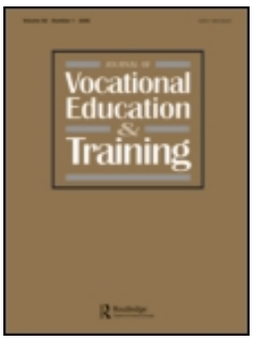

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Joseph Bosire & Martin Etyang

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The Effect of Education on Business Skills Cognition: the case of indigenous microscale enterprise owners in Kenya

JOSEPH BOSIRE
Egerton University, Nakuru, Kenya
MARTIN ETYANG
Kenyatta University, Nairobi Kenya

ABSTRACT One of the expected utilitarian values of education is the development of competencies for effective business practice after school. This article presents findings of a study on the effect of education on Business Skills Cognition among indigenous microscale business owners in Kenya. Data were collected from 208 respondents using an interview schedule, observation schedule and checklist. Business Skills Cognition as the dependent quantitative variable was measured using five broad dimensions of business practice to yield a continuum of scores ranging from a minimum of 45 to a maximum of 265 points. Results from chi-square, and One Way Analysis of Variance showed that the association between education levels, and Business Skills Cognition was positive and significant. The article discusses the implication of these findings for education delivery and training for enterprise development in Kenya and any other society that is keen on the utilitarian values of education.

Introduction

This study investigated the effects of education on Business Skills Cognition among indigenous microscale entrepreneurs in the informal sector in Kenya. The study was built on the premise that the acquisition and formation of various competencies by people may be attributed to the processes and experiences they go through in life, such as schooling and training. Business knowledge and skills is one of these competencies.

The growth and development of the informal sector in Kenya is historically associated with the country's education system (Juma et al,

1993). School leavers who were unable to secure modern sector employment resorted to self-employment within this sector as a survival mechanism (Juma et al, 1993; Luvanga, 1998). The formal wage sector could not absorb all the job seekers due to limited capacity, and because employment was pegged to educational qualifications and achievement in national examinations (Juma et al, 1993; Republic of Kenya, 2001a). In addition, subsequent employment was offered at lower wages and establishment positions for people with higher qualifications (Hazlewood, 1989). The limited absorptive capacity, and the low pay and establishment positions discouraged job seekers from searching for employment opportunities in the formal wage sector. School leavers were therefore disadvantaged in the competition for jobs in this sector.

Initially, the informal sector was associated with school dropouts and failures in National Examinations. Today, however, the informal sector has attracted a diversity of people in terms of educational and professional qualifications, from primary school level to university graduates, artisans and unskilled workers, and formerly employed public and private workers (Luvanga, 1998; Bosire, 2001). All these people are involved in diverse occupations with the basic objective of earning a livelihood. This trend appears to be similar in many countries in Africa, particularly Tanzania, Gambia, Botswana and South Africa (Luvanga, 1998; Morris & Leyland, 1995).

Definition of Informal Sector

Definitions of 'informal sector' vary depending on the purpose for which the term is required (Juma et al, 1993; Ghate et al, 1996) and from one region to the other. Generally, the definitions are based on the amount of labour or capital invested, legislation requirements, and functional characteristics in management, ownership and product specialization. Generally, it is a term used to refer to unregulated occupational activities operated on a family or single ownership level or even informal partnership.

According to Ghate et al (1996) informal sector enterprises are identifiable and, therefore, described at two levels. One category covers the livelihood enterprises, which are characterized by low levels of skill training and capital outlay, simple modes of operations and aggressive competition due to unrestricted entry. These types of enterprises rely on the family for labour and start-up capital. The other category is described as microscale enterprises, such as mercantiles, collective organizations, artisans and craftsmen. Owners of these businesses possess relatively higher skill training, have higher capitation, are more networked, expansive in orientation and therefore more serious in approach to business practice (Ghate et al, 1996; Luvanga, 1998). Such businesses are conducted under physically identifiable premises.

In Kenya and in the context of this study, the terms informal sector and microscale enterprises are used interchangeably to refer to business activities operated under single or family ownership, which rely on casual, temporal or family labour, and are not subjected to formal rules of contract, central legislation, labour inspection and taxation (Republic of Kenya, 2001a). Microscale entrepreneurs (or micro-entrepreneurs) are therefore business owners of such enterprises. Such enterprises cover a wide range of businesses in manufacturing, distribution and service subsectors in what is commonly referred to as *jua kali* (hot sun) because of the historical origin of operating under the open air shades and outside normal trading policy regulations (Juma et al, King, 1996).

Background Information

Over the last decade, employment in the formal sector slackened, while the informal sector recorded a dramatic and sustained expansion (Republic of Kenya, 2001b).

Table I presents employment trends in the modern and informal sector for the period 1997-2000 for comparative analysis. It is observed that employment in the modern sector continued to stagnate and even decline whereas the informal sector expanded remarkably over the same period. The decline in modern sector employment has largely been attributed to the prevailing economic recession occasioned by adverse weather conditions, reduced economic activity in agriculture, manufacturing and the services sector, and through retrenchment and restrictive Government employment policy in public institutions (Republic of Kenya, 2001b).

Employment type	1997 000s	1998 000s	1999 000s	2000 000s
Modern Establishments:				
urban and rural	1,711.5	1,729.7	1738.7	1742.1
Wage Employees	1,647.4	1,664.9	1,673.6	1,676.8
Self-Employed and unpaid family workers	64.1	64.8	65.1	65.3
Informal Sector	2,986.9	3,353.5	3,738.8	4,150.9
Total employment	4,698.4	5,083.2	5,477.5	5,893.0

Table I. Total Recorded Employment 1997-2000.
(Source: *Republic of Kenya,* 2001a, p. 46.)

Whereas the formal sector has failed to meet the challenges of employment creation, the informal sector has continued to be the panacea for the country's job requirements. As a result of this the Kenya Government recognized the importance of this sector in the general

process of development and formulated policies towards enhancing its growth and development (Republic of Kenya, 2001a).

The rapid growth in the informal sector over the last three decades is associated with increases in the number of unemployed school leavers and urbanization (Morris & Leyland, 1995; Luvanga, 1998). The sector has continued to play a leading role in absorbing the large pool of school leavers and assisted in solving the country's ever growing unemployment (Bosire, 2001; Republic of Kenya, 2001a,b).

Despite these phenomenal growth rates and in spite of the roles the informal sector is playing in economic development, it has been pointed out that productivity growth has been low. This has been precipitated by inadequate technological skills and subsequent production of low quality goods and services (Juma et al, 1993; Mahinda, 1993; Ghate et al, 1996; Luvanga, 1998; Republic of Kenya, 2001a). Knowledge and skills are regarded as crucial if this sector is to continue playing a leading role in sustainable job creation and in overall economic development. This is because education and skills-related training are regarded as key factors in the individual's ability to accomplish a sufficient degree of sophistication for effective and successful business operations (Morris & Leyland, 1995). This argument is based on the notion that business is about identifying and utilizing opportunities by accessing information, and using knowledge to link awareness and interest to desire and action (Cannon, 1991). In this respect, it is often argued that business operated with some degree of sophistication tends to achieve higher sales, create more jobs and develop a more optimistic outlook (Morris & Leyland, 1995; Ghate et al, 1996).

Conceptual Setting

The methodology of this study was based on identifying and measuring entrepreneurial knowledge and skills. Identifying an entrepreneur and measuring entrepreneurship is usually a difficult matter (Swerdberg, 1993). Casson (1982) observes that identification of an entrepreneur is a judgemental activity and that there is no recognized objective test of entrepreneurial ability that can guarantee a high degree of accuracy. According to Casson (1982), there are two main hypotheses on which judging entrepreneurial ability and identification are based. One is the Law of Self-esteem, which posits that entrepreneurs are their own best judges. This implies that no one else can give an accurate judgement of another entrepreneur other than the same entrepreneur. The other is the Law of Arrogance, which asserts that no one else has what it takes to be an entrepreneur - that any one who thinks he is an entrepreneur will disagree with everyone else. The two hypotheses point out that there might be difficulties in standardizing the process of identifying and judging an entrepreneur.

In addition, judging entrepreneurial acumen can be done through formal and informal methods. Formal methods of screening entrepreneurial ability include in-depth interviews and the assessment of performance in simulated business situations (Casson, 1982; Bosire, 2001). Informal methods involve continuous observation of an individual at close quarters, especially by close family members and friends. The Law of Self-esteem recognizes both methods of screening and identifying entrepreneurs as judgemental, but the Law of Arrogance does not allow judgement by a third party. This study applied the Law of Self-esteem to formally collect the required data from the entrepreneurs themselves.

The Purpose of the Study

Discussions on this topic tend to relate education levels and business success or failure. Little research information exists relating knowledge of the practice of business to formal education attainment. This study analyses the association between education levels and Business Skills Cognition among indigenous microscale entrepreneurs in the informal sector. This is important given the nature and the diversity of participants and the contribution this sector is credited with in the general development of economies. In addition, recent developments towards market liberalization necessitate a re-examination of the capacity and potential of the informal sector as an effective participant in the competitive commodity market. The results of the study provide useful indications on the role and importance of formal education and skills training in improving the capacity of the informal sector as a strategy for sustainable economic growth.

Methodology

It was neither necessary nor feasible to collect data from all the informal sector entrepreneurs from all the trading centres in Kenya. This is because the population of informal sector entrepreneurs (see Table I) and the number of trading centres where these entrepreneurs carry out their business activities is too large. Though the trading centres selected for the study were purposively determined, they represented areas of high population densities in Kenya and also absorb the burgeoning labour pool within the region. In addition, informal sector business owners exhibit relatively similar characteristics in the form of occupational interests, investment decisions, start-up capital, and reasons for entry into the sector and/or self-employment (Luvanga, 1998). These characteristics can be reflected and, therefore, represented in a sample of the population.

Cross-sectional data were collected from a sample of 208 respondents. These were sampled from various occupations in

manufacturing, hotels, restaurants, services and distributive trades. The respondents were selected through stratified random sampling procedure from an accessible population of 689 microscale entrepreneurs from the informal sector in nine trading centres in the Kisii, Kisumu and Nakuru Districts in Kenya. The accessible population was generated through a preliminary census survey of the nine trading centres. It was necessary to carry out an initial census survey because of a lack of accurate data on the informal sector. This is not unusual since it is relatively difficult to identify informal sector investors. In the absence of accurate data on the population of interest, a preliminary census survey is recommended for purposes of determining accessible population and the sampling frame (Landstrom, 1995; Peil, 1995; King, 1996). The level of education and trading centre hierarchy formed the basis of stratification. Trading centres were divided into three levels, namely market centres, town centres and municipalities in that ascending order.

This study focused on measuring Business Skills Cognition as the dependant variable.

The formal method of measuring entrepreneurial knowledge and practice was used in collecting data (Casson, 1982). This was because the 'know what' and 'know how' of business operations was judged thus through demonstrations as exhibited by the business owners. Selected dimensions of business behaviour were used as manifest variables to measure Business Skills Cognition as a latent variable (Scholing & Timmerman, 1988). This was because in Social Science, latent variables can only be measured through manifest variables, which then act as indicators of the variable under observation. For this reason, a comprehensive data set that was likely to be more reliable necessitated making observations on specific behavioural attributes in addition to checking and questioning. As explained in the theoretical framework, this procedure was regarded as appropriate and more accurate in judging the respondents' knowledge and practice of business.

Three instruments were used to collect the required data. These were:

- a structured interview schedule code-named Interview Schedule on Selected Business Dimensions (ISSBD);
- a checklist code-named Checklist Questionnaire on Selected Business Dimensions (CQSSBD);
- an observation schedule code-named Observation Schedule on Selected Business Dimensions (OSSBD).

These instruments were used to collect demographic data and to measure Business Skills Cognition. In addition, each of these instruments was used to collect the data associated with specific attributes of business practice. Some of these attributes are best measured through

personal observation and judgement, while others can be measured through interviewing and checking. This form of triangulation ensured completeness in collecting the required and reliable data (see summary of collected data in Appendix A).

Business Skills Cognition was measured by 58 items, most of which were weighted on a five-point rating scale. The items covered selected dimensions of observable characteristics of business practice. These characteristics were viewed in five broad business dimensions, namely, Business Growth and Diversification (BGD), Risk Aversion and Financing (RAF), Business Promotion and Marketing (BPM), Business Documentation (BD), and Pricing, Organization and Supervision (POS). These dimensions ensured that all the major aspects of business behaviour and practice were exhaustively covered for completeness (see Appendix A).

Each of these dimensions were measured through specific research items that focused on elements of behaviour that indicated the existence or absence of knowledge and skills of a given attribute of the respective dimension of business practice (check details in Appendix A). For example, the dimension of Business Growth and Diversification was measured through such attributes as the number of times the business owner had changed business type, number of businesses owned, business decay and start-up, level of stock, and type and variety of items for sale. These were weighted and aggregated to yield a given sum for this dimension. Similar computations were carried out for each of the other dimensions. The results were analysed against the respondents' levels of education using the Statistical Package for Social Sciences (SPSS) on PC Windows 97. Chi-square and gamma statistics as measures of association were computed and the hypothesis tested by use of One-Way Analysis of Variance (ANOVA) at $P < 0.05$.

Reliability and Validity of Data

Any measure of human behaviour uses indicators through which the attribute of interest is manifested (Scholing & Timmerman, 1988). This is unique to social sciences. If adequate care is not taken, the use of indicators to measure given human attributes may interfere with the validity and reliability of results. Since the identification of an entrepreneur is a judgemental activity and there is no one objective test of entrepreneurial ability that can guarantee a high degree of accuracy (Casson, 1982), several measures were taken to ascertain accuracy in measuring Business Skills Cognition, and to minimize hallow and hawthorn effects. Hawthorn effects are likely to arise when the respondents try to impress expecting to be rewarded after giving the required information. On the other hand, hallow effects are deceptions that can occur when the respondents exhibit certain characteristics

which would tend to appeal for favour, such as religious convictions, mastery of speech and appearing to be knowledgeable. Such effects were guarded against carefully. This included personalized collection of all data from all the respondents and triangulation of instruments through observation, checking and interviewing. All data were collected during business hours and at the business premises. In addition, the items for data collection were relevant, appropriate and comprehensively covered the basic dimensions of business knowledge and practice. All the instruments were validated through expert verification and judgement, and piloting on a section of microscale business owners in two trading centres.

A reliability analysis for the 58 items that measured Business Skills Cognition for all the respondents was computed using the Statistical Package for Social Scientists. The result was an alpha scale value of 0.92. Furthermore, a similar analysis was computed for the five dimensions of Business Skills Cognition and the alpha coefficient was 0.8, which was the same even for standardized items. This is an acceptable measure of reliability (Ebel & David, 1991). This method was considered appropriate because the scores on Business Skills Cognition were based on weighted values on a five-point rating scale (Ebel & David, 1991).

Findings and Discussions

Distribution of Respondents by Education Level

Table II shows that most of the respondents were of Primary 5-8 followed by Secondary 3-4 levels of education. Both represent the terminal levels of the primary and secondary school phases of Kenya's education structure, respectively. A very small proportion of respondents represented Tertiary levels of education. Generally, respondents with Secondary education constituted the majority (52.5%) followed by those with primary education level, who made up about 44%.

Education Levels	Frequency	Percentage*
Unschooled	4	2
Primary 1-4	12	6
Primary 5-8	79	38
Secondary 1-2	23	11
Secondary 3-4	74	36
Secondary 5-6	12	6
Certificate-Diploma	1	1
University	3	1
Total	208	100

*Percentage figures are rounded to whole numbers

Table II. Distribution of Respondents by Education Levels

The results presented in Table II reflect the national distribution where school leavers at primary and secondary education levels are relatively more dominant than other qualifications. For a long time, the majority of informal sector business owners have been primary school leavers and dropouts. The current trend in Kenya and some African countries, such as Tanzania, South Africa and Ghana, is moving towards having an increasing number of secondary school and tertiary level graduates joining the sector (Juma et al, 1993; Ghate et al, 1996; Luvanga, 1998).

Respondents' Work Expectations

Respondents were asked to indicate what form of employment they would prefer if given the freedom to choose. About 50% of them indicated a preference for self-employment occupations compared with about 44% who would have opted for waged employment. The rest were indifferent. Closer inspection of the data revealed that the inclination for self-employment tended to be associated more with respondents of primary level of education relative to those with higher education levels. On the other hand, respondents with secondary education and above preferred formal wage employment. The differences in occupational preferences between the two categories of respondents were, however, minimal. This finding is consistent with results from other studies, such as Dolinsky et al (1993) and Luvanga (1998).

The explanation for this state is related to the Paper Qualification Syndrome (Bosire, 2001), where higher education is associated with executive and white-collar jobs in the formal sector of the economy. The mismatch in terms of job expectations brought about by the type of education system and the reality of life resulted in most of the school leavers remaining unemployed for long periods before resorting to self-employment as a survival mechanism. Consequently, respondents with primary school qualifications, aware of their disadvantaged positions in respect of competing for formal employment, opted for self-employment. On the other hand, respondents with secondary education were still optimistic, though half-heartedly, while those with higher qualifications were virtually sure of such jobs.

Contribution of Schooling to Business Knowledge

As part of the preliminary background data, respondents were asked to rate their opinions on the contribution of schooling to the acquisition and development of knowledge and skills for business practice. A five-point rating scale was used. The data was analysed using gamma and chi-square statistics. A majority of the respondents with lower education levels gave a lower rating, while a majority of those with higher education gave a higher rating. The results showed a positive and significant

association between respondents' opinions and their educational qualifications (gamma = 0.28, χ^2 = 206.7, $P < 0.05$, df = 35). This implied that respondents felt that more education provided more knowledge and skills on business practice

Business Skills Cognition

As explained in an earlier section of this article, a total of 58 items measured the various dimensions of Business Skills Cognition to yield a continuum of weighted scores ranging from 45 to 265 points. This represented a quantitative dependent variable, which was analysed against educational levels as an independent variable. The dimensions of business practice that were covered were Business Growth and Diversification (BGD), Risk Aversion and Financing (RAF), Business Promotion and Marketing (BPM), Business Documentation (BD), and Pricing, Organization and Supervision (POS). The variables that were used in measuring each of the dimensions were weighted to reflect the magnitude of the presence or absence of the attribute or behaviour under observation. Therefore, each dimension yielded a weighted score, which added up to the Business Skills Cognition score.

Education Levels and the Dimensions of Business Skills Cognition

Measures of association between education levels and each of the dimensions of Business Skills Cognition were computed, and analysed using chi-square and gamma coefficients.

Dimensions of Business Skills Cognition	Measures of Association			
	Gamma	χ^2	Significance	df
Business growth & diversification	0.27	25.8	$P>0.05$	21
Risk aversion & Financing	0.58	69.9	$P<0.05$	21
Business promotion & marketing	0.41	47.3	$P<0.05$	21
Business documentation	0.42	44.4	$P<0.05$	21
Pricing, organisation & supervision	0.23	26.4	$P>0.05$	21
Business Skills Cognition	0.49	65.1	$P<0.01$	21

Table Ill. Measures of association between the dimensions of business skills cognition - by education levels of respondents.

The data on the relationship between education and the dimensions of Business Skills Cognition was analysed with the variables treated at both ordinal and interval scales. In the former case, a chi-square statistic was computed to test the relationship at 0.05 level of significance and 21

degrees of freedom. In the latter case, both the dependent and independent variables were treated on the interval scale and analysed by computing the gamma coefficient. Condensed results of both statistics are presented in Table III.

Results given in Table III show a positive association between education levels and each of the dimensions of Business Skills Cognition. The chi-square results were significant for three of the five dimensions ($P < 0.05$). In addition, Business Skills Cognition had a strong positive (gamma = 0.49) and significant correlation with education levels ($P < 0.01$). This further implied that more education was associated with more knowledge and skills of business practice, a result that confirms the respondents' perceptions of the contribution of education to business knowledge.

These results were analysed further and tested using One-Way Analysis of Variance (ANOVA) with education levels being the independent variable on the ordinal scale and Business Skills Cognition the dependent variable on the interval scale. The objective of using this statistic was to test the significance of the differences in Business Skills Cognition by differences in education levels. The hypothesis tested was:

> *Ho. There is no significant difference in Business Skills Cognition between different levels of educational attainment.*

The ANOVA model used to test this hypothesis was:

> *Ho.* $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7$

Where μ_1–μ_7 represented the different education levels in that order. The results of analysis are given in Table IV (a) and (b).

Results of analysis given in Table IV (a) and (b) show that the average scores on Business Skills Cognition were increasing with increasing levels of education. The *F*-ratio of 8.012 was significant at 0.05 level. This shows that the mean scores in Business Skills Cognition were significantly different between the different levels of education. A *post hoc* multiple comparison test using Scheffe's procedure (SPSS, 1998) revealed that the differences in Business Skills Cognition were significant ($P < 0.05$) between post-Secondary and all levels below Primary 8, Primary 5-8 and Secondary 3-4. This implied that Business Skills Cognition was associated with more years of schooling. However, it is noted that the mean differences between Secondary 5-6 and post-Secondary were not significant. An inspection of the data reveals that the maximum score in Business Skills Cognition was by a respondent in Secondary 3-4. This further implies that though education does play an important role, Business Skills Cognition may be influenced by other factors, such as experience and attitudes (Dolinsky et al, 1993)

Education levels	N	Mean	SD	Min.	Max.	Std. error
1. Unschooled	4	109.8	17.6	96	133	8.8
2. Primary 1-4	12	129.3	21.0	87	154	6.1
3. Primary 5-8	78	138.5	32.1	76	224	3.6
4. Secondary 1-2	23	153.8	31.7	95	205	6.6
5. Secondary 3-4	74	158.6	31.5	84	228	3.7
6. Secondary 5-6	12	183.4	30.6	125	222	8.8
7. Post secondary	4	186.8	33.0	150	218	16.4
Total	207	149.8	34.1	76	228	2.4

Table lV(a). Distributives of Business Skills Cognition Scores by Respondents' Education Levels.

Source	*Sum of squares*	*df*	*Mean square*	*F*	*P*
Between groups	46,525.85	6	7754.31	8.012	0.005
Within groups	193,565.89	200	967.83		
Total	240,091.74	206			

Table lV(b). ANOVA Summary results.

Discussion

Earlier studies, for example, the International Labour Organization (ILO, 1972, 1982), indicated that the informal sector participants were largely from the primary level of education. Recent studies, such as Juma et al (1993), Mahinda (1993), Ghate et al, (1996) and Luvanga (1998) reveal an increasing number of secondary and tertiary level graduates joining this sector for self-employment in various occupations. Both cohorts of studies make a common observation - that informal sector entrepreneurs lacked adequate business management skills.

The trend has been similar across different African countries (Headrick, 1988; Luvanga, 1998). Other studies (Dolinsky et al, 1993; Ghate et al, 1996) have observed that in developed countries, a greater proportion of participants in self-employment are of higher levels of education compared to those in developing countries. However, the commonly held view now is that self-employment in general and informal sector employment in particular is no longer for dropouts from the school system. Highly educated and trained individuals have increasingly ventured into this sector side-by-side with people of much lower qualifications.

Entrepreneurship is a human resource (Rao & Cream, 1991), whose contribution to the process of development in other countries has been recognized and acknowledged (Casson, 1982). Similarly, the informal

sector in Kenya has been acknowledged as a vital component in the mobilization of resources for industrialization and development (Republic of Kenya, 2001a,b). It is against such a background that many countries recognized the importance of educating and training the participants of this sector, in order to improve their efficiency and effectiveness in the utilization of resources and skills, in the production of goods and services, in order to enhance the realization of industrialization, growth and development (Rao et al, 1990).

The Liquidity Constraint theory as a version of the Human Capital theory supports this argument. The theory explains that people with more education are likely to have a greater ability to overcome liquidity constraints in their pursuits for self-employment (Dolinsky et al, 1993). This is interpreted to mean that people with more education would have greater abilities to overcome obstacles to business start-up and continuity in terms of securing initial capital requirements, legislative and licensing processes, planning, logistics, marketing and ensuring quality of products (Cannon, 1991; Dolinsky et al, 1993; Bosire, 2001).

Thus, for the informal sector to enhance its potential in its activities as leaders, participants in this sector need to be informed, skilled and knowledgeable about the essentials of business practice. However, such people also need to be deliberately prepared for this sector through appropriately designed curricula (Rebecca & Pithers, 2001). Specifically, formal education and competency-based training (Pauline, 2001) programmes on enterprise development and entrepreneurship need to be designed and initiated. These would enhance the formation of business skills, develop an enterprise culture and improve on the impact of the schools' vocationalization processes (Bosire, 2001).

Conclusion

Findings from this study show that more education is associated with more knowledge and skills on the practice of business. This implies that more education widens the scope of perception, hence enhancing the individual's abilities to perform certain tasks better. Improved entrepreneurial abilities are likely to enable one to overcome the various constraints that would otherwise inhibit entry into self-employment. These abilities and other competencies required for successful business practices could be enhanced through deliberately designed entrepreneurship development programmes in educational institutions. Countries where such programmes have been initiated have recorded an increased supply of entrepreneurs and performance of their economies (Luvanga, 1998; Shane, 2002).

While the findings of this study indicate the need for competency-based education and skills training in business, the many other factors that influence business performance and effectiveness will also have to

be addressed. These have to be addressed as cooperant factors, which influence both the demand for and supply of entrepreneurship in the economy. Competency has been identified as one of the vital characteristics that explain firm behaviour in respect to other firms in the business world. Since this study has shown that knowledge of the practice of business is positively associated with education levels, then appropriately-designed education and training programmes for informal sector entrepreneurs could help improve the performance of this sector, especially in terms of identification of opportunities, organizational efficiency and product quality. Ultimately, this may improve and sustain the positive roles this sector plays in the growth of young economies.

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Correspondence

Joseph Bosire, Department of Curriculum and Instruction, Egerton University, PO Box 16568, Nakuru, Kenya (bosirej@yahoo.com).

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APPENDIX A: score guide for business skills cognition

DATA FOR THE DIMENSIONS OF BUSINESS	WEIGHTED SCORES Minimum	Maximum
Variable 186: Business Growth and Diversification Period of business conception, number of businesses operated, number of failed businesses, start up of similar businesses, number of times changed business, range of goods/services, innovation of goods/services	8	28
Variable 187: Risk Aversion and Financing Sources of funds – personal/external, knowledge of external sources of funding, awareness of the stock exchange market, knowledge of insurance	4	24
Variable 188: Business Promotion and Marketing: Market survey, stock checking, business survey, attendance of business seminars, calculation of sales and income, display of goods, price discounts, customer care, quality of goods/services, marketing skills (stock levels, display pattern, clarity of prices, business name, business etiquette)	16	78
Variable 189: Business Documentation: Business plan, price list/catalogue, books of accounting, documents of trade e.g. receipts, inventory records, business power, legislation documents, record of debtors/creditors, banking statements, correspondence files, personnel records	12	60
Variable 190: Pricing, organization and Supervision: Organizational skills, Delegation of duty, Bargaining skills, Pricing (Each of these measured by several items to make up a total of 17 variables	8	75
Variable 191: Business Skills Cognition: Σ Variables 186 – 190	45	265