The Impact of Human Capital on Competitive Performance: An Empirical Study on Jordanian Pharmaceutical Companies

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Abstract

The study is aimed at knowing the impact of human capital on competitive performance in Jordanian pharmaceutical companies. The study sample consisted of Jordanian human medicines manufacturing companies listed in the Jordanian Association of Pharmaceutical Manufacturers' records of manufacturing companies for 2015. This amounted to 15 companies. The sampling unit and the analysis included individuals working in these companies from managers to department heads at various administrative levels. To achieve its objectives, the study used descriptive analytical method. This method was applied to collect and analyze data and test hypotheses through a questionnaire, which was used as a tool for the collection of information in the field of study. The study found a number of results, most important of which is: the existence of a statistically significant relationship between human capital (learning; knowledge; and skills) and competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

The study recommended that attention be given to human capital in the companies, which will lead to an improvement in the level of the company, as well as an expansion of its market share and maximizing of its strengths.

Keywords: Competition, human resource, pharmaceutical companies, Jordan

Framework of the Study

Introduction

Human Capital is an important and modern concept, which scientists and researchers in the field of administration have started discussing widely. This underscores the importance of human capital in building organizations and bringing operational success. Here, there are many definitions of human

capital as there are researchers. Jamal and Saif (2011) confirmed that human resource is the difference between success and failure, where it makes up the most important resources in any organization. Chin and Sofian (2011) pointed out that human resource is a resource that is owned by all the organizations who are key to their success and continuity.

Fayoumi O (2010) stated that human capital effectively works at improving quality and upgrading what makes this quality precedent, giving competitive advantage to organizations. This is usually done during an organization's building, developing human capital which is the weighty factor in the improvement and development of the level of performance based on quality.

The Problem of the Study

The problem of the current study stems from the following questions:

1. Is there a relationship between human capital (learning; knowledge; and skills) and competitive performance in Jordanian pharmaceutical companies?

2. Is there a trace of human capital (learning; knowledge; and skills) in competitive performance in Jordanian pharmaceutical companies?

The Importance of the Study

This study stems from the following scientific and practical considerations:

1. Highlight the importance of human capital in Jordanian pharmaceutical industry and their importance in achieving high levels of performance, raising the level of these companies, and contributing to the achievement of the objectives in the long run.

2. Contribute to the developmental work of Jordanian pharmaceutical companies' mechanism as well as maintain the continuity for public good.

3. This study contributes to opening up other research areas on the subject of human capital and spurring interest in this kind of capital, especially in the Jordanian pharmaceutical companies in order to achieve the strategic objectives of these companies.

Objectives of the Study

The aim of this study is to learn of the impact of human capital on the competitive performance of the Jordanian pharmaceutical industry. The independent variable is human capital, whereas the dependent variable is competitive performance in Jordanian pharmaceutical companies.

The study also aims to identify the impact of human capital (learning; knowledge; and skills) on competitive performance in Jordanian pharmaceutical companies.

Hypotheses of the Study

The First Major Hypothesis HO 1

There is a statistically significant effect of human capital (learning; knowledge; and skills) on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05. This give rise to the following sub-hypotheses:

Sub-first Hypothesis HO1-1

There is a statistically significant effect of learning on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

Sub-second Hypothesis HO1-2

There is a statistically significant effect of knowledge on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

Sub-premise Third HO1-3

There is a statistically significant effect of skills on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

Model Study

The dimensions of human capital (learning; knowledge; and skills) were determined based on the study by Ukenna et al. (2010). However, the competitive terms of performance has been relying on Oyedijo (2012).

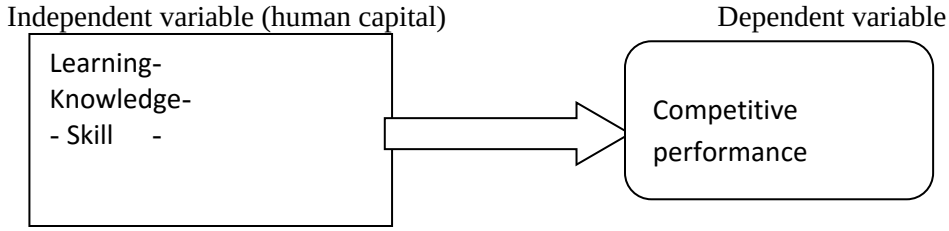

Figure 1.

The Study Procedural Definition of Terms

Human Capital: This refers to strategic capabilities possessed by the organization through the necessary skills and talents and applied knowledge to carry out the activities required by the organization (Kaplan & Norton, 2004). These are measured through learning, training, experience, knowledge, and skills.

Competitive Performance: This refers to the success of the organization in achieving its objectives. It is a reflection of their ability to achieve their goals compared to competitors (Morgan et.al., 2009).

The Theoretical Framework and Previous Studies

Human Capital

Human Capital is an important and modern concept which scientists and researchers in the field of administration have started discussing broadly (Van der Heijden, 2002). Human capital represents the assets an individual brings with himself to an organization, such as education, training in the previous job, age, and professional experience. These all culminate in the concept (of personnel in an organization) called human capital. These assets or items (carried by each individual) are supposed to lead to a positive impact on the management of the organization. Weatherly (2003) stressed that human capital reflects the cumulative total attitudes and experience, knowledge and creativity, and energy and enthusiasm shown by people to invest in their business.

Ukenna et al. (2010) stressed that human capital is positively linked to the performance of the organization and its profits. From the foregoing, it is obvious that human capital is an important factor for the input and output of modern organizations (cognitive private) and possesses features that are not available in other capital. This is that the rising productivity curve is in the same direction of his capabilities, knowledge, and skills curve. Although old moral and legal renewed environmental changes with the times and innovation, it will not disappear, but remain.

Competitive Performance

This occupied the subject of performance in strategic literature and is of critical importance to considerations relating to the first, being the central hub for measuring the success and the failure of organizations in its decisions and strategic plans. Secondly, the study of performance facing many challenges, particularly in the strategic issues, is the concept of contrast and indicators measured according to contrast of the organizations' objectives. The nature of the different objectives of the parties associated with them requires determining the appropriate metrics that can be used in measuring performance and source-based information in the measurement. How to integrate different measurements to provide a realistic picture of the organization’s competitive performance represents a strategic perspective or the perspective of the market. The most important measures adopted in competitive performance was done by Nayef (2007). They include:

1. Market gauges and indicators related to growth in shares refer to the company's ability to enter new market segments through growth in sales or increase the number of machines.

2. Value-added measures. This is one of my favorite indicators in measuring the returns achieved by the company compared to direct Elv to achieve those returns. The intervention exists in the context of value-added indicators of innovation, learning and the developing new services, and technical leadership and rates of improvement and innovation.

3. Satisfaction measures. There are two. The first is goods about the case of certain purchase and evaluates their results. The second is the accumulated goods which is based on the total purchases and transactions for clients with the organization. However, this refers to the customer's dealings with the company in the past, present, and future.

4. Location competitive standards. Competitive location for industry refers to its ability to achieve sustainable competitive advantages over its competitors in the market, whatever the source of these competitive advantages is. It does not matter if it is in the ability to adapt and survive or in the rapid growth of the industry environment.

Previous Studies

- Al-Saffar (2008): "The impact of human capital on the banking"

Performance: This is an analytical study of the views of a sample of Jordanian commercial banks. The study found that many of the results highlighted innovation variables as first in terms of important performance impact factor. Also, the knowledge of variables ranked second.

- Wang et al. (2008): "Effect of Human Capital Investment on Organizational Performance"

The study found many results. Of note was the existence of a significant relationship between human capital and organizational performance and the presence of the impact of organizational culture on the relationship between human capital and organizational performance.

Dizgah et al. (2011): "Human Capital Characteristics and Organizational Performance" "

The study found that there is a statistically significant relationship at the level 0.05 or less between human capital and organizational performance.

Jamal & Saif (2011): "Impact of Human Capital Management on Organizational Performance"

The study found that the human capital management has a positive and significant impact on organizational performance of these companies and is reflected on the development of a strategy to invest in human capital by these companies.

Study Approach

The current study can be regarded as an exploratory study. It is based on the descriptive analytical method where the questionnaire will be used to collect data and information about the supported variables of the study sample. It is the descriptive analytical method that is most suitable to achieve the objectives of the current study.

Study Population and Sample

The sample of the study is obtained from the study population, which consist of Jordanian Association of Pharmaceutical Manufacturers' records of pharmaceutical manufacturing companies for 2015. 15 companies have been intentionally selected.

Stability Study Tool

The stability or the internal consistency of the instrument used in this study to measure responses to paragraphs was assured using Cronbach equation alpha (Cronbach Alpha). The result is acceptable statistically if the value is greater than 0.70 (Sekaran, 2006). In addition, the results showed that the coefficient values stability is acceptable.

Table 1.

ITEMS		Questions	Mean	Std. Deviation	Cronbach's Alpha	Cronbach's Alpha
Human Capital	Learning	L1	2.3750	.48795	.786	.932
		L2	3.0000	1.46926		
		L3	3.1875	.39340		
		L4	2.3750	.48795		
	Knowing or Knowledge	K1	2.8750	1.46385	.863	
		K2	3.1875	.39340		
		K3	2.3750	.48795		
		K4	2.8750	1.46385		
		K5	3.1875	.39340		
	Skills	S1	2.3750	.48795	.755	
		S2	3.1875	.39340		
Competitive Performance		C1	2.3750	.48795	0.723	.755
		C2	3.1875	.39340	0.711	
Questionnaire			36.5625	8.00768	.941	

As the above table shows, the stability values for the main variables of the study as the stability factor in a comprehensive questionnaire was 941. The Alpha Cronbach indicators on the suitability of the above study tool is generally high by a factor of stability and thus achieves the purposes of the study.

Results and Test Hypotheses

The First Major Hypothesis HO 1

There is a statistically significant effect of human capital (learning; knowledge; and skills) on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05

Table 2. The results of multiple regression contrasts the impact of learning, knowledge, and skill analysis on competitive performance(The dependent variable is the competitive performance)

Dependent Variable	R	R Square	DF		Mean Square	F	B		T	Sig.
Competitive performance	.951	.904	Regression	3	2.994	188.255	Learning	.465	3.486	.000
			Residual	60	.016		Knowing	.513	3.902	
			Total	63			Skills	.031	.675	

Statistically significant ($\alpha \leq 0.05$)*

The results of Table 2 shows the value of the coefficient of determination to be R2 = 0.904. This means that the independent variable (human capital) explains what percentage of discrepancy (90%) is in the dependent variable (the competitive performance). Because the value of F is 188.255 at the significance level of <0.05, we accept the hypothesis that there is a statistically significant effect ($0.05 \leq \alpha$) of human capital on competitive performance.

Sub-first Hypothesis HO 1-1

There is a statistically significant effect of learning on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

Table 3 The results of simple regression contrasts learning competitive performance impact analysis (dependent variable is the competitive performance).

Dependent Variable	R	R Square	DF		Mean Square	F	β	T	Sig.
Competitive performance	.938	.879	Regression	1	8.735	450.240	.938	21.219	.000
			Residual	62	.019				
			Total	63					

The results of Table 3 shows that the value of the coefficient of determination R2 = 0.879. This explains the rate (88%) of the discrepancy in the dependent variable (the competitive performance). And because the value of F is 450.240 at a significance level of <0.05, we accept the hypothesis that

there is a statistically significant effect ($0.05 \leq \alpha$) to learn the competitive performance.

Sub-third Hypothesis HO 1-2

There is a statistically significant effect of knowledge on competitive performance in Jordanian pharmaceutical companies at a level of significance of 0.05.

Table 4

The results of simple regression contrasts the impact of knowledge on competitive performance analysis (dependent variable is the competitive performance)

Dependent Variable	**R**	**R Square**	**DF**		**Mean Square**	**F**	**β**	**T**	**Sig.**
Competitive performance	.940	. 884	**Regression**	1	8.790	474.757	.940	21.789	.000
			Residual	62	.019				
			Total	63					

Results of table 4 showed the value of the coefficient of determination to be R2 = 0.884. This means that the independent variable knowledge explains what percentage of (88%) discrepancy is existent in the dependent variable (the competitive performance). And because the value of F = 474.76 at a level significance <0.05, we accept the hypothesis that there is a statistically significant effect ($0.05 \leq \alpha$) of knowledge on the competitive performance.

Sub-third Hypothesis HO 1-3

No statistical effect of skill on competitive performance indication in Jordanian pharmaceutical companies at a level of significance of 0.05.

Table 5 The results of simple regression contrasts the influence of skill on the competitive performance analysis (dependent variable is the competitive performance).

Dependent Variable	R	R Square	DF		Mean Square	F	β	T	Sig.
Competitive performance	.451	. 204	Regression	1	2.025	15.867	-.451	-3.983	.000
			Residual	62	.128				
			Total	63					

Results showed, through the table 5, the value of the coefficient of determination to be R2 = 0.204. This means that the independent variable knowledge explains what percentage of (20%) discrepancy is present in the dependent variable (the competitive performance). And because the value of

F = 15.87 at a significance level of <0.05, we accept the hypothesis that there is a statistically significant effect ($0.05 \leq \alpha$) of skill on competitive performance.

Results and Recommendations

Results

1. Descriptive analysis results showed that the level of learning in the Jordanian pharmaceutical companies under study, from the point of view of the study sample, was high.

2. The results showed that the level of knowledge in the Jordanian pharmaceutical companies under study, from the point of view of the study sample, was average.

3. The results showed that the level of skills in the Jordanian pharmaceutical companies under study, from the point of view of the study sample, was average.

4. The results showed that the performance of the Jordanian pharmaceutical industry under study, from the point of view of the study sample, was high.

5. There is a statistically significant effect of human capital (learning; knowledge; and skills) on competitive performance in Jordanian pharmaceutical industry at the level of significance of $\alpha<0.05$.

6. There is a statistically significant effect of learning on the competitive performance in Jordanian pharmaceutical industry at the level of significance of $\alpha<0.05$.

7. There is a statistically significant effect of knowledge on the competitive performance in the Jordanian pharmaceutical industry at the level of significance of $\alpha<0.05$.

8. There is a statistically significant effect of skills on the competitive performance of Jordanian pharmaceutical industry at the level of significance of $\alpha<0.05$.

Recommendations

1. Concerted efforts among stakeholders must be made to identify priorities for building human capital in the companies under study.

2. Attention must be given to human capital in the companies under study because of its importance in improving the performance of companies and distinguishing them in the long run. This is done through the development of organizational structures and the use of flexible capacity and strengthening of the institutional structures of culture.

3. Conduct a study to diagnose the effectiveness of human capital in Jordanian pharmaceutical companies.

4. Conduct a study to demonstrate the impact of human capital money in performance excellence in terms of efficiency and effectiveness.

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