The Impact of Human Capital Development on the Financial Performance of Agricultural Enterprises: Application on Broiler Industry

Ali Al-Sharafat

Department of Agricultural Economics and Extension
Faculty of Agriculture, Jerash University
P. O. Box 311, Postal Code 26150, Jerash-Jordan

Abstract

This study aimed at examining the effect of human capital development on the financial performance of agricultural enterprises. Intentional sample of 119 broiler farms with almost equal capacity (20,000 birds for each) were selected to resemble the investigated broiler farms. A cross sectional survey using a 5-point Likert scale questionnaire was conducted on broiler farms included in the sample. The data covered human capital development related characteristics of farms operators (e.g. Level of training, education, level of exposure to agricultural extension activities, experience, education area and level of entrepreneurial skills). The financial performance indicators of the investigated broiler farms (e.g. return on assets, current ratio, debt to asset ratio and profit margin) were also covered. Multiple Regression (MR) and Pearson Product Moment Coefficient Analysis were conducted in this study to analyze the data. The results of the study revealed that among many human capital components, training, education, exposure to agricultural extension activities, experience, education area and entrepreneurial skills of farm operators have significant positive impact on the financial performance of the investigated broiler farms. The study recommend that attention must be drawn to the need for agricultural enterprises operators to key into the benefits of training, gaining experience, specialized education, participating in agricultural extension activities and developing their own entrepreneurial skills in order to positively impact the financial performance of any agricultural enterprise.

Keywords: Human capital, financial performance, agricultural enterprises, broiler farms

JEL Classification: L22, L25

1. Introduction

Many reasons explain why agriculture is important for countries; providing food, providing input for industry and service sectors, contributing to the national income and providing employment are the most obvious reasons (Karakaya, 2009). In explaining the relationship between the performance of agriculture and the economy, Nyoro et al., (2001) reported that agriculture must grow at a high rate for it to spur economic growth. Agricultural firms' financial performance is a critical indicator for agriculture growth. In all agricultural enterprises undertakings, the need for better performance has been increasing in today's highly competitive agribusiness environment. Good performance means improved scale of operations and productivity.Agricultural firms'performance is often measured in financial terms as entrepreneurs set specific financial goals concerning cash flow, profits, and overall financial performance.

Among agricultural firms' performance issues, the financial performance has become an issue of common concern as it reflects its development condition (Wang, 2008). Wu et al., (2010) reported that good financial performance is the precondition for agricultural firms to achieve sustainability. Traditionally, financial ratios calculated from accounting data used for financial performance evaluation and it still used today. Calculating key financial ratios for agricultural firms is a major tool in order to reveal trends and patterns in their financial performance. Based on financial performance analyses, investors consider firms in agriculture industry to be an area for their investment (Graham et al., 2012). Human capital development has been adopted as one of the most important managerial tools that can improve enterprises performance according to Ganotakis, (2010), Oforegbunam and Okorafor (2010), Ofoegbu et al (2013), Franssila et al., (2012), McIver et al., (2013).

The agricultural firms are not an exception. Improving human capital is important to influence the performance of any economic enterprise in a positive way (Hitt et al., 2001). Hessels and Terjesen (2008) defined human capital as individual's knowledge, skills and experiences related to entrepreneurial activity that the company could use to further its goals. Jin et al. (2010) suggested that human capital is one of the most important industry success factors in order to generate better performance. The challenge for emerging enterprises is to be able to demonstrate the intangible resources embedded in the venture, such as human capital (Ngatno et al., 2016). As a resource, human capital generates organizational capabilities to improve competitive advantages of the organization (Itami, 1987; Nahapiet and Ghoshal, 1998). Firms, including agricultural firms, need to invest resources to ensure that employees have the competencies needed to work effectively and achieve success (Pfeffer, 1994). Firms with higher general and specific human capital expected to show higher levels of performance than those with lower levels of general and specific human capital (Fatoki, 2011 and Coleman, 2007). Almasarweh (2016) stated that human capital is an important and modern concept that researchers have started discussing widely. This underscores the importance of human capital in building firms and bringing success to these firms. Datta et al., (2005) concluded that among several establishments, human capital scheme have been found to positively affect organizational performance. Empirical studies such as Fatoki (2011), Oforegbunam and Okorafor, (2010), Datta et al., (2005), Bosma et al. (2004), Lussiers and Pfeifer (2001) found significant relationship between human capital development and firm performance.

Despite the support from the government, the agricultural enterprises in Jordan have continued facing challenges with many firms, especially in the small and medium scale enterprises, closing down. Many studies conducted to examine factors influencing the performance of agricultural firms. Little efforts directed towards establishing the factors related to human resources leading to the poor performance and collapse of the firms. Lack of human capital development is the most vital cause of failure for new small and medium scale enterprises (Herrington et al., 2009). Among the overall effort to achieve better financial performance, firm's human capital development becomes a critical factor. In this regard, firms need to understand human capital that would improve performance. This study aimed at examining the effect of human capital development on the financial performance of agricultural enterprises. To the author knowledge, this is the first study carried out to investigate the effect of human capital development on the financial performance of agricultural enterprises among agribusinesses in Jordan.

2. Definition of Key Terms

2.1 **Financial performance**

According to Miller et al., (2013) and Gao (2010), the financial performance of a firm is the profitability of this firm given by financial measures. It refers to the ability to operate efficiently, make profit, survive and grow. Financial Performance of firms is usually measured using a combination of financial ratio analysis, benchmarking, measuring performance against a budget or a mix of all these methodologies. Financial performance analysis is the determination of the operating and financial characteristics of a firm from accounting and financial statements (Bhunia and Sarker, 2011).

2.2 **Human capital**

Human capital could be defined as the stock of competences, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value (Sullivan and Sheffrin, 2003). Hatch and Dyer (2004) reported that firm performance is derived from what a firm knows and the human capital that permit the firm to use what it knows. Ofoegbe et al., (2013) argued that adequate human capital development is indispensable for survival of firms especially small and medium scale enterprises (SMEs).

3. Methodology

3.1 **Population and sample**

Broiler farms operators in Jordan constituted the target population for this study. According to the 2015 livestock annual report of the Jordanian Ministry of Agriculture (MoA), the total number of broiler farms in the country is 1700 with a capacity of 34.3 million birds (MoA, 2015). Intentional sample of 119 broiler farms with almost equal capacity (20,000 birds for each) were selected to resemble the investigated broiler farms.

According to Frankfort-Nachmias and Nachmias (1992) sample size must be 5% of the population; whereas the sample size for this study was more than 5% of the population. The researcher administered 140 questionnaires and got 119, thus a response rate of 82% was achieved.

3.2 Data collection instrument

To collect primary data from the sampled broiler farms, the researcher developed a structured questionnaire using a 5-point Likert scale. A cross sectional survey was conducted for broiler farms included in the sample. The survey was conducted between February and May ~~of~~ 2016.The data covered human capital development related characteristics of the farms operators (e.g. Level of farm operator training, level of formal education, level of exposure to agricultural extension activities, experience, education area and level of entrepreneurial skills). The financial performance indicators of the investigated broiler farms (e.g. return on assets, current ratio, debt to asset ratio and profit margin) were also covered. The questionnaire was subjected to a test and re-test process in order to establish the reliability. Secondary data sources mainly included the Jordanian Ministry of Agriculture (MoA), the Jordanian Department of Statistics (DoS), the related published articles, reports, books and internet sources.

3.3 Analytical framework

Using the Statistical Package for Social Sciences (SPSS) software, Multiple Regression (MR) and Pearson Product Moment Coefficient Analyses were conducted ~~in this study~~ to analyze the data. The correlation coefficient analysis helped in assessing both the degree (strength) and form (direction) of the relationship between the dependent variable (farm financial performance) and the independent variable (human capital).The MRA helped in determining the impact of human capital development on the financial performance of the sampled broiler farms.

3.4 Model specification

3.4.1 The Conceptual model

A conceptual model is a conceptualization of the relationship and interactions among the variables informing the study and help to achieve its objectives. The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them. Following Ojokuku, and Sajuyigbe (2015), the model used in this study could be expressed using the composite index of the financial performance of the investigated broiler farms and the composite index of human capital as follows;

Farm Financial Performance (Y) = ƒ(Human Capital Development)

The relevant concepts in the present study and the type of relationship between the concepts are explained in Figure 1. In the conceptual model, it is assumed that factors related to human capital directly impact the financial performance of the broiler enterprises. According to this model, human capital development is the independent variable and the financial performance of the investigated farms is the dependent variable.
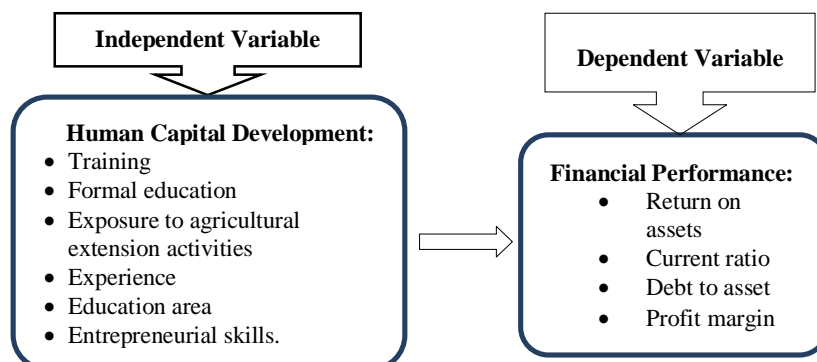

Figure 1: The conceptual model

3.4.2 The regression model

The conceptual model assumed that:

Farm Financial Performance (Y) = ƒ (Human Capital Development) or (HCD)

And,

HCD = f(X_1 = level of training of farm operator; X_2= level of formal education of farm operator; X_3 = level of exposure of farm operator to agricultural extension activities; X_4 = level of experience of farm operator; X_5 = education area of farm operator; and $X_{6=}$ level of entrepreneurial skills of farm operator) which is the composite index of human capital. Based on the conceptual model, the regression model could be expressed as follows; θ
Farm financial performance (Y) =f(X_1, X_2, X_3, X_4, X_5, X_6).

So,

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + U_i$

Where;

Y = composite index of the broiler farms financial performance as proxied by return on assets (ROA), current ratio (CR), debt to asset (D: A) and profit margin (PM).

The a priori expectation is summarized as follows; $\beta_1 ... \beta_6 > 0$

X_1 = level of training of farm operator;
X_2 = level of formal education of farm operator;
X_3 = level of exposure of farm operator to agricultural extension activities;
X_4 = level of experience of farm operator;
X_5 = education area of farm operator;
X_6 = level of entrepreneurial skills of farm operator.
U_i = disturbance term
β_0 = intercept
$\beta_1 ... \beta_6$ = coefficient of the independent variables.

This study considered return on assets, current ratio, debt to asset ratio and operating profit margin as financial performance measures of the investigated broiler farms. Table 1 shows brief description of the financial indicators adopted in this study.

Table1; Financial indicators adopted in this study

Indicator	Critical Zone value	Financial Measures	Calculations
Return on assets	<1%	Profitability	(Net farm income from operations + interest expense - family living withdrawals)/average assets
Current ratio	<1	Liquidity	Current farm assets/current farm liabilities
Debt to asset	>55%	Solvency	Total farm debt/total farm assets
Profit margin		Financial	Net farm income /Gross farm income

Source; adapted from Ahrendsen and Katchova (2012).

4. Results and Discussion

4.1 Model summary and ANOVA

The model summary of the analysis of the impact of human capital development on the financial performance of agricultural enterprises and the analysis of variance (ANOVA) are presented in tables 2 and 3.

Table 2: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.912[a]	0.832	0.826	0.287

[a] Predictors: (Constant), level of training, level of formal education, level of exposure to agricultural extension activities, level of experience, education area and level of entrepreneurial skills.

Table 3: Analysis of Variance (ANOVA[a]):

Model		Sum of Squares	Df	MeanSquare	F	Sig.
1	Regression	79254	6	13209	98.944	0.000 [b]
	Residual	14953	112	133.5		
	Total	94207	118			

[a] Dependent Variable: Financial Performance

[b] Predictors: (Constant), level of training, level of formal education, level of exposure to agricultural extension activities, level of experience, education area and level of entrepreneurial skills.

As shown in table 2, the value of the coefficient of determination ($R^2 = 0.83$) indicates that the sampled broiler farms financial performance can be associated to the investigated characteristics of the broiler farms operators, (e.g. level of training, level of formal education, level of exposure to agricultural extension activities, level of experience, education area and level of entrepreneurial skills). Almost 83% of the impact on the financial performance of the investigated broiler farms could be attributed to the effect of these independent variables. This means that nearly 83% of the variations in the financial performance of the investigated broiler farms are explained by the independent variables. The remaining 17% could be explained by other variables.

The overall model significance was tested using the analysis of variance (ANOVA). As shown in table 3 jointly, all the independent variables contributed significantly on the regression plane. F-value and model significance presented in the table confirm this result. The overall regression model was significant with F statistic of 98.944.

4.2 Correlation analysis results

Correlation analysis was conducted to assess the strength and the form of the relationship between the broiler farms financial performance as a dependent variable and human capital development as an independent variable. The financial performance of the farms is proxied by return on assets, current ratio, debt to asset and profit margin. The human capital development is proxied by level of training of farm operator, level of formal education of farm operator, level of exposure of farm operator to agricultural extension activities, level of experience of farm the operator, education area of farm operator and level of entrepreneurial skills of farm operator. Correlation coefficients regarding the relationship between these six characteristics as determinants of human capital development and the financial performance of broiler farms were determined. Table 4 shows the correlation analysis results.

Table 4: Correlation analysis results

Variable	Financial Performance
Financial Performance	1.000
Training	0.711**
Education	0.643**
Exposure to extension activities	0.547**
Experience	0.674**
Education area	0.548*
Entrepreneurial skills	0.601*

*Significant at the 0.05 level
**Significant at the 0.01 level

As shown in table 4, a positive significant relationship is found between all human capital development characteristics of the broiler farms operators with the financial performance of these farms. This means that all of these characteristics enhance and contribute positively to the financial performance of the investigated farms. Table 5 shows the rank of each of the investigated characteristics according to the strength of the relationship between them and the financial performance of the broiler farms.

Table 5: Ranks of the human capital development characteristics

Characteristic	Correlation Coefficient (r) with performance	Rank
Training	0.711	1
Education	0.643	3
Exposure to extension activities	0.527	6
Experience	0.674	2
Education area	0.548	5
Entrepreneurial skills	0.601	4

As indicated in table 5, training, experience, education, entrepreneurial skills, education area and exposure to agricultural extension activities are ranked according to the strength of the relationship between them and the financial performance of the broiler farms as 1, 2, 3, 4, 5 and 6 respectively. Level of training (r = 0.711) is with a

strong positive linear relationship to the financial performance of the investigated farms. Experience (r = 0.674), education (r = 0.643), entrepreneurial skills (0.601), education area (r = 0.548) and exposure of broiler farms operators to agricultural extension activities (r = 0.527) are with a moderate positive relationship to the financial performance of the investigated broiler farms. This implies that these are the key options of human capital development that improve broiler farms financial performance. The impact of the last two components (education area and exposure of broiler farms operators to agricultural extension activities) is less than the impact of the other components on the farms financial performance. Operators of broiler farms who are; efficiently trained, well experienced, highly educated, with specialized education in their activity, more exposed to agricultural extension activities and possessing higher levels of entrepreneurial skills will positively influence the financial performance of ~~these~~ their farms. These results are in line with the findings of Ojokuku and Sajuyigbe (2015) which indicated that on-job training, formal education and experience were the major factors in formulating human capital development, which largely affect the performance of small and medium enterprises including agricultural enterprises. In addition, these findings are consistent with the findings of Ofoegbunam and Okorafor (2010) which revealed that firms' performance could be associated to the promotion of on-the-job training; level of formal education; skills; specialization and level of participation in trade fair and exhibitions as strategies of human capital development in these firms. Similar result achieved by Bontis and Fitzenz (2002). Bontis and Fitzenz stated that the development of human capital is positively influenced by the educational level of employees, which end in yielding higher financial results per employee. Green (1993), in a study aimed at investigating the effect of training as a human capital dimension on firms' competiveness revealed similar results. He concluded that lack of training is highly related to low competitiveness. Likewise, Bates (1990) stated that training is linked to the longevity of companies. Becker (1993) noted similar results; he considered education and training to be the most important investment in human capital.

4.2 Regression analysis results

A multivariate model was developed using a measure of broiler farm financial performance as ~~the~~ a dependent variable and a series of independent variables representing various aspects of human capital (composite index of human capital), considered in the conceptual model. The individual regression coefficients were checked to see whether the dependent variable financial performance is significantly affected by the independent variables. Table 6 shows the regression findings of financial performance of broiler farms with human capital composite.

Table 6: Regression analysis results

Model	Variable	Std. Error	B	T		Sig.
1	Constant	0.221	0.089	1.674	0.058	
	Training	0.043	0.507	9.017	0.000	
	Education	0.038	0.397	2.014	0.000	
	Exposure to extension activities	0.027	0.125	1.534	0.029	
	Experience	0.052	0.486	8.458	0.000	
	Education area	0.042	0.039	3.532	0.052	
	Entrepreneurial skills	0.037	0.284	1.996	0.047	

[a] Dependent Variable: Broiler farms financial Performance

The result of the analysis depicted in the regression model includes human capital variables that check the impact on the broiler farms financial performance. As shown in table 6, all factors of human capital are significantly related to the financial performance of the investigated broiler farms in a positive direction. The table shows that the financial performance of the investigated broiler farms = 0.507 (training) + 0.397 (education) + 0.125 (exposure to extension activities) + 0.486 (experience) + 0.039 (education area) + 0.284 (entrepreneurial skills).

As a human capital component, the highest beta value is for training component (0.507), implies that this component contributes significantly to the financial performance of the investigated farms. The lowest beta value is for education area component (0.039), implies that this component is the one with the lowest impact on the financial performance of the investigated farms.

These results are in consistent with the findings of Pena (2001) who concluded that training and experience of economic activity operators are with a positive significant influence on the growth of business enterprise. The results are also in consistent with that of Hisrich and Drnovsek (2002) who stated that education and experience positively influence the performance of new enterprises.

The results of this study are also in line with the results achieved by Becker (1993) that prior experience and education are two of the most critical components among human capital variables. In support to Pena, Hisrich and Drnovsek, and Becker findings, this study categorized training, experience and education as the first, second and third influencing components on the financial performance of broiler farms respectively.

5. *Conclusions and Recommendations*

Among many human capital components, training, education, exposure to agricultural extension activities, experience, education area and entrepreneurial skills of farm operators have positive impact on broiler farms financial performance. Training, experience and education categorized as the first, second and third influencing components on the financial performance of broiler farms respectively. The impact of education area and exposure of broiler farms operators to agricultural extension activities is less than the impact of the other components on the farms financial performance. Nevertheless, all these components are the key options of human capital development that improve broiler farms financial performance. Correlation and regression analyses results in this study indicated that all factors of human capital are significantly related to the financial performance of the investigated broiler farms in a positive direction. These results imply that developing human capital components will enhance and contribute positively to the financial performance of the agricultural enterprise. In order to positively impact the financial performance of any agricultural enterprise, attention must be drawn to the need for agricultural enterprises operators to key into the benefits of training, gaining experience, specialized education, participating in agricultural extension activities and developing their own entrepreneurial skills. Agricultural enterprises operators who are efficiently trained, well experienced, highly educated, specialized in their activity, more exposed to agricultural extension activities and possessing higher levels of entrepreneurial skills will positively influence the financial performance of these enterprises.

References

Almasarweh Mohammad. (2016). The Impact of Human Capital on Competitive Performance: An Empirical Study on Jordanian Pharmaceutical Companies, European Scientific Journal, vol.12, No.4, pp 68-78, doi: 10.19044/esj.2016.v12n4p6

Ahrendsen, B.L, and Katchova, A.L (2012), "Financial ratio analysis using ARMS data". Agricultural Finance Review, Vol.72 Iss:2 pp.262 -272, available at: http://dx.doi.org/10.1108/00021461211250492

Bates, T. (1990).Entrepreneur human capital inputs and small business longevity. The Review of Economics and Statistics, 72(4), 551-559.

Becker, G.S. (1993). Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education (3rd edition). Chicago: University of Chicago Press.

Bhunia, A and Sarkar, R. (2011). A Study of Financial Distress based on MDA. Journal of Management Research, 3.2, 1-11.

Bontis, N. and Fitzenz, J. (2002).Intellectual capital ROI: A current map to human capital antecedents and consequences. Journal of Intellectual Capital, 3(3), 223-247.

Bosma N, Van Praag M., Thurik R., and De Wit G. (2004).The Value of Human and Social Capital Investments for the Business Performance of Startups. Small Business Economics, 23(1): 227 - 236.

Coleman, S. (2007). The role of human and financial capital in the profitability and growth of women-owned small firms, Journal of Small Business Management, 45 (3): 303-319.

Datta, D.K., J.P. Guthrie and P.M. Wright, (2005). Human Resource Management and Labour Productivity: Does Industry Matter. Academy of Management Journal, 48: 135-145.

Fatoki, O. (2011). The Impact of human, social and financial capital on the performance of small and medium-sized enterprises (SMES) in South Africa Journal of Social Sciences, 29(3); 193-204.

Frankfort-Nachmias, C. and Nachmias, D. (1992). Research Methods in the Social Sciences (4th edition). New York: St. Martin's Press. USA.

Franssila, H., Okkonen, J. Savolainen, R., andTalja, S. (2012). The Formation of Coordinative Knowledge Practices in Distributed Work: Towards an Explanatory Model. Journal of Knowledge Management, 16(4), 650–665.

Gao, Y. (2010). Study on Formative Mechanism of Financial Risk and Control for Agriculture Listed Companies in China, College of Economy and Management, Southwest University, Beibei, Chongqing, China.

Ganotakis, P. (2010). Founder's Human Capital and the Performance of UK New Technology - based Firms. Small Business Economics, 35(4): 1-21.

Graham, J., Li, S. and Qiu, J. (2012). Managerial attributes and executive compensation, Review of Financial Studies, 25,144-186.

Green, F. (1993). The determinants of training of male and female employees in Britain. Oxford Bulletin of Economics and Statistics, 55(1), 103-122.

Hatch, N. W., and Dyer, J. H. (2004). Human Capital and Learning as a Source of Sustainable Competitive Advantage. Strategic Management Journal, 25, 1155– 1178.

Herrington M, Kew J, and Kew P (2009). Global Entrepreneurship Monitor, South African Report. Fromhttp://www.gbs.nct.ac.za/gbswebb/userfiles/gem south africa 2000pdf.

HesselJ,and Terjesen S. (2008). Entrepreneurial Carrier Capital, Innovation andNew Venture Export Orientation, http://www.entrepreneurshipsme.eu/pdf ez/H200808.pdf.

Hisrich RD, and Drnovsek, M. (2002).Entrepreneurship and Small Business Research. Journal of Small Business and Enterprise Development, 9(2): 172-222.

Hitt, M., Bierman, L., Shimizu, K., and Kochhar, R. (2001), Direct and moderating effects of human capital on strategy and performance in professional firms: a resource-based perspective. Academy of Management Journal, 44(1), 13–28.

Itami, H. (1987). Mobilizing invisible assets.Cambridge MA: Harvard University Press.

Jin, Y., Hopkins, M. M., and Wittmer, J. L. S. (2010), Linking Human Capital to Competitive Advantages: Flexibility in a Manufacturing Firm's Supply Chain, Human Resource Management, 49(5), 939–963.

Karakaya, M. (2009).An overview to accounting applications on agricultural activities in Turkey within historical progress. African Journal of Business Management, 3(7), 294-304.

Lussiers,R.N. and Pfeifer, S. (2001). A Crossnational Prediction Model for Business success. Journal of Small Business Management, 30(3), 228-239.

McIver, D., Lengnick-Hall, C. A., Lengnick-Hall, M. L., &Ramachandran, I. (2013), Understanding Work and Knowledge Management from a Knowledge-in Practice Perspective. Academy of Management Review, 38(4), 597–620.

Miller, A., Boehije, M., and Dobbins, C. (2013). Management Challenges for the 21st Century. Key Financial Performance Measures for Farm General Managers.Purdue University Cooperative Extension.West Lafayette, pp. 1- 3.

MoA (Ministry of Agriculture), (2015), Annual Livestock Report, Jordan.

Nahapiet, J and Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage, Academy of Management Review, 23 (2): 242-266.

Ngatno, Apriantni, E.P. and Widayanto, (2016), Human Capital, Entrepreneurial Capital and SME's Performance of Traditional Herbal Industries in Central Java, Indonesia: The Mediating Effect for Competitive Advantage. Archives of Business Research, 3(4), 9-25.

Nyoro J.K, Wanjala, M. and Awour, T. (2001).Increasing Kenya's Agricultural Competitiveness: Farm Level Issue. A paper by prepared in a joint collaboration with Tegemeo Agricultural Monitoring and Policy Analysis (TAMPA) Project, Egerton

for International Development/Kenya. pp: 1 – 34.

Ofoegbu E.O, P.A. Akanbi and A.I. Joseph (2013), Effects of Contextual Factors on the Performance of Small and Medium Scale Enterprises in Nigeria: A Case Study of Ilorin Metropolis. Advances in Management & Applied Economics..3(1), 95-114.

Oforegbunam, T. E and G. F. Okorafor., (2010), Effects of Human Capital Development on the Performance of Small and Medium Scale Enterprises in the South Eastern Region of Nigeria.Journal of Sustainable Development in Africa, 12(8); 49-58

Ojokuku, R.M. and Sajuyigbe, A.S., (2015). Effect of Human Capital Development on the Performance of Small and Medium Scale Enterprises in Nigeria, Journal of Emerging Trends in Economics and Management Sciences, 6(1):88-93.

Pena, I. (2002). Intellectual capital and business start-up success.Journal of Intellectual Capital. 3(2): 180 – 198.

Pfeffer, J. (1994). Competitive advantage through people.Boston: Harvard Business School Press.

Sullivan A, and Sheffrin, DM (2003).Economic Principles in Action.Upper Saddle River, New Jersey: Pearson Prentice Hall.

Wang, P. (2008). How to Evaluate Performance of Government Agency: A manual for Practitioners.World Bank.

Wu, J., Li, Y. and Zhu, M. (2010).Empirical Analysis of Rural Influencing Factors on Listed Agribusiness Financial Performance. Agricultural Economics and Management, 3, 22-27.