

Islamic Human Capital and Firm Performance: An Evidence of Small and Medium Enterprises in Bahrain

Ahmad Rafiki¹, Khalid Mohamed AlKhalifa² & Imam Buchari³

¹ Faculty of Economic and Muamalat, Islamic Science University of Malaysia, Malaysia

² Founder and President of University College of Bahrain, Bahrain

³ Faculty of Department of Business Administration, University College of Bahrain, Bahrain

Correspondence: Ahmad Rafiki, Faculty of Economic and Muamalat, Islamic Science University of Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia. E-mail: hahmadrafiki@gmail.com

Received: December 23, 2013

Accepted: February 28, 2014

Online Published: March 21, 2014

doi:10.5539/ijbm.v9n4p173

URL: <http://dx.doi.org/10.5539/ijbm.v9n4p173>

Abstract

This paper discusses on the human capital concept in Islamic perspectives and its relationship with business firm performance. There are emphases of Islamic principles on every well-known variables of human capital in conventional views. Muslims owner-managers seem to overlook and forget the importance and valuable elements of Islamic human capital which they rarely adopt in their business operations. Four variables of experience, motivation, business training and education are tested using the multiple regression analysis in relation with firm performance. The study approach is evidence-based positivism and employs quantitative deductive hypotheses testing methods. The sample size (N) is 140 Muslims'owner-managers of small and medium enterprises randomly picked from Bahrain. It is found that the three variables of experience, motivation and training are have significant relationship with firms' growth, while another variable (education) has insignificant relationship. This findings may add knowledge to the small and medium firm performance literature especially in Islamic views, help policy makers in their decision making and assist the owner-managers to improve their performance.

Keywords: islamic human capital, business firm performance, growth measure

1. Introduction

Many organizations nowadays realizes the superiority of Islamic business concepts that need to be adopted in business operation. The comprehensive and meaningful guidance will lead to the better performance of firms which is inconsistently found in conventional methods. As been taught in distinctive Islamic worldview that it encompasses all aspects of both *worldly* and *hereafter*-life in which the *worldly-aspect* ultimately must be as an integrated, profound and inseparable way to *hereafter-aspect* preparation. Islam instructed Muslims to seek not only profit-optimization but also *maslahah* (socio-benefit) maximization. Through the basis of Al-Qur'an and Hadith; as a report of deeds and sayings of Prophet Mohammed, the best practices on Islamic business concept admittedly influence the organization performance. Unlike the studies found that there is no relationship between ritual worship activities and business performance, Islam considered all business activities as an act of *Ibadah* (servitude) if those works are done purposely with good intention (*niyyah*) and purposely for the conviction to ALLAH SWT.

The human capital researches had been done by many researchers in conventional methods. There is a large and growing body of evidence that demonstrates a positive relationship between the development of human capital and organisational performance. The emphasis on human capital in organisations reflects the view that market value depends less on tangible resources, but rather on intangible ones, particularly human resources. The organization has to leverage the skills and capabilities of its employees by encouraging individual and organisational learning and creating a supportive environment where knowledge can be created, shared and applied. While, in Islamic's approach, personal development is more than just providing options for better material life implemented for an organization since it caters to inner human needs as well (Zangouinezhad & Moshabaki, 2011). Even, it related to the ethical behaviors actions of employees or owners-managers that need to be considered as it called must be *shariah* compliance due to certain businesses' cases and abuses generally

occured which indirectly affect the organization performance and growth, thus, this study importantly need to be conducted to see the evidence of Islamic principles' thought of human capital in business operations.

2. Literature Review

2.1 Firm Performance

The performance considered as the outcome of an organization that should be evaluated againts a specific objective whether it is achieved or otherwise (Man et al., 2002). A range of financial and non-financial indicators have been suggested as measures of performance in many researches (Rhodes & Butler, 2004). However, several researchers suggested that the financial measures as indicators that are superior than the non-financial measures (Wiklund, 1999). The financial instruments such as return on assets, return on investment, return on equity, profitability, growth, return on sales and earnings per share were used by many authors (i.e., Norma & Jarita, 2010; Haber & Reichel, 2005).

In determining a set of measures, Benzing and Chu (2009) argued that there is no universal unit of analysis or consensus in small and medium firm researches as an appropriate indicators in assessing performance. Murphy et al. (1996) had reviewed numerous articles and found that majority of financial performance measures were related to one of dimensions such as efficiency, growth, profit, size, liquidity, market share and leverage. Among these dimensions, the growth variable is the best indicator of performance (Hall, 1995). Thus, this study proposed the use of growth dimension using financial instruments to measure the performance at the firm level.

2.1.1 The Growth Measure (Sales)

The research of growth has been done by many researchers. The common variables used are sales levels, profitability, number of employees, assets, market share, physical output, firms' resources, strategy, geographic location, its industry context and personal characteristics of entrepreneur (Gilbert et al., 2006). Despite hundreds of investigations in determining the level of growth, this stream however is unable to agreed on certain variables that have consistent effect on growth (Shepherd & Wiklund, 2009).

Davidsson et al. (2006) given the option of three indicators' choices beside the above alternatives of using a multiple indicator index, alternative measures separately or the best and most appropriate indicator. In fact, the third choice seems to receive an emerging consensus. Despite the suggestion of adopting multi-dimensional of measuring growth, Delmar et al. (2003) did not claimed that the single use of measure is unacceptable or otherwise and believed that some reseachers will do continue to adopt this approach, however, they suggested that this effort must be careful and consistent in the designs and executions, and reminded that the non-studied aspects of growth may blur the results, thought the results can be generalized, it may be too narrow to be practically meaningful (p. 34). They even mentioned that if the only one indicator had to be selected as a measure of firm growth, the suitable measure is sales growth. These confirmed by other findings by Davidsson et al. (2006), Cowling (2004). Wong and Aspinwall (2004) which stated that the most preferred measure and comprehensive set in influencing firms' growth is sales variables. The sales figures are relatively easy to obtain and reflect both short and long term changes in the firms (Delmar et al., 2003).

2.2 The Human Capital

2.2.1 Definition and Theory of Human Capital

Becker (1964) defined the human capital as the knowledge, ideas and skills of individuals that gained through activities such as formal education, off-the-job training and on-the-job training. All of these are useful in value creation in an organization which could differentiate from other competitors.

In labor economic theory, it is viewed that the labors are required to posses such skills and knowledge that used to increase productivity and employment probabilities (Rephann, 2002). Those attributed will be acquired through the investment initiated by the firms in education and training. Becker (1964) posited that the most valuable investment related to the human capital involve initial costs of tuition expenditures in expecting to gain return for future operations. Though it is crucial, however, the investment costs should not exceed the productivity especially when the development of employees on skills may be secured from the labor market, otherwise, it will jeopardize the cash flow that lead to decrease in profits (Becker, 1964). Schultz (1993) agreed that such investment will take place if it is justifiable for firms' productivity.

In Islamic perspectives, human capital is associated with a term of *ahliyah* defined as aptitude, fitness, competence validity, authority, and qualification which collectively connote the human ability and quality to perform certain duties diligently (Hans, 1980). Obtaining *ahliyah* means to reach certain level of intellectual

maturity and mental fitness, whereby the individual entitled to be fully responsible and accountable expected to contribute to the betterment of human life (Hashi & Bashiir, 2009).

The human capital in Islam founded by the *tawheed* (oneness) concept, means that all the human souls bond to ALLAH SWT, One Creator-Sustainer God. Hashi and Bashiir (2009) explained that the tawheedic worldview of human capital teachings is both noble and prolific manners. As the trustee of God (*Khalifa*), Muslims could not actualize their duties without resourceful and capable human capital. Muslims must believe that God has empowered them with qualities of intellect, knowledge, freewill and guidance to perform their responsibility effectively. Unlike the contemporary conventional theories which expose the human capital as a tradeable stock or returnable investment, Islam sought the development of human capital is purposive yet meaningful as a total conviction to God.

Initiation of developing human capital aim to gain positive output in productivity. Muslim had commanded to be consistent in their work, discourage laziness and enable Muslims to deliver the trustworthiness, truthful and sincerity. Hence, the better person who posses the technical skills, knowledge, moral and good values. This also been reminded by Prophet Muhammad SAW that excel in businesses need to pursue the knowledge persistently and gain *rida* (being pleased or contented) from Allah SWT (Trim, 2009). All of these noted that Islam encourages the possession of human capital means for continuous improvement in talents, skills, flairs and other techniques, which acquired through life-long learning and education.

2.3 The Studies of Human Capital in Relation to Business Firm Performance

The human capital elements of knowledge, abilities, experiences, skills and capabilities constitutes a key determinant to ensure business success (Pena, 2004) and give positive impact on business firm performance (Seleim et al., 2007). Earlier Doucouliagos (1997) noted that human capital as a source is not only to motivate workers and boost up their commitment but also to create expenditure in research and development, and eventually pave a way for the generation of new knowledge for the economy and society in general. While, Haber and Reichel (2007) in their study on small tourism ventures performance posited that human capital constitutes as one of the core constituent in entrepreneurial process and has greatest contributing factor, particularly on the entrepreneurs' managerial skills compare the role of physical and organizational capital, though, some authors argued that the relationship between human capital and entrepreneurial success commonly just over emphasized (Baum & Silverman, 2004). Several authors examined the impact of human capital at firms level of performance, among others, Noudhaug (1998); Iles et al. (1990); Eltis (1996) Kehoe and Wright (2010).

The crucial of human capital continues with a study by Uygur (2009) which stated that human capital became increasingly important for the firms where the employees will gain more power on their possession of such capital. He suggested that the firms are no more defined through their physical assets because these assets are not a center of the business anymore, instead of seeing the firms have as a unique combination of physical and human capital.

In Islamic perspectives, the human capital is the integration of physical and spiritual. It aims to produce better workers that obliged and fearful not only to the employer but most importantly to the Al-Mighty God. Muslim should be able to deliver the trustworthiness, truthful and sincerity. In other word, the better person is posses the technical knowledge, skills and good values as been taught in Islam religion. Unfortunately, only few conceptual studies discuss on Islamic human capital and none empirically touch on the relationship of Islamic human capital and firm performance, among others; Islamic human resources practices and organization performance in Malaysia by Ilhaamie (2010), Islamic hospitality on indigenization of products and human capital in UAE (Stephenson et al., 2010), Islamic human resource development and motivation (Khan & Sheikh, 2012) and human capital development from Islamic perspectives (Hans & Bashiir, 2009).

From the studies that have been conducted as mentioned in above paragraphs from various industries and countries, it is clearly explained that human capital concept and perspectives of knowledge, learning, creativity, innovation, competencies and capabilities are irreplaceable or no substitute and need to be relentlessly pursued especially in Islam which deeply emphasized of seeking *rida* (being pleased or contented) from ALLAH SWT. All these arguments conclude that human capital indicators affect the firm growth.

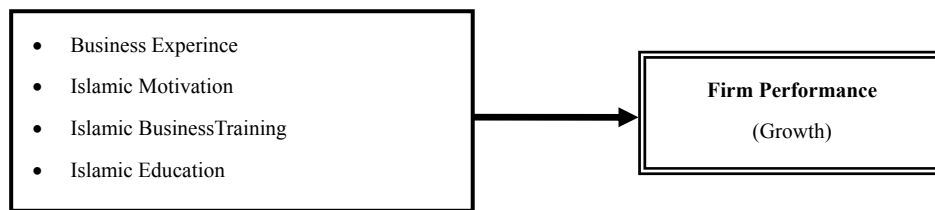


Figure 1. Theoretical framework

2.4 Selection of Human Capital Variables

2.4.1 Business Experience

The business experience would be an element of human capital that useful in the business operations. It tells the learning process in many aspects including the ways how to deal with customers, planning and organizing team and fluctuate business environment. The work experience gives the individual specific organizational knowledge which help in developing successful strategies leading to higher growth rates (Lazear, 2005). Andriessen (2004) agreed that an individual experience particularly in business can indeed create milestones in business performance. Other authors confirmed the positive relationship of both experience and performance such as Friar and Meyer (2003), Bosma et al. (2004), Syed (2011) and Muhammad (2012), while Westhead and Cowling (1995) find that previous labor market experience and growth are negatively correlated.

In Islamic perspectives, the experience associated with a process of learning that makes Muslims should be better in every day activities. The experience also relates of doing observations prior undertaking any decisions as instructed by ALLAH SWT the Almighty (Al-Qur'an. Al-Ghasyiah, p. 17–20) that every Muslims required to think and understand the greatness of ALLAH the Almighty's creations. Having experience i.e. in the business field, would teach them on the right and wrong judgements, and they must not fall in the same mistakes they did before. This aligned with a hadith narrated by Abu Hurairah stated that 'a believer must not fall twice in the same hole'. It is clearly described that Islam sought the business experience as a factor that significantly influence the firms' growth. Thus the proposed hypothesis is:

H1: The business experience is positively related to the firm growth.

2.4.2 Islamic Motivation

In Islamic views, in regard to the intention and the outcome expectancy concept, it begins with the importance of *niyyah* (intention) that could shape and derive the positive or negative behavior and actions. The *niyyah* itself delineated based on belief, norms, perception and attitudes. The belief in Islam refer to the *tawheed*, Muslim must aware on existence of God in his *niyyah* which will lead them into positive outcomes.

The explanations on conventional motivation approach obviously would be different with the Islamic-based motivation. Muslim workers find the motivation factor as a very important aspect as stated in the religion teachings compared to other religions (Ali, 2009). Ahmad (2009) posited that the motivation in Islamic management perspective is differ from other theories. Muslim entrepreneur as a holder of the *amanah* (trustworthy) on earth have fundamental belief and must be aware of the following; (i) Muslim is obliged to search commercially as much as they could or seize more business opportunities, for the bounty ALLAH SWT who has provided the sustenance; (ii) to work as a form of virtuous deed (*amal salih*); (iii) work as a form of (*Ibadah*) servitude to ALLAH SWT with conformity of the Divine norms and values; (iv) the reward for good deeds in this world and the hereafter.

It concluded that Muslim must have the basic driven material benefits or need for food or clothing means to devote the energy to work; the emphasis of importance of work (Al-Quran. Al-An'am & Al-Mulk) and freedom of choice in behavior or work (Al-Quran. An-Nisaa'); the incentives for good work; and the commitment (ikhlās) (Al-Quran. Al-Baqarah 2:139; Al-Bayyinah). On top of this, it is important to considered a *niyyah* (intention) in every actions intended to do rather than the result of work as stated in a hadith narrated by Al-Bukhari as well as the main motivation factor to attain the *al-falah*. There are ways to establish the Islamic-based motivation for an individual, one of the significant action is through attending any of spiritual programmes which contain elements of enhancement toward the Islamic faith and practices.

H2: The Islamic motivation is positively related to the firm growth.

2.4.3 Islamic Business Training

The training traditionally known as the stage of orientation process for newly employed employees in an organization to familiarize them with the business-related procedures and products. Either the employees or owner-managers are deemed to acquire some skills by attending specific training for having better performance in business operation. Some studies examined the effects of training such as on earnings (Dearden et al., 2000) and productivity (Winkelman, 1994) of the firms.

In Islamic views, Altalib (1991) posited that Islamic training is all encompassing from the moral and spiritual enhancement of man and manifested eventually into physical development. The training and development should be conducted to increase faith in ALLAH SWT, the God alMighty. Imam Ghazali reminded that the Muslim who decides to enter into a trade or establishes a business should acquire thoroughly understanding the rule of business transaction codified in *shariah* in which this could obtain in the training classes (Al-Ghazali, 1998).

As stated in conventional perspective that training is associated with acquiring knowledge and skills. However, the Islamic training method emphasized the general knowledge that can improve both faith and religious practices of Muslim. It also motivates them to seek perfection and excellence in all that they do including in business actions. Muslims also have responsibilities to perform their level best to obtain perfection and excellence in worship and all works of life (Saeed et al., 2001). It is also highlighted several important approaches to rationalize the training concepts such as through sermons (tadzkirah)—discussion of the Islamic principles in view of Al-Qur'an and Hadith, congregational prayers and personal obligations (Ilhaamie, 2009). From the literature mentioned above, it is clearly that Islam encourage the Muslim to attend the training based on *shariah* which consist of spiritual and commercial programmes expectedly will influence the firm performance.

H3: The Islamic business training is positively related to the firm growth.

2.4.4 Islamic Education

Education as one of the crucial indicators to measure the quality of human capital (Cosh et al., 2000). The possession of education will carry the innovation, knowledge and skills, motivation, information and self-confidence and discipline into the business field which link in developing the intellectual capability that may needed by the owner-managers to assist them in making strategic choices (Hitt et al., 2001).

In Islamic perspectives, education encompasses three concepts of knowledge, maturity and good manners (Halstead, 2004), while knowledge is a source of excellence and achievement. The pursuit of knowledge in Islam is a religious core duty. One Hadith reminds believers that “seeking knowledge is obligatory for every Muslim man and woman” (Ali, 2005). Beside that, numerous attentions cited in Al-Qur'an and Hadith on gaining knowledge to be successful, i.e. seeking the knowledge and skills can make people go and achieve beyond the boundaries (the zones of heavens and the earth (Ar-Rahman).

Education is good if it inspires “virtue” for its effective use in different fields of life (Khan & Sheikh, 2012). Moreover, there are three aspects need to be considered on the Islamic individuals education such as *tarbiya* (nurture), *tadib* (discipline) and *ta'alim* (teaching), all related to individual development, understanding of society and the inculcation of right social behavior and the right process of learning and knowledge transmission (Azmi, 2009). These points had been stressed by classical (e.g., Al-Ghazali & Ibn Khaldun) as well as contemporary (e.g. Sayyed Hossein Nasr) scholars of Islam (Halstead, 2004).

Muslim should seek to know ALLAH SWT and other knowledges comprises several items such as worship (ibadah), transactions (muamalah) and family values (munakahat). Muslim expected to seek knowledge comes genuinely from ALLAH SWT to use it as a tool to explore ALLAH's creature of human beings which obtain as the result of own achievement, initiative *aqliyah* (intelligence) through life experience, training, research and study. Having the owner-manager who posses Islamic education background which usually not so demanding in their pay but their reputation as pious persons are high, probably contribute to the firms' growth. It assumed that Islamic education has a positive influence on the business firm performance.

H4: The Islamic education is positively related to the firm growth.

3. Methodology

The quantitative deductive research approach is chosen in this study. The deductive approach allows the research to establish a hypotheses by using theory Creswell (2002). A total of 140 small and medium firms Muslims-owned picked from Bahrain. Furthermore, this study used the cross-sectional correlation survey design

which requires deploying the statistical correlation tests to measure the degree of relationship among variables and the multiple regression analysis to identify the significant factors of Islamic human capital influencing the firm performance.

Table 1 presents rank order correlation matrix with Pearson Correlation Coefficients among the 4 predictive variables of this study. Pearson's r ranges from -1.0 to 1.0 measure the strength of linear relationship. The larger the absolute value of r is, the stronger is the linear relationship. Pearson correlation coefficients also indicate normality and linearity (Bryman & Cramer, 2001). The most highly correlated variables between business experience and Islamic education was at 0.526 ($p < 0.01$), followed by Islamic motivation and business experience was at 0.508 ($p < 0.01$), while others are observed significantly correlated.

Table 1. Pearson correlation coefficients

Variables	(1)	(2)	(3)	(4)
Business Experience (1)	1			
Islamic Motivation (2)	.508**	1		
Islamic Business Training (3)	.356**	.464**	1	
Islamic Education (4)	.526**	.427**	.263**	1

** . Correlation is significant at the 0.01 level (2-tailed).

3.1 Multiple Regression Analysis

The main quantitative analysis method used in this research is the multiple regression analysis. The relationship between independent and dependent variables is modeled in the following equation:

$$Y_i = a + bX_i + e$$

Where Y represents growth rate of sales (GrS) in i th small and medium firms, X_i represents four independent variables such as Business Experience (X_1), Islamic Motivation (X_2), Islamic Business Training (X_3), Islamic Education (X_4), a is intercept, and e is error term. Table 3.2 summarises the regression results of the growth model generated by OLS techniques. The direction of each variable would be used as the hypothesis testing technique. From Table 3.2, it is depicted that adjusted $R^2 = .550$ indicates that the variables in the model explained 55.0% of the variation of the dependent variable sales growth. The results also explained that all the predictive variables are positively associated with the firms' performance which has had significant t -test. The Growth Model is given below:

$$Y = 3921.896 + 270.025X_1 + 1397.091X_2 + 649.687X_3 + 111.445X_4 + e$$

Table 2. Multiple regression analysis of islamic human capital and firm performance (n = 140)

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3921.896	512.130		7.658	.000		
Business Experience (X1)	270.025	82.132	.242	3.288	.001	.614	1.630
Islamic Motivation (X2)	1397.091	258.264	.395	5.410	.000	.625	1.601
Islamic Business Training (X3)	649.687	231.238	.185	2.810	.006	.765	1.307
Islamic Education (X4)	111.445	61.121	.127	1.823	.070	.689	1.452
R Square = .550	Adjusted R Square = .537		F Change = 41.251		Durbin-Watson = 1.983		

As illustrated in Table 2, the F value of 41.251 is significant at the 0.01 level. All the Islamic human capital factors examined in this study have significant relationship with sales growth except for the Islamic education variable. Thus, the findings support all the hypotheses H1, H2 and H3. Further result is the Durbin-Watson test statistic as suggested by Field (2000) to see the correlations between errors whereby a value smaller than 2 indicates a positive correlation. As depicted at Table 2 that the test statistic a value of 1.983 indicating that the

errors in the model were independent or uncorrelated. While, assessing the assumption of no multicollinearity among the independent variables was based on the collinearity statistic as depicted in Table 2 above. Menard (1995) pointed out that a tolerance value of less than 0.1 indicates a serious collinearity problem. Additionally, a VIF value greater than 10 is cause for concern. For this model, the VIF values were all well below 10 and the tolerance statistics all well above 0.1. This concludes that there was no collinearity within the data in this study.

4. Conclusion

The research revealed that three variables, namely business experience, Islamic motivation and training; have positively significant influence to the firm performance and consistently aligned with the previous researches in the literature except for Islamic education that has insignificant relationship. As majority of respondents are possess the Islamic education beginning at least from the primary and secondary schools, thus this variable may not be the factor to the firms' growth. This findings can not be generalized to other places or countries but would give the example to other Muslims' countries who have Muslims' dominant population.

Unlike the conventional method, the Islamic teaching highlights the importance of human capital development and its relation to business firm performance. It is obvious that Islam suggest on the adoption of Islamic human capital variables in business operations which comply with *shariah* guidelines. The Islamic perspective of human capital development has promoted a holistic and human oriented approach which includes moral responsibility, intellectual talent, knowledge and skills of the individual. Finally, while conventional theories of human capital development say that life is an ascending process which is under continuous transformation and change, and thus cannot conceive absolute values and principles, the *tawheedic* (oneness) conception of Islam insist that human resource development should be in line with the metaphysical principles and ethical values which are permanent and stable. This study provides additional evidence that the Islamic human capital positively related to the firm performance.

References

- Ahmad, K. (2009). Leadership and work motivation from the cross cultural perspective. *International Journal of Commerce and Management*, 19(1), 72–84. <http://dx.doi.org/10.1108/10569210910939681>
- Al-Ghazali Al-Imam, A. H. M. I. M. (1998). *Ihya 'Uhumuddin* (Vol. 3). Egypt: Maktabah Misr.
- Ali, A. J. (2005). *Islamic perspectives on management and organisation*. Northampton, MA: Edward Elgar.
- Ali, A. J. (2009). Level of existence and motivation in Islam. *Journal of Management History*, 15(1), 50–65. <http://dx.doi.org/10.1108/17511340910921781>
- Altalib, H. (1991). *Training Guide for Islamic Workers*. Herndon, VA: The International Institute of Islamic Thought.
- Andriessen, D. (2004). *Making sense of intellectual capital*. Elsevier Butterworth-Heinemann
- Azmi, I. A. G. (2009). Human capital development and organisational performance: a focus on Islamic perspective. *Shariah Journal*, 17(2), 353–372.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <http://dx.doi.org/10.1177/014920639101700108>
- Baum, J. R., & Locke, E. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89, 587–598. <http://dx.doi.org/10.1037/0021-9010.89.4.587>
- Becker, G. (1964). *Human Capital. A Theoretical and Empirical Analysis with Special Reference to Education*. (3rd ed.). Chicago and London: University of Chicago Press.
- Benzing, C., & Chu, H. (2009). A comparison of the motivations of small business owners in Africa. *Journal of Small Business Enterprise Development*, 16, 60–77. <http://dx.doi.org/10.1108/14626000910932881>
- Bosma, N., Van Praag, M., Thurik, R., & De Wit, G. (2004). The value of human and social capital investments for the business performance of start-ups. *Small Business Economics*, 23(3), 227–236.
- Bryman, A., & Cramer, D. (2001). *QuantitativeData Analysis with SPSS Release10 for Windows*. London: Routledge.
- Cosh, A., Hughes, A., & Weeks, M. (2000). *The Relationship between Training and Employment Growth in Small and Medium Sized Enterprises*. Cambridge University, Centre for Business Research, Working Paper No. 188.

- Cowling, M. (2004). The growth-profit nexus. *Small Business Economics*, 22,1–9.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson.
- Davidsson, A. P. L., & Naldi, L. (2006). What Do We Know about Small Firm Growth? In Parker S. (Ed.), *Handbook of Entrepreneurship Research* (Vol. 2, pp.361–398). New York: Springer.
- Dearden, L., Reed, H., & Van Reenen, J. (2000). *Who Gains when Workers Train?: Training and Corporate Productivity in a Panel of British Industries*. Discussion Paper No. 2496. London: Centre for Economic Policy Research.
- Delmar, F., Davidsson, P., & Gartner, W. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18, 189–216. [http://dx.doi.org/10.1016/S0883-9026\(02\)00080-0](http://dx.doi.org/10.1016/S0883-9026(02)00080-0)
- Doucouliaqos, C. (1997). The aggregate demand for labor in Australia: A Meta-analysis. *Australian Economic Papers*, Blackwell Publishing, 36(69), 224–42.
- Eltis, W. (1996). How low profitability and weak innovativeness undermined UK industrial growth. *The Economic Journal*, 184–195. Retrieved from <http://www.jstor.org/stable/2234942>
- Field, A. P. (2000). *Discovering statistics using SPSS for Windows: advanced techniques for the beginner*. London: Sage Publications.
- Friar, J., & Meyer, M. (2003). Entrepreneurship and start-ups in the Boston region: factors differentiating high-growth ventures from micro ventures. *Small Business Economics*, 21(2), 145–152.
- Gilbert, B. A., McDougall, P. P., & Audretsch, D. B. (2006). New venture growth: A review and extension. *Journal of Management*, 32, 926–950. <http://dx.doi.org/10.1177/0149206306293860>
- Graevenitza, G. V., Harhoffa D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organisation*, 76, 90–112.
- Haber, S., & Reichel, A. (2005). Identifying measures of small ventures—the case of the tourism industry. *Journal of Small Business Management*, 43(3), 257–286. <http://dx.doi.org/10.1111/j.1540-627X.2005.00137.x>
- Hall, G. (1995). *Surviving and Prospering in the small firm sector*. London: Routledge.
- Halstead, J. M. (2004). An Islamic concept of education. *Comparative Education*, 40(4), 517–29.
- Hans, W. (1980). *A Dictionary of Modern Written Arabic-Arabic-English*. London: Macdonald & Evans Ltd.
- Hashi, A. A., & Bashiir, A. (2009). *Human Capital Development from Islamic Perspective*. Conference paper: International Conference on Human Capital Development. Kuantan: Pahang, University Malaysia Pahang.
- Hitt, M. A., Ireland, R. D., Camp, S. M., & Sexton, D. L. (2001). Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic Management Journal*, 22(Special Issue), 479–491. <http://dx.doi.org/10.1002/smj.196>
- Iles, P. A., Mabey, C., & Robertson, I. T. (1990). HRM practices and employee commitment: Possibilities, pitfalls and paradoxes. *British Journal of Management*, 1, 147–157. <http://dx.doi.org/10.1111/j.1467-8551.1990.tb00003.x>
- Ilhaamie, A. G. A. (2010). Islamic human resource practices and organisational performance: a preliminary finding of Islamic organisations in Malaysia. *Journal of Global Business and Economics*, 1(1), 27–42
- Kehoe, R., & Wright, P. (2010). The impact of High Performance Human Resource practices on employees' attitudes and behaviors. *Journal of Management*. <http://dx.doi.org/10.1177/0149206310365901>
- Khan, M. B., & Sheikh, N. N. (2012). Human Resources development, motivation and Islam. *Journal of Management Development*, 31(10), 1021–1034. <http://dx.doi.org/10.1108/02621711211281807>
- Lazear, E. (2005). Entrepreneurship. *Journal of Labor Economics*, 23(4), 649–80.
- Man, T. W. Y., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises a conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123–142. [http://dx.doi.org/10.1016/S0883-9026\(00\)00058-6](http://dx.doi.org/10.1016/S0883-9026(00)00058-6)
- Menard, S. (1995). *Applied Logistic Regression Analysis*. London: Sage.

- Muhammad, A. S. (2012). The Impact of Socio-Economic Factors on Small Business Success. *Malaysia Journal Society and Space*, 8(1), 24–29.
- Murphy, G., Jeff, B., Trailer, W., & Robert, C. H. (1996). Measuring Performance in Entrepreneurship Research. *Journal of Business Research*, 36, 15–23. [http://dx.doi.org/10.1016/0148-2963\(95\)00159-X](http://dx.doi.org/10.1016/0148-2963(95)00159-X)
- Nordhaug, O. (1998). Competencies specificities in organisations. *International Studies of Management and Organisation*, 28(1), 8–29.
- Norma, M.S. & Jarita, D. (2010). Determinants of Economic Performance of Micro-Credit Client and Prospect of Islamic Microfinance in Malaysia. *ISRA International Journal of Islamic Finance*, 2(1), 113–130.
- Pena, I. (2004). Business incubation centers and new firm growth in the Basque country. *Small Business Economics*, 22(3/4), 223–236.
- Rephann, T. J. (2002). The Importance of Geographical Attributes in the Decision to Attend College. *Socio-Economic Planning Sciences*, 36(4), 291–307. [http://dx.doi.org/10.1016/S0038-0121\(02\)00006-X](http://dx.doi.org/10.1016/S0038-0121(02)00006-X)
- Rhodes, C., & Butler, J. S. (2004). Understanding Self-Perceptions of Business Performance: An Examination of Black American Entrepreneurs. *Journal of Developmental Entrepreneurship*, 9(1), 55–71.
- Saeed, M., Ahmed, Z., & Mukhtar, S. (2001). International marketing ethics from an Islamic perspective: a value-maximization approach. *Journal of Business Ethics*, 32, 127–142.
- Schultz, T. W. (1993). The economic importance of human capital in modernization. *Education Economics*, 1(1), 13–19. <http://dx.doi.org/10.1080/09645299300000003>
- Seleim, A., Ashour, A., & Bontis, N. (2007). Human capital and organisational performance: A study of Egyptian software companies. *Management Decision*, 45(4), 789–801. <http://dx.doi.org/10.1108/00251740710746033>
- Shepherd, D., & Wiklund, J. (2009). Are we comparing apples with apples or apples with oranges? Appropriateness of knowledge accumulation across growth studies. *Entrepreneurship Theory and Practice*, 33, 105–123. <http://dx.doi.org/10.1111/j.1540-6520.2008.00282.x>
- Stephenson, M. L., Russell, K. A., & Edgar, D. (2010). Islamic hospitality in the UAE: Indigenization of products and human capital. *Journal of Islamic Marketing*, 1(1), 9–24. <http://dx.doi.org/10.1108/17590831011026196>
- Syed, W. H. N. (2011). Critical Success and Failure Factors of Entrepreneurial Organisations: Study of SMEs in Bahawalpur. *Journal of Public Administration and Governance*, 1(2), 17–22.
- Trim, B. (2009). *Brilliant Entrepreneur Muhammad SAW*. Bandung: Salamadani Pustaka Semesta.
- Uygur, S. (2009). The Islamic work ethic and the emergence of Turkish SME owner-managers. *Journal of Business Ethics*, 88(1), 211–225. <http://dx.doi.org/10.1007/s10551-009-0107-z>
- Westhead, P., & Cowling, M. (1995). Employment change in independent owner-managed high-technology firms in Great Britain. *Small Business Economics*, 7(2), 111–140.
- Wiklund, J. (1999). The Sustainability of the Entrepreneurial Orientation-Performance Relationship. *Entrepreneurship Theory and Practice*, 37–48.
- Winkelmann, R. (1994). *Training, Earnings and Mobility in Germany*. Discussion Paper No. 982. London: Centre for Economic Policy Research.
- Wong, K. Y., & Aspinwall, E. (2004). Characterizing knowledge management in the small business environment. *Journal of Knowledge Management*, 8(3), 44–61. <http://dx.doi.org/10.1108/13673270410541033>
- Zangouinezhad, A., & Moshabaki, A. (2011). Human resource management based on the index of Islamic human development. *International Journal of Social Economics*, 38(12), 962–972.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).