

IMPACT OF INTELLECTUAL CAPITAL ELEMENTS ON COMPETITIVE ADVANTAGE IN SYRIAN PHARMACEUTICAL COMPANIES

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Abstract

Intellectual capital, in the era of knowledge economy, is the most invaluable asset of the organization to get a competitive advantage. It is precious, unique, non-substitutable and as such, difficult to replicate. Therefore, this study attempts to establish impacts of elements of intellectual capital on competitive advantage in Syrian pharmaceutical companies. This study through review of pertinent literatures extracted four aspects of intellectual capital which includes human capital, structural capital, relational capital, and spiritual capital. The findings of a survey of 306 respondents from 47 companies in the Syrian pharmaceutical sector. The partial least squares method was leveraged for data analysis. The results support seven out of eight hypotheses by showing a significant positive correlation between human capital and structural and relational capitals and competitive advantage. Additionally, a positive relationship is shown to exist between structural capital and relational capital and competitive advantage. Moreover, there is a statistically significant between relational capital and spiritual capital and competitive advantage. No meaningful relationship is found to exist between spiritual capital and competitive advantage.

Key words: intellectual capital, competitive advantage, human capital, structural capital, relational capital, spiritual capital

1. Introduction

The need for strategic changes in business administration and the ensuing concentration on knowledge management and intangible assets are key developments that followed the rapid changes in global economy (Switzer, 2008; Obeidat, 2017). Thus, the strategy of organisations' regarding knowledge should be led by a business strategy that inculcates the knowledge development culture in the its administration. This form of culture guarantees knowledge activities which include its acquisition, dissemination, creation, transformation and utilisation (Zaheer, 2014). The fundamental of management in the knowledge economy lies in the development, deployment and practical and effective use of intangible assets, particularly tacit knowledge, competence, and intellectual property. Intangible assets are the major foundations of competitive differentiation and successful strategies in many sectors especially information technology sector and the pharmaceutical industries (Omotayo, 2015; Teece, 2002).

Resource-based and knowledge-based views of firms are examples of strategic management theories that are upgrading the perception of the nature and significance of intellectual capital as a strategic resource (Dženopoljac, 2015). The assumption held by the resource-based view is that firms possess various forms of resources that allow them to develop different strategies (Barney, 1991). Therefore, it is superior resources and the capabilities under the possession of a firm which gives it the competitive edge and ability to exploit those resources more productively. Firms are viewed, according to Barney (1991), as heterogeneous entities described by their unique resource base. In this regard, certain resources would be of greater significance due to their ability to firms the sustainable competitive edge (Barney, 1991). Resources with such invaluable potentials are often rare, hard to copy and sustainable (Abrhiem, 2012). It is also these resources, the intellectual capital, that play a major role in achieving a company value and success compared to the physical assets. Lack of knowledge in intellectual capital leads to management putting less attention on intellectual capital which implies that intellectual capital capabilities would not be fully exploited (Kamardin, 2013). Development, application, unification, careful management and exploitation of a firm's intellectual capital are important for a firm to gain competitive edge and ultimately succeed. (Fragouli, 2015).

Pharmaceutical companies are found to be consistent in making more investment in the protection of their intellectual property rights and improve R&D activities (Munjae Lee, 2015). The pharmaceutical sector is rich in intellectual capital and very innovative in facing global competition because of the high regulatory environment and increased human experts' involvement in R&D activities that open the door for the generation of new drugs, molecules and patents. Looking at all these factors, one of the most ideal projects to evaluate the relationships among the intellectual capital is pharmaceutical industry due to its innovation and company performance. Therefore, the study opted to use the pharmaceutical sector due to its heavy reliance on intellectual capital as a major source of business performance (Mehralian, 2012).

Previous studies, Yassen (2016), Chahal (2015), Salavati (2014), and Chen (2008) have hinted at a significant positive relationship between intellectual capital and competitive advantage. In addition, human capital (HC), relational capital (RC), and structural capital (SC) are the three major elements of intellectual capital considered in these studies. This current study adds a spiritual capital (SpC) as a forth intangible resource to intellectual capital and evaluate the impact these of four elements of intellectual capital on competitive advantage in Syrian pharmaceutical industry. Thus, this study aims to demonstrate the effect of intellectual capital elements on competitive advantage in Syrian pharmaceutical firms.

2. LITERATURE REVIEW

2.1 Intellectual capital(IC)

Resource Based View (RBV) is a method used to gain competitive edge. The approach was developed in the 1980s and 1990s following Wernerfelt, B's work; "The Resource-Based View of the Firm, 1984". The current concept of intellectual capital has its roots back in the middle of the 1980s. Although, studies on resource-based view strongly assert the uniqueness of firm resources and capabilities, the advocates of this view are of the opinion that capabilities are not adequate enough for the sustenance of firm's competitive edge (Kariuki, 2017). According to Stewart (1998), the concept of intellectual capital is more often than not used interchangeably with intangible or knowledge assets which are increasingly used in determining business success. For Serenko and Bontis (2004), this achievement is credited with the achievement of coining the term "Intellectual Capital" which refers to these assets. It has been used to stress the significance of general knowledge as vital for growth and development. Successful organisations are those that are continually aware and concerned with the significance of intellectual capital. In the 1990s, Brooking (1996) defined having knowledge, good customer relationships, applied experience, organisational technology and professional skills that a firm leverages for competitive edge as intellectual capital. Edvinsson and Malone (1997) proposed a similar definition. Likewise, Stewart (1997) believes whatever of intellectual material, knowledge, information, intellectual property and experience is used in knowledge creation as intellectual capital. A more comprehensive definition of intellectual capital has been given by Khalique and Mansor (2016) who defined intellectual capital as intangible assets or resources such as knowledge, know-how, professional skills and expertise, customer relationships, information, databases, organisational structures, innovations, social values, faith and honesty.

Human and structural capital were the two primary elements of intellectual capital that were initially identified (Skandia, 1994). However, Brooking (1996) gave a more detailed explanation of intellectual capital as Intellectual property, human centered assets, market assets and infrastructure assets. Sveiby (1997), on his part, suggested three classifications of intellectual capital which are employee competence, internal and external structures. To Stewart (1998), intellectual capital consists of knowledge, information, intellectual property, and experience. However, most studies on intellectual capital have focused on human, relational, and structural capitals as the three major components (Mitchell and Bontis, 2000; Sullivan 2000; Edvinsson, 2000). While some other studies have made these components four by including spiritual capital to human, structural and relational capitals (Khalique et al. 2011; Mazlan, 2005), social and technological capitals have also be suggested as addition. The following paragraphs will discuss the major components of intellectual capital

2.2 Human Capital (HC)

Human capital is believed to be a major strategic resources of firms that are vital for success (Memon et al. 2009; Schultz, 1961). Human capital is of significance in the contemporary competitive environment (Subramaniam and Youndt, 2005). This is because it is the sum of employees' capacity to create tangible and intangible assets using their ideas and knowledge. These ideas create values for firms and provide them with a competitive edge. According to Memon (2009), concentration on innovation, quality enhancement and reduction of expenses on human capital should be the aim of a firm in order to have and sustain competitive advantage.

2.3 Structural Capital (SC)

Structural capital is the ability of a firm or an enterprise to carry out regular business processes and structures that bring the best intellectual and business performance out of the employees (Tseng, 2005).

Structural capital revolve around “what transpires among the people, their relationship within the company, and what remains after an employee leaves the company” (Halim, 2010; Hormiga, 2011). Structural capital is made up of the non-human storehouses of knowledge in an organisation that is inherent in system, databases and programs (Edvinsson, 1997; Halim, 2010). Structural capital, in contrast to human capital, is an intangible asset that has the possibility of being traded, replicated and shared within the organisation (Zambon, 2002; Abdel-Aziz Ahmad Sharabati, 2010). It can also enjoy legal protection of its components through patents and trademarks of important results and findings its research and delvelopment (Bontis, 1999).

2.4 Relational Capital (RC)

In the contemporary knowledge economy, integrating external partners is fundamental as they are valuable and effective sources of new information that help to innovate products and services successfully and provide a source of competitive advantage (Singh, 1998; Chesbrough, 2006; Gatignon, 2002). Therefore, relational capital is the most powerful component in gaining competitive advantage for an organization because forming a healthy relationship with customers helps a firm to sustain and survive in the market (Singh, 1998; Chahal, 2015). Bontis (2000) also argues that relational capital includes the knowledge rooted in all types of organizational interactions with the relevant stakeholders like clients, suppliers, competitors, trade associations and government (Yitmen, 2011; Stewart, 1997). Fundamentally, relational capital is focused on the mobilization of knowledge and relationship resources via the social structure (Hsu, 2012).

2.5 Spiritual Capital (SpC)

Spiritual capital is found in individuals who produce a decent profit and business sustainability assurance. Individuals and organisations act and behave with honesty, integrity, sincerity, trust, truth love, morals and ethics (Ismail, 2005). Ismail (2005) also considers spiritual capital as part of organisations’ capital. As for Marshall, (2004), spiritual capital is wealth that we can live by and enriches the deepest aspect of our lives. It is the sort of wealth we gain from our deepest meanings, values, and the most fundamental purposes and biggest motivations (Zohar, 2004). Hence, spiritual capital is important in individuals and organisations that can influence the way and manner of management of a firm or company, ensuring that business operations run based on laws and standards that include honesty in its financial dealings as well as other aspects that will eventually improve company performance (Abdullah, 2012).

2.6 Competitive advantage (CA)

Competitive advantage or edge is a strategic objective of firms which is difficult to achieve due to the competitive challenges in the knowledge economy. Competitive advantage helps in achieving the added value of the organisation and also guarantees its survival and sustainability. Some characteristics that include uncommonness, invaluable and indispensable human resources, cordial customer relationships and system, are what gives an organisation a competitive advantage that results in a sustainable competitive position (Chahal, 2015). According to Ma (2004), competitive advantage is a relative positional superiority in the marketplace that ensures a firm outperforms its competitors by putting in place unique strategies that are inimitable. He further stated that competitive advantage is something driven from a valuable, rare, non-substantial and imitable resources that came as a result of integrating unique resources and capabilities (Ngwenya, 2017).

3. CONCEPTUALFRAMEWORK

3.1 Relationship human capital and the competitive advantage.

Human capital is considered today greater than before due to its role in wealth success and its being a main source of competitive advantage (Mangi, 2009). Human capital leads to the sustainable competitive edge when employees add value through their rare and unique characteristics. They further stated that the more competent and unique individuals at the disposal of an organisation, the better the chance of an organisation gaining a competitive edge; because invaluable and unique employees are likely to create more values (Bontis, 2000). However, it should be noted that the achievement of competitive advantage with human resources should be founded on unique combination of a firm's human capital, strategy and core capabilities that differentiates one organisation from another (Becker, 2006). Many previous studies such as Bontis (1998), Mitchel and Bontis (2000), Bontis and Edvinsson (2008), Cohen and Kaimenakis (2007), Jardon and Martos (2012), Hsu and Wang (2010) and Tseng et al. (2013) indicated that the implication of human capital is indirect. exerts an indirect effect. The question of whether structural, relational or process capital brought about this influence still remains largely a subject of debate. A few scholars demonstrated that human capital affects the duo of structural and relational capitals which in turn positively influences competitive advantage (Bontis and Edvinsson, 2008)

Against this background, we hypothesize:

H1: A significant correlation exists between Human capital and competitive advantage.

H2: A significant correlation exists between Human capital and Structural Capital.

H3: A significant correlation exists between Human capital and Relational Capital.

3.2 Relationship structural capital and competitive advantage

Having unique knowledge sets are viewed as a determining factor of the extent of sustenance of competitive advantage (Silvi, 2006). How specific the possessed knowledge represents a significant influence on the organisational ability to attain and sustain competitive standard of performance among its competitors is due to its ability to differentiate competitively and the challenges involved in imitating and replicating such knowledge (Silvi, 2006). Once the knowledge is systematically structured into regular procedural activities and rules, it implicitly becomes systematic with the use of structural capital within the intellectual capital. Structural capital not only makes the application and spread of such knowledge possible, but also systematically opens it up for use (Kong, 2008). Hence, the possessed knowledge influences the ability of an organisation to maintain a higher level of performance. An important measure competitive advantage as obvious in the literature is performance. Likewise in the knowledge of strategic management which is integrated into the organisation via structural capital. Based on the the afore-stated, it can be concluded then that structural capital is crucial to achieving competitive advantage. A number of other scholars also – such as Mention and Bontis (2013) and Sharabati (2010) – are of the view that structural capital consists of systems and programs, research and development, and intellectual property rights. Based on findings in pertinent literatures, proposed herein are the following research hypotheses:

H4: A significant correlation exists between Structural capital and competitive advantage.

H5: A significant correlation exists between Structural capital and Relational Capital.

3.3 Relational Capital on the Competitive advantage

Competitive advantage is what offers firms with the differentiation that gives them comparable dimension and allows them to compete better than their rivals. However, Morgan (1999) contend giving greater emphasis to the relationship-based resources leads to competitive advantage. Competitive advantage can be gained through the offering of superior value to stakeholders and maintain long-term partner relationships

either upwards to suppliers or downwards to customers in the channel. In this regard, both supplier relationship strategies and customer loyalty strategies can lead to superior financial performance (Li, 2005; Zhou, 2009) that in turn lead to a sustained competitive advantage. Organisations that choose relational capital as a strategic approach have to inevitably focus on the relationships with their stakeholders (Krause, 2007; Reuer, 2002). Advocates of relational capital encourage organisations to seek partners on long-term relationship basis (Dyer, 2003).

The above-reviewed literature leads to the following hypotheses, that:

H6: A significant correlation exists between Relational capital and competitive advantage.

H7: A significant correlation exists relation between Relational capital and Spiritual Capital.

3.4 Spiritual Capital on the Competitive advantage

Presently, various publications emphasize the special meaning of human/intellectual capital affecting the achievement of competitive advantage. However, it has been highlighted that the sustainability of competitive advantage for a longer time consists of support provided by spiritual capital (Zofia, 2015). Spiritual capital that stresses sustainability-based core competencies usually live up to the accepted standards for building a sustained competitive edge that is hard to copy by in organizations nowadays, despite the preponderance of sustainability-rich business environment (Stead, 2014). Leaders that held deep beliefs of human nature have a greater tendency to develop ethical systems based on sustainability to undergird their strategic processes and actions (Roth, 2000; Stead, 2014). It is on the basis of this literature that the following research hypothesis is proposed:

H8: A significant correlation exists between Spiritual capital and competitive advantage.

4. Method

4.1 Research design and data collection

The proposed research model was tested using a survey method. The questionnaire was validated by expert's interviews from Syrian pharmaceutical companies, and a panel of academic judges. Data were collected from administrative staff in 47 pharmaceutical companies in Syria. Out of the 450 distributed questionnaires, 331 were returned. This made up the response rate of 73.55%. Out of 331 questionnaires returned, the results After the screening and elimination of the outliers, 306 of the questionnaires were ready for analysis.

4.2 measurement

In this research, the model's constructs were measured with survey questions measuring based on representative literatures. The current study utilized a five-point Likert scale where 1 refers to (strongly disagree), 2 to (disagree), 3 to (neutral), 4 to (agree) and 5 to (strongly agree). The measures for all constructs were reflective. A structured questionnaire was adopted from (Bontis 1998) and Sveiby (1997) to measure human capital (HC), structural capital (SC), relational capital (RC). Four items drawn (Mazlan 2005) (Marshall, 2004) were used to measure spiritual capital. Finally, five items were modified and adapted from (Hill & Jones, 1999) to measure competitive advantage. In all, a total of 27 items were contained in the questionnaire, 8 of which refer to HUC, 5 to STC, 5 to REC, 4 to SPC, and 5 to CA.

5. Data analysis and results.

49.3% of the respondents were male while the females were more with 50.7%. In addition, about 76.8% of the respondents fall within the ages of 20 and 39 years old and roughly 72.9% had university degrees. Meanwhile, the work experience of about 79.7% of the respondents range from 3 to 14 years. Also, (70.9%) of employer's work in human resources and customer service, marketing department. The tool used for the

data analysis is Smart PLS version 3.2.6; a second-generation tool, by the name Partial Least Squares Structural Equation Modelling (PLS-SEM) (Hair, 2014). The method of choice in Structural Equation Modelling in Smart PLS is the component-based method. In addition, measurement or inner and structural or outer models are the two key elements of PLS path model. While the results that has to do with validity and reliability of scales are handled by the measurement model, the relationships and interactions between the research constructs illustrated by the structural model. The assessment of the measurement and structural models are explained in Figure 1.

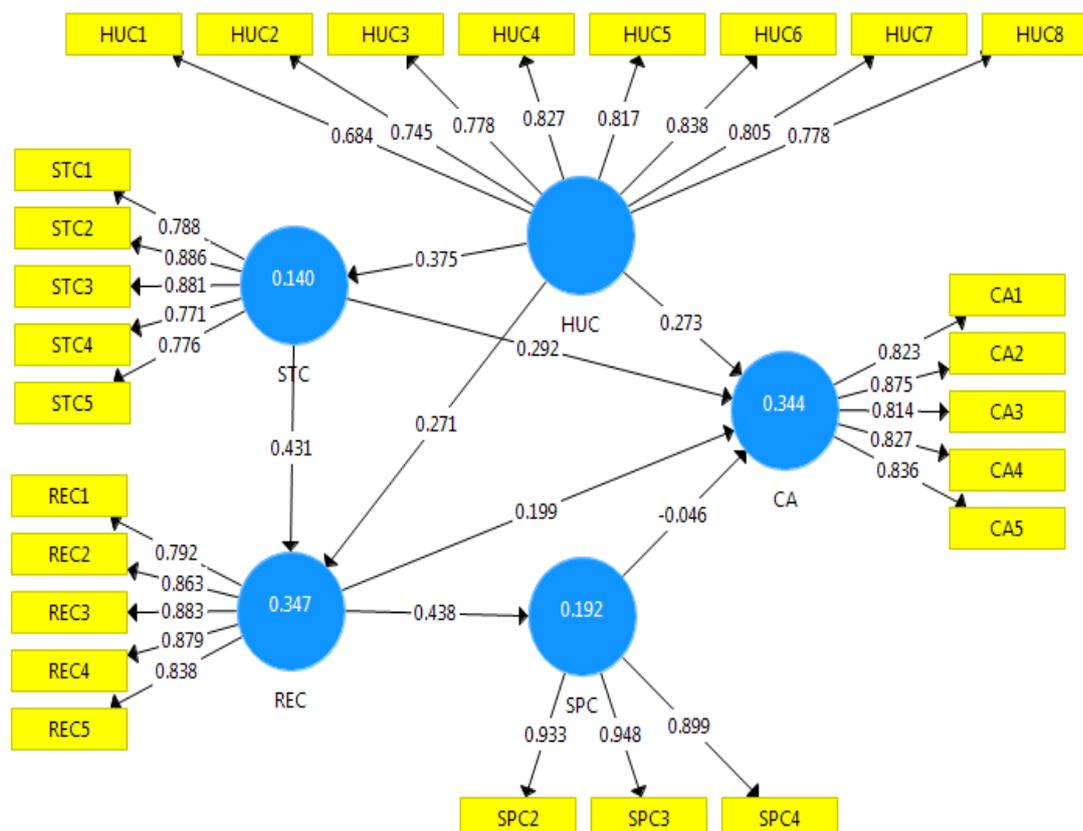


Figure 1: assessment of measurement model and assessment of structural model.

5.1 Assessment of Measurement Model (Outer model)

The reliability of each item was evaluated by ensuring that each underlying variable was loaded to standard by its corresponding item. Vinzi, Chin, and Henseler (2010) have stated a minimum value of 0.7 as loading values for individual item. Based on (hair,2014), examination of the composite reliability was used in the evaluation of convergent validity and subsequent extraction of average variance. Values between 0.70 and 0.95 have been deemed satisfactory composite reliability values while a minimum of 0.50 as Average Variance Extracted (AVE) has been reported as a good indicator of the construct's explanation of the variance of its indicators. The values for all indicators can be seen to exceed the recommended thresholds as in in Table 1 (Fornell&Larcker, 1981; Hair et al., 2014). As shown in Table 1 of, all items are load more strongly on their own constructs in the model

Table1: Indicators for assessing internal consistency and convergent validity.

Constructs	Items	Loading	Average variance Extracted(AVE)	Composite Reliability(CR)
Human capital	HUC1	0.684	0.617	0.928
	HUC2	0.745		
	HUC3	0.778		
	HUC4	0.827		
	HUC5	0.817		
	HUC6	0.838		
	HUC7	0.805		
	HUC8	0.778		
Structural capital	STC1	0.788	0.676	0.912
	STC2	0.886		
	STC3	0.881		
	STC4	0.771		
	STC5	0.776		
Relational capital	REC1	0.792	0.726	0.930
	REC2	0.863		
	REC3	0.883		
	REC4	0.879		
	REC5	0.838		
Spiritual capital	SPC1	0.933	0.859	0.948
	SPC2	0.948		
	SPC3	0.899		
Competitive Advantage	CA1	0.823	0.698	0.920
	CA2	0.875		
	CA3	0.814		
	CA4	0.827		
	CA5	0.836		

The model construct's correlation matrix and the square root of AVE are shown in Table 2. Discriminant validity was measured in order to specify that the square roots of the AVE are more than the correlation between the construct and the other constructs (Smith, 2002). The AVE of a latent variable is expected to be greater than the squared correlations between the latent variable and another variable (Fornell, 1981).

Table 2. Indicators for assessing discriminant validity

Latent Variable Correlations					
	HUC	STC	REC	SPC	CA
HUC	0.785				
STC	0.375	0.822			
REC	0.433	0.533	0.852		
SPC	0.255	0.428	0.438	0.927	
CA	0.456	0.481	0.452	0.236	0.835

The values in the boldface are square root of AVE

5.2 Assessment of structural model (inner model).

The overall explanatory power (R^2), path coefficients (β) and significance level are examined with structural model. Overall, A path coefficient (β) implies the standardized regression coefficient, where absolute (β) values of 0.5 or more, around 0.3 and less than 0.1 means large effect, medium effect and small effect respectively (Cohen, 1988). The final dependent construct (an anticipation of continuing the relationship) has R^2 value of 0.344, which is favourable, considering the complexity of the model. Structural capital has the R^2 value of 0.14 and relational capital and spiritual capital have the explained variances of 0.347 and 0.192 respectively, which ensure the strong predictive power of capital indicators (i.e. structural capital, relational capital and spiritual capital) on competitive advantage and the predictive power of human capital on structural capital and relational capital indicators as well. Also, the predictive power of structural capital on relational capital. Moreover, the predictive power of relational capital on spiritual capital. After path estimates computation in the structural model, the author conducted bootstrapping in SmartPLS in a bid to the statistical significance of the path coefficient. The t-statistic and the structural relationship within the model are shown in Table 3. Tenenhaus, Vinzi, Chatelin, and Laura (2005), defined GoF as a global fit measure, it is the geometric mean of average variance extracted (AVE) and the average of R^2 of the endogenous variable. The purpose of GoF is to report the study model at both levels, namely measurement and structural model with the aim obtaining the overall performance of the model (Chin, 2010). The calculation formula of GoF is as follows:

$$\text{GoF} = \sqrt{(\bar{R} * \overline{AVE})} = \sqrt{0.184} = 0.4289.$$

According to (Martin Wetzels, 2009), GoF greater than 0.36 is large. The value of the GoF (0.4289), it can be concluded that GoF model of this study is large enough to consider sufficient global PLS model validity. As shown in Table 3, the results that relationship human capital is significantly and positively related to structural capital ($\beta = 0.375$, $p < 0.01$) and relational capital ($\beta = 0.271$, $p < 0.01$) and competitive advantage ($\beta = 0.273$, $p > 0.01$) (supporting H1, H2, and H3). The impacts of structural capital on competitive advantage are significant positive ($\beta = 0.292$, $p < 0.01$), Hence H4 is also supported. The link between structural capital and relational capital is significant ($\beta = 0.431$, $p < 0.01$) (supporting H5). The effects of relational capital on competitive advantage are significant positive ($\beta = 0.199$, $p < 0.05$), Hence H6 is also supported. Also, the relationship between relational capital and spiritual capital also shows a significant positive correlation to ($\beta = 0.438$, $p < 0.01$). Finally, the link between spiritual capital and competitive advantage is insignificant ($\beta = -0.046$, $p > 0.01$), hence not supporting H8.

Table 3 Results of the proposed hypotheses.

H no	Relationship	Path coefficient	Standard Deviation (STDEV) (Std.Error)	T Statistics	P Values	Decision
H1	HUC -> CA	0.273	0.061	4.456	0.000	Supported**
H2	HUC -> STC	0.375	0.064	5.889	0.000	Supported**
H3	HUC -> REC	0.271	0.053	5.095	0.000	Supported**
H4	STC -> CA	0.292	0.073	4.005	0.000	Supported**
H5	STC -> REC	0.431	0.053	8.108	0.000	Supported**
H6	REC -> CA	0.199	0.081	2.439	0.015	Supported*
H7	REC -> SPC	0.438	0.053	8.342	0.000	Supported**
H8	SPC -> CA	-0.046	0.073	0.631	0.528	Rejected

Significant at $P^{**} = < 0.01$, $P^* < 0.05$

6. Discussion and recommendation

In this paper, the theoretical part develops eight hypotheses, seven of them are supported by our results. The author found positive relationships among human capital, structural capital, and relational capital with a competitive advantage (in support of H1, H4 and H6), which is expected from previous research such as (Hardeep,2015; Salavati,2014; Kamukama,2013). Human capital also has a positive impact on structural capital and relational capital (in support of H2,H3), which is expected from previous research such as (Bontis et al.,2008). Furthermore, a positive effect of structural capital on relational capital (in support H5) which is expected from previous research such as (Cabrita,2008). Also, relational capital has a significantly positive relation with spiritual capital (in support H7). However, the findings do not support the hypothesis that spiritual capital is positively related to competitive advantage (H8). This insignificant effect may be interpreted, spiritual capital through its components Ethical values and religious dimension are inherent qualities in human beings in countries of a religious nature, Spiritual capital improves business performance (Mazlan 2005; Khalique et al. 2015), but not giving a competitive advantage. In addition, competitive advantage is based on a unique resource is owned by companies (Halawi et al. 2005; Porter & Kramer 2002).

6.1 Theoretical and managerial implication

Previous studies are criticized for lack comprehensive conceptual of intellectual capital. The present paper contributes to our understanding of intellectual capital elements and its drives in organizations and its effect on competitive advantage. Particularly by combine two prominent theoretical perspectives in business: resource based view theory and competitive advantage theory. The results show that the model depicted in Figure 1 has acceptable construct validity, reliability, and relationships regarding both the measurement and structural properties. The author tested the conceptual model developed by linking human capital, structural, relational, and spiritual capitals with the competitive advantage. Moreover, link the intellectual capital elements with each other in Syrian pharmaceutical companies. The current study and its results are an extension of previous research conducted in neighbouring countries and different industries. In the current knowledge economy, investing in intangible assets become more profitable than investing in fixed assets. Intangible assets play a vital role and give companies a competitive advantage. The finding of the present study supports seven out of eight hypotheses. The supported hypotheses are convergent with previous research (Hardeep,2015; Salavati,2014; Kamukama,2013; Bontis et al.,2008; Cabrita,2008;); indicating empirical evidence to support resourced based view theory. Some managerial implications can also be derived from the study. The study shows that: managers should understand what constitutes intellectual capital to care for and developing this resource and exploit it to achieve sustainable competitive advantages. Also, intellectual capital is an indispensable strategic resource possessed by the company, and its continuous maintenance as an effective element in the success of the company is important, especially considering the tremendous technological development of business environment. Hence, it is important for managers must strengthen the strategic alliances and rely on them and benefit from their experience in the field its job.

6.2 limitation and future research

Author faced some limitations in the current study which should be addressed in future studies. First, responders from top management were low. Second, spiritual capital is not positively related to competitive advantage deserves future exploration, to determine whether the result is affected by the nature of the religious state. The examination of the relationship between spiritual capital and competitive advantage in secular countries is recommended. Third, a quantitative method was used in this research. Therefore, It is

recommended to use mix method in future studies. Fourth, Future research should be in other sectors such as communication companies, insurance and banking companies, and technology companies.

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