The Correlates of Human Capital and Organizational Performance: Empirical Evidence from North-Kivu Hospitals in DR Congo

Agnes Riziki Lufungula, Robert A. Borromeo

Received: 11 November 2019, Revised: 29 November 2019, Accepted: 12 December 2019

Published Online: 28 December 2019

In-Text Citation: (Lufungula, & Borromeo, 2019)

Copyright: © 2019 The Author(s)
Published by Human Resource Management Academic Research Society (www.hrmars.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licenses/by/4.0/legalcode

Vol. 9, No. 12, 2019, Pg. 177 - 194

http://hrmars.com/index.php/pages/detail/IJARBSS

Full Terms & Conditions of access and use can be found at
http://hrmars.com/index.php/pages/detail/publication-ethics
The Correlates of Human Capital and Organizational Performance: Empirical Evidence from North-Kivu Hospitals in DR Congo

Agnes Riziki Lufungula, Ph.D, CPA
Institut Superieur de Commerce, ISC/Butembo DRC
Email: rizikiagnes@gmail.com

Robert A. Borromeo, Ph.D., CPA
Adventist University of the Philippines, Silang, Cavite, Philippines
Email: raborromeo@aup.edu.ph

Abstract
Healthcare institutions such as hospitals and health centers, in today’s world, are experiencing systemic failures in the process and human capital that is affecting their organizational performance. It is as a result of the issue of hospitals performance that this study looked at the influence of human capital in North-Kivu Hospitals in DR Congo. Based on self-contracted questionnaire with human capital and organizational performance having 0.864 and 0.77 Cronbach alpha respectively and a descriptive-correlational research design among 271 (47%) healthcare facilities, the study examined the relationship between human capital and organizational performance as well as the level of human capital. The respondents were simple randomly selected. The results revealed that the human capital is high and there is a positive significant relationship between human capital and organizational performance in healthcare institutions. The study recommends that with the high knowledge, skills and positive attitude of their employees, health administrators should mobilize the employees to participate in the achievement of organizational performance.

Keywords: Human Capital, Organizational Performance, Hospital

Introduction
Healthcare institutions such as hospitals and health centers, in today’s world, are experiencing systemic failures in the process and human capital that is affecting their organizational performance. Generally, organizational performance is characterized by the effectiveness of the use of financial resources to reach organizational goals. Failures in organizational performance could be the results of risk elements of fraud, theft, errors, external hazards, and human mistakes that surround operational human capital, and management control.
To name a few health institutions that went through organizational performance failures as a result of human capital and its consequences, in the 2010; the healthcare institution named “Centre Hospitalier Régional Universitaire (CHRU) of Nancy” in France with 14 million euros loss in bankruptcy, Dutch Health Hospital, in Amsterdam (Barth, Carpio & Levine, 2008). In the Netherlands, four Dutch healthcare institutions under the control of an insurance company were declared default (Etu-Menson, 2011). In August 2018, Baba Raghav Das Medical College Public Hospital in Uttar Pradesh and Ram Manohar Lohia's Public Hospital in India had $1billion loss, Healthcare Maranata in Canada $1.4 billion loss and Beshili Hospital $691.2m loss in 2002, and in 2004 National Ngema Hospital (Giqncotti, Gugielmo, & Mauro, 2017).

It must be admitted that these situations are not different in what happens in the Democratic Republic of Congo (DRC) healthcare institutions (Ntembawa & Lerberghe, 2015). DRC had experienced for more than a decade the autocratic leadership and social disturbance from conflicts in 2006 and 2011 when it experienced democratic elections. These circumstances have impacted the hospital operations, human capital.

Ntembwa and Lerberghe (2015), in their evaluation of the health system in DRC to improve aid coordination in the health sector, noted the risks consisted of management disproportional cost, operational wastage in the process due to duplication of systems, inefficient workforce deployment, and supply chain duplication.


Until recently, there scant research in DR Congo which has focused on addressing the problem of organizational performance from the perspective of human capital. Therefore, this study has found the gap in knowledge to contribute to it. The study seeks to answer the following research questions:

1. What is the level of the human capital of the healthcare institutions in terms of their employees’:
   a. Knowledge
   b. Skill
   c. Attitude

2. Is there a significant relationship between human capital and organizational performance?

Hypothesis
There is no significant relationship between human capital and organizational performance.

Literature Review
Human Capital
A great assertion by Grant (2014) about human capital is that amidst technology, the innovation of products and low cost to overcome competitors, human capital is the backbone of every organizational success. In the capitalist study by Adam Smith, he based his work more
on human capital. Smith’s human capital elements included education, apprenticeship, talent and skill that the individual acquired.

The concept of human capital rooted in macroeconomic theory considers people as the most valuable asset for the growth and establishment of the firm (Goldin, 2014). It is this consideration that leads the organizations to “invest in people in the form of training and development, improvement of the quality of work-life, support of work-life balance, general health improvement, among others, to improve the asset value of people” (Goldin, 2014, p. 34).

Human capital is among the elements that make up intellectual capital, and there are several definitions and approaches to understanding human capital (Mushref, 2014). Human capital involves the sum of inborn or obtained knowledge, competencies, skills, and attitude of the individuals. Therefore, it can be concluded that human capital presents the brainpower of the employee inside the organization (Maditinos, Sevic, & Tsairidis, 2010).

Goldin (2014) views human capital as health, the stock of talent and expertise of employees. Again, Baron (2011) contends that human capital is not only about the skills, knowledge, and attitude of individuals; it encompasses their commitment and willingness to part their knowledge, skills, and attitude in value addition to the organization. Human capital is the employees’ knowledge and skills accumulated through attitude. Human capital is defined as “the competence of firm’s members, including individual knowledge, skills, attitude, expertise and abilities” (Mention & Bontis, 2013, p. 2-3).

Knowledge
In the current competitive world of commerce, knowledge has been identified by current researchers like Mills and Smith (2011), Andreeva and Kianto (2012), and Mukhtar et al. (2013) as the greatest asset of every firm. Knowledge management in an organization is defined by Nvaok (2017) as the power of information creation, storage, transfer, and application by the employee. Knowledge is simply power. There have been discussions and empirical studies considering the relationship between knowledge management and organizational performance. The facts as discussed by Novak (2017), state that organizational performance measurement elements are many, but there are studies providing evidence that knowledge has a positive relationship with organizational performance.

Rhodes et al. (2008) observed the relationship between social capital, organizational learning, and knowledge transfer, and perceived organizational performance. Their study results showed that knowledge transfer (absorption capacity, learning intention) is positively correlated with financial performance. Another study exposed that organizational trust and innovativeness are correlated as mediated by knowledge management in Polish firms (Sankowska, 2013).

Abu-Bakar et al. (2016) study in construction companies showed that there is a positive correlation between growth as indicated by employment growth and turnover and knowledge creation, storage, transfer, and application. Among these four factors, the transfer had the most significant impact on growth. Khalique at el. (2013) highlighted human capital as the main component of the firm, and it represents the employee’s knowledge, skills, training and development, education, professional attitude, and intellectual ability. Likewise, it also considers the concept of human capital skills, ability to relate, and standards. It can, therefore, work to transform an individual into combined know-how and organizational
capital for a longer-term. In this respect, human capital is the employee's brainpower within
the hospital.

Siril et al. (2014) examined the human resource crisis in the Tanzania health sector. Their study indicated that there was 87.5% and 67% shortage of health knowledge personnel in private and public healthcare institutions respectively. They reported that from 2001-2010 a total of 2,446 made up of medical and dental doctors completed their studies to be employed into the sector. However, due to challenges like accommodation, allowances, delayed salary, working environmental condition and lack of job security only 38.10% stayed in Tanzania to work. The rest of these knowledge personnel sought employment overseas.

Skill
Skill acquisition by employees is through training. The training aims to make employees efficient and effective. Skill is synonymous with competence are all essential elements employees require to help firms increase their performance through continuous learning (Osei, 2015). When employees have clear idea in terms of the strategic goals and job expectations; also when jobs and tasks are planned in line with these set goals, firms achieve high performance. (Swarnalatha & Prasanna, 2012; Gill, 2011).

Osei (2015) studied the relationship between competency and organizational performance in pharmaceutical firms. The results showed that health institutions are aware of the positive relationship between employees’ skills and organizational performance. The study recommended continuous learning as the best way to increase the skills or competence level of employees.

Employee’s skills can be identified through an employee’s knowledge, talents, and knack, of which knowledge and skills are uppermost. Employee’s knowledge can be recognized through practical training and education, generally acquired through schooling. Similarly, the skills of an employee can be recognized through his/her capability of accomplishing practical assignments. Therefore, the primary answer for an organization is to keep its competitive excellence coming through employee’s capability of accomplishing practical assignments and organizational ability to be faster in learning than its rivals.

Isafani, Aryankhesal, and Haghani (2014) examined the relationship between skills of managers and the impact on performance among nursing managers at Iran University Medical Science. Results showed that the nursing managers’ management skills were fair (2.57 out of 5) and the performance assessment results were in good condition (98.44). There was no meaningful correlation between the results of the managers’ evaluation and the scores of managerial skills.

Attitude
Kotur and Anbzhagan (2014) define attitude as a learned tendency to act in a consistent way to a particular object or situation. Attitudes have affective, mental and behavioral intention elements. A competent person must have the ability to feel and understand a situation, the propensity to act in a manner that is controlled and predictable, and the ability to act consistently in a manner appropriate to the situation. By persuasion as well as a response to the communication, attitudes can be changed. According to PWC (2014), such attitudes can be nurtured and developed.

Amiri, Jandaghi, & Ramezan (2011); Ahmadi & Shakeri (2012), and Pirvulescu (2015) highlight that organizations are now matching employees based on personality and attitudes
(that is, ambition) in order to forecast future employee engagement and workplace behaviours. These advanced matching techniques reduce the amount of risk in the external labour market by enabling the firm to secure candidates that are more likely to prosper in the organization.

Organizations measure the interrelationships among these three types of capital, as the interactions between these constructs have significant consequences for the development of both human capital and knowledge capital within organizations. Also noteworthy is that human capital can be measured at both the individual and firm-level in order to align organizational capabilities with strategic objectives (Njogu, 2017).

In particular, a better understanding of the role of emotion, as well as broader environmental impacts, is needed and has been largely overlooked in past research. In addition, ongoing research will provide a more in-depth understanding of the effects on organizational indicators such as customer satisfaction and financial indicators of employee attitudes and job satisfaction. Greater insights into the relationship between employee attitudes and business performance will help HR professionals as they strive to improve the business’ essential people in a highly competitive global arena (Zlate & Enache, 2014).

Employee attitude must not be considered as merely the length of years spent on the job but must consider how the employee has learned his skill and has become competent on the job to achieve efficiency (Kotur & Anbazhagan, 2014). Attitude is the performance ability of an employee due to the length of work, skill, and education. The right attitude is attained through repetitive work and also job design rotation or specialization.

According to PWC (2014), attitude is based on the employee value proposition’s alignment with his/her company’s business and talent strategy. The elements on employee engagement that will really move the needle are unique to each organization. The employee attitude indicates four significant dimensions: leadership, development, recognition, and culture. Leadership focused thought and energy that inspire and direct and are cascaded through the organization. Development is coaching and training that allows employees to continuously learn and grow personally and professionally. Recognition is the hand, heart, and mind and is recognized and rewarded to motivate employees to do their best work. Culture is the shared assumptions that drive organizational norms on how people interact and get the work done. These four scopes do not exist in isolation but influence the employee attitude through a combination of eight elements.

Attitude acquisition is not only by education but, most importantly by training. However, there is a positive correlation between education; skill imparts to attitude causing a high operational performance (Amiri, Jandaghi, & Ramezan, 2011; Ahmadi, Ahmadi & Shakeri, 2011). The attitude should not be coupled with knowledge because attitude may or may not lead to increased knowledge (Sonnentag, as cited in Unger et al., 2011). In a 15-year panel study by Pirvulescu (2015), he concluded that there is a strong relationship between managerial attitude and organizational performance among firms in the USA. Kotur and Anbazhagan (2014) study also confirmed the strong positive relationship between education and attitude on organizational performance. In a study by Kotur and Anbazhagan (2014) they concluded that education and attitude towards work actually have their various influences on the worker’s performance. With a shift in any of these two factors, which is attitude towards education and work, it will lead to a change in the worker’s performance. The study also indicates that the workers tend to show relatively better performance with the increased labor-attitude, but otherwise in the case of education. When these variables have increased...
significantly, the performance is found to decline even more—the studied sample. The research was conducted at a factory in Chittoor Sugar located in South India’s Chittoor city. Njogu (2017) analyzed the impact of work attitude on employee performance in a healthcare institution in Kenya. The study investigated the effect of work attitude on effectiveness and efficiency. From the study, the employee work attitude was found to enhance performance.

**Organizational Performance**

The purpose of business existence has changed over time in relation to its organizational performance. According to Mortin and Audebrand (2014), the assessment of organizational performance must not only consist of financial indicators of return on investments, profit per share, or profits. It must consider the human capital, process, and environment. Our modern-day organizational performance focuses on growth, competition, financial performance, social cooperation, and human dignity. The aim is to address the needs and wants of shareholders, customers, and employees. This is because human capital will influence the customer and in turn, after the satisfaction of the shareholder (Mortin & Audebrand, 2014).

**Financial Performance**

Financial Performance is a systematic organizational evaluation. It considers the financial indicators and the quality of goods and resources. According to World Health Organization (WHO, 2014), the financial performance of a healthcare institution can be assessed in relation to the bed occupancy ratio, personnel cost in the total income of services, asset sustainability ratio, cost-to-income ratio, net financial liabilities ratio and the cost of drugs and materials. In short financial performance must create value (Mortin & Audebranh, 2014).

Firms are now encouraged to pursue good financial performance (Wales, 2013). According to Ford (2012), financial performance that is best explained by organizational sustainability must focus on the customer needs that are met for now and not compromising the future. Wales (2013) asserts that financial performance is long-term preservation of social capital evaluation and financial enhancement. The Chartered Institute of Personnel Development, UK (CIPD, 2012) has termed organizational sustainability as enhancing environmental, social and economic systems in a business. This is evidenced by Kosutic (2018) survey which showed that 55 firms in the fortune 500 firms are using this approach in measuring organizational performance.

**Employee Productivity**

Another crucial organizational performance is employee productivity. The worth of employees’ productivity is measured regarding commitments, firm climate, personal health and safety, competitiveness and employee performance in general (Mortin & Audebrand, 2014). Once the employees are in reasonable worth, it impacts the output of the firm.

In the discussion of commitment, the study addressed it from Ntembza & Lerberghe (2015), considering affective, continuance and normative dimensions. Employees’ affective commitment is about his emotional attachment to the firm. The continuance is the fear of loss of the job. The normative is the obligation the employee has to stay in the organization. These factors cause the employee to exhibit a commitment to an organization.
Another critical employee productivity factor is the organizational climate. This motivates the employee to deliver the set organizational performance. Many studies in the past by Tagiuri, (2008), Forehand and Glimer (2014), Litwin and Stringer (2015), House and Rezzo (2016), Pareek (2017) and Payne and Manserfield (2017) have noted that organizational climate impact organizational performance. This has currently been confirmed by a study by Madhukar et al. (2017). The conclusion hinges on the intrinsic and extrinsic factors of motivation for health workers. In a study in DR Congo by Mitonga-Monga (2018), it considered the ethical climate in health institutions to include caring, laws, and rules and independence to influence job satisfaction regarding employees’ commitment.

Patient Satisfaction
Patient satisfaction epitomizes the perceived need for patients, their health system expectations, and experience of healthcare. This multidimensional concept includes healthcare aspects, both medical and non-medical (Mukhtar et al., 2013). Different theories of healthcare patient satisfaction have been published. These theories consist of the theory of expectancy-value, which suggests patient beliefs, values, and prior care expectations to influence patient satisfaction, and another is the theory of quality of health care, which emphasizes that interpersonal care processes play a crucial role in ensuring patient satisfaction.

According to Sofaer, Crofton, Goldstein, Hoy, and Crabb (2015), patients' satisfaction factors related to providers are the skills of doctors and interpersonal communication skills, hospital staff behavior, access to care, necessary facilities, as well as infrastructure. Patient-related factors include patient socio-demographic characteristics, the patient's attitude of a trust relationship and the stage of their illness, as well as the feeling of involvement.

Today's patient is more conscious and educated, informed, and also has healthcare system expectations (Khattak, 2012). It is, therefore, more critical to address issues relating to the provision of services in healthcare institutions. A patient with positive attitudes is more likely to translate it into positive results. While a person with negative attitudes and health care frustration prevents others from attending to the hospital. Patients resort to contrary word-of-mouth, which discourages anyone else from seeking system health care.

Mukhtar et al. (2013) studied patient satisfaction as a comparative phenomenon that encapsulates the perceived need of patients, their health system expectations, and experiences of healthcare. The objective was to determine the level of patient satisfaction with OPD services referring to physician-patient interaction, waiting area, registration desk, and overall health facilities.

Kloosterman, (2014) studied patient satisfaction as an important indicator that is commonly used to measure healthcare quality. Clinical outcomes, patient retention, and claims of medical malpractice are affected by patient satisfaction. It affects the delivery of quality health care in a timely, efficient and patient-centered manner. Patient satisfaction is, therefore, a proxy but a very appropriate indicator for measuring doctors and healthcare institutions' success.
Internal Process

Competition is making various institutions improve their process with the aim of enhancing organizational performance. There have been many concepts developed to improve health operations, but the notable processes are Total Quality Management (TQM) and Six Sigma. Ismyrlis and Moschidist (2015) and Aranda and Marquez (2015) understand TQM as when all organizational members participate in the improving products/service, process, and culture with the aim of achieving customer satisfaction. Further, Gygai and Williams (2012) define Six Sigma as a statistical problem-solving. It focuses on eliminating waste in a process. These process improvement techniques and technologies are used to improving business (Mortin & Audebrand. 2014). As defined by Zaheer, Rehman and Slaif (2008) business process are when a defined input produces the desired output in a structured system.

It must be noted that health system management is a service process that affects time and information efficiently. This affects customer satisfaction on organizational performance. Zaheer, Rehman, and Slaif’s (2008) study confirm that process efficiency affects organizational performance. In process efficiency, the outcome is an essential measurement to be considered in the transformation process.

In a sponsored study of Yip and Hafez (2015) by the World Health Organization, they discussed how to improve the health system efficiency of ten countries from the economics perspective. Allocative efficiency and technical efficiency are the two efficiency concepts commonly used in economics. Allocative efficiency in allocating resources to provide the optimal mix of goods and services in order to maximize the benefits to society; technical efficiency uses the least amount of resources or the correct combination of inputs to produce a given mix of goods and services. Allocative efficiency is driven by "doing the right thing," while practical efficiency is focused on "doing the right thing." It should be indicated that allocative efficiency is dissimilar from equity. No other resource allocation can improve at least one individual without aggravating another individual. Therefore, an active allocation situation may be unjust. Likewise, switching from an unreasonable to an equal distribution of resources from the point of view of allocative efficiency can be suboptimal.

The perspective of internal processes is primarily an analysis of the business processes of the organization. Internal business processes are the methods by which expectations of organizational performance are achieved (Massingham, Massingham, & Dumay, 2019). This viewpoint focuses on the results of internal processes that lead to financial success and customer satisfaction.

Managers, therefore, need to concentrate on those essential internal workings that enable them to meet Kaplan & Norton's customer needs (2002). Organizations should determine which processes and competencies they are required to excel in and specify initiatives for each. To make sure that the results are satisfactory, core internal processes are tracked.

The measures must also link the judgment of top management on competencies and key internal processes to individual actions that affect the goals of the healthcare institutions. Furthermore (Kaplan & Norton, 2005) states that this linkage ensures that employees at the organization's lower level have valid targets for actions, choices, and improved performance activities that will affect the general mission of the organization. Internal business process measures and customers recognize the parameters for competitive success that the organization considers most important (Behrouzi & Ma'aram, 2019).
Behrouzi and Ma’aram (2019), assert that measuring performance is a requirement for healthcare institutions and clinics because they need to be efficient, increase profitability, attract customers, and survive in the healthcare industry. Healthcare institutions usually struggle to find suitable performance. Forty-four performance measures for health care in four balanced scorecards (BSC) performance perspectives consisting of customer, learning and growth, financial, internal business processes were collected and filtered using a survey in private healthcare institutions in the Klang Valley area of Malaysia based on "feasibility" and "relevance" criteria. Next, a ranking survey in private healthcare institutions in Klang Valley was conducted on the 31 performance measures. To help healthcare institutions calculate their overall performance more accurately, a weight between 0 and 1 with a range of 0.095 to 0.207 was obtained for each performance measure.

**Human Capital and Organizational Performance**

Bartel, Phibbs, Beaulieu, and Stone (2011) studied the health sector impact of human capital on organizational performance. Their research was based on monthly longitudinal data on nurses. The result was that human capital has a significant effect on the patient’s outcomes for permanent nurses, but contract nurses had a negative patient outcome. They recommended that policies should be put in place to increase the human capital to save costs.

Muhammed and Awan (2013) investigated the relationship between human capital and organizational performance as mediated by employee satisfaction in Pakistan among the telecom industry. The respondents were 200 employees and based on regression evaluation, came to a conclusion. The relationship is strongly significant between human capital investment and organizational performance. Also, employees’ satisfaction significantly mediates the relationship between human capital and organizational performance.

Majis, Samad, Tazilah, and Hanaysha (2017) also scrutinized the impact of human capital on organizational performance in Malaysian government agencies. Based on their conceptual evaluation and various literature review, they concluded that there is a relationship between human capital and organizational performance. The paper aimed to extend both theoretical and empirical research. In summary, the human capital dimension should include leadership practices, knowledge accessibility, and learning capacity.

Zlate and Enache (2014) also scanned the interdependence between human capital and organizational performance among Romanian universities. They noted that personality significantly contributes to predict and explain organizational performance. They admitted that success in higher education depends on employees’ capacity with changes in attitude, beliefs, feelings, and value.

Rajapaksha (2015) examined the impact of human capital on organizational performance in the banking industry in Sri Lanka. The study focused on age, education, attitude, marital status, sex, training and development and rewards as the moderating variables on the relationship to determine the strength of the relationship. However, the study found that the variables such as employees aged between 21 to 25 years who have completed secondary education and having gained training and development are significantly and positively influential. Further, the employees with 5-15 years of attitudes are also positively and moderately significant under 95 percent confident intervals. Further, the variables such as attitude with 26-30 years, being male employees, being an unmarried employee, having training and development exposures and having ages between 18-20 years show an inverse relationship to financial performance through labor productivity. Only males
become highly significant under 99 percent confident interval. Finally, the study concludes that components in human capital have a significant impact on organizational performance.

Methodology
This is descriptive-correlational research design. The study was conducted in North-Kivu, DR Congo. This region had 594 health facilities, and with the application of the Yamane statistical formula 271 (46%) were randomly sampled to answer the self-constructed questionnaire. Human capital and organizational performance had 0.864 and 0.77 Cronbach alpha respectively for the internal consistency of the instrument. The analysis of the data was done with the use of SPSS 23 by descriptive with the used of mean and standard deviation and correlation. The scoring system for the descriptive is as shown below:

Table 1
Likert Scale Interpretation for Knowledge, Skill, and Organizational Performance

<table>
<thead>
<tr>
<th>Numeric Scale</th>
<th>Numerical Scale average weight</th>
<th>Degree of Intensity</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3.60– 4.00</td>
<td>Strongly Agree</td>
<td>Very High</td>
</tr>
<tr>
<td>3</td>
<td>2.60 – 3.59</td>
<td>Agree</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>1.60– 2.59</td>
<td>Disagree</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>1.00– 1.59</td>
<td>Strongly Disagree</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

Table 2
Likert Scale for Interpretation for Attitude

<table>
<thead>
<tr>
<th>Numeric Scale</th>
<th>Numerical Average Weight</th>
<th>Degree of Intensity</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3.60– 4.00</td>
<td>Strongly Agree</td>
<td>Positive</td>
</tr>
<tr>
<td>3</td>
<td>2.60 – 3.50</td>
<td>Agree</td>
<td>Positive</td>
</tr>
<tr>
<td>2</td>
<td>1.60– 2.50</td>
<td>Disagree</td>
<td>Negative</td>
</tr>
<tr>
<td>1</td>
<td>1.00– 1.50</td>
<td>Strongly Disagree</td>
<td>Negative</td>
</tr>
</tbody>
</table>

The strength of the correlation was interpreted with Cohen (1988) where $r = .10$ to $0.29$ is low/small, $r = 0.30 - 0.49$ is moderate/ medium and $r = 0.50$ to 1 is high/ large.

Results and Discussion
The study investigated the level of human capital in hospitals. The overall human capital in the various healthcare institutions is shown in Table 3 and ranked from the highest to the lowest average mean. All items were rated agree: “attitude” $(M=3.4, SD=0.45)$, “skill” $(M=3.37, SD=0.47)$, and “knowledge” $(M=3.32, SD=0.45)$ with verbal interpretation of “positive” for the attitude and “high” for both skill and knowledge.

In general, the level of human capital among the respondents in the health industry of DRC was high $(M=3.36, SD=0.43)$. The results are supported by Goldin (2014) and Baron (2011), who admitted and reported that high human capital is required in health industries.

Table 3
The results revealed that knowledge and skill are to be improved from high to very high where knowledge and skill are both very high in a hospital, the overall human capital, in the long run, will increase the organizational performance (Awan, 2013).

**Correlation between Human Capital and Organizational Performance**

Table 25 illustrates in detail the relationship of each sub-variable of human capital to each sub-variable of the organizational performance. In this study, knowledge \(r = .807\) significant at the .01 level and Sig. = .000), skill \(r = .808\) significant at the .01 level and Sig. = .000), and attitude \(r = .789\) at the .01 level and Sig. = .000) are accounted to be positively and significantly to financial performance.

Similarly, knowledge \(r = .828\) significant at the .01 level and Sig. = .000), skill \(r = .812\) significant at the .01 level and Sig. = .000), and attitude \(r = .789\) at the .01 level and Sig. = .000) prove to be positively and significantly correlated with employee productivity. Likewise, knowledge \(r = .841\) significant at the .01 level and Sig. = .000), skill \(r = .784\) significant at the .01 level and Sig. = .000), and attitude \(r = .753\) significant at the .01 level and Sig. = .000) prove to be positively and significantly correlated with internal processes. In like manner, knowledge \(r = .921\) significant at the .01 level and Sig. = .000), skill \(r = .715\) significant at the .01 level and Sig. = .000) and attitude \(r = .725\) significant at the .01 level and Sig. = .000) have positive and significant correlation with risk patient satisfaction.

Furthermore, knowledge \(r = .913\) significant at the .01 level and Sig. = .000), skill \(r = .834\) significant at the .01 level and Sig. = .000), and attitude \(r = .815\) significant at the .01 level and Sig. = .000) are positively and significantly correlated with the overall organizational performance. Similarly, human capital \(r = .907\), significant at the .01 level and Sig. = .000) is positively and significantly correlated with the overall organizational performance.

In a 15-year panel study by Propeter (2015), he concluded that there is a strong relationship between managerial attitude and organizational performance among firms in the USA. Kotur and Anbzhagan’s (2014) study also confirmed the strong positive relationship between education, skill, and attitude on organizational performance. The study also indicates that the workers tend to show relatively better performance with the increased labor-attitude, but otherwise in the case of education. When these variables have increased significantly, the performance is found to decline even more—on the studied sample. The research was conducted at a factory in Chittoor Sugar located in South India’s Chittoor city.

**Table 4**

Correlation result of Human Capital and Organizational Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>FP</th>
<th>EP</th>
<th>IP</th>
<th>PS</th>
<th>OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Pearson Correlation</td>
<td>.807**</td>
<td>.828**</td>
<td>.841**</td>
<td>.921**</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
The study reveals that a higher level of human capital in terms of knowledge will result in higher financial performance and consequently to better organizational performance. The findings of the study also denote that a higher level of skills among the employees shall bring about a higher financial performance, which contributes to better organizational performance for the respondent healthcare institutions as well. Moreover, the study shows that the better the attitude of the employees, the better the financial performance for the respondent healthcare institutions which translates to higher organizational performance. Furthermore, the result of the study implies that a higher level of human capital among respondent healthcare institutions will cause them a higher organizational performance.

The result supports the study by Muhammed and Awan (2013), which investigated the relationship between human capital and organizational performance as mediated by employee satisfaction in Pakistan among the telecom industry. The results showed that the relationship is strongly significant between human capital investment and organizational performance. Majis, Samad, Tazilah, and Hanaysha (2017) also scrutinized the impact of human capital on organizational performance in Malaysian government agencies. Based on their conceptual evaluation and various literature review, they concluded that there is a relationship between human capital and organizational performance.

**Conclusion and Recommendation**

The study aimed at establishing the level of human capital in the health institutions in North-Kivu Hospitals in DR Congo and also the relationship between human capital and organizational performance. The study major findings have revealed that the human capital is high among health professional in DR Congo and is constituted by the workers have a positive attitude and high knowledge and skill. Furthermore, the organizational performance of the hospitals are impacted positively by the human capital.

Healthcare institutions administrators are the owners and decision makers to run the healthcare institutions. With the high knowledge, skills and positive attitude of their employees, they should mobilize everyone to participate into the implementation of risk management and management control to enhance the performance. Administrators of the healthcare institutions need to maintain as high and continue improving the human capital at a very high level by recruiting specialists and experts in various fields; providing development...
and training towards the creation of an organizational culture that implants positive attitude among employees. Also, institutions need to maintain employees that have experiences in managing healthcare institutions.

The study have confirmed the human capital theory which is associated with resource-based view (RBV) of the employee’s knowledge, skill and attitude is vital for the sustainability of the health institutions in DR Congo. It has confirmed that the employee’s knowledge, skill and attitude makes them valuable, rare, imitable and non-substitutable (VRIN) to achieve hospital performance in attaining competitive advantage.

References


