

Al-Ghazali's Islamic Ethics as a Moderator of Human Capital-Performance Relationship

¹Sakinah Mat Zin, ²Ahmad Azrin Adnan and ³Abdul Malek A. Tambi

¹Faculty of Business and Management, Universiti Teknologi MARA,
Kelantan, 18500 Machang, Malaysia

²Research Institute for Islamic Products and Civilization (INSPIRE),
Universiti Sultan Zainal Abidin, Terengganu, Malaysia

³Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin,
Terengganu, Malaysia

Abstract: While the Human Capital (HC) perspective has been widely applied to research in conventional aspects, less attention has been paid to Islamic approach. This exploratory study aims to investigate the association between HC and organizational performance, moderated by Islamic ethics. In Islam, entrepreneurs are advised to search for the needed knowledge for human capital development and manage it comprehensively towards the betterment in this world and the hereafter. The study scrutinizes the researches of Al-Ghazali which is based on Sufism (incorporation of Al-Quran and Hadith interpretations with reason). Al-Ghazali's thought depicts Islamic ethics that offer practical implications for entrepreneurial activities. What is the effect of human capital on firm performance. Following Islamic business ethics by Al-Ghazali will entrepreneurs with HC be successful. Established on previous contributions in this stream of literature, the present study is pursuing to provide conclusive evidence of the relationship between human capital and firm performance as impacted by Al-Ghazali's Islamic ethics.

Key words: Human capital, Al-Ghazali, Islamic ethics, firm performance, stream of literature

INTRODUCTION

Human Capital (HC), an integration of the attributes, knowledge, experience, skills, innovation, energy and passion that people invest in a firm (Florin *et al.*, 2003; Sexton and Bowman, 1986) is an essential resource for firm success (Cassar, 2006; Florin *et al.*, 2003; Pfeffer, 1994; Sexton and Bowman, 1986). What is more, due to intensified knowledge-based research activities in the future, it is estimated that human capital would be more significant (Bosma *et al.*, 2004; Sonnentag and Frese, 2002; Honig, 2001; Pennings *et al.*, 1998). Although, some studies highlight on the embellishment of the connection between human capital and entrepreneurial success (Baum and Silverman, 2004), others assert that human capital acts as one of the fundamental elements in the entrepreneurial process (Haber and Reichel, 2007). Hence, there is incongruity about the relative importance of human capital in influencing firm performance. More importantly, the magnitude of the relationship between human capital and organizational success remains unidentified. Despite the

fact that some findings indicate mediocre or even high relationships (Duchesneau and Gartner, 1990; Frese *et al.*, 2007), other studies claimed low relationships (Davidsson and Honig, 2003; Gimeno *et al.*, 1997). The reason behind this is may be the existence of moderator variables. Surprisingly, to the authors' knowledge, studies investigating Al-Ghazali's Islamic ethics as moderator in human capital success relationship have never been conducted before.

Previous literature on intangible resources confers several variables that possibly moderate the HC-performance relationship. However, little agreement arrived at the constitution of appropriate moderators. There are diverse findings on the effect of moderating variables on the HC-performance relationship. For instance, past research has found both significant positive (Roos *et al.*, 1998) and negative (Blunch, 2007) relationships between Islamic religiosity and HC. Despite the fact there are a lot of potential clarifications for results inconsistency regarding a moderating variable, this does not defeat the demands for scholarly attention from researchers who continuously provide more convincing

proof of the effect these variables have on the strength and direction of the HC performance relationship. As asserted by Crook *et al.* (2011), there are numerous possibly essential moderators of the human capital performance relationship. Considering the eminence of human capital as a determining factor of firm performance and the preliminary evidence indicating that the empirical evidence is mixed, a theoretical moderator of the human capital performance relationship to elucidate extant evidence seems both judicious and warranted.

Taking into account Imam Al-Ghazali's economic theory, the purpose of this study is to highlight knowledge gaps in the existing literature and to suggest a conceptual framework for the association of human capital and firm performance. Researcher's inspiration to select the classical Muslim scholar, Al-Ghazali is based on the views of Islamic ethics that he started the discussion by grounding the Islamic viewpoint in assessing aspects of business and economic growth. Al-Ghazali's thoughts are based on the values and ethics that come from the Quran and Hadith. Al-Ghazali also provides a comprehensive thought, linking social and political aspects of society, physical and non-physical aspects and values of divinity with the idea of business and economic growth.

Specifically, this study operates past research to examine the relationship between human capital and firm performance as well as the moderating impact of Al-Ghazali's Islamic ethics. It is anticipated that the results of this study will contribute to the prevailing body of knowledge by providing an enhanced understanding of the relationship between human capital and performance. The study will also offer a foundation to researches on the human capital-performance relationship. Furthermore, it is envisioned that the findings of the study will uncover knowledge gaps and help researchers to gain profound understanding of human capital and how it influences on firm performance.

In order to posit human capital within the broad area of Islamic entrepreneurial studies, the first section begins by defining what is meant by human capital both from conventional and Islamic perspective. Then, the study attempts to explain Al-Ghazali's approach to Islamic ethics and its moderating effect on HC-performance relationship. Finally, it analyses the contributions of Al-Ghazali, showing how these are relevant for theory and research in the expanse of ethical-economic virtues.

THE CONCEPT OF HUMAN CAPITAL

Research in the field of Human Capital, a component of intellectual capital primarily started appearing in the

prevalent magazines early 1990's (Stewart, 1994). Such research has mainly evolved from the scholars like Bassi and Buren (1998), Bontis (1996), Darling (1996), Edvinsson and Sullivan (1996) and Onge (1996). Accordingly, Elliott (1991) developed Human Capital Theory (HCT) concerning the quality, not quantity, of the workforce. Supported by other researchers, HC is defined as knowledge, skills, education, abilities (Garavan *et al.*, 2001; Youndt *et al.*, 2004), competency, attitude and behavior (Rastogi, 2002) of a person. Roos *et al.* (1998) further categorised HC into three: competence (competencies, skills and knowhow), attitude (motivation and leadership) and intellectual agility (creativity, innovativeness, mental flexibility and problem solving). Accordingly, HC has been recognised as an important determinant for economic growth (Schultz, 1961), since it is regarded as the competences (knowledge and skills) entrenched in an individual (Beach, 2009).

According to Human Capital Theory (HCT), entrepreneur's competences, knowledge, skills and abilities will contribute to firm competitive advantage. HC theorists believe that the more education one has in terms of skills, knowledge and abilities, the more he can provide productivity to the firm (Kwon, 2009). At firm level, HC can be a source of justifiable competitive benefit (Barney and Wright, 1998; Kraaijenbrink, 2012) and this outlook draws on Resource-Based View (RBV) (Barney, 1991).

Resource Based View (RBV) was expressed into a theory by Wernerfelt (1984). The theory states that the firm's valuable and non-substitutable resources are the roots for competitive gains. In securing sustainable competitive advantage, RBV proposes that the firm uphold the growth of competencies, heighten social relationship or networking and create tacit knowledge. RBV also identifies internal resources, like HC as invaluable and irreplaceable resource for the firm to utilize successfully in order to achieve growth and competitiveness (Hagan, 1996; Lado *et al.*, 1992; Castanias and Helfat, 1991). In promoting Human Resource Management (HRM) particularly human capital, RBV attempts to bring about integration between the strategies and HRM (Wright *et al.*, 2001) by attaining the best degree of fit between the internal firm resources and external opportunities (Conner, 1991; Chandler, 1993; Sloan, 2015). Precisely, RBV emphasizes the importance of human capital, highlights the role of managers (Teece and Pisano, 1994) and fortifies the strategic human resource management for the ultimately sustained competitive advantage.

In conventional perspective, the concept of human capital generally emphasizes on the development of

knowledge, abilities and skills of people as the most important source of productivity and economic development. Human beings are considered as asset and investments which can lead to getting better profits. Contradictory, human beings are social creatures so the production return for their investment will not be exactly the same as that of the machine. Nevertheless, scholars have reached an agreement that it is crucial to develop knowledge, skills and capabilities of people for achieving economic growth. As reminded by Imam Ghazali, Muslim entrepreneurs must gain thorough understanding of business transaction rules prescribed in shariah (Ghazali and Imam, 1998).

AL-GHAZALI-A BRIEF INTRODUCTION

Al-Ghazali was well-known as Hujjatul Islam al-Imam Abu Hamid Al-Ghazali. His real name was Muhammad bin Muhammad bin Muhammad At-Tusi. He had a nickname; Zainuddin. He was born in Thus, Khurasan in 450 AH/ 1058 AD (Shakirah, 2008). His intense mastery of philosophical resolutions is apparent from the scholarly rebuttals specified to his writings by highly honored philosophers. Scholars consider Al-Ghazali as the most unusual Islamic thinker who is the expert in theology. He was the most prominent influential intellectual, philosopher, legal expert, theologian, sacred reformer and mystical thinker of Islam (Macdonald, 2009). Al-Ghazali accentuated on the purification of the soul which had been paid less attention by other scholars. His writing on ethics and morality has very thorough and detailed discussions, containing the factors and required sources. He talked about the impurity of heart, its causes and treatments (Syami, 1993). Additionally, it is fascinating to note that al-Ghazali's writings cover a decent number of economic thoughts which are deliberated in an ethical perspective.

Al-Ghazali's philosophy on Islamic economics and ethics:

Al-Ghazali's Islamic economics is connected primarily to the Islamic principles of the Qur'an and Sunnah. Al-Ghazali's philosophy encompasses both Islamic economics and ethics since intermediation of ethical codes and moral conducts are vague in contemporary economics. Ethics subjugate a major place in Islam as in a hadith the Prophet Muhammad (SAW) upholds that the aim of his mission is to complete the good characters. In the area of "Earnings, Trade and Commerce" discussed in *Ihya ulum-id-din*, Al-Ghazali has also emphasized on ethical issues when involving in business and economic activities (Ghazali and Imam, 1998). Islamic economy is contained by the considerations of its specific ethical

system (Naqvi, 1994). Therefore, Islamic economics is considered as a vital part of Shariah deliberating the righteous ethical path. Al-Ghazali's Shariah-based concept of economics incorporates all human activities that are realised as a means to attain goals in serving the community. The concept of *malaa* and its relation to Islamic economics, concerning social welfare is well defined by Al-Ghazali (Daghistani, 2016). The promotion of *maslaha* (public good) in the society is regarded as the noblest act in the sight of Allah (SWT). Accordingly, Al-Ghazali presents five obligatory Shariah-based mechanisms for the benefits and justice of the people and society *din* (religion) *nafs* (life of soul) *nal* (family) *mal* (wealth) and *'aql* (intellect) (Choudhury, 1992). In specific, Al-Ghazali's Islamic economics embraces the rudimentary concepts of individual righteous behaviour as economic mediators, for example the concept of property, social welfare, market values and ethics, market growth, demand and supply, prices and profits, barter system, production and functions of money and the state in the economy (Irijanto *et al.*, 2015).

The association of Al-Ghazali's philosophy on Islamic economics and ethics with the concept of Islamic beliefs recounts to the explanation of individual rights and social responsibilities, thus it cannot be approached merely on material grounds. Moreover, the philosophical foundation of the Islamic moral economy establishes on the collective ethical system indicating that business strategies must not limit the opportunity for individual skill development, independency or duties for taking action (Asutay, 2007). Islam epitomizes the inclusive order of Islamic economics and other systems connected to daily life. Hence, these systems are assimilated in the tie of ethical dealings (Choudhury and Malik, 1992). Consequently, in managing firm profitability and sustainability within the Shariah principles, it is essential that entrepreneurs retain pertinent competencies as they are the human capital of the firm. Fundamentally, in the literature, human capital defines as skills and abilities that are valuable, exceptional and difficult to emulate (Barney, 1991). More importantly, the human capital of the firm must be nurtured according the values and ethics prescribed in the Quran and Hadiths

Al-Ghazali's Islamic ethics: Basically, Al-Ghazali's Islamic ethics render upon four elements wisdom, courage, chastity, justice clarifying the notion that any other factors are only consequences of those components (Gendy, 2005). Al-Ghazali recognized Islamic ethics as man spiritual custom, entrenched in his soul and conveyed over the actions. It is the guiding principle to secure the virtuous deeds and to abstain from evils. Al-Ghazali's

Islamic ethics encompasses of the right actions towards God, family members and the public (Quasem, 2009). Al-Ghazali highlights on the notion of faith which was an unconditional and definite belief in God the-One, the Benefactor, the Overseeing who embrace in his power to reward and punish (Ghazali and Imam, 1998), both in this world and the hereafter.

In general, there are three main considerations outlined in Al-Ghazali's ethical theory, specifically: an issue of accumulation of wealth; a concern of avoiding harms to others and foul of injustice. The theory has drawn a distinctive concept between creating wealth for a sustainable prosperous economy which is morally justifiable and that of accumulation of wealth which Al-Ghazali reprimanded. Despite morally-based economic and business activities linger on lawful or unlawful and just or unjust matters, Al-Ghazali has delved into the notion of compassion and conscious concern of those who are in need and less fortunate in society. Precisely, Muslims' obligation is to uphold justice besides being charitable and compassionate which are regarded as substances of generosity and voluntary acts. Further, Al-Ghazali has stressed that the act of injuring the poor and orphan is considered as more malevolent than harming the strong and Machiavellian (Ghazali and Imam, 1998). Justice is indeed a magnificent feature as it is one of the 99 attributes of Allah (SWT) and analogous to good conducts, devotion and charity. As mentioned in the Quran: "Surely, God bids to justice and good-doing and giving to kinsmen and he forbids indecency, dishonour and insolence, admonishing you so that haply you would remember".

In essence, Al-Ghazali's main ethical value focuses on ethics and veracity in which individuals are abstaining from being companion to evil act of injustice since no one was exempted from committing injustice activities (Ghazali and Imam, 1998). Justice, benevolence, piety, trustworthiness, integrity, thankfulness and chastity are among the ethics taught in the Quran and Hadith. As a matter of fact, Islamic ethics consist of obligations, duties and responsibilities whose authority originates straight from the Quran and sayings and traditions of the Prophet Muhammad. Further, for entrepreneurs, Islamic ethics are moral fillers of sound business actions and better firm performance (Rice, 1999).

FIRM PERFORMANCE AND ITS MEASURES

In the turbulent globalization era, firms endeavor to succeed and adapt by generating sustainable competitive benefit through better firm performance (Mehralian *et al.*, 2014). Performance refers to how well a firm runs the

business to attain its objective. It is the measure of how effective and efficient the firm manages its resources in delivering the values to customers and other stakeholders (Wu and Zhao, 2009). The practice of performance measurement is often commended for improving firm performance (Santos and Brito, 2012). It is undeniable that the main purpose of both entrepreneurship theory and research to enhance firm performance (Mthanti, 2012). The firm must achieve superior relative-performance than its competitors (Wu and Liu, 2010), thus for the value delivered, several measures should be used. Currently, performance measurement contains financial and nonfinancial performance measurements are utilised, linking to the firm's business approach. Even though financial performance measures are prevalent in most researches, they are not intensely related to business strategy and objectives, hence do not really provide competitive advantages to the firm to cope in an open competition challenges. Consequently, the American Institute of certified public accountants had proposed integrating non-financial information into the performance measures as to replicate intellectual capital and communal obligation besides promoting knowledge (Wu and Liu, 2010).

Accordingly, Dess and Robinson (1984) observed the effectiveness of subjective performance measures as equated to objective methods. On the contrary, Venkatraman and Ramanujam (1986) empirically studied the degree of merging the methods of measuring organizational performance. These researchers found that that growth in sales and profits was differentiated measures for diverse areas of business performance. Prior researches have proven that there are numerous measurements to firm performance construct. Although, Robinson (1995) stated that return to shareholders was the most prevailing indicator for individual performance among businesses that have undertaken preliminary public offerings, his findings are not universal and cannot be used to diverse samples. Concisely, neither there is irrefutable investigation that has recognized the best inclusive measure of firm performance nor a measurement model that precisely signifies the construct (Santos and Brito, 2012).

This study attempts to investigate the perception of the firm that will be measured subjectively. Subjective performance measures are used in this study based on an adapted version of Kotey and Meredith (1997) and Gadenne (1998). This kind of measurement has been commonly engaged by preceding studies (Gaskill and Auker, 1994; Najihah *et al.*, 2014; Swinney *et al.*, 2006). The entrepreneurs will be asked about their satisfaction with the outcome of the sales, profit, business growth an

increase in the number of employees, customer satisfaction, net asset value of the business and rate the firm performance indicators for the past 3 year using a 5-point scale, ranging from 1 = "very dissatisfied" to 5 = "very satisfied". Watson *et al.* (2003) claimed that subjective measurement of success is generally susceptible to errors. On the other hand, research will verify its validity by adding several items in the questionnaires. Moreover, entrepreneurs are compulsory to objectively answer the questions concerning the firm performance-comprising the profits and sales per month.

Relationship of human capital and firm performance:

Previous studies had the view that a high level of HC is connected to firm performance (Pennings *et al.*, 1998; Bosma *et al.*, 2004; Unger *et al.*, 2011; Mappigau and Agussalim, 2013; Lu *et al.*, 2014). In fact, regardless of organizational settings, HC would positively influence firm performance (Benson *et al.*, 2006). HC would enable the entrepreneurs to be more capable in determining and exploiting business opportunities (Shane and Venkatraman, 2000), besides assisting them in the accrual of new knowledge and skills. Bruderl *et al.* (1992) and Isaksen (2006) asserted that entrepreneurs having various skills and capabilities would be more efficient in managing the production process and thus increase the productivity and performance of the firm. This is because HC is positively interrelated to strategic planning which is crucial for business success (Baum *et al.*, 2001; Frese *et al.*, 2007). Firm success is also influenced by entrepreneur's ability, experience and motivation. As evidenced by many studies showing that the entrepreneur's education is positively related to firm profitability and growth (Ganotakis, 2012; Bates, 1995; Hay and Ross, 1989; Cooper *et al.*, 1989).

Entrepreneurs with higher HC would be more effective and efficient in managing their business and act as catalysts to firm survival than those with lesser HC. Possessing high level of HC, the successful entrepreneurs may profit from better treatments and therefore may perhaps have well access to vital assets like financial resources, market information and other linkages. Given the above discussion, the following hypothesis is formulated: H₁: HC is significantly and positively related to firm performance.

Relationship of human capital, Al-Ghazali's Islamic ethics and firm performance: Putting ethics into HC management would considerably enhance the quality of firm performance (Mehralian *et al.*, 2012). Basically, the crucial aim of ethics in business is to develop

decision-making quality and firm performance (Valentine and Barnett, 2007). Not only that an ethical environment will affect decision-making, but also react to ethical predicaments over succeeding actions. Incidentally, organizational ethics may be transformed into actions which are then transported to numerous work outputs (Cullen *et al.*, 1989). Adnan (2015) has anticipated that HC and Islamic ethics would promote initiatives to form successful businesses among entrepreneurs. Supported by Moghaddam *et al.* (2015), ethics like trust, loyalty, commitment, hard-work, culpability and just can motivate employees to have higher level of HC and work at their full capability, talents, knowledge, creativity and innovation for the sake of business growth.

According to Al-Ghazali's Islamic ethics, ethical actions will bring entrepreneurs to higher conditions of spiritual enlightenment. As the Prophetic saying "Act in accordance with what you know for what you do not know (will) be unveiled to you (by Allah)" (Ghazali, 2004). Hence, ethics should be emphasized in entrepreneurial activities since they can contribute to the economic development while improving the quality of life of the employees and society. For instance, in measuring the Corporate Social Responsibility (CSR) of an organization, spiritual values or Islamic ethics should be positioned as the most important consideration (Adnan, 2015). In addition, Sudarsono (2010) instituted that those individuals who have work-life balance (material and spiritual) will be very satisfied with their research and thus perform better. As asserted by Ghazali (2011) an individual will attain the highest satisfaction when he is able to know Allah SWT more closely.

Furthermore, in managing a firm, entrepreneurs have to nurture Islamic ethics such as patience, prayer, thankfulness, reliance on Allah, faith, contentment, self-composure, mildness, humbleness, knowledge, sincerity, modesty, loyalty, dignity, silence and deliberateness. Consequently, these qualities will promote decent comportment that leads to obedience and salvation (Ghazali and Imam, 1998). Moreover, an individual who makes efforts to develop the business economic performance as a medium of devotion to Allah (SWT) then he is among those who worship in accordance with the teachings of the Prophet (Ghazali and Imam, 1998).

Al-Ghazali appreciated HC as he had encouraged entrepreneurs to seek the necessary knowledge. Al-Ghazali's Islamic ethics should be adopted by entrepreneurs and integrated in their entrepreneurial activities. The ethics offer balance guidelines as they have inclusive means to attain success in this world and afterlife. First of all, entrepreneurs need to have pure intention when indulging in their business dealings and

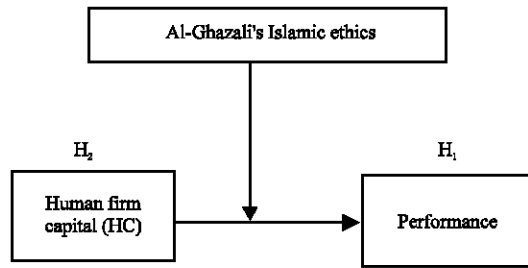


Fig. 1: Research model

it must be for the sake obtaining the pleasure of Allah (SWT)'s pleasure. Thus, entrepreneurial activities will strictly be lawful as Islamic teaching forbids entrepreneurs from involving in prohibited activities. Also, entrepreneurs should fulfil their Fardhu Kifayah duty by completing the requirement of Muslim community. In addition, Imam Al-Ghazali further stresses that the Muslim entrepreneurs should not accommodate any distraction that may hinder them from observing their religion obligation no matter how hectic the activities are (Ghazali and Imam, 1998). In this sense, it is hypothesized that H₂: Al-Ghazali's Islamic ethics moderate the relationship between HC and firm performance. HC has a stronger and more positive relationship with firm performance among entrepreneurs who exhibit a high level of ethics than for entrepreneurs who exhibit a low level of ethics.

Proposed research model: Founded on the literature review, a proposed research model has been developed. HC will be regarded as an independent variable and Al-Ghazali's Islamic ethics will be treated as moderating variables while firm performance would be a dependent variable shown in Fig. 1.

CONCLUSION

In brief, researchers have instigated in putting more emphasis on a variable that influences the strength of the HC-performance relationship. Such contributions have exposed quite a few significant expanses for HC researchers. Hence, it is hoped that the review provides insights into the impact of human capital on firm performance and the role of Al-Ghazali's Islamic ethics in moderating this relationship. As it has been debated that HC acts an important role in improving firm performance, Al-Ghazali's Islamic ethics has also been argued to positively moderate the relationship between HC and performance. Moreover, Islam cultivates ethical values to the entrepreneurs which is unquestionably the most important factor of improvement. In fact, Imam al-Ghazali's

guidance is beneficial for entrepreneurs and anybody in a management position. Islamic entrepreneurs should adopt the philosophy of al-Ghazali's economic pursuit which highlights on economic and business success is a means to the end and not an end in it. More importantly, the ultimate aim is al-Falah (success) which is the achievement in spiritual, ethical and socio-economic well-being in this world and success in the Hereafter.

REFERENCES

- Adnan, A.A., 2015. The missing dimension of corporate social responsibility measurement in Malaysian Islamic Banks. *Br. J. Econ. Finance Manage. Sci.*, 10: 16-28.
- Asutay, M., 2007. A political economy approach to Islamic economics: Systemic understanding for an alternative economic system. *Kyoto Bull. Islamic Area Stud.*, 1: 3-18.
- Barney, J.B. and P.M. Wright, 1998. On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Hum. Resour. Manage.*, 37: 31-46.
- Barney, J.B., 1991. Firm resources and sustained competitive advantage. *J. Manage.*, 17: 99-120.
- Bassi, L.J. and V.M.E. Buren, 1998. Investments in intellectual capital: Creating methods for measuring impact and value. *American Society of Training and Development, American*.
- Bates, T., 1995. A comparison of franchise and independent small business survival rates. *Small Bus. Econ.*, 7: 377-388.
- Baum, J.A.C. and B.S. Silverman, 2004. Picking winners or building them? Alliance, intellectual and human capital as selection criteria in venture financing and performance of biotechnology startups. *J. Bus. Venturing*, 19: 411-436.
- Baum, J.R., E.A. Locke and K.G. Smith, 2001. A multidimensional model of venture growth. *Acad. Manage. J.*, 44: 292-303.
- Beach, J.M., 2009. A critique of human capital formation in the US and the economic returns to sub-baccalaureate credentials. *Educ. Stud.*, 45: 24-38.
- Benson, G.S., S.M. Young and, E.E. Lawler, 2006. High involvement work practices and analysts' forecasts of corporate earnings. *Hum. Resour. Manage.*, 45: 519-537.
- Blunch, N.H., 2007. *Religion and Human Capital in Ghana*. University of Cambridge, Cambridge, England.
- Bontis, N., 1996. There's a price on your head: Managing intellectual capital strategically. *Bus. Q.*, 60: 40-47.
- Bosma, N., M. Van Praag, R. Thurik and G. De Wit, 2004. The value of human and social capital investments for the business performance of start-ups. *Small Bus. Econ.*, 23: 227-236.

- Bruderl, J., P. Preisendorfer and R. Ziegler, 1992. Survival chances of newly founded business organizations. *Am. Sociol. Rev.*, 57: 227-242.
- Cassar, G., 2006. Entrepreneur opportunity costs and intended venture growth. *J. Bus. Venturing*, 21: 610-632.
- Castanias, R.P. and C.E. Helfat, 1991. Managerial resources and rents. *J. Manage.*, 17: 155-171.
- Chandler, J.A.D., 1993. *The Visible Hand*. Harvard University Press, Boston, Massachusetts, ISBN:0-674-94052-0, Pages: 608.
- Choudhury, M.A. and U.A. Malik, 1992. *The Foundations of Islamic Political Economy*. Plagrave Macmillan, Basingstoke, England.
- Choudhury, M.A., 1992. *The Principles of Islamic Political Economy: A Methodological Enquiry*. Plagrave Macmillan, Basingstoke, England.
- Conner, K.R., 1991. A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *J. Manage.*, 17: 121-154.
- Cooper, A.C., C.Y. Woo and W.C. Dunkelberg, 1989. Entrepreneurship and the initial size of firms. *J. Bus. Venturing*, 4: 317-332.
- Crook, T.R., S.Y. Todd, J.G. Combs, D.J. Woehr and D.J. Ketchen Jr., 2011. Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *J. Applied Psychol.*, 96: 443-456.
- Cullen, J.B., B. Victor and C. Stephens, 1989. An ethical weather report: Assessing the organization's ethical climate. *Organiz. Dyn.*, 18: 50-62.
- Daghistani, A.S., 2016. Semiotics of islamic law, maslaha and islamic economic thought. *Int. J. Semiotics Law Rev. Int. Legal Semiotics*, 29: 389-404.
- Darling, M., 1996. Building the knowledge organization. *Bus. Q.*, 61: 61-66.
- Davidsson, P. and B. Honig, 2003. The role of social and human capital among nascent entrepreneurs. *J. Bus. Venturing*, 18: 301-331.
- Dess, G.G. and R.B. Robinson Jr., 1984. Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Manage. J.*, 5: 265-273.
- Duchesneau, D.A. and W.B. Gartner, 1990. A profile of new venture success and failure in an emerging industry. *J. Bus. Venturing*, 5: 297-312.
- Edvinsson, L. and P. Sullivan, 1996. Developing a model for managing intellectual capital. *Eur. Manage. J.*, 14: 356-364.
- Elliott, R.F., 1991. *Labor Economics: A Comparative Text*. McGraw-Hill, New York, USA.
- Florin, J., M. Lubatkin and W. Schulze, 2003. A social capital model of high-growth ventures. *Acad. Manage. J.*, 46: 374-384.
- Frese, M., S.I. Krauss, N. Keith, S. Escher and R. Grabarkiewicz *et al.*, 2007. Business owners' action planning and its relationship to business success in three African countries. *J. Appl. Psychol.*, 92: 1481-1498.
- Gadenne, D., 1998. Critical success factors for small business: An inter-industry comparison. *Int. Small Bus. J.*, 17: 36-56.
- Ganotakis, P., 2012. Founders' human capital and the performance of UK new technology based firms. *Small Bus. Econ.*, 39: 495-515.
- Garavan, T.N., M. Morley, P. Gunnigle and E. Collins, 2001. Human capital accumulation: The role of human resource development. *J. Eur. Ind. Training*, 25: 48-68.
- Gaskill, L.R. and V.H.E. Auken, 1994. Impact of operational planning on small business retail performance. *J. Small Bus. Strategy*, 5: 21-35.
- Gendy, E.A.R., 2005. *The International Islamic Code for Medical and Health Ethics*. Islamic Organization for Medical Sciences, Kuwait.
- Ghazali, A. and A.A.H.M.I.M. Imam, 1998. *Ihya 'Ulumuddin*. Vol. 3, Maktabah Misr Publisher, Cairo, Egypt.
- Ghazali, A., 2011. *IhyaUlumuddin: Turning Religious Sciences: Book 2* (Translated by Purwanto). Publisher Marja, Bandung, Indonesia.
- Ghazali, A.M., 2004. *Muslim Character* (Translated by M.A. Usmani). Kazi Publication Inc, Chicago, Illinois.
- Gimeno, J., T.B. Folta, A.C. Cooper and C.Y. Woo, 1997. Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Sci. Q.*, 42: 750-783.
- Haber, S. and A. Reichel, 2007. The cumulative nature of the entrepreneurial process: The contribution of human capital, planning and environment resources to small venture performance. *J. Bus. Venturing*, 22: 119-145.
- Hagan, C.M., 1996. The core competence organization: Implication for human resource practices. *Hum. Res. Manage. Rev.*, 6: 147-164.
- Hay, R.K. and D.L. Ross, 1989. An assessment of success factors of non-urban start-up firms based upon financial characteristics of successful versus failed ventures. *Front. Entrepreneurship Res.*, 1989: 148-158.
- Honig, B., 2001. Human capital and structural upheaval: A study of manufacturing firms in the West Bank. *J. Bus. Venturing*, 16: 575-594.

- Irijanto, T.T., M.A.S. Zaidi, A.G. Ismail and N.C. Arshad, 2015. Al ghazalis thoughts of economic growth theory, a contribution with system thinking. *Sci. J. PPI-UKM.*, 2: 233-240.
- Isaksen, E.J., 2006. Early business performance: Initial Factors effecting new business outcomes. BA Thesis, Bodo Graduate School of Business, University of Nordland, Bodo, Norway.
- Kotey, B. and G.G. Meredith, 1997. Relationships among owner/manager personal values, business strategies and enterprise performance. *J. Small Bus. Manage.*, 35: 37-64.
- Kraaijenbrink, J., 2012. Human Capital in the Resource-Based View. In: *The Oxford Handbook of Human Capital*, Spender, J.C. and A.B. Jones (Eds.). Oxford University Press, Oxford, England, ISBN:978-0199655892, pp: 218-237.
- Kwon, D.B., 2009. Human capital and its measurement. *Proceedings of the 3rd OECD World Forum on Statistics, Knowledge and Policy*, October 27-30, 2009, OECD World Forum, Busan, Korea, pp: 15-15.
- Lado, A.A., N.G. Boyd and P. Wright, 1992. A competency-based model of sustainable competitive advantage: Toward a conceptual integration. *J. Manage.*, 18: 77-91.
- Lu, W.M., W.K. Wang and Q.L. Kweh, 2014. Intellectual capital and performance in the Chinese life insurance industry. *Omega*, 42: 65-74.
- Macdonald, D.B., 2009. Al-Ghazzali. In: *Shorter Encyclopaedia of Islam*, Gibb, H.A.R. and J.H. Kramers (Eds.). Cornell University Press, New York, USA., ISBN:978-9-004-00681-2, pp: 111-114.
- Mappigau, P. and M. Agussalim, 2013. Human capital and survival of small scale food processing firms under economic crisis in central Java Indonesia. *Aust. J. Bus. Manage. Res.*, 3: 16-29.
- Mehralian, G., A. Nazari, J.P. Akhavan and R.H. Rasekh, 2014. Exploring the relationship between the knowledge creation process and intellectual capital in the pharmaceutical industry. *Learn. Organiz.*, 21: 258-273.
- Mehralian, G., A. Rajabzadeh, R.M. Sadeh and R.H. Rasekh, 2012. Intellectual capital and corporate performance in Iranian pharmaceutical industry. *J. Intellectual Capital*, 13: 138-158.
- Moghaddam, J.Y., P. Akhavan and G. Mehralian, 2015. Intellectual capital, ethical climate and organisational performance: An interaction analysis. *Int. J. Lear. Intellectual Capital*, 12: 232-250.
- Mthanti, T., 2012. The effect of effectuation on performance of South African medium and high technology firms. Ph.D Thesis, University of Witwatersrand, Johannesburg, South Africa.
- Najihah, M.Y., M. Rosman, M.Z. Sakinah and P. Mazidah, 2014. An investigation of the small business start-up performance. *J. Basic Appl. Sci. Res.*, 4: 10-17.
- Naqvi, S.N.H., 1994. *Islam, Economics and Society* (RLE Politics of Islam). Routledge, Abingdon-on-Thames, UK., ISBN:9781134609420.
- Onge, S.H., 1996. Tacit knowledge the key to the strategic alignment of intellectual capital. *Plann. Rev.*, 24: 10-16.
- Pennings, J.M., K. Lee and V.A. Witteloostuijn, 1998. Human capital, social capital and firm dissolution. *Acad. Manage. J.*, 41: 425-440.
- Pfeffer, J., 1994. *Competitive Advantage through People: Unleashing the Power of the Work Force*. 5th Edn., Harvard Business School Press, Boston, MA., USA., ISBN-13: 9780875844138, Pages: 281.
- Quasem, M.A., 2009. *The Ethics of al-Ghazali: A Composite Ethics in Islam*. University of California, New York, USA., ISBN:978-0882060217.
- Rastogi, P.N., 2002. Knowledge management and intellectual capital as a paradigm of value creation. *Hum. Syst. Manage.*, 21: 229-240.
- Rice, G., 1999. Islamic ethics and the implications for business. *J. Bus. Ethics*, 18: 345-358.
- Robinson, K.C., 1995. Measures of entrepreneurial value creation: An investigation of the impact of strategy and industry structure on the economic performance of independent new ventures. Ph.D Thesis, University of Georgia, Athens, Greece.
- Roos, R.R., L. Edvinsson and N. Dragonetti, 1998. *Intellectual Capital: Navigating in the New Business Landscape*. New York University Press, New York, USA., ISBN-13: 9780814775127, Pages: 143.
- Santos, J.B. and L.A.L. Brito, 2012. Toward a subjective measurement model for firm performance. *BAR. Braz. Admin. Rev.*, 9: 95-117.
- Schultz, T., 1961. Investment in human capital. *Am. Econ. Rev.*, 51: 1-17.
- Sexton, D.L. and N. Bowman, 1986. The entrepreneur: A capable executive and more. *J. Bus. Venturing*, 1: 129-140.
- Shakirah, N., 2008. *Al-Ghazali and His Theory of the Soul: A Comparative Study*. Penerbit Universiti Sains Malaysia, Pulau Pinang, Malaysia.
- Shane, S. and S. Venkataraman, 2000. The promise of entrepreneurship as a field of research. *Acad. Manage. Rev.*, 25: 217-226.
- Sloan, A.P., 2015. *My Years with General Motors*. eNet Press Inc., Lake Oswego, Oregon.
- Sonnentag, S. and M. Frese, 2002. Performance Concepts and Performance Theory. In: *Psychological Management of Individual Performance*, Sonnentag, S. (Ed.). Wiley, Chichester, UK., pp: 3-25.

- Stewart, T.A., 1994. Your company's most valuable asset: Intellectual capital. *Fortune*, 130: 68-74.
- Stewart, T.A., 1991. Brainpower: How intellectual capital is becoming America's most valuable assets. *Fortune*, 3: 44-60.
- Sudarsono, 2010. *Islamic Philosophy*. Publisher Rineka Copyright, Jakarta, Indonesia, pp: 21-110.
- Swinney, J.L., R.C. Runyan and P. Huddleston, 2006. Differences in reported firm performance by gender: Does industry matter?. *J. Dev. Entrepreneurship*, 11: 99-115.
- Syami, A.A.S., 1993. *Imam Al-Ghazali Hujjatul Islam wa Mujaddidu al-Miah wal Khamsah*. Dar Al-Qalm, Damsyik, Syria.
- Teece, D. and G. Pisano, 1994. The dynamic capabilities of firms: An introduction. *Ind. Corporate Change*, 3: 537-556.
- Unger, J.M., A. Rauch, M. Frese and N. Rosenbusch, 2011. Human capital and entrepreneurial success: A meta-analytical review. *J. Bus. Venturing*, 26: 341-358.
- Valentine, S. and T. Barnett, 2007. Perceived organizational ethics and the ethical decisions of sales and marketing personnel. *J. Pers. Selling Sales Manage.*, 27: 373-388.
- Venkatraman, N. and V. Ramanujam, 1986. Measurement of business performance in strategy research: A comparison of approaches. *Acad. Manage. Rev.*, 11: 801-814.
- Watson, W., W.H. Stewart and A.B. Nir, 2003. The effects of human capital, organizational demography and interpersonal processes on venture partner perceptions of firm profit and growth. *J. Bus. Venturing*, 18: 145-164.
- Wernerfelt, B., 1984. A resource-based view of the firm. *Strat. Manage. J.*, 5: 171-180.
- Wright, P.M., B.B. Dunford and S.A. Snell, 2001. Human resources and the resource based view of the firm. *J. Manage.*, 27: 701-721.
- Wu, D. and F. Zhao, 2009. Performance Measurement in the SMEs in the Information Technology Industry. In: *Information Technology Entrepreneurship and Innovation*, Zhao, F. (Ed.). Idea Group Inc., Hershey, USA, ISBN: 978-1-599-04902-1, pp: 79-99.
- Wu, S.I. and S.Y. Liu, 2010. The performance measurement perspectives and causal relationship for ISO-certified companies: A case of opto-electronic industry. *Int. J. Q. Reliab. Manage.*, 27: 27-47.
- Youndt, M.A., M. Subramaniam and S.A. Snell, 2004. Intellectual capital profiles: An examination of investments and returns. *J. Manage. Stud.*, 41: 335-361.