

The Relationship between Public Entrepreneurial Orientation, Entrepreneurial Training Oninnovation and Performance of Public Universities in Pakistan

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Abstract: *This study is a theoretical debate on government funding in the state government higher education institutions (HEIs) in Pakistan, with a generally accepted conceptual model. The objective of the study is to measure the direct relationship between entrepreneurial orientation, entrepreneurial training on innovation and organizational performance among the public HEIs in Pakistan. Pearson correlation test was used to examine the association between the independent and dependent variables. It showed the strength and direction of the relationship. A regression test was done to identify the predictive ability of each independent variable on the organizational performance. The respondents were made up of 415 head of department out of 1100 identified in the study. The findings indicated that, entrepreneurial orientation, and entrepreneurial training on innovation significantly predicts the performance of the HEIs. The study recommends that the state government and higher education institutions in Pakistan need to allow room for entrepreneurial activities, and development of entrepreneurial principles and opportunities, and further encouragement entrepreneurial practices through the development of public entrepreneurial orientation and entrepreneurial training on innovation to bring positive effect to the organizational performance of HEIs.*

Keywords: *Entrepreneurial orientation, Entrepreneurial training on innovation, organization performance, universities, Pakistan.*

I. Introduction

Every economy, regardless of its size, position, and stability; relies heavily on the education sector. This is due to the fact that, the development and nourishment of the most important asset, 'the human resource' is its responsibility; holistically. National as well as international institutions across the globe have regarded higher education sector in particular, as the core arena for the strategic strengthening and stability of a nation (Bosetti & Walker, 2010). Moreover, the race of globalization, similar to other sectors, has also stressed higher education in to strengthen their core operations with quality for strategic sustenance (McCarthy, Bui & Chau, 2013). The global pressures and challenges are increasing on higher education institutions, whereby, they are forcing universities and institutions to rethink on their policies, procedures, and financials. According to Curristine, Lonti, and Jourmard (2008), uplifting and improvement in terms of efficiency and overall performance of public sector institutions is challenging due to variety of different influences. Taking this further, (Dougherty and Reddy 2011; Ball, 2013) have asserted that universities have a very critical role to play in an economy and the kind of resource that they produce depends upon how they perform at the first place. According to level (Nambi Karuhanga & Werner, 2013; Lahr, et al., 2014) have explained through the survey that poor performing universities ultimately would end up producing poor graduates and vice versa. This principally raises the number of unemployed individuals and weakens the overall outlook of the country at the global. Likewise, public sector universities and their performance is has also been a point of criticism over the past years (Rabovsky, 2014; Pushkar, 2013; Oldfield & Baron, 2000; Alexander, 2000). These evidences have outlined that the performance of public universities has not been up to the mark and there are several measures that the institutions needs to take in order to improve on urgent grounds.

Pakistan in comparison with its neighbors has reportedly ranked lower in terms of academic quality and performance (Hoodbhoy, 2009). Accordingly, the performance of public sector universities in Pakistan has also been criticized (Ali et al., 2013; Akhtar & Kalsoom, 2012; Pahi et al., 2015; Hoodbhoy, 2009). The evidences have suggested that public universities on a major ground are underperforming which can be evidently noticed from the poor quality of their graduates, research, academic performance and general management. Ali and Haider and (2015) suggests that there are many public sector higher education institutions in the country that have dramatically ranked lower in the annual ranking and no one bothered about the issue. There seems to be no

concern amongst the authorities and officials on the issue and how to go about it. Usman (20114) has reported that public universities are not performing very well particularly, in comparison against private institutions. The poor performance of public institutions is of no surprise as the country's national divisions have been heavily criticized for their highly debatable outputs (Akhtar&Kalsoom, 2012). Naseer (2007), the performance of public run institutions is a challenge and has been not improving over the decades.

Entrepreneurial orientation is the according to Miller (1985) is the aspect of creating an environment whereby, new ideas, approaches, products, services and tasks are encouraged, aiming to lead the organization and boost competitive position. According to Alegre and Chiva (2013), entrepreneurial orientation create a conducive environment in the organization which motivates employees to come up with ideas and creative projects that can make a considerable impact on boosting organization performance and the achievement of broader objectives. Hoodbhoy (2009) has reported that creativity innovative mindset is important for elevating the performance of higher education especially of the public sector universities which are facing the majority of the performance issues. Entrepreneurial training and innovation it can make a considerable impact on boosting performance of public sector universities in Pakistan Zaman, 2013). These evidences hints towards the potential significance of entrepreneurial orientation, entrepreneurial training and innovation at the university level for the purpose of boosting performance. There lies a major gap as to how public entrepreneurial orientation and entrepreneurial training can enhance the performance issue of public sector universities both, globally as well as in Pakistan. Henceforth, such an examination would yield results to provide a point of initiation to make entrepreneurship practices more practical to the public sector administration and to optimize the quality of research in the field of public entrepreneurship (Salik, Zhu, & Liu 2014).

II. Literature

2.1 Organizational Performance

It is evident that organisations are affected by the changes and evolution surrounding the global economy. In order to sustain in a volatile environment, organisations need to be able to address, face and adapt changes (Boxall, Guthrie &Pauwe, 2016; Pahi, et al., 2016). In addition to that, performance indicator also acts as a sustenance support to achieve organisational goals. Adams, Muir and Hoque,(2014) have studied on public sector and defined performance as the value creation for the external and internal stakeholders. Previous researches have adumbrated that organisations benefit from their capacity of risk taking and adoption of new ideas and trends (McKinley, Latham, & Braun, 2014).

2.2 Entrepreneurial Orientation

Entrepreneurial orientation actually refers to strategy-making procedures and smartness of an organization, which helps it in entrepreneurial activities (Lumpkin &Dess, 2001). Entrepreneurial orientation (EO) has been suggested as an essential attribute of high performing organisations (Covin&Slevin 1989; Lumpkin &Dess, 2001); these studies suggest that EO has positive impact on organisational performance. Wiklund and Shepherd (2005) applied a configuration approach to investigate the relationship between EO of innovativeness, risk taking, and pro-activeness to measure organisational performance in public sector. Results showed that EO positively influences organisation performance. Wiklund and Shepherd (2003) focused on the relationship between knowledge-based resources, EO and the performance. They illustrated that EO can positively affect organisational performance if there must be enough knowledge-based resources. On the other hand, Kreiser et al., (2002) and Lumpkin and Dess (1996) claimed that EO can vary independently of each other. Particularly, a strong positive relationship between EO and performance is found in dynamic and hostile environments (Brouthers, Nakos, &Dimitratos, 2015; Covin&Slevin, 1989; Dess& Beard, 1984). High EO is closely related to first-mover advantages and the tendency to take advantage of emerging opportunities, which ultimately has a positive influence on performance (Wiklund, 1999). Wang (2008) surveyed public sector institutions of UK in order to investigate the relationship among EO, learning orientation (LO) and organisation performance. The findings of this study suggest that EO is important for performance. Furthermore, Caruana, Ewing and Ramaseshan (2002) have studied the relationship between EO and Organisational performance in Australian public sector organisations. They also found positive relationship between these two variables. Some studies gave evidences that EO in public sector can positively influence innovation and proactiveness, which can further enhance the performance of organisation (Naldi, Nordqvist, Sjöberg&Wiklund, 2007). Bartlett and Dibben (2002) studied public entrepreneurship in public sector and proved that innovation in organisation can improve its performance as innovation has strong positive association with Entrepreneurial Orientation. However, Hameed and Ali (2011) also proved no relationship of EO and organisational performance unless there is a moderator between them. In their case, they have taken Entrepreneurial Management and Environmental Dynamism. Nevertheless, most of the literature tends to leads to positive effect of EO on organisational performance, so this study tends to support these empirical findings and proposed the following hypothesis:

Hypothesis 1: Entrepreneurial Orientation has positive relationship organization performance.

2.3 Entrepreneurial training on innovation

Kavinda et al. (2013) elaborated that the entrepreneurship training is important and prominent as advanced by many researchers and scholars. Entrepreneurship training was found to have had a substantial impact on performance of entrepreneurs. Rosli and Mahmood (2013) found that employee and employer's entrepreneur training on innovation have positive effect on the performance of the firm. Bharadwai and Menon (2000) found through education, training and experience; which in turn improve firm performance. As evident in the past studies, the relationship between entrepreneur training and organisational performance is positive (Petridou, Sarri, & Kyrgidou 2009). Many studies also found that entrepreneur training and innovation interact to improve organisational performance and have direct relationship (Flynn, Doodley&Cormican, 2003). Researchers saw entrepreneurial training on innovation as a tool of reinvention in public sector, thus, continuous training is required for the improvement in the public sector universities (Mulgan&Albury, 2003). Unfortunately, in some countries, many public sector organisations do not give more focus on quality training programs on innovation (Bates, 2001; Albury, 2005). A recent study on public sector illustrated that only 40% of the employees got training on innovation and rest of 60% had not been offered any entrepreneurial training. They also discussed that employee's training on innovation has positive relationship on the performance of both employee and organisation (Mbiya, Egezza&Musiega, 2014). Studies revealed that the participants who attained entrepreneurial training on innovation have higher innovativeness, higher need for achievement and high risk taking tendency (Gürol&Atsan, 2006). Based on the results reported in previous studies, this study postulates the following hypothesis:

Hypothesis 2: Entrepreneurial training on innovation has a positive relationship with performance of the organisation.

III. Research methodology

3.1 Measurements of variables

One of the most important processes of the research method is taking measurement of variables. The observations that are collected in the research are observed and recorded as part of the measurement process. In the current research, the variables, entrepreneurial orientation and entrepreneurial training on innovation will constitute the independent variables of the study and their impact will be studied on dependent variable that is organisational performance (universities will take as an organisation). Entrepreneurial Orientation by Covin and Wales (2012) with Seven items. Entrepreneurial training on innovation by Rosli&Mahmood (2013) with 2 items. Organisational Performance by Covin and Slevin's (1989) with four items. All instrument adapted from previous studies.

3.2 Sample Size

The target population was the Head of Departments of 1100 department of higher learning institutes run by state. There were 1100 department dens in the 91 universities located Pakistan. By referring to the sample size table generated by Krejcie and Morgan (1970), for a given population 1100 a sample size of 285 according to MarganTable and would be required to represent the population of this study.

3.3 Sampling technique

The present study adopted probability, simple random sampling technique. Probability sampling design is adopted because of the need to generalize the findings of the present study. A simple random sample is a subset of a statistical population in which each member of the subset has an equal probability of being chosen (Olken, & Rotem,1986) A simple random sample is meant to be an unbiased representation of a group and provide equally chance to everyone be selected Gupta, and Kabe, (2011). In this study, to ensure an equal distribution of 1100 Head of Departments of departments in the 91 universities located Pakistan. The sample was selected by simple random sampling (Hansen, Hurwitz, &Madow, 1953). Everyone get equal chance from whole list of population 1100 Head of Departments. From 1100 population randomly selected 570 from list.

IV. Results

4.1 Data Collection and Response Rate

The data for this study was collected through a questionnaire targeted to 1100 Head of Departments of 91 state public universities in Pakistan. The data collection was conducted over a period of three months, starting from April to June 2016. The summary of the response rate is as follows

Table 1Summary of the Response Rates

Questionnaire mailed	570
Number of responses	415
Response rate	72.8%

Table 5.1 shows the distribution of the questionnaires. 570 questionnaires were given to the Head of Departments and only 415 questionnaires were received resulting in a response rate of 72.8 percent.

4. 2 Respondent Profiles

According to the demographic details, Head of Departments in each university; work experience and academic qualifications. As stated earlier, the data were collected from the Head of Departments of faculties of public universities in Pakistan.

Table 2:Number of HODs in Universities

HODs	Frequency	University Percentage	Valid Percent	Cumulative Percent
10 or Less	94	22.7	22.7	22.7
11-20	164	39.5	39.5	62.2
21-30	69	16.6	16.6	78.8
31-40	47	11.3	11.3	90.1
More than 40	41	9.9	9.9	100.0
Total	415	100.0	100.0	

The descriptive results of Table 5.2 describes that 22.7 % universities have less than and equal to 10 Head of Departments, 39.5% universities have 11 to 20 Head of Departments, 16.6 percent universities have 21 to 30 Head of Departments, 11.3 % universities have 31 to 40 Head of Departments and 9.9 % universities have more than 40 Head of Departments.

Table 3:PhD holders in the Faculty

PhD holders in the Faculty	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 10	126	30.4	30.4	30.4
10-20	101	24.3	24.3	54.7
20-30	50	12.0	12.0	66.7
30-40	105	25.3	25.3	92.0
More than 40	33	8.0	8.0	100.0
Total	415	100.0	100.0	

The descriptive results of Table 5.3 exhibits that the 30.4 % of departments have less than and equal to 10 number of PhD degree holder Head of Departments in the departments of the faculties in the public universities in Pakistan, 24.3 % of the departments have 11 to 20 PhD faculty members, 12.0 % departments have 21 to 30 PhD Head of Departments, 25.3 % of the departments have 31 to 40 PhD Head of Departments, while 8.0 % departments have more than 40 PhD Head of Departments.

Table 4:Years of Service of Faculty

Years of Service of Faculty	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 3 years	24	5.8	5.8	5.8
3-5years	130	31.3	31.3	37.1
6-8 years	97	23.4	23.4	60.5
9-11 years	91	21.9	21.9	82.4
12-14 years	27	6.5	6.5	88.9
15years and above	46	11.1	11.1	100.0
Total	415	100.0	100.0	

Table 5.4 indicates the number of years of service of Head of Departments in the departments of schools and faculties in the public universities in Pakistan. 5.8% Head of Departments' work fewer than three years, while 31.3 % Head of Departments have three to five years of service. There are 23.4 % of Head of Departments have the period of service six to eight years. There are 21.9 % of Head of Departments have the period of service nine to eleven years. There are 6.5 % of Head of Departments have the period of service twelve to fourteen years while 11.1 % staff have the experience of fifteen years and above.

V. Hypothesis testing

Table 5: Multiple Regressions

Independent Variables	Organizational Performance			R ²
	Standardized Beta	t-value	Sig.	
Entrepreneurial Orientation	0.133	2.511	0.012	0.331
Entrepreneurial Training on Innovation	0.118	2.865	0.000	

Hypothesis 1 indicates that Entrepreneurial Orientation has positive relationship with performance of the organization. The results of analysis that Entrepreneurial Orientation has positive and significant relationship with performance of the organization as ($\beta = 0.133$; $p = 0.012$), therefore, hypothesis 1 is supported and Hypothesis 2 states that Entrepreneurial training on innovation has a positive relationship with performance of the organization. The results given in Table 5.17 demonstrated that Entrepreneurial training on innovation has positive and significant relationship with performance of the organization as ($\beta = 0.118$; $p = 0.000$), therefore, hypothesis 2 is supported.

VI. Discussion

While addressing the research question related to relationship between entrepreneurial orientation and organisational performance. The results of the correlation analysis indicate that entrepreneurial orientation has significant correlation with organisational performance. On the other hand, the result of regression analysis indicates that there exist a significant relationship between entrepreneurial orientation and organisational performance of public higher education institutes. Previous studies mentioned that EO is key for organisational success (Agrawal, 2001). New firms can responsively enhance their performance if they are strong in entrepreneurial orientation (Covin & Slevin, 1991; Zahra, 1993). These assertions have been discussed by Zahra (1993), mentioning that there is a scarcity of literature on the effect of entrepreneurship on company's performance.

In order to assess the magnitude and strength of the relationship between entrepreneurial training on innovation and organisational performance. The result of the correlations shows that there is a strong positive association between entrepreneurial training on innovation and organisational performance. The regression results also showed that there is a significant positive relationship between entrepreneurial training on innovation and organisational performance of public higher education institutes. Entrepreneurship training in the organisation is a growth strategy and effective tool to achieve competitive advantage (Kuratko, 2001; Lumpkin & Dess, 2001). Notably, Rosli and Mahmood (2013) and found that the employee and employer training interacted with innovation and significantly influences performance.

Public universities of Pakistan if evaluated critically should adopt a more organic type of entrepreneurship to encourage new ideas and take innovative opportunities as a source of growth. From the perspective of entrepreneurial training to the top management of the universities, research results indicate that entrepreneurial training on innovation tends to enhance the performance of the public universities in Pakistan. It is observed that there are no considerable training opportunities for the HoD's and Head of Departments to engage in furthering their entrepreneurial skills. In a practical perspective, the results suggest that the performance of public universities is more likely to be improved by public entrepreneurship, market orientation and entrepreneurial training on innovation. Moreover the impact of these factors has been influenced which can help in fostering the process of improved organizational performance specifically in public universities of Pakistan.

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