

# Impact of Human Capital Practices on the Performance of Small and Medium Enterprise's in Pakistan: Examining the Mediating Role of Innovation

Muhammad Irshad Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan

Muhammad Ibrahim College of business Management, Institute of Business Management, Karachi, Pakistan

Muntazir Mehdi Department of Commerce, Bahauddin Zakariya University, Multan, Pakistan

## Abstract

Small and Medium Industries play an important role in the development of the economy of any country. The current study aimed to examine the impact of human capital and social capital on the SMEs performance with the mediating role of innovation. SMEs were divided into various categories and then the respondents were reached out with convenience random sampling due to large size of the population. A sample of 307 SMEs was chosen and the data were analyzed through SMART PLS version 3.0. The findings of the study indicated that human capital has positive impact on the SMEs performance and when checked the mediating effects of innovation shows a partial between Human Capital and firm performance. It is recommended that SMEs in Pakistan must embark innovation to improve their performance and when planning human resource strategy they must concentrate on human capital carefully because it is positive linked with firm performance.

Keywords: SMES, Human Capital, Innovation, Firm Performance.

### Introduction

Human Capital in addition Firm Performance for entrepreneurial events have converted significant up till now dispersed ranges of management study for the previous three eras. Organizational sympathetic environment, as an interior surroundings feature, only indicator is described as a expediter intended for organizations to branch of structural entrepreneurial doings (Miller and Friesen, 1982; Schuler. 1986; Zahra and Covin. 1995; Antoncic and Hisrich. 2001). On the supplementary indicator. HC by means of essential proficiency is defined as unique of the core gages of managerial culture (Bantcl and Jackson. 1989; Edvinsson and Malone. 1997; Hitt et ai. 2001; Skaggs and Youndt. 2004). Hereafter it is value to explore their mutual consequence on the groundbreaking performance whereas together retain the aptitude to donate discretely to the administrative know-hows from diverse characteristics.

For example on one indicator the structural provision for entrepreneurship - that be able to precise as a proper legislative background wherever businesspersons may without difficulty contact to essential executive resources and environments to mature and gadget innovative thoughts and plans be able to inspire and permit the general managerial innovativeness. And on the extra indicator the human capital that is entirety of the distinct understanding, abilities and skills of the managerial human capitals establishes an obligatory' understanding base for the superiority of the individual state-of-the-art and innovative efforts.

The expenses and similarly the performance influences of all these properties and exertions are identical serious aimed at the executive superiors whereas the researcher at the period of familiarity cheap recommend them to expertise approaches besides buildings to be similarly state-of-the-art and competent by the side of the similar spell (March, 1991, Raisch and Birkinshaw, 2008). Publics directors who attend on the way these propositions might wonder uncertainty the reserves ended at the same time to the advancement of the Human capital and toward the delivery of structural provisions Will make harmony belongings Or just make a better a lime is new beneficial particularly once the legislative floppy means are imperfect.

That one similarly distinct in place of the combined the real or prospective properties that stand connected to the custody a hard- wearing linkage of extra or else fewer existing relations of reciprocal associate also gratitude (Bourdieu, 1983) Businesses benefitting on or after funds donate toward their particular innovativeness in relations of invention development, market expansion, besides client affiliation, between others. The social capital inside establishments happens in the interior three different clusters the extraordinary, average, and subordinate accountability sets (Camps & Marques. 2011). The level as well as landscapes of societal money also this one assistances in the interior these clutches remain at various levels. This individuality inside these sets is ascribed to the scopes of communal capital (Camps & Marques. 2011).

The literature about HC practices and Small and Medium Enterprises performance in the services sector



focused on healthcare industries (Mihail & Kloutsiniotis, 2016; Karetape et al., 2015), flight attendants (Karatepe et al., 2015), and in western countries context only (Mihail & Kloutsiniotis, 2016). Most of the earlier studies ignored the South Asian context, which High Performance Human Capital Practices on small and medium enterprises' Performance required further empirical evidences in other cultural context (Mihail & Kloutsiniotis, 2016), specifically such research evidences might be collected from the Pakistan's services sector, which is growing at a faster pace. Therefore, there was a need to study the relationship between entrepreneurial human Capital practices on small and medium performance in the Pakistani context. Thorough the mediating effect of innovation

Therefore, that scenario leaded to the development of following research questions:

- What is the impact of Human Capital on Firm Performance?
- ➤ What is the impact of Human Capital on Innovation?
- ➤ What is the impact of innovation on Firm Performance?
- > Does Innovation mediates the relationship between Human Capital and Firm Performance?

# Literature Review Human Capital

The original concept was also composed of general perception of the term 'human capital' in the sense of social experiences gained during the whole life. Therefore, the relationship of human and social (cultural) capital is often mentioned. Human capital, according to several authors, consists of experience and knowledge relevant to the economic activity of a person. The former term can be seen as part of (a subset of) social and cultural capital that places an emphasis on intergenerational (long-term) behavioural development, actions, contacts and relationships within the family. The above mentioned difference is quite important because of economic inputs and outputs that are related to human capital and can be at least partially measured. This is practically not possible in the context of 'behaviour'. Brožová (2003) notes again that human capital itself has a social and cultural dimension.

Even the human capital theory was, of course, subjected to criticism. What is the cause of a positive relationship between the individual's qualifications and earnings is still an unanswered question. According to Kadeřábková (2005), not even quality education guarantees a high salary, if the employee is on the external labour market. In the case of internal market, implementation delays are very common related to quality education = higher pay because it uses the so called principle of seniority. Too much emphasis on (nearly perfect) rationality of human behaviour is also a bit simplified, but there is no one-sided orientation towards the supply side in the real world

According to Becker (1993), human capital is the main and crucial factor of wealth creation in developed countries. Becker and Schultz (both are representatives of the Chicago school of economics) were attaching more importance to education as an investment element which should bring higher profit to an individual (higher salary), a company (higher productivity), and society (technological progress, higher consumption) in the future. Thus, Becker subsequently distinguished two types of human capital personal and social. The social contribution is evaluated by Kuchař (2007) on the example of higher consumption of skilled labour force, which means potentially higher investments and thus stimulation of the economic growth.

Experimental indication provisions the optimistic association stuck between the business of the human capital then the enterprise's enterprise (Gantocyt , 2000). Provides significant importance for effective business development to better education professionals by managing a firm, proper market identification and to improve applications for external funds (Gantocuks, 2012; Gohysey and Solugogen, 2000). With similar experience in business, businesses have more knowledge about technology and market opportunities for their in this way, the business person's ability to promote new products and market prospects can be located a big teamster for their firm performance. However, according to the exploration, construction of the high association of association and its six scopes affect the performance of sightseeing. And the business of guests remains unusual. Experimental evidence and self-effect (scary drawings, 1997).

Despite the numerous advantages involved in having high levels of human capital, Subramaniam and Youndt (2005), analyzing a broad group of organizations and industries, and Tzabbar et al. (2008), in the field of biotechnology companies, suggested that this may present certain negative aspects. These considerations lead us to believe that major differences could exist among different economic activities. In physical product and technology firms, the task of innovating is typically assigned to one particular unit, such as research and development or product development (Lyons et al., 2007). However, in the service sector, organization of the innovation process is normally less systematic and more global and complex, generally involving more departments and teams in the innovation process (Hipp and Grupp, 2005; Sundbo, 1997). Innovation in the field of services is therefore not centred on one particular group of employees but is affected by the behavior of a much wider range of people (Kattara and El-Said, 2013; Lyons et al., 2007). Consequently, here in the sector under Sector, we suggest that there is a positive impact on innovation in human capitalism

Human capital developed by the business's previous work experience can help promote innovation in existing



businesses (Hedgehogulus, 2000). Making a high degree of education to the top level of education; with the present experience, with new knowledge, a method of learning, which discovers new insight and new opportunities (Durban and Sense, 2010). In spite of this proof, nearby at slightest two extents that guarantee further investigation. First of all, De Vincen and Ess (2010) focus on modern production only on small businesses on the effect of employee level. They did not review the effect on the innovation of the owner of the human capital. It seems that small business owners show a significant character in innovation.

It makes the foundation for the following hypothesis:

H1: There is positive relationship between Human Capital and firm Performance.

**H2:** There is positive relationship between Human Capital and Innovation.

# Innovation and performance

The main role plays in the Innovation Advertising (Hunterbread and Links, 2006). And it is described as the development of transporting a new solution to the use of. This is the race, innovative ideas, practices, foodstuffs, (Theater, 1983, page 20). Innovation must be a new idea that involves someone who is considered individually, at the time when it was first used or discovered, and achieved success to gain economic benefits. Must be (Damanor, 1987; Roger, 2003).

Innovation of Enterprise Affairs has revealed that in the capitalist institutions, businesses have driven the scope of current economic structure to promote ways to execute and implement new practices and implement new processes by the compromised (1952) New created by a process of labeling as 'creative destruction'. While the top management team of the main concern of the young firm maintains a long-term innovation strategy, management does not only affect the direction of its strategy. Many researchers concentrate on the harmful effects of the corporate venture capital "Shark" because these companies can innovate during the demolition of knowledge and technology from young organizations (Kitty, Rosenburger, and AIS Hartet, 2008).

While in some investigation, the question is whether "all shorts are dangerous" (Dysriery and Rajgopalan, 2012), focuses on the structure of low investigation government structure to meet the huge impact of corporate venture capital (CVC) institutions. Required. Whether a company may face victimization of CVC companies, it can depend on the internal government structure, for instance, when the founders have strengthened the firm within the firm.

Innovation is a large business potential and the ability to 'modernize' is an element in which business managers are different from "business" (China and E, 1998). Chen and L (1998) make various associations 'innovations' and 'risk' dimensions from different business capabilities and managers.

The human capital, developed by the business's previous work experience, the current business can encourage the promotion of innovation (Hadithnolutions, 2000). Making a high degree of education to the top level of education; with the present experience, with new knowledge, a method of learning, which discovers new insight and new opportunities (Durban and Sense, 2010). Although this indication, present at slightest two parts that assurance further examination. Different scientific studies establish a direct connection between the level of education of education and the ability to modernize the organization.

Experimental evidence supports positive relationships between human capitalism and innovation (Diane and Siszes, 2010; Hajjnollys, 2000). Endogenous Development Theory (Nelson and Fifteen, 1966) teaches that the level of education increases (for example, basic, secondary, arbitration) will accelerate the innovation and promotion process. For this reason, in a technically progressive and energetic economy, higher education goals supervisors will have more capabilities to appreciate and estimate innovative information and improve the difference between promise and non-negative views. It makes the foundation for the succeeding hypothesis:

**H3**: There is positive relationship between Innovation and Firm Performance.

**H4:** Dose the Innovation mediates the relationships between Human Capital and Firm performance.

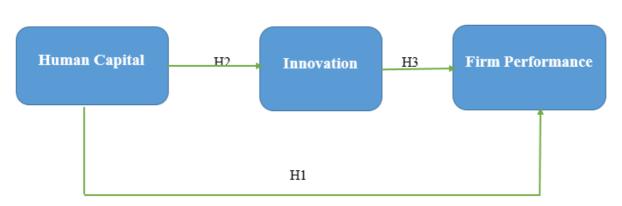
# Research Design

# Methodology

The population of this study was owners and employees of small and medium enterprises of Pakistan specifically South Punjab. A study of each small and medium industries was carried out to understand the innovative trends in industries. The survey gave a wide audience and a qualitative way of collecting data, analyzing information, and reporting the results. The research design gave guidance on getting an in-depth understanding of how human capital could be used in an innovative way for the improvement of performance within the small and medium industries in southern Punjab. SMART PLS version 3 used for data analysis.



H4



#### Measurement

Variables of this study were measured with the help of multiple items adopted from prior studies. To evaluate the human capital we adopted the five items from the previous literature of in (Kuratko et al studies,1990, 1992 and Hornsby and L. 2002). To measure firm performance questionnaire is created by adapting from literature that focus on financial performance indicators such as profitability and growth (Baker and Sininkula, 1999; Atonic and Hisrich, 2001). The first used Zou et al.'s (1998) items. The study preserved innovation on its decomposed near to observe in what way each kind of innovation mediates the performance small and medium industry completed through human capital five items adopted from the (Chirico and Salvato 2014).

## **Results and Discussion**

Afterward data assemblage, the prime phase for consequent systematic investigation is vigilant inspection of collected data for correctness (Tabachnick & Fidell; 2001). The scholar's castoff dual approaches aimed at data transmission, out-of-range standards and misplaced information. Facts entrance faults remain collective whereas incoming a huge dataset (Coakes & Steed; 2006). Data entrance mistakes be situated and scrutinized through attaining frequencies as of Smart PLS 3 also the scholar confirmed that here be present nope out-of-range standards in the collected data.

## Cronbach's Alpha, Composite Reliability

This dimension model stays assessed with esteem to reliability plus validity (Hair et al. 2011; Hair et al. 2014). used to indicate reliability be present measured by Cronbach's important which stands a customary assessment of interior steadiness (Cronbach, 1951). Entirely concepts exposed suitable heights indicating Cronbach's dominant, reaching from 0.677 to 1.00. Additional, composite reliability (Werts et al., 1974) stood likewise recycled near measure inner steadiness for the reason that "Cronbach's alpha" tends toward deliver a simple dryness *inconceivable* inner uniformity reliability of dormant variables in PLS pathway representations.

The "composite reliability" outcomes similarly specified that assessment be there robust trendy relations expressing core steadiness reliability. The directories of "composite reliability displayed acceptable standard, reaching as of 0.795 near 0.836 which one surpassed the approach close of 0.8 (Nunnally & Bernstein, 1994).

Constructs	Cronbach's Alpha	Composite Reliability
FP	0.703	0.808
HC	0.755	0.836
INNO	0.766	0.827

Note: "FP" Firm Performance, "HC" Human Capital, "INNO" Innovation,

# **Average Variance Extracted (AVE)**

AVE refers to test the latent variable and to test the variance of its items (Hair et al. 2014). The value of AVE higher than 0.5 shown that the latent variable defines additional than partial of variance (Hair et al. 2014). Current study results were shown that the AVE value of latent variable was higher than the recommended values ranging between 0.506 to 0.571 respectively. Those values indicate that more than half variance of items describe latent variable as well.



Constructs	Average Variance Extracted
FP	0.571
HC	0.506
INNO	0.527

Note: "FP" Firm Performance, "HC" Human Capital, "INNO" Innovation,

#### Fornell-Larcker test

Fornell-Larcker examination methods discriminant validity on the concept level (Fornell & Larcker 1981). This examination theorizes that a hypothesis must share further modification with his particular trials than it segments through added theories in the assumed perfect. Therefore, the association of a concept with its particular displays "(square root of AVE)" essentially remain larger than the connection among the concept in addition to rather extra paradigm operationalized in the learning (Fornell & Larcker 1981; Chin; 2010). Additional, the connections in the middle of the constants must not surpass than 0.8 (Bagozzi et al.; 1991). In altogether belongings, the square root of average variance extracted standards existed originate superior than the agreeing off-diagonal associations demonstrating acceptable discriminant validity (Barclay et al., 1995).

## Fornell-Larcker test Table

Constructs	Firm Performance	Human Capital	Innovation
FP	0.677		
HC	0.623	0.711	
INNO	0.643	0.687	0.761

Note: "FP" Firm Performance, "HC" Human Capital, "INNO" Innovation,

## **Predictive Power of the Model**

R2 is an extent of predictive correctness and its greatness designates a collective consequence of external factors concealed variables on apiece internal factors variable In PLS-SEM, R2 the greatest generally used standard of value is to define the model's accuracy The importance of R2 assortments from 0 to 1 and greater value specifies superior prophetic accuracy. As such, R2 standards of 0.75, 0.50, and 0.25 are understood as strong, moderate and weak correspondingly (Hair et al. 2014).

Table below shows R2 values and adjusted R2 values to show the variances.

## **Predictive Power of the Model Table**

Predictive power of the model	R Square	R Square Adjusted
FP	0.834	0.833
INNO	0.610	0.607

Note: "FP" Firm Performance, "INNO" Innovation.

# Beta Coefficients, Standard Deviation, T values and P values

Constructs	Beta Coefficient	Standard Deviation (STDEV)	T Statistics	P Values
HC -> FP	0.336	0.045	7.445	0.000
HC -> INNO	0.247	0.063	3.899	0.000
INNO -> FP	0.281	0.052	5.378	0.000

Note: "FP" Firm Performance, "INNO" Innovation.

A standardized beta coefficient relates the strength of the influence of each individual independent variable to the dependent. The strongest value of beta capacity, strong effect. In this research our beta coefficients shows that our independent variable human capital relation with firm performance is 0.336 mediating variable innovation human capital effects the innovation value is 0.247. And the overall mediation effects of innovation on firm performance shows the value 0.281.

## Mediation

Mediation analysis is used to see the impact of human capital on firm performance in presence of the mediating role of innovation. The below table display the results of mediation analysis according to the mediation analysis VAF in the current study our variable named innovation a partially mediate between Human Capital and personality and Firm Performance.

Relationship	Indirect effect	Total effect	VAF	Finding
HC >INNO>FP	0.2387	0.7187	0.3321	Partial Mediation

Note: "FP" Firm Performance, "INNO" Innovation.



## Conclusion

The population for this study came from small and medium industries in South Punjab. There might be specific economic factors that affect firm performance but in our study we check performance through the constructs of human capital and the mediating effects of innovation. The main theme of this study is to expose the association among human capital, through the mediating role of innovation and firm performance small and medium industries in south Punjab. As a result of data analysis we found that human capital, social capital has significant effect firm performance and the innovation mediates the relationship between human capital, and firm performance. This study was conducted in Punjab, Pakistan in south Punjab region small industries.

The current study also describes that how human capital can affect the firm performance through the mediating role of innovation. Additionally, the current study has also recommended that theory resource based perspective. This theory describe the mechanism connecting human capital directed to firm performance. The current study has made numerous findings. First, the human capital was significantly linked to firm performance through the mediation of innovation. Second, innovation mediates the links between Firm Performance and Human Capital.

## **Future Directions and limitation**

The current study is cross sectional basis and in future it should be longitudinal. The current study is conducted on only a single culture but in the future, there should be need to conduct on different type of culture.

In this way, future studies can be checked by coordinated by SEM based on the cove tryptic basis. Confirm the contact between the more preview ideas. Future researcher must also investigate with other forecaster of small business performance such as the firm's owner's creative self-efficacy, social capital, and the properties of paternal role models. Social network providing through protracted domestic, public.

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