of SHRM with the organizational performance advocates the implementation of the mediators (Darwish et al., 2013).

According to Dyer and Reeves (1995), SHRM's first direct impact is on the HR performance outcomes. The measures at this level include employees' HR performance outcomes Liu (2016),
comprised of job satisfaction, organizational commitment, self-efficacy, and organizational citizenship behaviour, etc. (Herdman, 2008). Effective alignment of HR policies and practices within and outside the HRM hierarchy encourages employees to generate effective HR performance outcomes (Herdman, 2008; Liu, 2016). Thus based on this, the first hypothesis of the study is:

**H1**: SHRM horizontal fit is directly related to HR performance outcomes.

In line with the theoretical underpinnings of Dyer and Reeves (1995), SHRM next level of impact is on the operational performance outcomes. The measures at this level include product and service quality, satisfaction of customers and employees, etc. (Allen, 2006). Efficient HR performance outcomes, helps organizations to achieve effective operational performance outcomes by mediating the relationship. Thus based on this, the second hypothesis of the study is:

**H2**: SHRM horizontal fit relationship with operational performance outcomes is mediated by HR performance outcomes.

In line with the theoretical underpinnings of Dyer and Reeves (1995), SHRM next level of impact is on the operational performance outcomes. The measures at this level include product and service quality, satisfaction of customers and employees, etc. (Allen, 2006). Efficient HR performance outcomes, helps organizations to achieve effective operational performance outcomes by mediating the relationship. Thus based on this, the third hypothesis of the study is:

**H3**: SHRM horizontal fit relationship with financial performance outcomes is mediated by HR and operational performance outcomes.

**Methodological Concerns**

In the field of SHRM, the prevailing methodological concerns are related to the elimination of the common method bias, ensuring the survey effectiveness, and non-response bias.

**Elimination of the Common Method Bias**

The elimination of the common method bias, in the field of SHRM, is a prevailing methodological concern. The common method bias is normally generated in the data collection process, when an independent and dependent variable data is collected from the same respondent, which in result distorts the sources of data (Podsakoff & Organ, 1986). To eliminate the bias from the study, prominent researchers like Allen (2006), Podsakoff, Mackenzie, Lee, and Podsakoff(2003), and Tehseen, Ramayah, and Sajilan (2017) endorsed to methodologically develop the studies, in which independent and dependent variable data should be collected from different respondents.

**Ensuring Survey Effectiveness**

The survey effectiveness methodologically ensured through the gross response rate and items completion rate (Green et al., 2006). The gross response rate is identified by ensuring the usable
survey responses in a proportion of distributed survey questionnaires, whilst the item completion rate is identified through the answers of the survey in relationship with the applicable responses (Klassen & Jacobs, 2001).

Elimination of the Non-Response Bias

The elimination of the non-response bias, in the field of SHRM, is also a prevailing methodological concern. The non-response bias generates a potential bias in the data, which may lead to biased research results (Green et al., 2006). The non-response bias in the data can be eliminated by comparing the early and late respondents. For identifying the late respondents, Armstrong and Overton (1977) guided that those respondents who respond through follow-ups or demanding to send the survey, again and again, should be treated as non-respondents. Once, non-respondents are identified, early and late respondents should be compared statistically for methodologically assessing and eliminating the non-response bias from the data (Lambert & Harrington, 1990).

Research Methodology

Research Design

The study hypotheses were derived from the existing literature to identify the proposed relationship, thus the study comprehensively adopted a causal research strategy with positivism philosophical positioning. The inquiry of the research remained with the deductive method by focusing on the primary data collection through the questionnaire technique.

Research Population

For conducting the study, the primary research population identified as the organizations operating under the Pakistan F&I. An overview of Pakistan's F and I revealed the following composition of the sector.

Table 1
Composition of Pakistan F&I

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sub Sector</th>
<th>Number of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State Bank of Pakistan</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Domestic and International Banks</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Life and General Insurance Companies</td>
<td>47</td>
</tr>
<tr>
<td>4</td>
<td>Development Financial Institutions (DFIs)</td>
<td>8</td>
</tr>
</tbody>
</table>

(Table Continued...)
Target Population

The target population was ascertained based on the availability of SHRM horizontal fit and organizational performance data. A stepwise process adopted to identify the specified organizations, having well-established HRM departments and the availability of SHRM horizontal fit and organizational performance data.

Based on the non-availability of the organizational performance data, the State bank of Pakistan was dropped from the study. Similarly, money changers and stock exchange brokers based on the lack of well-established HR departments were dropped from the study. The final target population of the study is provided in table 2.

Table 2
Target Population of Pakistan F&I

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sub Sector</th>
<th>Number of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic and International Banks</td>
<td>46</td>
</tr>
<tr>
<td>2</td>
<td>Life and General Insurance Companies</td>
<td>47</td>
</tr>
<tr>
<td>3</td>
<td>Development Financial Institutions (DFIs)</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Modaraba and Leasing Companies</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>153</td>
</tr>
</tbody>
</table>

Measurement of Variables

The measurement of SHRM horizontal fit was based on the integration and alignment of HRM policies and practices at within the HRM hierarchy and outside the HRM hierarchy. The scale was adopted from the study of (Soomro & Shamsi, 2018). The measurement of organizational performance was based on HR, operational and financial performance outcomes and was in line with the studies of (Azmi, 2011; Gooderham, Parry, & Ringdal, 2008; Green et al., 2006; Gurbuz & Mert, 2011). HR performance outcome scale measured job satisfaction, teamwork, self-efficacy, organizational commitment, and organizational citizenship behaviour. The scale was adopted from the study of (Herdman, 2008). The operational performance outcome scale measured the operational performance based on the measures of the full potential of the organization and the satisfaction
of customers and employees. The scale was adopted from the study of (Allen, 2006). Financial performance outcome measured the performance of the organization based on the market share, sales growth, and profitability. The scale was adopted from the study of (Allen, 2006). All the scales, subjectively assessed by the review of the experts to ensure their content validity and simultaneously tested in the pilot phase in which they yielded the Cronbach’s reliability of .83 for SHRM horizontal fit, .88 for HR performance outcome, .88 for operational performance outcome and .89 for financial performance outcome.

Elimination of the Common Method Bias

The concern of the common method bias was eliminated from the study by methodologically designing the study data collection from different respondents. According to Podsakoff and Organ (1986), common method bias distorts the sources of data and creates reliability concerns in the data. To effectively eliminate the common method bias, it is essential to collect the independent and dependent variable data from different sources, hence in line with the literature SHRM horizontal fit data was collected from Senior HR Professional and organizational performance data were collected from the employees.

Sampling Technique

For the collection of the data, a stratified probability sampling technique was decided. The decision for the adoption of a stratified sampling technique was based on the nature of the sector, in which the target population is divided into different subsets, hence accordingly sample is selected. Amongst 153 organizations, 110 organizations were estimated for sample on a proportionate basis, the share of each sub-sector based on stratified sampling is provided in table 3.

Table 3
Proportionate Stratified Share of Each Sub-Sector

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sub Sector</th>
<th>Number of Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Domestic and International Banks</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>Life and General Insurance Companies</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Development Financial Institutions (DFIs)</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Modaraba and Leasing Companies</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>110</td>
</tr>
</tbody>
</table>
Primary Data Collection

The primary data was collected from the respondents through questionnaires. Around 110 questionnaires for SHRM horizontal fit and 4440 for organizational performance outcomes were distributed, which have finally resulted in the collection of the useable responses of 52 for SHRM horizontal fit and 1,492 useable responses for the organizational performance. During the final data collection, the Cronbach's reliability was .87 for SHRM horizontal fit, .92 for HR performance outcome, .83 for operational performance outcome and .87 for financial performance outcome.

In the next phase, the primary data was also assessed for missing data, outliers, and multivariate assumptions. Normality, homoscedasticity and linearity multivariate assumptions were fulfilled before applying confirmatory factor analysis (CFA) on scales. The CFA results of the scales are provided in the following table 4.

Table 4
CFA Indices Results for Scale

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Ideal Values</th>
<th>SHRM Horizontal Fit</th>
<th>Organizational Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>&gt; .90</td>
<td>.90</td>
<td>HR Performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Non-Normed Fit Index (NNFI) or Tucker</td>
<td>&gt; .90</td>
<td>1</td>
<td>Operational Performance</td>
</tr>
<tr>
<td>Lewis Co-efficient (TLI)</td>
<td></td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>&gt; .90</td>
<td>1</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation</td>
<td>&gt;.05&lt;.08</td>
<td>.00</td>
<td>Financial Performance</td>
</tr>
<tr>
<td>(RMSEA)</td>
<td></td>
<td>.045</td>
<td>.069</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.48</td>
<td></td>
</tr>
</tbody>
</table>

The CFA fit indices values met the threshold values as recommended by (Ahire, Golhar, & Waller, 1996; Green et al., 2006; Hair, Black, Babin, & Anderson, 2010).

Ensuring Survey Effectiveness

The gross response rate and item completion rate was confirmed for identifying the survey effectiveness. The gross response rate for SHRM horizontal fit stood at 47% and organizational performance outcomes stood at 34%. The survey gross response rate was compared with the gross response rate of previous studies provided in table 5. On average the gross response rate in these studies stood at 26.8%, which in result represented good survey effectiveness of the study. Whereas the item completion stood at 98% for SHRM horizontal fit and 97% for organizational performance outcomes, hence this also represented survey effectiveness.
Table 5
Survey Response Rates in Other Studies

<table>
<thead>
<tr>
<th>S.No</th>
<th>Studies</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chang and Huang (2005)</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>Collins and Clark (2003)</td>
<td>35%</td>
</tr>
<tr>
<td>3</td>
<td>Fey et al. (2000)</td>
<td>25%</td>
</tr>
<tr>
<td>4</td>
<td>Green et al. (2006)</td>
<td>15.4%</td>
</tr>
<tr>
<td>5</td>
<td>Zhu et al. (2013)</td>
<td>33.9%</td>
</tr>
</tbody>
</table>

Assessment of the Non-Response Bias

In line with Armstrong and Overton (1977) approach, the respondents were categorized as 60% and 68% early respondents and 40% and 32% late respondents for SHRM horizontal fit and organizational performance. By using, the independent sample t-test a comparison for both the groups was conducted which provided no statistical differences in both the groups. Based on this, it was concluded that non-response bias has not negatively influenced the data.

Data Analysis and Results

Descriptive Data

The descriptive data based on variables means, standard deviations and correlations are provided in table 6.

Table 6
Means, Standard Deviations and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SHRM Horizontal Fit</td>
<td>3.8</td>
<td>.49</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. HR Performance</td>
<td>3.9</td>
<td>.26</td>
<td>.14</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Operational Performance</td>
<td>3.7</td>
<td>.35</td>
<td>.06</td>
<td>.85**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Financial Performance</td>
<td>3.9</td>
<td>.32</td>
<td>-.022</td>
<td>.76**</td>
<td>.89**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Correlation is significant at *p < .05
Correlation is significant at **p < .01

Model Analysis

The model fit was analyzed by using AMOS and fulfilling the fit indices values as recommended by (Ahire et al., 1996; Green et al., 2006; Hair et al., 2010). These model fit indices values and relationship diagrams are provided in table 7 and figure 1.
Table 7
**SHRM Horizontal Fit and Organizational Performance Model Fit Results**

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Ideal Value</th>
<th>Model Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodness of Fit Index</td>
<td>&gt; .90</td>
<td>.97</td>
</tr>
<tr>
<td>Normed Fit Index</td>
<td>&gt; .90</td>
<td>.98</td>
</tr>
<tr>
<td>Non-Normed Fit Index</td>
<td>&gt; .90</td>
<td>1</td>
</tr>
<tr>
<td>Comparative Fit Index</td>
<td>&gt; .90</td>
<td>1</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation</td>
<td>&gt; .05 &lt; .08</td>
<td>.00</td>
</tr>
</tbody>
</table>

**Figure 1**: AMOS Output of SHRM Horizontal Fit Relationship with Organizational Performance

The fit indices result reflected the robustness of the SHRM horizontal fit relationship with the organizational performance by meeting the threshold values criteria and indicated the suitability of the hypotheses testing.

**Hypotheses Testing**

Hypothesis 1 stated that SHRM horizontal fit is directly related to HR performance outcomes.

As indicated in Table 8, the direct structural path result of SHRM horizontal fit with HR performance outcomes is not significant, having *p*-value = .298, this result indicated that SHRM horizontal fit is not directly related with HR performance outcomes. Hence, hypothesis 1 is not supported.
Hypothesis 2 stated that SHRM horizontal fit relationship with operational performance outcomes is mediated by HR performance outcomes.

As indicated in Table 9, the indirect path result of SHRM horizontal fit with operational performance outcomes through the mediation of HR performance outcomes is significant, having \( p < .00 \). The result indicated that SHRM horizontal fit relationship with operational performance outcomes is mediated by HR performance outcomes. Hence, hypothesis 2 is supported.

Hypothesis 3 stated that SHRM horizontal fit relationship with financial performance outcomes is mediated by HR performance outcomes and operational performance outcomes.

As indicated in Table 10, the indirect path result of SHRM horizontal fit with financial performance outcomes through the mediation of HR performance outcomes and operational performance outcomes is significant, having \( p < .00 \). This result indicated that SHRM horizontal fit relationship with financial performance outcomes is mediated by HR performance outcomes and operational performance outcomes. Hence, hypothesis 3 is supported.
Discussion

The study result of hypotheses testing revealed that SHRM horizontal fit provided an effective prediction of organizational performance outcomes. The study's first hypothesis focused on identifying the relationship of SHRM horizontal fit with the HR performance outcomes. Its hypothesis result did not provide sufficient evidence to conclude that SHRM horizontal fit is directly related to HR performance outcomes. The hypothesis result did not remain consistent and in line with the several study results of (Collings, Demirbag, Mellahi, & Tatoglu, 2010; Diamantidis & Chatzoglou, 2011; Green et al., 2006). The possible variation in results remained associated with the usage of different SHRM and HRM performance outcomes along with the context of the study. The second hypothesis focused on identifying the SHRM horizontal fit relationship with operational performance outcomes through the mediation of HR performance outcomes. Its hypothesis result provided sufficient evidence to conclude that SHRM horizontal fit is positively related to operational performance outcomes through the mediation of HR performance outcomes. The hypothesis result remained consistent and in line with several study results of (Alaraqi, 2017; Kuipers & Giurge, 2017; Tzafrir, 2006). The third hypothesis focused on identifying the SHRM horizontal fit relationship with financial performance outcomes through the mediation of HR and operational performance outcomes. Its hypothesis result also provided sufficient evidence to conclude that SHRM horizontal fit is positively related to financial performance outcomes through the mediation of HR and operational performance outcomes. The hypothesis result remained consistent and in line with the study results of (Collins & Clark, 2003; Sherafati & Mohammadi, 2014; Zehir et al., 2016).

Contributions of the Study

The study answered the call of the literature by conducting the study on SHRM horizontal fit as opined by (Chang & Huang, 2005; Gooderham et al., 2008). Similarly, the study focused on the Pakistani context to identify SHRM horizontal fit relationship with organizational performance by specifically addressing the concern of Fey et al. (2000), Green et al. (2006), and Oyelere (2014) regarding the domination of SHRM literature in the western context. The study data was collected from multiple respondents to exhaust the reliability concerns and eliminations of common method bias as opined by (Tehseen et al., 2017).

Directions for Future Research and Managerial Implications

In the future, it is recommended to conduct the study on other sectors to identify the SHRM horizontal fit relationship with organizational performance. Researchers may try to collect data from different sources along with utilizing the longitudinal data collection strategy. The study vital managerial implications are the association of organizational performance data based on HR, operational and financial performance outcomes. In organizations, a mechanism should be developed for admirably linking these three forms of organizational performance data altogether.
References


Diamantidis, A. D., & Chatzoglou, P. D. (2011). Human resource involvement, job-related factors, and


THE ROLE OF “INDIVIDUAL LEVEL COLLECTIVIST VALUES” (ILCV) IN MEASURING IMPACT ON BRAND LOYALTY

Syeda Quratulain Kazmi¹, Mustaghis Ur Rahman² and Tariq Jalees³

Abstract

This research is conducted to check the applicability of theory of individual level collectivist values (ILCV) in developing brand loyalty. Hence, association between brand loyalty with its determinants and mediating effect of individual level collectivist values have been checked in this study. This research is explanatory in nature based on primary and secondary data collected through cross sectional survey. A sample size of 384 women customers of five Pakistani renowned brands have been carved out from the regular customer population of about 500,000. Margin of error is 5%. Though researched works available on brand loyalty with different dimensions, few studies have been found on ILCVT internationally and not spotted any research in Pakistani context. This study can be taken as first of its kind in Pakistan. This research finds women shopping behavior in Pakistan where they belong to different Pakistani sub-culture. Study found a strong relationship between brand loyalty and brand trust even when individualistic values at group level play its role as a mediator. This study has several implications for managers and policy makers. Hence brand managers need to undertake sub-cultural themes while offering new volumes in order to make more and more customers brand loyal.

Keywords: ILCV, Brand Loyalty, Cultural Dimensions, Brand Trust, Perceived Value.

JEL Classification: M000, M310

Introduction

In contemporary world development of brand equity in every business is becoming indispensable factor which plays vital role in business performance and determine its success. Brand loyalty is measured as the basic antecedent of “brand equity” and since long it has been researched many different perspectives of creating brand equity and so the way of creating brand loyalty diverse definitions and drivers have been identified to measure it. Jacoby and Kyner (1973) worked on

¹Assistant Professor, PAF-KIET, Karachi and a PhD scholar at the Faculty of Management Sciences, Bahria University, Karachi Campus, Pakistan. Email: syedakazmi44@gmail.com

²Senior Professor, Faculty of Management & Social Sciences at Bahria University, Karachi Campus, Pakistan. Email: mnb2k3@hotmail.com; mustaghis.bukc@bahria.edu.pk

³Associate Professor, PAF-KIET, Karachi, Pakistan. Email: tariqj@pafkiet.edu.pk
the basic conception of brand loyalty and its implication identified the complex definition of brand loyalty that holds many difficult constructs which are difficult to analyze and synthesize. Thiele and Mackay (2001) explained the term loyalty as an interchangeable means with its operational definition with repeated purchase. Since then the behavioral approach and attitudinal approach developed. Behavioral approach represents consistent purchase behavior and attitudinal represent favorable attitude toward brand (Quester & Lim, 2003). Both approaches are insufficient to define brand loyalty as both approaches are ignoring psychological aspect of consumer commitment with the brand (Bowen & Chen, 2001). Particularly low involvement products, repeated purchase could be the habitual purchase behavior (Kabadayi, 2007). Second is the attitudinal approach that depends upon consumer’s positive feedback and reviews. This approach is based upon emotional attachment with the brand and it goes beyond repetitive purchase (Quester & Lim, 2003). According to Choi, Konan and Kim (2016), loyalty is positively impacting on the increased purchases of customers and in case of failure in development of brand loyalty product may face the failure. For example in some cases when substitutes of any specific brand/ product are not available then people make repeated purchases even if the actual product is of higher price. Further Brakus, Schmitt and Zarantonello (2009) are of the views that customer’s evaluation of a brand is affected by the brand perceived quality based on their perceptions backed by the customers’ cultural affinity. Consumer responses towards choosing a product varies and their buying decisions are mostly influenced by their familiarity of brand and their cultural orientations.

This research paper highlights how brand loyalty which is among the most important antecedent of brand equity would develop. Among various other antecedents of brand equity, brand loyalty is the most significant factors because it created and measured through customers’ feedbacks, evaluations and reviews (Pappu & Quester, 2016),which can be influenced by their cultural affiliations and orientations. While evaluating brand loyalty two broad categories of loyalty comes under consideration, behavioral and attitudinal loyalty. Behavioral and attitudinal elements are helpful in identifying the reaction of buyers to gauge brand loyalty (Hew, Lee, & Ooi, 2016). Dawes, Meyer-Waarden, and Driesener (2015) identified that social influence is considered as another distinctive level of dimension for brand loyalty because it attracts and retains customers for longer period of time.

Literature Review

The origin of brand loyalty is the focal umbrella concept in marketing strategy for any organization because of its diverse measurement of consumer’s commitment with brands (Aaker, 1991). The long run success of a brand is not only dependent upon the number of customers, it holds, but also repeat purchases of the same product by them. In the presence of high competition creating and retaining loyal customers is vital and it decreases uncertainty about brand’s quality (Fournier & Yao, 1997). Researchers used “attitudinal” and “behavioral” measures to asses this concept (Oliver, 1999; Zeithmal, 2000). According to the views of some other researchers, attitudinal loyalty narrate to develop connection with specific service provider (Czapiel & Gilmore, 1987). In
addition from behavioral perspective repurchase patron of any specific product over different time frame (Neal, 1999). The other approach is “attitudinal approach” and measure favorable attitude onward brand. Large numbers of antecedent to predict brand loyalty have been explored whereas among all perceived values, perceived quality and brand trust are considered as the most important and fundamental antecedents of brand loyalty (Bramlett & Holbrook, 2000). The complexity in the measurement of loyalty is explaining the phenomena of repeated buying do not express the actual intention and intentions do not reflect the action (Yang & Peterson, 2004). While explaining intentions and consumers purchase decisions previous researches identify the extensive role of culture in shaping consumer cognition. Culture plays a vital role in impacting consumer’s subconscious. That is why the role of culture cannot be neglected while measuring brand loyalty. Culture is the way of life, set of attitudes and norms as well as a living style of a society. Different thinking styles of people residing in different geographical region living with different national values and norms (Lee, 2014). For example Eastern and Western societies behave differently in various situations and they make decisions accordingly. According to (Bartels, 2014) decision making is a phenomena which itself is a commitment of individual with group members depending upon the shared value system in which an individual is living.

Individual Level Collectivist Values (ILCV) and Brand Loyalty

ILCV are related to culture values operated by groups (Schwartz, 1990). ILCV are not similar as individualism and collectivism but it refers individual behavior measured at group level. The dimension of individualism and collectivism refers to national culture and consider each consumer is behaving same at national level. Individual level collectivist theory emphasize inequality of consumers on the basis of their different thinking styles and feelings (Keillor, D'Amico, & Horton, 2001; Schwartz; 1994, 1999; Triandis; 1989, 1995).

ILCV are the values that influences consumer behavior and buying decision and explained through shared values, and belief system represent by individuals toward the association between individual and group exist in society (Schwartz, 1990). Individual level group values influence consumer behavior according to personal interest and according to the relationship of individuals and between groups within society. According to scholars individual level socialist values stimulate consumer behavior in such a way that effect the service quality (Patterson & Prasong, 2006) and consumer impulsive buying activities (Bond, 2002; Schwartz, 1990). However various researchers have worked on antecedent of brand loyalty but still mediating influence of (ILCV) on consumer behavior less explored area.

This research study is grounded on the theory of “individuals’ collectivist values” but keeping the concept valid that consumer belong to different regions even if they belong to one country are not similar in many cultural subjective means (Keillor, 2001). The contribution of this research is as it adds value to the current literature on brand loyalty and open a new venue to measure brand loyalty.
Generally, brand loyalty is measured through repeated purchase, brand commitment, perceived value and perceived quality, brand trust and other antecedents discussed by previous researchers but the role of ILCV is less explored and almost untapped in Pakistani society and their behavior representation due to different cultural backgrounds. Through this research the differences in consumer behavior is identified in the context of (ILCV) that influence traditional models of brand loyalty (Bolton & Bramlett, 2000; Bolton & Drew, 1991; Chang & Wildt, 1994; Parasuraman, Zeithmal, Berry, & Grewal, 2000; Sirdeshmukh, Singh, & Sabol, 2002). Previous researches suggested how brand loyalty developed collectively which is not possible because every consumer behave differently in different situation (Keillor et al., 2001; Schwartz, 1994; 1999; Triandis, 1994; 1995), that’s why they could have different brand loyalty behavior in preference or choice of different brands. Customers belong to low (ILCV) behavior express low level of loyalty whereas high individual level social values represent high level of loyalty (Thompson, 2014). Previous researchers identified three basic antecedents of measuring brand loyalty in which perceived quality, perceived values and brand trust are the most essential are all three antecedents are moderated by the role of individual level collectivist values because of the differing nature of consumers on different regions and cultural background. For theorizing the impact of individual level cultural values as a moderating factor, the role of (ILCV) values need to be determined. Many previous scholars have indicated that (ILCV) play a moderator’s role in consumer evaluation of “product and his/ her cognitive style, their attitudes, self-behavior” (Bond, et al.), and impulsive purchasing style.

**Relationship between Brand Trust & Brand Loyalty**

In recent years brand trust has earned the attention of many practitioners and researchers. According to Lau and Lee (1999) it can be viewed as willingness of customers to rely on brand they choose. In other researches it is also viewed as willingness to depend on other exchange partner on whom they can rely on (Moorman et al., 1992). Chaudhary and Holbrook (2001), in his research described brand trust as readiness of consumer to rely brand and its stated functionality. Through the previous researches the association between brand trust and brand loyalty is considered as the determinant of loyalty (Berry, 1983). Developing brand loyalty is not only to about repeated purchase rather maintaining long-term relationships with your customers which as a result will turn into brand loyalty (Matzler et al., 2008: Sung et al., 2010: Ming et al., 2011). Brand trust develops positive relationship between brand and customers and resulting is adding value into brand loyalty (Morgan & Hunt, 1994). According to Choudhry and Holbrook (2001), brand trust is the factor that decides the brand’s fate and in term of success and failure because trust influences customers repurchase intentions.

**Perceived Quality and Brand Loyalty**

Perceive quality is about developing perception of brand in the mind of the customers. In perceive quality functional and non-functional attributes of the products are discussed. High quality
of a product gives consumers satisfaction regarding quality and associated risk of the product/brand (Aaker, 1991). Further in his study (Aaker, 1991) discuss that perceive value create point of differentiation so consumers can easily differentiate unique points of their own brand in comparison with competitor brand. According to Zeithmal (1988) perceived quality is the perception about overall quality of product or service in comparison with other brands, whereas Aaker (1991) defines perceive quality as overall perception of consumer about product or service quality with respect to its intended purpose in comparison with its alternatives. Furthermore, perceive quality in four distinct categories. These four characteristics include intrinsic, extrinsic, performance and appearance of the product. While discussing the relationship between perceived quality and brand loyalty previous researches confirm a positive relationship between perceive quality and purchase intention (Tsiotsou, 2006). According to Biedenbach and Marell (2009) perceived quality is one of the most important element of brand loyalty and it also has an effect on brand image (Ming et al., 2011; Chen & Tseng, 2010).

**Perceived Value and Brand Loyalty**

Equity theory discuss perceive value while discuss about consumer outcome/input to that of the provider’s outcome/input (Oliver & DeSarbo, 1988). The equity theory discuss about the fair and rightful treatment of what does that cost. The concept of value described by (Keller, 2013) it is a cost and benefit analysis which consumer mind constantly analyses at the time of purchase or intent to purchase. Perceive value is treated as monetary and non-monetary risk associated with the product that consumer consider it as estimated cost to that product and consider benefits as a reward he/she receive from selling the product. Sirdeshmukh and Sabool (2012) explain high value is super ordinate goals where loyalty belongs to subordinate goal because it is behavioral intentions. As sub ordinate goals are regulated by super ordinate goals that is why perceive value regulate behavioral intentions of loyalty (Sirdeshmukh et al., 2002). That is why along with previous researches designate perceive value as an important antecedent of brand loyalty.

![Perceived Value and Brand Loyalty Diagram](image)

**Figure 1: Conceptual Framework**

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**Hypothesis Development**

From the above discussion, it is evident that a number of determinants of brand loyalty have been explored but scholars are agreed upon the substantiality of perceived value, perceived quality and brand trust (Bolton et al., 2000). Building upon the existing literature, seven hypothesis to test for the direct relationship between: ‘brand trust and brand loyalty’; ‘perceived quality and brand loyalty’ and ‘perceived value and brand loyalty, ILCV and brand loyalty, ILCV and brand trust, ILCV and perceive value, ILCV and perceive quality and three hypothesis explaining indirect relationship are being formulated basing on the following discussion heading wise.

**Brand Trust and Brand Loyalty**

Brand trust is the willingness of a consumer to buy a brand or product to get the desired quality and its promises (Chaudhry & Holbrook, 2001). Previous researches suggested the positive relationship between brand loyalty and brand trust (Choudhry & Holbrook, 2001). It has been further explained by them that the brand trust and brand loyalty are the two simultaneous factors of one phenomena as it is been observed that reliable brands are bought repeatedly and so the perceived risk associated with the purchase of brand is reduced (Chaudhry & Holbrook, 2001). However observes that the capability to behave of an individual indifferent region varies from one culture to another. By keeping the importance of differences in thinking styles of different consumers it has been established that the brand loyalty in all customers are not the same, despite the fact, they show similar values of brand trust. Individual level theories based on cultural values suggested that differences in individuals attitude is basically due to difference in individual level group values and their representation. Number of studies on ILCV linked with brand trust (Doney, Cannon, & Mullen, 1998). Many other authors also suggest brand trust is predicted by individual level collectivist values and those customers are more dependent on others’ views and give more importance to relationships then low individual level collectivist customers (Swartissubstz, 1990; Triandis; 1989; 1995). That is why the importance of trust is substantial in in-group and out-group (Triandis, 1995). This flexibility of differences in individual level of collectivist values impact consumer decision making at the time of purchases. Collectively more collectivist consumers are tend to refer their in-group suggestion at the time of purchases (Roth, 1995). Reliance on other group member’s opinion shows consumer pay greater attention to the purchasing preference to the group then their own preference which means trust builds up and sense of belonging develops in “in-group” members (Thompson, 2014). As a result those consumers carrying higher individual level collectivist values prefer that brand which comes under group approval (Roth, 1995). Hence, in the above backdrop, it is hypothesized in Pakistani context as follows:

*H1*: brand trust has a positive impact on brand loyalty

**Brand Trust and ILCV**

According to (Thompson, 2014), if trust level of an individual is constant then those
consumers having high ILCV will be more loyal with the brand because of the in group expectations and experiences (Roth, 1995). Because in group cohesiveness and brand trust is more important than individual likes and dislikes that is why consumers low in ILCV are less brand loyal because they are influenced by out group feedbacks and reviews.

**H2**: brand trust has a positive impact on Individual level of collectivist values.

**ILCV and Brand Loyalty**

Previous researches on theory of ILCV explain the differences among consumers are due to their different cognitions, attitudes and behavior (Bond, 2002). (Aaker, 1991) bifurcate the concept of brand loyalty into attitudinal and behavioral. Both of which consist on individual customer’s own willingness to buy and other one is through peer feedbacks and word of mouth. As ILCV is the individualistic approach considered as collectivist level that is why both attitudinal and behavioral loyalty lie under the concept of ILCV. Later, (Thompson, 2014), theorize that ILCV positively impact on brand loyalty. For this reason we can postulate that:

**H3**: ILCV has a positive impact on Brand loyalty.

**Perceived Value and Brand Loyalty**

Perceived value is defined as customer’s evaluation of a product or service on a basis of its utility depending upon the perception of prices charged to customers (Zeithmal, 1988). Previous researcher’s extensive work on the relationship of repeated purchase and perception of the customers reveal prominent and positive relationship between positive perception of customers lead to repeated purchase of a brand or a product which at last change into brand loyalty. When consumer perceive high value provided by brand then significantly impact on repeated purchase (Chang & Wildt, 1994). Hence, in the above backdrop, it is hypothesized that

**H4**: Perceive value has a positive impact on brand loyalty.

**Perceived Value and ILCV**

The concept of value is different among different consumers that’s is why through previous researches explained that all consumers are not same (Keillor et al., 2001; Schwartz, 1994; 1999; Triandis, 1994; 1995). In group bonding and social conformity are the focal concepts in value system for those consumers who are high in ILCV (Wong & Ahuvia, 1998). That is why consumers who are high in ILCV always prefer to have group preference over individual preference (Schwartz, 1990; Triandis, 1995). That is why it is postulate that:

**H5**: Perceive value has a positive impact on ILCV.
Perceived Quality and Brand Loyalty

Perceived quality is positively related to brand loyalty on high individual level collectivist values-customers as compared to low level of individual level collectivist values customers. Perceived quality refers to consumer’s evaluation of the product based on consumer personal likes and dislikes and their perception about brand (Olson, 1985; Kirmani & Baumgartner, 2000; Lai et al., 2009; Liang et al., 2013). Many previous studies conducted explain in that quality of a brand is the factor that signal quality and status that is why consumers purchase high quality brands to show their status (Batra, Ramaswamy, Alden, Steenkamp, & Ramachandran, 2000; Boulding et al., 1993a, 1993b). Perceived quality belong to consumer’s overall evaluation as well as perception that is why it is considered as the influential factor for purchase, repurchase and switching behavior of a customer (Boulding et al., 1993a, 1993b). Hence, in the above backdrop, it is hypothesized as follows: 
H6: Perceive quality has a positive impact on brand loyalty.

Perceive Quality and ILCV

According to (Thompson, 2014) those consumers who are having low individual level collectivist value in-groups are less cohesive with in-group that’s why perceive quality is individualistic approach for low ILCV consumers unlike those consumers who are high ILCV. In contrast consumers of high ILCV are more brand loyal that’s why they perceive the best quality of their focal brand. Thats why we can postulate that:
H6: Perceive quality has a positive impact on ILCV.

Brand Trust, ILCV and Brand Loyalty

Previous researches suggest that if trust level among the customers is constant then those customers who have high individual level collectivist values will remain loyal with the focal brand for the longer period of time (Newman, 2014). That is why we can postulate that:
H7: Brand trust is positively related brand loyalty with the mediation of ILCV.

Perceived Value, ILCV and Brand Loyalty

Hypothesis 9 is discussing the relationship of perceived value with ILCV. As perceive value concept is totally reflect social bonding and conformity that is why through the word of mouth in group reviews develop brand loyalty (Wong & Ahuvia, 1988). Family bonding and group cohesiveness narrate high individual level collectivist values that is why it would be postulate that:
H8: Perceive value is positively related to brand loyalty with the mediation of ILCV.
Perceived Quality, ILCV and Brand Loyalty

Hypothesis 10 discuss the indirect relationship between perceive quality and brand loyalty with the mediation of ILCV. According to (Boulding et al.,1993), perceive quality refer consumer evaluation of brand in terms of its cost and benefits received that is why it is considered as the basic factor purchase decision and it may cause switching of brand if consumer’s evaluation is not favorable about brand. This consumer evaluation depend upon consumer cognition which may be impacted by differentiated culture (Hofstede, 2010). As it is been discussed earlier that perceive quality has a positive impact on brand loyalty that is why it could be postulate that:

\[ H9: \text{Perceive quality is positively related to brand loyalty with the mediation of ILCV.} \]

Research Design and Method

This study is an explanatory research type and quantitative in nature based on primary and secondary data. For data collection purpose structured questionnaire has been used and got filled.

Using Google form.Probabilistic sampling method is applied and cluster sampling has been used for selecting the respondents. A sample size of 384 women customers of five Pakistani renowned brands (Khaadi, Gul Ahmed, Nishat linen, & Alkaram) has been carved out from the customer population of about 500,000 regular customers by using the scientific calculator Rao soft at the rate of 5% margin of error. Accordingly, 384 questionnaire were distributed out of which 285 responses (75%) were received through online survey. Out of 285 responses 35 responses were eliminated because of missing values and incomplete questions responses and total of 250 questionnaires have been considered for analysis purpose. Deductive approach is adopted as hypothesis are developed on the basis of relevant theories and strategy is designed to develop those hypothesis.

Scales and Measures

Already developed scales on the subject by previous researchers have been used are selected, however (presented in table 1) reliability and validity of questionnaire is checked again which are presented in the results section.

<table>
<thead>
<tr>
<th>Construct Adapted/Items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Loyalty (6)</td>
<td>(Chaudhry &amp; Holbrook, 2001; Yi &amp; Jeon, 2003)</td>
</tr>
<tr>
<td>Brand Trust (4)</td>
<td>(Chaudhry &amp; Holbrook, 2001)</td>
</tr>
<tr>
<td>Perceived Quality (5)</td>
<td>(Dodd, Monroe &amp; Grewal, 1991)</td>
</tr>
<tr>
<td>Perceived Value (5)</td>
<td>(Dodd, Monroe &amp; Grewal, 1991)</td>
</tr>
<tr>
<td>Individual level Collectivist Values (6)</td>
<td>(Donthu &amp; Yoo, 1996)</td>
</tr>
</tbody>
</table>
Results

Descriptive Statistics

The descriptive statistics of the variables used in research are used to disclose and ascertain their univariate normality and internal consistency. Results of descriptive statistics are presented Table 2:

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Loyalty</td>
<td>4.873</td>
<td>1.571</td>
<td>0.826</td>
<td>0.763</td>
<td>0.696</td>
</tr>
<tr>
<td>Brand Trust</td>
<td>4.774</td>
<td>1.314</td>
<td>0.642</td>
<td>0.819</td>
<td>0.875</td>
</tr>
<tr>
<td>ILCV</td>
<td>5.153</td>
<td>1.467</td>
<td>0.757</td>
<td>0.284</td>
<td>0.233</td>
</tr>
<tr>
<td>Per. Value</td>
<td>4.428</td>
<td>1.443</td>
<td>0.526</td>
<td>0.763</td>
<td>0.724</td>
</tr>
<tr>
<td>Per. Quality</td>
<td>4.481</td>
<td>1.698</td>
<td>0.675</td>
<td>0.609</td>
<td>0.726</td>
</tr>
</tbody>
</table>

The results of brand loyalty are showing (Mean=4.873, SD=1.571, SK=0.826) has got the highest skewness, perceive value (Mean= 4.428, SD=1.443, SK=0.526) has the lowest level of skewness. In addition brand trust (Mean=4.774, SD=1.314, KR= 0.819) has the highest level of kurtosis whereas ILCV (individual level collectivist values), (Mean=5.153, SD=1.467, KR=0.284) has got the lowest level of kurtosis. As skewness and kurtosis both lie in between ±3.5, that is why all variable are considered to have univariate normality. Furthermore brand trust (Mean=4.774, SD=1.314, α = 0.875) has the highest value of Cronbach alpha, whereas, ILCV (Mean=5.153, SD=1.467, α= 0.233) has receive the lowest level of Cronbach alpha. Therefore all variables other than ILCV has receive the acceptable level of internal consistency.

Correlation Analysis

Results related to correlation analysis are presented in Table 3.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Loyalty</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Trust</td>
<td>0.754</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ILCV</td>
<td>0.533</td>
<td>0.483</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per. Value</td>
<td>0.873</td>
<td>0.724</td>
<td>0.126</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Per. Quality</td>
<td>0.780</td>
<td>0.852</td>
<td>0.311</td>
<td>0.790</td>
<td>1</td>
</tr>
</tbody>
</table>
The results of the correlation table suggest that perceive value has the highest correlation with brand trust. On contrary, perceive value had the lowest correlation with perceive quality. Therefore it is inferred that constructs are unique and distinct in nature. In addition, there is unlikely to be multi-co linearity problem (Junior et al., 1992; Benesty et al., 2009).

**Convergent Validity**

The results related to convergent validity are presented in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Loyalty</td>
<td>4.873</td>
<td>1.571</td>
<td>0.818</td>
<td>0.874</td>
<td>0.582</td>
</tr>
<tr>
<td>Brand Trust</td>
<td>4.774</td>
<td>1.314</td>
<td>0.898</td>
<td>0.929</td>
<td>0.766</td>
</tr>
<tr>
<td>ILCV</td>
<td>5.153</td>
<td>1.467</td>
<td>0.272</td>
<td>0.73</td>
<td>0.577</td>
</tr>
<tr>
<td>Per. Value</td>
<td>4.428</td>
<td>1.443</td>
<td>0.882</td>
<td>0.914</td>
<td>0.681</td>
</tr>
<tr>
<td>Per. Quality</td>
<td>4.481</td>
<td>1.698</td>
<td>0.861</td>
<td>0.907</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Results are showing that brand trust and perceive value have highest composite reliability, whereas individual level collectivist values (ILCV), (Mean=5.153, STD=1.467, AVE= 0.577, CR=0.73) has the lowest composite reliability. Moreover brand trust (Mean=4.873, SD= 1.571, AV= 0.582) has the highest value of average variable explained while perceived quality (Mean=4.481, SD=1.698, AV=0.71) has the lowest. As all values of composite reliability are greater than 0.7 and 0.6 other than ILCV that’s why we may conclude acceptable convergent validity.

**Discriminate Validity**

The results are related to discriminant validity is presented in Table 5.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.569</td>
<td>0.875</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.284</td>
<td>0.233</td>
<td>0.760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.763</td>
<td>0.724</td>
<td>0.126</td>
<td>0.825</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.609</td>
<td>0.726</td>
<td>0.097</td>
<td>0.624</td>
<td>0.843</td>
</tr>
</tbody>
</table>
The results suggest that all variables are unique and distinct as their diagonal values are greater than square of each pair of correlation (Breyman & Bell, 2015).

**Results of Hypothesis**

The study applied structural equation modeling using the Smart PLS software to test the hypothesis. We have proposed seven direct hypothesis and three indirect hypothesis, which are presented in Table 6 and table 7. The measurement and structural models are presented in Figure 2 and, Figure 3.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Direct Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Trust -&gt; Brand Loyalty (H1)</strong></td>
<td>0.545</td>
</tr>
<tr>
<td><strong>Brand Trust -&gt; ILC V (H2)</strong></td>
<td>0.377</td>
</tr>
<tr>
<td><strong>ILCV-&gt; Brand Loyalty (H3)</strong></td>
<td>0.113</td>
</tr>
<tr>
<td><strong>Per. Value -&gt; Brand Loyalty (H4)</strong></td>
<td>0.374</td>
</tr>
<tr>
<td><strong>Per. Value -&gt; ILCV (H5)</strong></td>
<td>-0.06</td>
</tr>
<tr>
<td><strong>Per. Quality -&gt; Brand Loyalty (H6)</strong></td>
<td>-0.031</td>
</tr>
<tr>
<td><strong>Per. Quality -&gt; ILCV(H7)</strong></td>
<td>-0.139</td>
</tr>
</tbody>
</table>

The statistical Results of SEM suggest that we found support for four hypothesis i.e. H1, H2, H3, and H4 in contrary H5, H6, H7 are not supported.

Hypothesis 1 is about a direct relationship between brand loyalty and its antecedents suggest brand trust is a strong predictor and has positive relationship with brand loyalty (B=0.545, T-statistics=10.544, P Value= 0) P-value < 0.05 shows hypothesis is accepted. Hypothesis2 on brand trust in direct relationship with individual level group values is also accepted as P-value =0. Hypothesis 3 which is about direct association of ILCV and brand loyalty p-value = 0.002 which is less than 0.05 is also accepted. Hypothesis 4 which is about the direct relationship between perceived value and brand loyalty is also accepted as p-value is less than 0.5. As per values suggest hypothesis 5 which is on direct relationship between perceive value and individual level collectivist values is rejected as (B=-0.06, T-statistic=0.501, p-value=0.308) because of the fact that p-value is >0.50 the relationship between perceive value and ILCV is rejected. Hypothesis 6 is discussing about the relationship between perceive quality and brand loyalty which is also rejected as values are (B=-0.031, T-statistic=0.54, P-value= 0.295), as P value is greater than 0.05 that is why hypothesis 6 is rejected. Hypothesis 7 is on the relationship between perceive quality and individual level collectivist values in which (B= -0.139, T-statistic= 1.285, p-value= 0.099), as P values is greater than 0.05 that is why hypothesis 7 is also rejected.
Table 7
Indirect Relationship

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Beta Value</th>
<th>T Stat.</th>
<th>P Values</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Trust -&gt; ILCV -&gt; Brand Loyalty (H8)</td>
<td>0.043</td>
<td>2.071</td>
<td>0.019</td>
<td>Accepted</td>
</tr>
<tr>
<td>Per. Value -&gt; ILCV -&gt; Brand Loyalty (H9)</td>
<td>-0.007</td>
<td>0.48</td>
<td>0.316</td>
<td>Rejected</td>
</tr>
<tr>
<td>Per. Quality -&gt; ILCV -&gt; Brand Loyalty (H10)</td>
<td>-0.016</td>
<td>1.172</td>
<td>0.121</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

The indirect relationship of hypothesis 8 explain the relationship between brand loyalty and brand trust with the mediation of ILCV in which (B=0.043, T-static=2.071, P-value= 0.019) this hypothesis is accept as p value is lesser than 0.05. Hypothesis 9 is about the relationship between perceive-value and brand loyalty with the mediation of ILCV (B=-0.007, T-static-0.48, p value=0.316) this hypothesis is rejected as p value is greater than 0.05. Hypothesis 10 explaining the indirect relationship between perceive quality and brand loyalty with the mediation of ILCV (B=-0.06, T static=1.172, p-value= 0.121) as p-value is greater than 0.50 that is why hypothesis 10 is rejected.

Figure 2: Measurement Model
Measurement Model

![Diagram of Measurement Model]

Figure 3: Structural Model

Discussion

Theory of a universal psychological structure is presented by Schwartz and Bilsky in (1987) describe the value system in various different cultures. Other researchers admitted that, theories like Schwartz and Blisky need to be tested on different cultures to “aspire universality”. Later in (1990:87) Schwartz and Blisky proposed the theory of “Universal structure of Human values”. In continuation of the theory of Schwartz and Blisky our research study using data from different provinces of Pakistan attempt to test the phenomena of how customer respond to marketing activities offered by companies to develop brand loyalty and maintaining long term relationship with their customers. As Pakistan is rich in ethnicity and possess diversified culture that is why the common forum that caters customer’s need (belong to different culture) by offering brands, has to be identified. Theory of (ILCV) suggest that consumers of different regions are not same beside the binding factor of individual level collectivist “values”. Individual level collectivist values are shared beliefs, norms and set of attitudes
demonstrated by individual toward relationship between individual and groups of the society. ILCV are individualistic values presented at group level. That is why developing brand loyalty has to be mediated by ILCV. By keeping the importance of ILCV as a focal factor hypothesis about direct relationship between brand loyalty and its antecedents and relationship with mediation of ILCV are developed. This study examine 7 direct relationship and 3 indirect relationship (mediating) variables. The statistical results of SEM suggest support of 4 hypothesis and rejection of 3 hypothesis. The relevance of the result with earlier literature are discussed in the following sections.

The first hypothesis examines the impact of brand trust on brand loyalty. This hypothesis is supported by the result (p< 0.05). It is previously determined that brand trust is one of the important antecedents of brand equity (Keller, 2013). As brand trust develop through the feedback of other customers and through word of mouth attitudinal loyalty gained. Choudhry and Holbrook (2001) explained brand trust as consumers desire to start relying on specific company’s offering and keep stick with it for longer period of time which as a result turn into brand loyalty.

The second hypothesis examine the impact of brand trust on individual level group values. This hypothesis is supported as (p< 0.05). Theory on individual level collectivist values explain cultural orientations effect on consumers that sis why difference in their decision making arise Newman, & M. (2014). Because all consumers don’t show the same level of brand loyalty other than if they share the same level of individual level collectivist values. That’s why we hypothesize that it is because of the difference in consumer’s perception and due to difference in (ILCV). Many previous studies link up individual level of collectivist values withy brand trust. Because of the examined difference in (ILCV) in consumers it is proved that brand trust is higher in those customers who have greater individual level collectivist values (Newman & Liu, 2014).

The third hypothesis examines the relationship between individual level collectivist values. This hypothesis is accepted as (p< 0.05). As contemporary era is very competitive that’s why it is becoming very difficult for brand and other apparel companies to retain their customers. According to (Oliver, 1999) brand loyalty is a “Commitment” between customers and company about repetitive purchase of same brand even the advertisements and other factors influence consumer decision and may turn to switching behavior. Through previous studies it is confirmed that those consumes who are carrying high individual level collectivist values find the true meaning of be with one brand through social interaction and in- group bonding and harmony bring interrelationship by subordinating personal goals (Bond, 2002; Schwartz, 1990). As previous researches declared ILCV as predictor of consumer perceptions and social behavior (Soomro, Y. A).

The fourth hypothesis is examining the impact of perceive value on brand loyalty. This hypothesis is accepted as (p< 0.05). As previous studies on brand loyalty suggest that brand loyalty could provide a substantial value to customers and companies both (Yang & Peterson,2004). Customers always want to purchase those brands which give value to them (Reichheld, 1996). Whereas perceive
Value reflect the amount of consumer’s input and out to that service input and output.

The fifth hypothesis examine the effect of individual values at social level on perceive value. This hypothesis is rejected as (p > 0.05). Through previous researches it is proved that customer value is the basic of marketing activity (Holbrook, 1994). Customer value and brand loyalty are considered as subordinated goals as both are related with behavioral intentions (Sirdeshmukh, Singh, & Sabol, 2002). Whereas the individual level collectivist values are in the group interactions that shape behaviors (Thompson, 2014).

The sixth hypothesis examining the influence of perceive quality on brand loyalty. This proposition is rejected as (p > 0.05). Perceive quality is a output of consumers judgment about product attributes and features (Zeithmal, 1988; Dodd et al., 1991; Aaker, 1991). Because of consumer’s perception about product perceive quality most of the time perceive quality considered as consumer’s mental orientations which is different in different people according to their valuations and likes and dislikes of features and attributes a product possesses. Whereas brand loyalty mostly considered as repeated purchase and constant positive feedback from customers (Aaker, 1996).

The seventh hypothesis is examining the effect of individual level group values on perceived quality. This hypothesis is rejected as (p > 0.05). Perceive quality is considered as an antecedent of brand loyalty but with the moderating effect of ILCV perceive quality does not have impact on individual level collectivist values. Because of the fact that perceive quality is dependent upon emotional attachment with the product. As ILCV reflect group choice and in group bonding among society members that’s why perceptions, attitudes, behaviors could change due to peer reviews which shows negative impact of ILCV and perceived quality.

Developing brand loyalty is the crucial marketing strategy that decides the success and future of the business. In present era it become indispensable for every business holder to remain stick with its customers to develop long term relationship with them. Using structural equation modeling the study find that brand trust, perceive value and individual level social value have positive and significant influence on brand loyalty. Whereas perceive quality does not impact brand loyalty. In addition we find that individual level group values mediates the association amongst brand trusts, perceive value and brand loyalty.

This study has several implications for managers and policy makers. For example this study has found a strong relationship between brand loyalty and brand trust even when individualistic values at group level play its role as a mediator, the relationship is significant. Brand managers need to undertake cultural themes while offering new volumes and extensions. Because of the fact that individual level group values represent individual’s behavior at societal level that is why brand managers and company owners have to develop their advertisement and market strategy which cater customers even though they belong to different culture. This study found a negative relationship
between brand loyalty and perceive quality even through the mediation of ILCV relationship is negative. This negative relationship gives hint to the brand managers that company should advertise the actual texture, quality and feature of the product. Exaggerated qualities just for the purpose of big volume sales would develop a wrong perception in the mind of the customers. And eventually customers get dis-hearted with the product. Perceive value has a positive and significant relationship with brand loyalty, which is an important aspect for brand providers to undertake manageable prices for their target market. Perceive value explain cost over benefit analysis.

Limitations and Way Forward

This research study is restricted to Pakistani market, that is why results would be challenged and may have different perspective if conduct in different country or region. Other Hofstede’s culture dimensions like power distance, uncertainty avoidance, time orientation, masculinity/femininity would be touched and further explored with other antecedents of brand equity like awareness, perceive quality, brand image.

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Kurt. (2016). Brand personality and culture: The role of cultural differences on the impact of brand personality perceptions on tourists’ visit intentions. Tourism and management.


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      North-Holland, For contributions to collective works.
   b. Newbery, Daved M.G., 1975., The use of rental contract in peasant agriculture, in:

   For periodicals
   d. Note that journal titles should not be abbreviated.
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