

The association between Human Capital, Social Capital, and Innovative Work Behavior, A Descriptive Case Study
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Abstract:

Sustainable competitive advantage can be driven through human capital and social capital that considered as vital and intangible assets to help organizations produce value and wealth in a knowledge-based economy. The current study investigated the association between human capital and innovative work behavior as well as the association between social capital and innovative work behavior. The sample contained 56 students enrolled in EMBA program at Albaha University. Pearson correlation analysis revealed a statistically significant positive relationship between human capital and innovative work behavior, and a statistically significant positive relationship between social capital and innovative work behavior. The strength of both relationships is considered strong.

Keywords: Human Capital, Social Capital, Innovative Work Behavior.

العلاقة بين رأس المال البشري ورأس المال الاجتماعي

و سلوك العمل الابتكاري، دراسة حالة وصفية

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الأستاذ المشارك بقسم إدارة الأعمال

كلية إدارة الأعمال في جامعة الباحة

الملخص:

يمكن الحصول على الميزة التنافسية المستدامة من خلال رأس المال البشري ورأس المال الاجتماعي، والتي تعتبر من الأصول المهمة وغير الملموسة لمساعدة المنظمات في إنتاج القيمة والثروة في عصر الاقتصاد المبني على المعرفة، والدراسة الحالية تهدف إلى معرفة العلاقة بين رأس المال البشري وسلوك العمل الابتكاري، وأيضا العلاقة بين رأس المال الاجتماعي وسلوك العمل الابتكاري، واشتملت العينة على ستة وخمسون طالباً في برنامج إدارة الأعمال التنفيذي بجامعة الباحة، و أوضح تحليل ارتباط بيرسون أن هناك علاقة طردية قوية ذات دلالة إحصائية بين رأس المال البشري وسلوك العمل الابتكاري، وأيضا علاقة طردية قوية ذات دلالة إحصائية بين رأس المال الاجتماعي وسلوك العمل الابتكاري.

الكلمات المفتاحية: رأس المال البشري؛ رأس المال الاجتماعي؛ سلوك العمل الابتكاري.

Introduction:

Bill Gates has been known to comment that the most important assets in an organization walk out the door every night. During the last two decades, structures of organizational resources have moved from material to intangible assets. Some advocates confirm that the product-based economy and retail-based economy have been changed to the knowledge-based economy. Knowledge, skills, and abilities of employees deemed to play a key role, as a vital antecedent of an organization's ability towards sustained organizational effectiveness (Mura, Lettieri, Radaelli, and Spiller 2013; Örnek & Ayas, 2015; Luthans, Luthans, and Luthans, 2004). In the same vein, Harter, Schmidt, and Hayes (2002) have examined comprehensively the value created when human capital is aligned with an organization strategy and entirely involved in making the enterprise more effective, and concluded to have an important positive influence on performance outcomes. In the old economy, performance could be associated with a certain level of output or production. In the new economy, however; the value is increasingly stemmed from intangible sources that make measurement much more challenging. Social capital as discussed by Youndt, Subramaniam, and Snell (2004) does not exist neither at the individual nor the organizational level. Instead, social capital regards as an intermediary form of intellectual capital, comprising knowledge in groups and networks of individuals. Social capital includes knowledge resources embedded within, available through, and

stemmed from a network of relationships. Social capital "refers to recourses of trust, relationships, and contact networks" (Luthans et al., 2004, p. 46).

As shown in figure 1.1, human capital is "what you know", while social capital is "who you know". Social capital can be used both inside an organization "whom can I turn to for help in solving this problem?" and outside an organization "who can advise me on finding the best price and quality in making a good decision?" if an organizations with that significant strength direct human capital and social capital towards innovative work behavior, they can build a strong work environment, survive for years, and obtain competitive advantage.

The current study is undertaken for three important reasons. First, the recommendations of some knowledge-based theorists who have strongly underscore the need to address the process of knowledge-based value creation, which is typically rooted in individual action and reactions. Second, so far, to the best of the researcher's knowledge, there is no empirical study done to understand association between human capital and social capital on innovative work behavior in southern Saudi Arabia. Finally, less attention has been devoted in examining the linkage between intellectual capital, i.e. human capital and innovative work behavior at an individual level (Longo & Mura, 2011; Örnek & Ayas, 2015; Mura et al., 2013). Consequently, the purpose of this study is to examine the association between human capital social capital and innovative work behavior in Southern Saudi Arabia, Albaha province

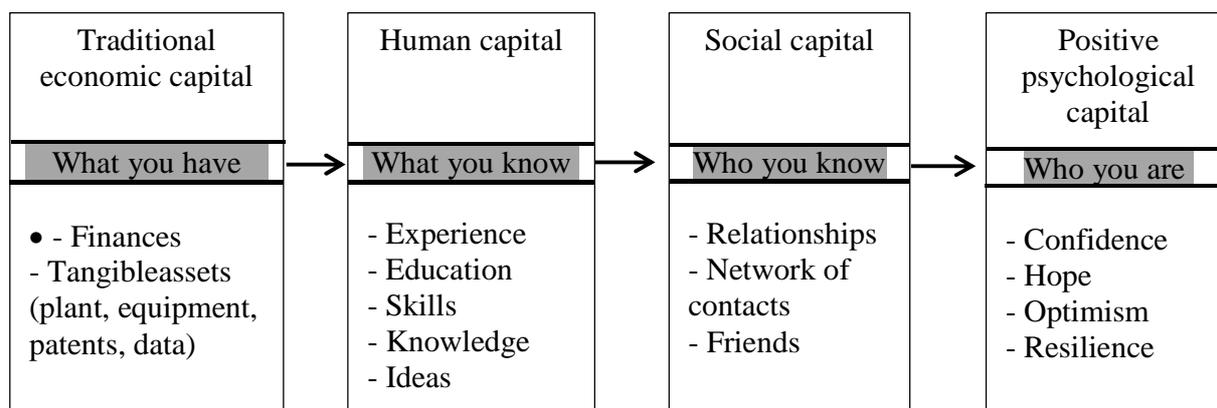


Figure 1.1: Expanding capital for competitive advantage. Adapted from: Luthans, F., Luthans, K., and Luthans, B. (2004) “positive psychological capital: beyond human and social capital” *Business Horizons*, 47/1, 45-50.

Literature review

Human Capital

Human capital is the foundation of intellectual capital; it is a key component to perform intellectual capital’s function. It is considered as the largest and the most significant intangible asset in an organization (Kalkan, Bozkurt, and Arman, 2014). In the 1960s, a very strong interest started to develop about concept of human capital. The models of human capital were coined by Schultz (1961) and Becker (1964), and hence active sets of individual

skills were identified, proposing that human capital cannot be regarded as the property of an organization (Santos-Rodrigues, Faria, Cranfield, and Morais, 2013). In the Skandia’s model, human capital was one element of intellectual capital along with structural capital. Human capital was defined as the employees’ competence, tacit knowledge, skills, and interrelationship ability and values. Figure 2.1 portrays the location of human capital, as opposed to other capitals.

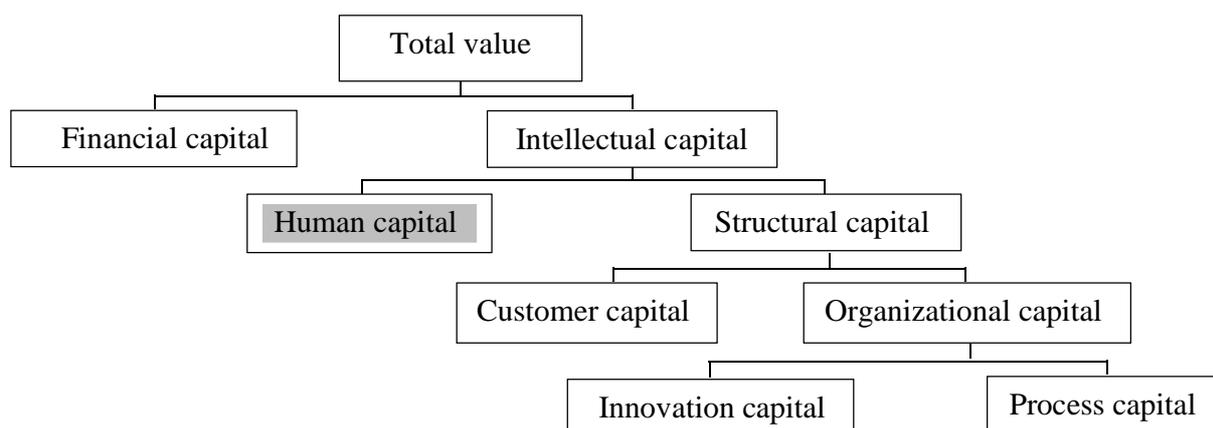


Figure 2.1: The value distinction tree. Adapted from: Chen, J., Zhu, Z., and Yuan Xie, H. (2004) “measuring intellectual capital: a new model and empirical study” *Journal of intellectual capital*, 5, 1, 195-212.

Among human capital components, competency is the most frequently cited component of human capital (Karechegani, Sofian, and Amin, 2013; Marr &

Moustaghfir, 2005; Roos et al., 2004). According to Brooking (1996), six components of human capital are suggesting: educational level, job-related

licenses or qualifications, job-related knowledge, job potential, personality traits, and job-related ability. Another view was pointed out by (Wee & Chua, 2013; Örnek & Ayas, 2015) that human capital mainly consists of factors such as: technical knowledge, technological knowledge, educated devoted time, educational background, professional competence, professional qualifications, occupational appreciated values, attrition rate of staff, psychological assessments, and innovation.

Human capital is intellectual and imagination power, and therefore the heart of intellectual capital. The employees' motivation, knowledge, skills, competences, innovative abilities, and language of customer desire creates the raw marital of innovative services. Indeed, the employees are an entrepreneur and their performances are measured through the quality of the obtained goals and performance outcomes, not through the hours spent in an organization (Örnek & Ayas, 2015). In a hot study of Fortune 500 and Europe 500 executives by the Conference Board (2002), 86% of the subjects concluded that the major drive for human capital measurement was to improve an organization's bottom line (Luthans et al., 2004). It is believed that human capital may be developed by means of formal training and education intended to update and renew one's capabilities so that can do well in a society (Dakhli & De Clercq, 2004).

Social Capital

The cousin of human capital is significantly more intangible or subtle and difficult to measure. It is defined as resources of trust, relationships, and contact network. The central suggestion in the social capital literature is that networks of relationships form, or result in, resources that can be used the good of the individual or group. The word Bank defines social capital as "the norms and social relations embedded in

social structures that enable people to coordinate action to achieve desired goals" (Doh & Acs, 2010, p 243). Social capital has been defined at two levels, and hence at an individual level, social capital is the resources embedded in one's relationships with others, while at an organizational level, social capital is the value to an organization as to the relationships established through its members in order to engage in collective action (Luthans et al., 2004; Dakhli & De Clercq, 2004). As a result, social capital eases actors' particular activities in certain networks.

By the same token, there may be high social capital within a group "bonding social capital" that helps organizational members, or may be excluded from other groups because they lack "bridging social capital". These two types of social networks correspond to Putnam's (2000) concepts, considering "bridging social capital" as bonds of connectedness that are formed across different social groups (an actor's relation with other actors), while "bonding social capital" consolidates only homogenous groups (relations between actors within a collectivity). The former has a positive impact on growth, while the latter has a negative impact on the degree of sociability outside the closed social circle. He lists some indicators of social capital, that is, formal membership, civic participation, social trust (generalized trust), and altruism or volunteerism (Molina-Morales & Martínez-Fernández, 2010; Doh & Acs, 2010).

The key ground behind the value-added contributions of social capital (social networks, trust, norms, values, etc.) lies in the fact that it is a supplement to traditional resources (physical capital, human capital, etc.) to generate better outcomes. From an economist's perspective, when social capital impacts expectations, then valuable effects arise. It is contended that the networks of

social relations in developing expectations tend to generate trust, create and enforce norms. In fact, it is not easy to have a social capital indicator. For example, trust as one of the most important indicators of social capital has been studied to understand the different in economic growth and has benefited from “generalized trust” as a proxy for social capital, measuring the degree of opportunistic behavior. It is argued that trust is the percentage of people in a society who assume that most other will behave cooperatively in a prisoner’s dilemma game (Akçomak and Weel, 2009). Some recommended methods to measure and evaluate social capital including the size, structure, and composition of networks (Luthans et al., 2004). It has been suggested that there are three organizational dimensions, by which the level of social capital within an organization can be examined. The first one, called structural dimension, is to examine strength and content of network ties –the general pattern of connections among actors. The second is the relational dimension that refers to assets rooted in relationships such as trust and trustworthiness – whereby sociability can be examined. The last one, called cognitive dimension, is to examine culture, defining as resources that provide shared representations, interpretations, and systems of meaning among parties (Wu, Chang, and Chen, 2008; Xerri & Brunetto, 2011).

Innovative Work Behavior

Innovative work behavior refers to implement a new idea that creates value. According to this generic definition, different type of innovation can be explained such as product management, deployment of new process technologies, and management practice. Moreover, previous literature has discussed four other types of innovation, i.e., product innovation, process innovation, marketing innovation, and organizational innovation. Product innovation consists of

presenting a new product and service to a market and improving mostly in functional or user characteristics of current goods and services. Process innovation refers to key changes in methods, tools and/or software. Marketing innovation is looking for increasing a company’s sales, responding to customers’ needs in a more successful way, opening a new market, locating a company’s product in a market in a new way. Finally, organizational innovation denotes to a new method for organizing routines and procedures for performing assigned tasks (Kalkan et al., 2014; Antonioli, et al., 2004, Leskovar, 2007). In the same vein, Armbruster et al., (2008) claimed that innovation can be seen as a complex phenomenon, comprising technical (new products, new production methods) and non-technical aspects (new markets, new forms of organization), product innovation (new products or services), and process innovation (new production methods, or new forms of organization).

It is emphasized that innovation as other business functions, is a management process demanding especial tools, rules, discipline, and management support. In the presence of necessary organizational support, innovation starts with individuals in an organization or group, working on a specific project mostly via the generation of creative ideas. Nevertheless, these ideas must make a positive change in a product or service so that an innovation cycle can be finalized. Even though innovative behavior is widely accepted business function for improving organizational performance, the high risk for an individual who takes an innovative method is regularly ignored. This can be caused by the fact that innovative behavior swerves traditional linear behavior, presenting uncertainty and a risky learning process. It has been suggested that only in a culture, where mistakes can be made without fear of retribution, will risky

innovative behavior augment (Xerri & Brunetto, 2011; Janssen, 2005; Kriegsman et al., 2007).

Innovation is a social process in such a way that there is an interaction between innovators and those who are impacted by innovations. It is recognized that one's action will impact others and will influence that action; innovation is to bring in novelties, make changes. Previous literature uncovers that innovation is multistage processes. In every stage, different activities and different individual behaviors are perceived. These stages are presented in a logical sequence: idea exploration, idea generation, idea championing, and idea implementation. The first stage is idea exploration with which innovation process starts, that is to say, seeking new opportunities in which nonlinear, tumultuous, and opportunistic events are occurred. This stage centers on searching for new ways so as to develop existing products and services, business processes, discover new product and service alternatives, evaluate feedbacks of customers, and conduct intense market researches. The second stage called idea generation in which knowledgeable individuals are able to orient their behaviors towards concept generations for improvement purpose. It is concerned with developing new products, services, current business processes, and entering to a new market. The key aim of this stage is to collect and edit information essential for generating problem solutions, and enhancing performance. The third stage is idea championing or promotion that consists of finding support of ideas, depending on innovative behavior and formation of enthusiastic structure. It refers to a social-political behavior which includes behavior of mobilizing resources, persuading and influencing, pushing and negotiation, and challenging and risk-taking. The last stage is idea implementation or application in which

ideas are implemented, otherwise they are useless. When new products or services are developed, tested, modified, commercialized, routinizing, idea implementation or the application of an idea is occurred. Having done that, the innovation process is being completed. Finally, the feedback given through customers is a means by which efficiency and productivity of innovation idea can be comprehended (Kheng, June, Mahmood, 2013; Örnek & Ayas, 2015).

Hypothesis development

The association between human capital, social capital, and innovative work behavior has been considerably examined. Wu et al., (2008) conducted an empirical study to answer the question of whether or not organizations with higher levels of intellectual capital including human capital, customer capital, and structure capital incline to promote higher levels of innovative work behavior. It also aimed to answer the question of whether or not the positive impact of intellectual capital including human capital, customer capital, and structure capital on innovative work behavior will increase when organizations have higher levels of social capital. 700 Taiwanese organizations were selected for the study, and hence a total of 700 questionnaires were mailed to these organizations. A total of 159 questionnaires were usable, with a response rate for manufacturing organizations of 24.50%, and for non-manufacturing organizations of 20.33%. The findings showed that intellectual capital including human capital ($\beta = 0.597$), customer capital ($\beta = 0.185$), and structure capital ($\beta = 0.204$), can improve the organizations' level of innovative work behavior. They also showed that social capital alone ($\beta = 0.028$, $P > 0.05$) was not significantly related to innovation; however, the interaction of human capital and social capital was significantly related to

innovation ($\beta = 0.213$; $P < 0.001$). Another study was undertaken (Mura et al., 2013) in Italy to investigate the impact of practitioners' perception of the human capital and social capital of the organization on their innovative work behavior. The data were collected from three Italian hospice and palliative care organizations. A total of 226 questionnaires were given to a selected sampling, and hence 184 of them were returned and useful for the final analysis. The results showed that human capital did not significantly affect innovative work behavior directly ($\beta = -.03$; $P > 0.05$). Yet, while there was a positive effect of the structural component social capital on innovative work behavior ($\beta = .33$; $P < 0.001$), the affective component of social capital did not ($\beta = -.11$; $P > 0.05$).

A multi-country study was carried out by (Dakhli & Celrcq, 2004) to examine the influence of two forms of capital, i.e. human capital and social capital, on innovative behavior at the country level. The study used three secondary data sources. That is, for assessing the level of human capital, the Human Development Index (HDI) provided by the United Nations World Development Program was applied. The level of social capital within a country was measured based on the data provided by the World Values Survey. The country - level innovation was assessed using a database maintained by the World Bank. The sample size for each country ranges from about 600 to 3000. The surveys in the countries were executed via face to face interviews at home and in the respective national languages. The final sample includes 59 countries from all five continents, that is, 30 countries in Europe, 12 countries in America, 3 countries in Africa, 13 countries in Asia, and Australia. The results revealed that human capital was positively associated with innovative behavior (the number of patents filed, expenditures in R&D, and high- technology export. Social capital (generalized trust and institutional trust) was positively associated with at least one of innovative behavior measures. Nevertheless, social capital

(associational activity, and to a lesser extent norms of civic behavior, is not associated with innovative behavior measures.

An empirical study was conducted in Northern Portugal to examine the impact of human capital on innovative work behavior. The questionnaire was distributed to 68 service directors of hospitals, and hence 65 questionnaires were returned and useful for the final analysis. The findings concluded that there was a significant positive relationship between human capital and innovative work behavior i.e., innovation creation and incentive to innovative (Santos-Rodrigues et al., 2013). Molina-Morales and Martínez-Fernández (2010) examined the influence of social capital (social interactions, trust, and shared vision) on innovative work behavior. Data were collected from a sample of Spanish industrial organizations located in the Valencia Region. Using a questionnaire among 400 organizations, 220 questionnaires were completed and useful for the final analysis. The results of the hierarchical regression analysis indicated that social capital i.e., social interactions, trust, and shared vision, was more likely to make organizations more innovative. The coefficients for all these relationships were positive and significant, showing that they did indeed contribute to innovative work behavior.

Finally, a cross-country investigation has been undertaken (Doh & Acs, 2010) to examine empirically the influence of social capital on innovation, taking into account human capital entrepreneurship, and R&D as well-known drivers of innovation. The study used macro and micro data for the empirical analysis at the country level. The finding showed that human capital was positively correlated with innovation. After controlling for R & D and human capital, social capital was positively correlated with innovation. Consequently, the preceding discussion proposed the following two hypotheses:

H1: there is a statistically significant positive relationship between human capital and innovative work behavior.

H2: there is a statistically significant positive relationship between social capital and innovative work behavior.

Methodology

Instrument

The current study applied a descriptive case study design. The study instrument includes three main variables human capital, social capital, and innovative work behavior. The intellectual capital construct includes human capital, organization capital, and customer capital. Human capital was measured using 6-items provided by Bontis (1998). The social capital includes three dimensions: structural dimension that measured using 2-items, relational dimension that measured using 2-items and cognitive dimension that measured using 3-items. All social capital's items were provided by Nahapiet and Ghoshal (1998) and Tsai and Ghoshal (1998). The last variable is innovative work behavior that was measured using 3-items for idea generation, 3-items for idea promotion, and 3-items for idea realization. All innovative work behavior's items were coined by Scott and Bruce's (1994).

The response was recorded on a five-point scale wherein "1" indicates "strongly disagree" and "5" indicates "strongly agree". The modified questionnaire was translated from English language to Arabic language, which is the official language for all potential participants, using a back-translation technique. In doing so, a professor at Albaha University translated the modified questionnaire into Arabic language and then another professor at the same university translated back to English language without references to the original English version. Both professors are fully bilingual. After that, the researcher went carefully over both versions and made revisions needed in order to ensure a complete and accurate meaning of the original text of the modified questionnaire. In addition, the researcher wanted to ensure that an appropriate level of formality for all potential participants can be achieved.

Sample

The target population of this study consisted of all 88 students enrolled in

EMBA program at Albaha University for Fall 2016. All students must work, or have worked, in either the public or private sector. As for confidentiality for all participants, the protocol describes the means whereby personal information is collected, kept secure, and maintained was explained clearly, including anonymity of all participants. A cover letter providing some information about the importance of the study, participants' rights, as well as explaining how to respond to the questionnaire items was attached. The sample of the study was selected using a simple random sampling technique. For determining appropriate sample size, the guideline provided by Barlett, Kotrlik, and Higgins (2001) was used. Hence, for the population size 100 or less with continuous data, 55 sample size are appropriate at ($P = 0.05$). There were 88 self-administered questionnaires distributed to participants who met the criteria mentioned above. Trained employees worked with the researcher have been assigned to distribute the questionnaires to potential subjects and then collect all completed questionnaires. From that, 56 were returned and useful for analysis, with a response rate of 64%.

Data analysis

Descriptive statistics were used first to summarize the data. Cronbach' alpha was applied to test the internal consistency reliability for the scales. The current study utilized Pearson correlation analysis to examine the relationship between human capital and innovative work behavior, as well as the relationship between social capital and innovative work behavior. The study used SPSS for Windows 22 to summarize study data and to examine the first and second hypotheses, as well as internal consistency reliability. Statistical significance at $P < 0.05$ were used for all tests.

Results

A total of 56 EMBA students at Albaha University participated. Table 5.1 depicts the demographic data of participants. The majority of the participants were male (76.8%). The age ranged from 29 to 39 had

the majority of the participants (55.4%), followed by 40-50 (28.6%), and the remaining percentage fell between 18-28 years old. The majority of participants married (83.9%), single (14.3%), and other (1.8%). As for work experience, participants with work experience ranged from 5 to 15 years had the highest percentage of participants (50%), less than 5 years (26.8%), 16 – 26 years (17.9%), 27 or more

years (5.4%) respectively. Of the sample, the majority of the participants come from public sector (69.6%) and the remaining participants come from private sector (30.4%). The majority of participants (69.6%) have a monthly income ranged within 5000-15000 Saudi Riyal, 15001-20000 (12.5%), and the remaining participants ranged within less than 5000 (8.9%), and 20001 and above (8.9%).

Table 5.1: Demographic Data of Participants

Variable	Frequency N= 56	Percentage (%)
Gender		
Male	43	76.8
Female	13	23.2
Age		
18-28	9	16.1
29-39	31	55.4
40-50	16	28.6
51- and above	--	--
Marital Status		
Married	47	83.9
Single	8	14.3
Other	1	1.8
Work Experience		
Less than 5 years	15	26.8
5-15	28	50
16-26	10	17.9
27 or more	3	5.4
Type of Organization		
Public sector	39	69.6
Private sector	17	30.4
Monthly Income (SR)		
Less than 5000	5	8.9
5000-15000	39	69.6
15001-20000	7	12.5
20001 and above	5	8.9

The Cronbach alpha of internal consistency was calculated in order to demonstrate the reliability of the survey's scale, namely human capital, social capital, and innovative work behavior scales. The mean value for human capital scale is 20.63, with a standard deviation of 4.39. The Cronbach's alpha (α) for this construct is 81%. The mean value for social capital scale

is 24.38, with a standard deviation of 4.48. The Cronbach's alpha (α) for this construct is 73%. Finally, the mean value for innovative work behavior scale is 29.13, with a standard deviation of 8.45. The Cronbach's alpha (α) for this construct is 96%. Hence, the internal consistency for the study's questionnaire deemed substantially reliable(Nunnally, 1978).

Table 5.2: Correlation between HUM and InnovJob

		HUM	InnovJob
HUM	Pearson Correlation	1	.737 ^{*2}
	Sig. (1-tailed)		.000
	N	56	56
Innovjob	Pearson Correlation	.737 [*]	1
	Sig. (1-tailed)	.000	
	N	56	56

*. Correlation is significant at the 0.05 level (1-tailed).

For testing the first hypothesis which stated that there is a statistically significant positive relationship between human capital and innovative work behavior, Pearson correlation analysis was carried out. As shown in **Table 5.2**, there was a statistically significant positive relationship between human capital and innovative work behavior ($r = 0.73$; $P < 0.05$, one-tail). The strength of the relationship considered strong. The correlation is in the range greater than .60 which reported in the literature (Healey, 2009). Therefore, the first hypothesis is supported.

For testing the second hypothesis which stated that there is a statistically significant positive relationship between social capital and innovative work behavior, Pearson correlation analysis was used. As shown in **Table 5.3**, there was a statistically significant positive relationship between social capital and innovative work behavior ($r = 0.70$; $P < 0.05$, one-tail). The strength of the relationship considered strong. The correlation is in the range greater than .60 which reported in the literature (Healey, 2009). Therefore, the second hypothesis is supported.

Table 5.3: Correlation between SociCap and InnovJob

		SociCap	InnovJob
SociCap	Pearson Correlation	1	.705 [*]
	Sig. (1-tailed)		.000
	N	56	56
innovJob	Pearson Correlation	.705 [*]	1
	Sig. (1-tailed)	.000	
	N	56	56

*. Correlation is significant at the 0.05 level (1-tailed).

Discussion

The current study addresses the relationship between human capital, social capital, and innovative work behavior. As shown in the finding of the first study hypothesis, there was a strong and positive relationship between human capital and innovative work behavior. According to Dakhli and De Clercq (2004), individuals who are better educated, have more work experience, and devote more time, energy, and resources in enhancing their skills are better securing higher benefits for themselves, as well as are better contributing to the overall well-being of the society. In the current study, all participants are EMBA students which means that they are more

educated, have more experience, and more skilled, and hence a strong and positive relationship between human capital and innovative work behavior is in line with what Dakhli and De Clercq (2004) proposed. Moreover, the same study concluded that a strong positive relationship was found between human capital and all innovative work behavior measure, namely, number of patents, R& D expenditures, and high-tech export at a societal level. It may be argued that these findings are taken at a societal level, and hence are not suitable to be applied to an organizational level. However, it is understandable that an organization and a society have a reciprocal relationship in terms of innovative work

behavior variable. For example, an individual who awarded a patent while working in an organization is considered to be a member of that society where he lives and works. Hence, such dimension can be taken into account when a research examines innovative work behavior at a societal level or an organizational level. In addition to that, Hayton (2005) concluded in his study that human capital in the top management team was significantly related to innovation among high-technology new ventures which supports the current study's results.

In the same vein, the results of the first study hypothesis consists with Chen et al, (2008) who has examined the impact of intellectual capital, i.e., human capital on innovation. He concluded that human capital ($\beta = 0.597$, $P < 0.001$) can enhance the organization's level of innovation. Moreover, the effects of intellectual capital including humancapital ($\beta = 0.528$, $P < 0.001$) on innovation can be found at a significant level, suggesting a perfect mediating effect of intellectual capital on innovative work behavior. Santos-Rodrigues's et al., (2013) study about intellectual capital and innovation of a public healthcare organization in Europe found a direct relationship between human capital and innovation, mainly with innovation created. This result is consistent with the current study results obtained from the first study hypothesis.

In terms of the second study hypothesis, the result suggested a strong and positive relationship between social capital and innovative work behavior. This finding is supported by many preceding studies (Doh & Acs, 2008; Molina-Morales & Martínez-Fernández, 2010; Akçomak & Weel, 2009; Kheng et al., 2013; Dakhli & De Clercq, 2004). Also, Kohtamäki, Kekäle, and Viitala (2004) and Zakaria, Amelinckx, and Wilemon (2004) claimed that interpersonal trust and mutual respect can stimulate the communication of ideas, knowledge sharing, and problem solving. This argument is in line with what the current study found in terms of the relationship between social capital's components, namely, interpersonal

trust, mutual respect, knowledge sharing, and problem solving and innovative work behavior.

In this regard, social exchange theory (Homans, 1958) can explain the human behavior in dynamic of relationships among actors. Social exchange is said to have two individuals or more who engage in tangible or intangible activities that can be rewarding or costly. Applying the reciprocal in rewarding, it has been suggested that there should not be a direct reward of performance from employees but rather on offering resources in the form of development and social benefits. The mentioned resources are given to employees before as a gift on a voluntary basis without pertaining to performance, which was well discussed in the social exchange theory, the principles of the gift economy (Dolfsma, Eijk, & Jolink, 2008; Marcoux, 2009), and in the reciprocity principles (Gouldner, 1960). These theories claimed that since employees have been given a gift and received an act of kindness, they will, as a result, increase their loyalty, engagement, and work performance. That is, more trust and fairness will be perceived by employees, because they have been given more innovation-relevant resources. Employees, in return, will oblige to take on an extra work behavior, which is very significant in seeding creativity and innovative work behavior among employees (Kheng, June, & Mahmood, 2013). The previous explanation supports the results of the second study hypothesis and concludes that building a good work environment in any organization would enhance a level of social capital among employees, and hence encourage innovative work behavior.

Conclusion

Human capital is considered to be an impetus for economic growth, development, and innovation process. Within a developing country, Saudi Arabia, human capital is associated with innovative work behavior. This conclusion is not surprised since modern organizations focus on the needs of internal customers for achieving its goals effectively and efficiently. Generating new and creative ideas can be obtained through

investing in employee education and training. In the current study, the results support the previous argument in that more educated employees will have a higher level of engaging in innovative work activities. It is recommended that organizations that look for building a strong competitive advantage, enhancing organizational performance, and contributing to a knowledge-based economy should pay much more attention to improve their employees' knowledge, skills, and abilities.

Along with human capital, social capital is associated with innovative work behavior, and therefore, organizations that boost trust and effective communication will have a higher level of innovative work activities. Since this study was conducted in a developing country where some classic management practices are prevailed, tight monitoring and control mechanisms are more likely to reduce creative thinking and idea generation. Hence, it is recommended that organizations should have more freedom of rigid rules and job definition, which, in turn, would foster a higher level of innovative work activities.

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