

Policy and Strategic Options for Enhancing the Performance of Youth-Run-Enterprises in Kenya

Patrick Muthama Kilonzo

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Youth-Run-Enterprises (YREs) are defined as businesses owned and run by people aged below 35 years. The performance of such enterprises continues to attract a lot of policy and scholarly attention. However, empirical evidence on the determinants of performance of youth run enterprises is limited. This limits policy initiatives aimed at improving the performance of youth run enterprises. The configuration approach is used as the framework of this study. In this approach the determinants of performance are categorized as entrepreneurs' personality, personal resources, environment and organization. The interactive effect of these four configurations of factors is a useful feature of this model that begs for validation among YREs. Consequently, a survey of 465 YREs in Machakos District in Kenya was undertaken. Sixty percent of these enterprises were owned by males. Eighty eight percent of the enterprises were in the customer oriented sectors. Ninety four percent of the surveyed enterprises employed less than three workers. On average, the businesses have been in operation for 3.35 years. Moreover only one in every ten YREs had positive performance. A multiple regression model indicates that measures of perception namely need for achievement, self efficacy, and moderate risk taking, perception of opportunities are important predictors of the performance of YREs. In addition, financial resources and membership into business associations were associated with better performance of YREs. The evidence provided in this study suggests that perceptual factors are dominant predictors of the performance of YREs. This study highlights a new frontier for government policy, namely, the possibility that programs aimed at improving perceptions of youth entrepreneurs may lead to higher performance. Another important strategic option includes the strengthening of the financial resource base of households.

Introduction

Youth-Run-Enterprises (YREs) are defined as businesses owned and run by people aged below 35 years (Government of Kenya, 2005). Chigunta (2002) describes several benefits of YREs. First, YREs create employment particularly among alienated and marginalized youth. In this way, YREs help address some of the socio-psychological problems and delinquency that arises from joblessness. YREs also promote resilience as it encourages young people to find new solutions, ideas and ways of doing things through experience-based learning. It is increasingly accepted that youth entrepreneurs present

alternatives to the organization of work, the transfer of technology, and a new perspective to the market. They are also responsive to new economic opportunities and trends. Further, YREs provide valuable goods and services to society, especially the local community. This results in a revitalization of the local community. Therefore, enhancing the performance of YREs is of paramount importance.

Generally, firm performance refers to outcomes that come from undertaking entrepreneurial activities. Improving the performance of YREs is a complex and dynamic process covering numerous activities and decisions. These events can be described as person-environment interactions, which include among others the refinement of the business idea. Thus the improvement of the performance of YREs requires the discovery and exploitation of opportunities. Entrepreneurial opportunities are those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production (Shane and Venkataraman 2000). Discovery of opportunities occurs when an individual makes the conjecture that a set of resources is not put to its best use. In other words, the resources are priced too low, given a belief about the price at which the output from their combination could be sold in another location, at another time, or in another form. If the conjecture is acted upon exploitation of opportunity occurs. If the conjecture that is acted upon is correct, the individual earns entrepreneurial profit but if it proves to be incorrect, the individual incurs an entrepreneurial loss. In essence, this is firm performance. Understanding the key determinants of firm performance remains a daunting task for researchers in entrepreneurship. Specifically, Chigunta (2002) has called for systematic studies that investigate the determinants of performance of YREs.

A useful way to classify the main factors that can influence the performance of YREs is to adopt the configuration approach (Miller 1987; 1990; Korunka *et al.* 2003). When this approach is applied, the personality of youth entrepreneurs forms one configuration area, in addition to personal resources, environment, and organizing activities. While the importance of these configurations has been examined among large enterprises (Miller 1990) and small enterprises (Korunka *et al.* 2003), its usefulness in understanding the performance of YREs is not clear. Bird (1989) advises that, due to differences in personality, ability and personal energy levels among old and young

entrepreneurs, there is need to assess both groups differently. Further, the configuration approach has been devised within developed economies and likewise is its empirical justification. Its relevance and applicability in developing economies and especially among YREs is not yet well established and justified. Validation of the configuration approach among YREs particularly those in developing is needed since very little is known about them. Chigunta (2002) has decried on the paucity of data on the key determinants of the performance of YREs particularly in Sub Sahara Africa. Lack of data on the critical drivers of YREs performance limits the design of policies and strategies that can improve the performance of YREs. Consequently, the objective of this study is to analyse the determinants of performance of YREs in Kenya using the configuration approach.

This study is organized as follows. The next section outlines the main tenets of the configuration approach. Next, the hypotheses that guide this study are developed. This is followed by a description of the methods applied in the present study before a presentation and discussion of the study results is given. A note on the implications and limitations of the study is then offered. This report ends by highlighting possible directions for future research in this area.

The Configuration Approach

This study is based on the configuration approach (Miller 1987; 1990; Korunka *et al.* 2003). Configurations are inherently multidimensional entities in which key attributes are tightly interrelated and mutually reinforcing (Korunka *et al.* 2003). This approach emphasizes patterns and interrelations within a broader set of configuration areas (Miller 1987; 1990). Although originally developed for large organizations, the configuration approach has been adapted for smaller and entrepreneurial organizations (Korunka *et al.* 2003). Application of this approach reveals four configuration areas namely; the personality of entrepreneurs, personal resources, environment, and organizing activities as important in entrepreneurship.

Personality can be defined as the consistent and persistent profile of beliefs, feelings and actions which make one person distinct from another (Wickham 2001). At least five important personality traits are commonly considered in entrepreneurship

literature namely high need for achievement, internal locus of control, risk-taking propensity, self efficacy and intention (Shane *et al.* 2003; Korunka *et al.* 2003; Bird 1989; Segal *et al.* 2005). This stream of research was initially heavily criticized due to partly its mixed findings, lack of strong theoretical base and problems related to the measurement of variables. However there has been a re-emergence of research on personality in entrepreneurship which consists of refined theory development, the integration of research models, using broad measures of personality and analyzing the importance of previously less-observed dimensions such as proactivity, action control, mental health and personal initiative (Shane *et al.* 2003; Korunka *et al.* 2003; Segal *et al.* 2005). The unit of analysis in these newer approaches is the entrepreneurial personality, including action, choice, and process dimensions (Shaver and Scott 1991; Korunka *et al.* 2003). Consequently, there is emerging evidence that personality based factors are important predictors of entrepreneurial outcomes (Arenius and Minniti 2005; Bosma *et al.* 2008).

Personal resources include the human capital of entrepreneurs. Literature distinguishes between general and specific human capital (Becker 1964). General human capital includes family background characteristics, education, age and gender. The entrepreneur's financial position (income, financial independence, and bank backing) is also seen as part of general human capital. On the other hand, specific human capital is defined as skills and knowledge particularly applicable to the development of firms. It is more or less exclusively applicable to given activities such as improving the performance of YREs. Knowledge, experience, technical and managerial competencies and industry specific know-how are important dimensions of specific human capital. In general, the human capital theory contends that individuals with more or higher quality human capital will achieve more desirable outcomes.

The environment of the entrepreneurial process includes both microsocial and macrosocial aspects (Bird, 1989; Korunka *et al.* 2003). Family restrictions and/or support and social networks based on earlier occupational experiences are important microsocial and macrosocial aspects respectively, that are widely discussed in the literature (Bird 1989). Another important environmental influence is the existence (or nonexistence) of role models, both in the microsocial (parents as entrepreneurs) and the macrosocial

contexts (Bird 1989; Bosma *et al.* 2008). Availability of entrepreneurial opportunities is also considered an important element of the environment (Venkataraman 1997; Shane and Venkataraman 2003; Bosma *et al.* 2008).

The organizing activities in YREs include cognitive aspects such as planning, decision making or failure considerations and actions such as resource acquisition. Registration with relevant government agencies is a suitable measure of how firms are organized. Registration helps to distinguish formal and informal enterprises (Bigsten *et al.* 1999). Registering a firm as a limited company, for instance, ensures that a firm has formal and centralized decision making structures. Registration also has positive impacts on access to external resources such as bank loans and government support.

The mutual effects of these four sets of variables form and modify the configuration of enterprises over time. The performance of a firm can thus be reconstructed as a chain of configurations. In principle, configurations are unique, but similarities may allow the creation of typologies or taxonomies of configurations (Korunka *et al.* 2003). Experience with certain types of configurations can help to identify the strategic position of a new venture and to evaluate its prospects for further development. It can also help to find interventions to foster successful venture development. The configuration approach has been applied to large enterprises (Miller 1990) and small enterprises (Korunka *et al.* 2003); however, literature on its use in YREs is not readily available. This is a critical omission in the understanding on the determinants of firm performance since there are marked differences in personality, ability and personal energy levels among old and young entrepreneurs (Bird 1989).

The important lesson of the configuration approach for the entrepreneurial process is that it allows the identification of the configurations associated with successful and unsuccessful ventures. Thus, it allows for a comprehensive and integrated analysis that provides a basis for effective interventions.

Development of Hypotheses

Performance refers to outcomes that come from undertaking entrepreneurial activities. It has been noted that performance is a multidimensional concept (Ventakaraman, 1997). Therefore, single performance indicators are likely to produce

biased results. Performance is measured in several ways, but a useful dividing line can be drawn between objective performance measures and perceptual ones. Objective measures consist mainly of sales growth or employment growth. Perceptual measures include non-financial goals and global success ratings made by business managers. There is evidence that perceptual performance measures are more highly related to business owner's personality characteristics than organizational outcomes (Rauch *et al.* 2006). Therefore, independent and dependent variables should to be at the same level of generality to produce high relationships.

Shane *et al.* (2003) argue that variance across people in motivations influence who pursues entrepreneurial opportunities, who assembles resources, and how people undertake the entrepreneurial process. Important personality variables that are commonly examined in literature include need for achievement, internal locus of control, risk-taking propensity, and self efficacy ((Korunka *et al.* 2003; Shane *et al.* 2003; Bird 1989). It is important to clarify that these personality variables have not been rigorously validated among YREs.

The concept of need for achievement (*n Ach*) has received much literal attention. McClelland (1961) argued that individuals who are high in *n Ach* are more likely than those who are low in *n Ach* to engage in activities or tasks that have a high degree of individual responsibility for outcomes, require individual skill and effort, have a moderate degree of risk, and include clear feedback on performance. Further, McClelland argued that entrepreneurial roles are characterized as having a greater degree of this task attributes than other careers; thus, it is likely that people high in *n Ach* will be more likely to pursue entrepreneurial jobs than other types of roles. However, the empirical support for this argument is mixed. Some studies show that the achievement motivation scores of business owners predict organizational performance (Bird 1989). A meta analysis study of the relationship between *n Ach* and performance (Collins *et al.*, 2000) concluded that *n Ach* is an effective tool for differentiating between firm founders and the general population but less so for differentiating between firm founders and managers. Further, this study concluded that *n Ach* might be particularly effective at differentiating between successful and unsuccessful groups of firm founders. Therefore entrepreneurs who score highly on need for achievement are expected to have better performance.

Locus of control refers to the extent to which individuals believe that their actions or personal characteristics affect outcomes. This trait is also called self confidence, veridical perception, perception of venture feasibility or personal efficacy. Individuals who have an external locus of control believe that the outcome of an extent is out of their control, whereas individuals with an internal locus of control believe that their personal actions directly affect the outcome of an event. A review of previous studies on locus of control by Shane *et al.* (2003) indicates that successful entrepreneurs hold more internal control beliefs than those whose business have ended. However, Bird (1989) reports findings from studies that demonstrate that entrepreneurs do not hold more or stronger beliefs about their ability to control events than managers. Therefore it is not clear whether entrepreneurs with internal locus of control are more likely to report better performance of their enterprises.

McClelland (1961) claimed that individuals with high achievement needs would have moderate propensities to take risk. This claim by McClelland is especially interesting for entrepreneurship research because the entrepreneurial process involves acting in the face of uncertainty. Moreover, several theories of entrepreneurship view the entrepreneur as bearing residual uncertainty (Venkataraman 1997). This arises from the observation that entrepreneurs often must accept uncertainty with respect to financial well-being, psychic well-being, career security, and family relations. Empirical evidence demonstrates that moderate risk taking predicts performance (Rauch *et al.* 2006). Thus, moderate risk taking is associated with better performance of YREs.

Self-efficacy is the belief in one's ability to muster and implement the necessary personal resources, skills, and competencies to attain a certain level of achievement on a given task (Segal *et al.* 2005). In other words, self-efficacy can be seen as task-specific self-confidence. Shane and Ventakaraman (2003) summarize literature that demonstrates that self-efficacy is a robust predictor of performance. Therefore self-efficacy is expected to be associated with better performance of YREs.

Broadly, intention refers to the conscious state of mind that directs attention toward a specific object (goal) or pathway to achieve it (means). Entrepreneurial intention may aim toward either the creation of new venture or new values in existing ventures. Literature identifies two important dimensions of intention (Bird, 1989). The

first one, namely location considers whose intentions are operative, those of the entrepreneur (internal locus of control) and/or those of other stakeholders and markets (external locus of control). The second dimension focuses on the relative rationality versus intuition of the entrepreneur. This dimension varies from along a continuum from a rational, analytic, and cause and effect orientation found in formal business plans, opportunity analysis, resource acquisition, goal setting, and most observable goal-directed behaviour to intuitive, holistic, and contextual orientation found in networking, focus, persistence, and vision of the entrepreneurial act. Therefore, intention is either planned or caused by events such as displacements (Segal *et al.* 2005). Overall, intentions are considered to be crucial predictors of behaviour and business performance (Orser *et al.* 1998; Shane *et al.* 2003). Therefore intention is expected to be positively related to the performance of YREs.

Hypothesis 1a: Need for achievement is positively related to the performance of YREs.

Hypothesis 1b: Internal locus of control is positively related to the performance of YREs.

Hypothesis 1c: Risk taking has a curvilinear relationship with the performance of YREs.

Hypothesis 1d: Self efficacy is positively related to the performance of YREs.

Hypothesis 1e: Intention is positively related to the performance of YREs.

The entrepreneur's track record of thorough and proven operating knowledge of business is considered important (Delmar and Shane, 2007; Bird, 1989; Shane, 2000). Experience encompasses work experience and other practical learning that takes place on the job, as well as non-formal education such as training. Both depth of work experience and broad experience across markets are theorized to increase human capital (Becker, 1964).

Specialized knowledge of the industry particularly on technology and market is considered critical for venture performance (Shane 2000; Shane and Delmar 2006).

Previous employment experience is considered useful in enhancing the performance of new firms (Shane, 2000). Knowledge gained from career experience provides the entrepreneur with certain key competencies and inside information needed to recognize and exploit opportunities. Through work experience, people develop information and skills that facilitate the formulation of entrepreneurial strategy, the acquisition of resources, and the process of organizing. Bird (1989) observes that those lacking industrial experience such as high school and college graduates compensate for the unproven and possibly undeveloped skills with technical training and extraordinary zeal. Thus, industry experience is expected to be associated with better performance.

Apart from the depth of experience, the breath of experience is also considered important for the performance of enterprises (Orser *et al.*, 1998; Bird 1989). Breath of experience may be defined as the sheer number and variety of jobs held. Career dissatisfaction is usually seen as an indicator of breath of experience. In another perspective, the more diverse a person's experiences, the greater number of puzzle pieces they can draw upon. People often learn about entrepreneurial opportunities through participation in markets (Shane 2000). Further, variation in market experience provides access to different types of information that may be useful in the discovery process. Therefore, participation in more markets should increase the likelihood that a person will gain access to the information that is needed for opportunity recognition, evaluation and exploitation. The breadth of experience may therefore be a key element of human capital among entrepreneurs. Having broad experience is thus a prerequisite for good performance.

Previous experience with entrepreneurship is considered an important factor in assessing firm performance (Delmar and Shane 2006; Shane 2000). Entrepreneurial experience can be obtained in two ways (Bird 1989). In the first method entrepreneurial experience may be obtained vicariously through working for or with entrepreneurs, growing up with entrepreneurial parents or watching a friend develop a business. In the second method this experience is gained hands-on from having started previous ventures. Prior entrepreneurial experience helps to develop key competencies, provide considerable motivation for venturing again, open new opportunities and link the entrepreneur to

important resource providers. Therefore youth entrepreneurs with previous start-up experience are expected to report better performance of their enterprises.

Bird (1989) argues that education helps entrepreneurs to succeed. Education increases a person's stock of information and skills, including those needed to recognize and pursue an entrepreneurial opportunity successfully. Others argue that education is not useful for entrepreneurship (Bosma *et al.* 2008). This is because it impedes entrepreneurship by reducing curiosity, vision and the willingness to take risks. Formal education is thought to foster conformity and low tolerance for ambiguity and thus is an impediment to entrepreneurship. However the technical requirements of certain types of enterprises for instance those in biotechnology and healthcare may require higher levels of education. A possible explanation for these mixed results is that broad measures have insufficient sensitivity to capture the impact that human capital may have on differing entrepreneurial outcomes. Moreover, due to lack of other sources of information in developing countries such as Kenya, education remains the only useful source of new knowledge. Education has been found to help separate the more successful entrepreneurs from those who are less successful (Bird 1989). Therefore, education may enhance the performance of YREs.

Empirical research suggests access to finance enhance the performance of firms in terms of income and employment generation (Odiege 1996; Shane and Venkataraman 2003; Bosma *et al.* 2008). It has also been established that individuals with large stocks of financial capital are most likely to start and grow new enterprises. This set of research findings is usually connected to the theory of liquidity constraints. The general implication of this theory is that people with financial capital are able to acquire resources that better help them exploit entrepreneurial opportunities. Therefore, access to financial capital may be an important predictor of the performance of YREs.

The chronological age of an entrepreneur has been thought to relate to both education and work experience. The chronological age of starting an entrepreneurial career contributes to differences in long term success. Research also shows that younger entrepreneurs tend to be more successful than older ones (Bosma *et al.* 2008). This is partly attributed to the personal energy levels (motivation) of the youth (Bird, 1989). Chigunta (2002) demonstrates that different age groups of the youth start different types

of enterprises with different performance levels. Thus, the age of youth entrepreneurs is expected to have a curvilinear relationship with performance.

Some literature suggests that female owned enterprise tend to perform less favourably than male owned businesses. For example, female owners of small businesses in Kenya report 57 percent lower revenues than their male counterparts (International Centre for Economic Growth *et al.* 1999). Research suggests that male and female entrepreneurs are more similar in many attributes such as abilities, backgrounds and motivations. However, gender differences are noted in leadership styles, sectoral distribution and accessing resources. Female entrepreneurs are more concentrated in retail and service industries and they work for fewer hours. Moreover, female entrepreneurs are concentrated in small enterprises in terms of sales and employees. Female entrepreneurs also face added barriers such as lack of tangible collateral that is a prerequisite for obtaining external finance. There is some suggestion that women entrepreneurs tend to employ transformation leadership that is, they focus more on personal relationships with the employees. Such a leadership style has important and problematic business repercussions. Therefore, women owned YREs are expected to report lower performance levels than male owned YREs.

There is some expectation that information gained from training is important in enhancing firm performance (Korunka *et al.*, 2003; Bird 1989). Thus, alternative classrooms such as attending seminars, trainings, workshops, symposiums and conferences are expected to improve the performance of enterprises. Such alternative classrooms help to develop key competencies, motivations and the ability to acquire important knowledge-based resources. Therefore, youth entrepreneurs who attend trainings are expected to report better performance of their enterprises.

Hypothesis 2a: Youth entrepreneurs' experience depth is positively related to performance.

Hypothesis 2b: Youth entrepreneurs' experience breadth is positively related to performance.

Hypothesis 2d: Entrepreneurial experience is positively related to the performance of YREs.

Hypothesis 2d: Youth entrepreneurs' formal education is positively related to performance.

Hypothesis 2e: Availability of finance is positively related to performance of YREs.

Hypothesis 2f: The age of youth entrepreneurs has a curvilinear relationship with the performance of YREs.

Hypothesis 2g: Male owned enterprises outperform female owned enterprises.

Hypothesis 2h: Attending training enhances the performance of YREs.

Social capital is commonly described as the goodwill available to individuals or groups (Adler and Kwon 2002) that includes feelings of gratitude, reciprocity, respect, and friendship. It is an asset that resides in an individual's relationships and consists of the goodwill flowing from friends, colleagues, and other general contacts. Social capital assists in the explanation of individuals' success as they can utilize their contacts and connections and the resources that they bring for personal gain. Specifically, Shane (2003) argues that social capital is necessary for the recognition, evaluation and exploitation of opportunities. There are two forms of social capital namely bonding and bridging social capital (Adler and Kwon 2002). The bonding social capital perspective explores the impact of a collective's internal ties and the substance of the network relationships within that. Alternatively, bridging social capital sometimes referred to as the private-goods model of social capital, focuses on individuals and their network relationships. Compared with the bonding social capital approach, the bridging social capital's focus is on an individual's external social ties and how the social capital, as a resource within this network, is used for the individual's private benefit. Bridging social capital has been shown to be useful in enhancing the performance of small businesses. Youth entrepreneurs who are members of business associations are expected to have better performing enterprises.

There is a general observation that those with parents in business are significantly more likely to become entrepreneurs (Bosma *et al.* 2008). Entrepreneurial parents influence entrepreneurial outcomes of their children either through being role models or

by linking them to important resource providers. This influence spans through out the entrepreneurial career. As role models, entrepreneurial parents teach their children values and attitudes towards independence, tolerance for risk, and achievement (Bird 1989). Further, they are a source of motivation and drive for youth entrepreneurs. On the other hand, linkages with resource providers are important since necessary resources are usually not difficult to access from familiar sources. Consequently, youth entrepreneurs with entrepreneurial parents are expected to perform better in business.

Opportunities are central to entrepreneurship (Venkataraman 1997). Opportunities refer to situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production (Shane and Venkataraman 2000). Thus, opportunities are objective phenomena that occur in the environment and they are not known to all parties at all times. Literature suggests that individuals need to perceive opportunities for entrepreneurship to occur (Shane 2003). Recognizing, evaluating and exploiting opportunities separates entrepreneurs from other market actors. Research shows that individuals who believe that entrepreneurial opportunities exist in their environment are more likely to pursue a successful entrepreneurial career (Bosma *et al.* 2008). Consequently, perception of opportunities is expected to lead to better performance of YREs.

Hypothesis 3a: Membership to a business association is positively related to the performance of YREs.

Hypothesis 3b: Having a key parent in business is positively related to the performance of YREs.

Hypothesis 3c: Perception of entrepreneurial opportunities is expected to lead to better performance of YREs

There is growing evidence that the organization of firms leads to improved performance. Birney (1991) argues that having valuable, rare, inimitable resources and the organization of resources influence the performance of firms positively. Wiklund and Shepherd (2003) demonstrate that the way enterprises are organized is an important predictor of performance. Bigsten *et al.* (1999) demonstrates that there are performance differences between formal and informal enterprises in Kenya. Registered enterprises

perform better since they are not harassed by local authorities. Moreover, they have access to external resources such as loans and government support. Thus, registered YREs are expected to outperform unregistered YREs.

Hypothesis 4: Registration of YREs is positively related to the performance.

Research Design

This is a survey that aims at analyzing the critical factors that explain performance of YREs in Kenya. Surveys are considered useful in examining the relationships between variables and in the derivation of policy options (Saunders *et al.*, 2003). This study was conducted in Machakos District in Kenya. This area was chosen primarily due to its high density of YREs in the country.

The target population of this study included all the YREs in the study site. A list of the YREs in the study site was prepared using cluster sampling procedures. In Machakos town estates were taken as the sampling clusters. In these estates all the housing blocks were taken as the sampling units. However in the rural areas of Machakos, landholding schemes were taken as the sampling clusters. Therein smallholder farms were taken as the sampling units. From these sampling units, a list of youth who own businesses was compiled.

From the constructed sampling frame, simple random sampling procedures were used to select the study sample. The minimum sample size for this study was calculated following the formula offered in Saunders *et al.*, (2003) to be 384 YREs. However, to allow for non response this study surveyed 465 YREs.

Measurement of Variables

The dependent variable for this study is performance. A review of literature identified six important performance dimensions namely: sales level, sales growth rate, cash flow, gross profit margin, return on investment and ability to fund business growth from profits. Respondents were first asked to rate the degree of importance they attach to these six dimensions of performance. A five point scale ranging from least important to very important was used. The respondents were then asked to indicate the extent to which

they were satisfied with the performance of their business in the last one year on each of the above mentioned performance dimensions. A five point scale ranging from least satisfied to very satisfied was used. Performance was then measured as the product of, first, the importance of these dimensions of performance and second, the degree of satisfaction on these six different dimensions of performance. A performance index was calculated as the sum of these products.

Two sets of independent variables were measured. The first set included variables that measured the human capital of youth entrepreneurs namely: experience, education, age and gender. The second set of independent variables measured the perceptions of youth entrepreneurs which included *n Ach*, risk taking, locus of control and self efficacy.

Two types of experience were considered: entrepreneurial and industry experience. Entrepreneurial experience was measured as the number of businesses previously started by the respondents while industry experience was measured as the number of years in the present industry. Vicarious entrepreneurial experience was measured by asking the respondents to state whether their parents were in business or not.

Two measures of education were used. The first measured the highest level of education attained while the second measured the number of trainings (workshops, seminars, conferences) attended by the youth in last three years.

Network was measured as a binary variable with membership into a business association labeled one, otherwise zero. Age was measured as the number of years since birth. Gender was measured as a binary variable with males' assigned one and females two.

Two questions were used to assess *n Ach*. In the first, respondents were asked whether fear of failure would prevent them from improving the performance of their business. In the second the respondents were required to state the extent of agreement with the statement 'I have greater value for performance feedback'. These two questions were constructed following the suggestions offered in Bird (1989) on the sub dimensions of need for achievement. Factor analysis of *n Ach* isolated one factor which explained 61% of the variance and had a reliability coefficient of ($\alpha = 52.2\%$). Since the reliability coefficient of the aggregated measure of *n Ach* is low, the underlying sub dimensions of this concept were utilized for further analysis in this study.

One likert type question was used to assess risk taking. This question required the respondents to state their agreement with the statement, “I have a strong preference for low risk projects (with normal and certain rates of return).”

Locus of control was asked by one question that required the respondents to indicate the extent to which they believed that their own actions can exercise control over the environment. This item was measured on a five point likert scale ranging from strongly agree to strongly disagree.

Self efficacy was measured by one liker type question that required the respondents to state whether they believed to have the knowledge, skill and experience required to improve the performance of their enterprise.

Intention was measured using a single question. This question required the respondents to state their agreement with the statement: “I am interested in improving the performance of my business.” This question was assessed on five point likert scale ranging from strongly agree to strongly disagree.

Perception of opportunity was measured by one question which asked the respondents to state their agreement with the statement: “there are good opportunities to exploit in the area where I live.” This question was assessed on five point likert scale ranging from strongly agree to strongly disagree.

The organization of the YREs was assessed by asking the respondents to indicate whether their enterprises were formally registered by the government. A subsequent filter question asked the legal form of the YREs. Respondents who said that their enterprises were registered and were limited liability companies were assigned a value of one and considered duly registered.

Data Collection

A pre-tested questionnaire was used to collect data from the sampled YREs. This research tool was tested for both reliability and validity using a three step process. First variables for this study were extracted from previous literature. Experts in entrepreneurship were also used to help in the selection of variables for this study. Next correlations of the key variables were tested to help rule out any multicollinearity. This

research tool was further pre-tested on 40 YREs. Responses from this exercise were only used to improve the quality and the process of administration of the questionnaire.

Two research assistants and the researcher administered the questionnaire. Data for this study was collected using interviews with the respondents at the study site. The research assistants were trained on the topic under study and on the handling of the research tool. In addition, the researcher closely supervised the research assistants during data collection.

Data Analysis

Several methods for data analysis shall be adopted for this study. Quantitative data was summarized and presented using percentages, means, standard deviation (SD), and correlation coefficients. The likert type questions were reduced to meaningful factors using factor analysis. To examine which factors influence the performance of youth run enterprises a multiple regression model was used. All the analyses of data were done using the Statistical Package for Social Sciences (SPSS) Version 13.0.

RESULTS

Sample Characteristics

The mean age of the sampled enterprises was 3.35 (SD = 3.60). Ninety four percent of the samples YREs operated as sole traders, 4 percent were partnerships and 2 percent were limited companies. Eighty eight percent of the sampled YREs were in the consumer oriented enterprises where the primary customer is an individual. Three percent of the YREs were in the extractive sector, while 9 percent were in the transformation industry where the primary customer is another business.

The mean age of the respondents was 27 years (SD = 4.6). Sixty percent of the sampled YREs were owned by males while 40 percent were female owned enterprises. Half of the respondents had secondary level education, 25 percent had primary level education, 21 percent had college level education and 4 percent had university level education.

The sampled YREs had a mean of 96.90 on the performance index (SD = 32.70). When performance was measured in terms of growth in the number of employees, only

ten percent of the sampled YREs had positive growth. The subjective measure of performance was positively and statistically associated with growth in the number of employees (Correlation coefficient = 0.17, $\rho < 0.01$). This gives confidence in the use of the subjective measure of performance in this study.

The means, standard deviation and correlation coefficients of continuous variables are presented in Table 1. From this table, the chances of successfully improving the performance of YREs, age of respondents, and moderate risk taking are positively correlated with the performance of YREs. Fear of failure is negatively and statistically associated with performance. None of the correlation coefficients are very strong, thus multicollinearity is ruled out as a problem in the estimation exercise.

Table 1: Correlations of Continuous Variables.

	<i>Mean</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	
1. Number of Previous businesses	0.60	0.87	1										
2. Number of Previous jobs	1.01	1.23	.011	1									
3. Training Attended	1.48	1.82	.142**	.133**	1								
4. Interest	4.80	0.60	.024	.020	.060	1							
5. Self Efficacy	4.34	1.27	-.086	-.147**	-.003	.223**	1						
6. Success	3.57	0.87	.136**	.017	.076	.209**	.020	1					
7. Fear of Failure	1.77	1.03	-.060	-.032	.029	-.251**	-.102*	-.210**	1				
8. Age Squared	751.75	249.70	.198**	.234**	-.009	.070	-	.116*	-	1			
9. Risk squared	23.62	14.29	.019	-.040	-.003	.101*	.083	.353**	.202**	-	.097*	1	
10. Performance	96.90	14.29	.043	-.004	.025	.055	-.041	.349**	.194**	-	.162**	.270**	1
									.255**				

Adjusted R² = 0.23

Key * Significant at $\rho < 0.10$; **Significant at $\rho < 0.05$

Estimation results of the regression model are given in Table 2. The model is statistically significant ($F = 8.56$, $\rho = 0.000$). Further the model explains 23% of the variance in performance. A closer examination of this table indicates that membership into business associations, fear of failure, self efficacy and perception of opportunities are negatively and statistically associated with the performance of YREs. In addition moderate risk taking and family income level are positively associated with the

performance of YREs. Thus only hypotheses 1c and 2e are supported as stated. Hypotheses 1a, 1d, 3a and 3c are supported but the relationship is in directions different from the stated.

Table 2: Regression Results

	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
	B	Std. Error	Beta		
Constant	115.927	23.401		4.954	0.000
Registration Family Income	-8.871	11.463	-0.034	-0.774	0.439
Gender	6.177**	2.826	0.105	2.186	0.029
Number of Previous businesses	-.252	3.007	-0.004	-0.084	0.933
Previous Employment	-1.027	1.719	-0.027	-0.598	0.550
Number of previous jobs	-5.532	3.779	-0.083	-1.464	0.144
Parents in Business Education Level	-1.701	1.575	-0.062	-1.080	0.281
Trainings Attended Business Association Interest	2.408	2.955	0.036	0.815	0.416
Self Efficacy Success	2.393	2.055	0.055	1.165	0.245
Fear of Failure Opportunity	-0.200	0.861	-0.011	-0.233	0.816
Age Squared Risk Squared	-16.845**	3.882	-0.205	-4.339	0.000
Adjusted R ² = 0.231	-1.095	2.653	-0.019	-0.413	0.680
	-2.405**	1.203	-0.092	-2.000	0.046
	8.379**	1.847	0.222	4.536	0.000
	-5.088**	1.463	-0.160	-3.477	0.001
	-5.706*	3.211	-0.082	-1.777	0.076
	0.006	0.006	0.043	0.895	0.371
	0.287**	0.116	0.124	2.475	0.014

Key * Significant at $\rho < 0.10$; **Significant at $\rho < 0.05$

Personality based variables namely the chances of successfully improving firm performance, fear of failure and moderate risk taking appear to dominate as predictors of the performance of YREs. Risk taking is positively and statistically associated with the performance of YREs. The chance of successfully improving the performance of YREs is positively and statistically significantly. Fear of failure is negative and statistically significant. Chances of successfully improving the performance of YREs and fear of failure are two dimensions of need for achievement (Bird, 1989). Therefore, personality based factors (motivation) appear to be important predictors of the performance of YREs.

DISCUSSIONS

The performance of YREs has been attracting a lot of scholarly and policy attention in the world in general and in Kenya specifically. However the key drivers of the performance of YREs are not clearly understood. To address this gap in knowledge a survey of YREs in Machakos District in Kenya was undertaken. This study established that 88 percent of the YREs are in consumer oriented sectors where the primary customer is an individual. This finding offer support to previous studies that indicate that the youth operate in marginal business sectors (Chigunta, 2002). This is most likely due to the limited experience they have with other lucrative sectors such as in the transformation industry. Need therefore exists to introduce the youth to such sectors. Apprenticeships and employment in manufacturing companies would be a good starting point.

This study identified that generally YREs do not perform well as only one out of every ten surveyed enterprises indicated that they had positive growth. This finding is in agreement with the observation in Chigunta (2002) that a majority of YREs are marginal and only offer the youth a modest means of livelihood. A possible explanation for this limited performance emanates from the observation that the youth lack requisite experience, a situation that forces them to establish businesses in highly competitive sectors where the probability of failure is high. This finding underscores the need for concerted efforts to improve the performance of YREs if they are to be pillars of wealth and employment creation.

This study used Millers (1987; 1990) configuration approach to examine the critical factors that influence the performance of YREs. Both correlation and regression

results demonstrated that personality based factors are statistically associated with performance of YREs. Specifically *n Ach* and moderate risk taking were found to be statistically associated with the performance of YREs. Factor analysis of the sub-dimensions of *n Ach* suggests that this concept is unidimensional. Further the YREs that showed a high inclination for *n Ach* were found to perform better. This finding is in agreement to the studies that show that *n Ach* drives performance (McClelland 1961) but differs with the reports that show that *n Ach* is not associated with superior performance (Bird, 1989). A unique contribution offered in this study is the extension of the concept of *n Ach* to a group of youth entrepreneurs. A possible reason for finding a positive and statistically significant association between *n Ach* and performance among YREs may be the observation that a majority of the youth lack the necessary prior experience that drives entrepreneurial performance. In the absence of such experience the youth resort to sheer zeal (Bird 1989). Further exploitation of opportunities requires the youth to act in the face of skepticism of others thus underscoring need for achievement.

The estimation results indicated that moderate risk taking is statistically associated with better performance of YREs. This finding is in agreement with previous reports that show that moderate risk taking is associated with performance (Kreissor *et al.* 2000; McClelland 1961). Thus some cumulative evidence is emerging across time, space and within age groups that moderate risk taking is associated with superior firm performance.

An unexpected finding of this study is that membership into business association was found to be negatively associated with the performance of YREs. This is in contrast to the literature that shows that business association help entrepreneurs to access necessary resources, identify emerging business opportunities and are a source of psychological release (Bird, 1989). Differences in these findings may probably be due to the nature of business associations in Kenya. Most of them are weak and occasionally they suffer from managerial problems (Government of Kenya, 2005). Therefore business associations may not be steering YREs towards better performance.

Family income was found to be positively associated with the performance of YREs. In other words youth entrepreneurs who come from better socio-economic classes had better performing enterprises. This finding is in agreement with the literature that

shows that access to financial resources influences entrepreneurial outcomes favourably (Shane and Venkataraman 2003; Aurenus and Minniti 2005; Ondiege 1996). Financial resources are important in the acquisition of other resources such as employees and machinery that are used in the exploitation of opportunities. Consequently, strategies that address poverty at the household level may benefit the performance of YREs.

Interestingly this study established that youth entrepreneurs who believe that opportunities to expand their enterprises exist in their location actually reported better performance. This finding is in agreement with literature that shows that perception of opportunities is a prerequisite of entrepreneurial outcomes (Bosma *et al.*, 2008). This offers evidence to the literature that holds that the recognition of opportunities is a key defining characteristic of entrepreneurs (Venkataraman, 1997). Thus efforts that can increase the density of opportunities in different regions and the ability of youth entrepreneurs to recognize them should be initiated.

This study established that youth entrepreneurs who believed that there are good chances of improving the performance of their enterprises actually reported better performance of their enterprises. This finding supports the literature that shows that optimism leads to better business outcomes (Shane and Venkataraman 2003). This optimism motivates the exploitation of opportunity by limiting information, stimulating rosy forecasts of the future, triggering the search for relatively small amounts of information, and leads people to act first and analyze later.

Overall, the results of this study suggest that together *n Ach* and risk taking drive the performance of YREs. This finding offers support to the claim by McClelland (1961) that moderate risk taking brings out the most achievement motivation in people. Bird (1989) explains this interaction in this manner: “tasks where the chances of success is very certain (very easy tasks) or very uncertain (very difficult tasks) do not arouse expectations that skill is a great determiner of outcomes, and those who need to feel personal responsibility and control are not highly motivated.”

The key finding of this study is that personality based factors are the most important drivers of the performance of YREs. However the presence of resources such as financial capital and the presence of business networks are other configurations of factors that help explain the performance of YREs in Kenya. This finding has both

theoretical and policy implications. To entrepreneurship theory this study has an important implication. Current research suggests that prior experience is a key driver of entrepreneurial outcomes (Shane 2000; Shane and Delmar 2007). Evidence provided in this study among the YREs does not support this observation. On the contrary, personality based factors (motivations), financial resources and membership into business association influence the performance of YREs. The finding is in agreement to a growing body of literature that shows that perceptual variables are important in explaining entrepreneurial outcomes (Arenius and Minniti 2005; Bosma *et al.* 2008). This finding also offers support for the call to examine the role of motivation in entrepreneurship (Shane 2004). It also supports the configuration approach as a suitable framework for understanding the key determinants of performance in YREs. Moreover, the evidence provided in this study indicates that there may be different drivers of performance among older and younger entrepreneurs. Because of such differences, there is need to assess the performance of younger and older entrepreneurs differently. In the extreme, the results presented here suggest that researchers should develop different sets of explanations for the performance of older and younger entrepreneurs.

This study used measures of risk taking and *n Ach* that were developed without the youth in mind. Thus further effort should be directed towards developing appropriate measures for personality based factors that are friendly to younger entrepreneurs. The psychometric properties of such measures should also be assessed.

This study has some important policy implications. First, the evidence presented in this study offers support to the policy initiatives that distinguish younger and older entrepreneurs. Therefore, having policies specifically geared towards youth in business is a viable policy initiative. Second, the study indicates that policy makers interested in enhancing the performance of YREs should focus on offering achievement motivation training to potential and existing youth entrepreneurs. The study also points to the need to offer simulation trainings to owners of YREs in order to enhance their risk taking propensity. Finally, this study offers empirical evidence on the effects of personality based factors and financial resources on the performance of YREs. This evidence can be used to develop appropriate policies and strategies that can enhance the performance of YREs.

Limitations of the study

This study is not without limitation. This is a cross sectional study and therefore the causal direction between *n Ach*, risk taking and performance can be called into question. While there are conceptual arguments in favor of personality based factors affecting firm performance, the other causal direction is also possible. Superior performance may enhance risk taking and *n Ach* of YREs. Moreover, the sampled YREs are all survivors and therefore we can not rule out survivor bias. A suitable approach to correct the weaknesses of this study would be to conduct a panel study where data are repeatedly gathered from a cohort of YREs as this would allow cross-lagged regression analysis, which could help tease out the causal relationship between personality based factors and the performance of YREs.

In general, about 75 percent of the variance remains unexplained. Although this is not an unusual result in empirical research, it is worth further discussion. First, it is most likely that our study does not include all relevant variables. In particular, given the data available, our consideration of most of the ability variables is limited to the inclusion of dummy variables. This is far from satisfactory since we are not able to specify the nature of important differences in ability. Second, perhaps the use of nonparametric techniques or other research and statistical methods would complement the evidence provided in this study and add greater explanatory value to the study of the performance of YREs. This issue will be partly addressed, among others, by future rounds of this project. Clearly, the relatively low R^2 does not mean that the unexplained variance is necessarily due to variables capturing ability but simply that our models fails to include accurately assess all important the variables as suggested by the configuration approach. It should also be noted that, because of our failure to properly account for ability, our results do not fully capture the importance of perceptual variables in entrepreneurial decisions. In other words, it is likely that our results would be much stronger had we been able to more fully describe differences in ability.

Finally, it should be noted that we can only establish that perceptual variables are the most important drivers of the performance of YREs. The lack of longitudinal data, unfortunately, prevents us from establishing unequivocally the causal direction of the

tested relationships. However, Koellinger *et al.* (2005) found evidence that the importance of perceptual variables in entrepreneurial decisions is higher for nascent entrepreneurs than for experienced entrepreneurs. Further, Shane and Venkataraman (2000) argue that previous literature suggests that perceptual variables are important in explaining entrepreneurial outcomes. These observations provide support for the argument that a causal relationship indeed exists between perceptual variables and the performance of YREs.

Conclusion

In conclusion, this study contributed to one of the most important questions facing youth entrepreneurship research today, namely, what are the critical factors involved in the performance of YREs (Chagunta 2002). The study responded directly to this fundamental, yet unresolved, question. The findings underscore the importance of perceptions variables in driving the performance of YREs. This study contributes to our understanding of the reasons behind the behavior of the youth with respect to firm performance. At a time when governments all over the world are looking at entrepreneurship as a way to increase the wealth and well-being of their countries, we believe this issue to be a particularly important one. This study highlights a new frontier for government policy, namely, the possibility that programs aimed at improving perceptions of younger entrepreneurs may lead to higher performance rates of YREs. It also supports the current policy efforts that are aimed at reducing poverty at the household level.

REFERENCES

- Adler, P. and Kwon, S. (2002). "Social capital: Prospects for a New Concept." *Academy of Management Review*, 27:17–40.
- Arenius, P. and Minniti, M. (2005). "Perceptual Variables and Nascent Entrepreneurship." *Small Business Economics*, 24, 233–247.
- Barney, J. (1991). "Firm Resources and Sustained Competitive Advantage." *Journal of Management*, 17 (1): 99-120.
- Becker, G.S. (1964). *Human capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.

- Bigsten, A., P., Kimuyu, and K., Lundvall (1999). *Are Formal and Informal Small Firms Really Different? Evidence from Kenyan Manufacturing Firms*. Discussion Paper No. 020/ 1999. Nairobi. Institute of Policy Analysis and Research
- Bird, B. (1989). *Entrepreneurial Behaviour*. Scott Foresmann and Company, Glenview
- Bosma, N., K., Jones, E. Autio, and J. Levie (2008). *Global Entrepreneurship Monitor 2007 Executive Report*. Babson, London Business School and Global Entrepreneurship Research Consortium (GERA). Available internet:
- Chigunta F. (2002). *Entrepreneurship*. Paper presented at the Youth Employment Summit Alexandria, Egypt.
- Collins, C., Locke, E., and Hanges, P. (2000). "The Relationship of Need for Achievement to Entrepreneurial Behavior: A Meta-Analysis." Working Paper, University of Maryland, College Park, MD
- Delmar, F. and S. Shane (2006). "Does experience matter? The effect of founding team experience on the survival and sales of newly founded ventures." *Strategic Organization* 4 (3): 215–247
- Government of Kenya (2005) *National Youth Policy*. Government Printer. Nairobi
- International Centre for Economic Growth, Central Bureau of Statistics and K-Rep (1999) *National micro and small enterprises Baseline survey*. ICEG, Nairobi.
- Korunka, C., F., Hermann, M., Lueger and J. Mugler (2003). "The Entrepreneurial Personality in the Context of Resources, Environment, and the Startup Process-A Configurational Approach." *Entrepreneurship Theory & Practice*, 16(1), 23–45
- McClelland, D. C. (1961). *The Achieving Society*. Princeton, NJ: Van Nostrand
- Miller, D. (1990). "Organizational configurations: Cohesion, Change, and Prediction." *Human Relations*, 43 (8) 771–789.
- Miller, D. (1987). "The Genesis of Configuration." *Academy of Management Review*, 12, 686–701.
- Ondiege P.O. (1996). "Capital and Performance of Small Enterprises in Kenya." In (Eds.) D. McCormick and Poul Ove Pedersen: *Small Enterprises: Flexibility and Networking in an African Context*. Nairobi, Longhorn Kenya

- Orser, B. J., S., Hogarth-Scott and P., Wright (1998). "On the Growth of Small Enterprises: The Role of Intentions, Gender and Experience." In *Frontiers of Entrepreneurship Research*: Wellesley, MA: Babson College. Available internet: file:///F:/attitude/Growth%20and %20intention.htm XIII_A Text. Accessed on 4/9/2007
- Rauch, A., J., Wiklund, M., Frese and G. T. Lumpkin (2006). "Entrepreneurial Orientation and Business Performance: Cumulative Empirical Evidence." In *Frontiers of Entrepreneurship Research*: Wellesley, MA: Babson College.
- Rotter, J. B. (1966). "Generalized Expectancies for Internal versus External Control of Reinforcement." *Psychological Monographs: General and Applied*, 80, 609.
- Saunders, M., Lewis, P., and A. Thornhill (2003) *Research Methods for Business Students*. 3rd Edition. Harlow, England. Prentice Hall Financial Times
- Segal, G., D. Bogia and J. Schoenfeld (2005). "The Motivation to Become a Entrepreneur." *International Journal of Entrepreneurial Behaviour and Research*, 11(1): 42-57
- Shane, S. (2000). Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organization Science* 11(4), 448–469.
- Shane S., E. A., Locke, C. J. Collins (2003). "Entrepreneurial Motivation." *Human Resource Management Review* 13: 257–279. Available Internet: www.socscinet.com/bam/humres. Accessed on 3rd Jan. 2008
- Shane S. and S. Venkataraman (2000). "The Promise of Entrepreneurship as a Field of Research." *Academy Of Management Review* 25 (1) 217-226.
- Shaver, K.G. and Scott, L.R. (1991). "Person, Process, Choice: The Psychology of New Venture Creation." *Entrepreneurship Theory & Practice*, 16 (1), 23–45.
- Venkataraman, S. (1997). "The Distinctive Domain of Entrepreneurship Research: An Editor's Perspective." In J. Katz and R. Brockhaus (Eds.), *Advances in Entrepreneurship, Firm Emergence, and Growth* 3: 119–138. Greenwich, CT: JAI Press
- Wickman P. A. (2001) *Strategic Entrepreneurship: A Decision-making Approach to New Venture Creation and Management*. Harlow, Prentice-Hall
- Wiklund, J. and D. Shepherd (2003). "Knowledge-based resources, Entrepreneurial Orientation and Performance of Small and Medium Sized Businesses." *Strategic Management Journal*, 24, 1307-1314